

‘It has impacted our lives in great measure’: Families, Patients, and Health Care during  
Manitoba’s Polio Era, 1928 – 1953

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A thesis submitted to the Faculty of Graduate Studies of  
The University of Manitoba  
in partial fulfilment of the requirements of the degree of

Doctor of Philosophy

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## Abstract

This dissertation examines the broad social impacts of the multiple polio epidemics that occurred in Manitoba between 1928 and 1953, a period I refer to as the epidemic era. It argues that examining the six major polio epidemics as an era, and the disabilities it engendered are useful windows into twentieth-century social history, particularly in terms of the capacities and limits of the state to control and manage disease, illness, and health, and the myriad ways the family negotiated discourses about disability and the intersections of disability and gender. It also examines the changes to nurses' labour during the epidemic era, particularly in terms of the introduction of two new technologies of care – respirators and the Kenny method – both of which led to nursing shortages in the later epidemic, exposing the lingering gendered conceptions about women and voluntary nursing. This project also considers the post-war development of rehabilitation programs, and argues that they worked to discursively transform people with an illness into people with disabilities, in need of reformation in order to become useful, contributing citizens. Finally, this dissertation examines the impact of polio-related disabilities on the lived experiences of a number of Manitobans, and argues that while polio and ideologies about disability worked to shape their lives in many ways, these were not the only forces to impact people's lives and that people with polio-related disabilities negotiated the quotidian aspects of life much like anyone else. Polio tested, but did not break, the bonds of family. This dissertation draws on a variety of sources, including oral histories, the records of social welfare organizations, hospital records and annual reports, newspapers, and other public records. By exploring the broad social impact of polio, this dissertation adds to a number of literatures and works to bring the history of disability and people with disabilities out of the margins and into the mainstream of Canadian social history.

## Acknowledgements

After many years spent on this project, one page does not seem like enough space for acknowledgements. Esyllt Jones has been a patient, rigorous, and understanding supervisor and her support, guidance, knowledge, and encouragement have been invaluable. Adele Perry and James Hanley read drafts quickly and I appreciate their insightful comments and conversations. Thanks to Stacie Burke and Magda Fahrni for agreeing to serve on my committee. Gerry Friesen first suggested that this was a topic worth pursuing: he was right.

Working on one's doctorate can feel isolating, but in retrospect it is not. Adele Perry has been the best of mentors, showing me by example how to be a better writer, teacher, and historian. Roisin Cossar has always taken the time to answer my all my questions and provide useful and timely advice. Barry Ferguson, Greg Smith, Sarah Elvins, Marion McKay and others have been supportive in numerous ways. Sandra Ferguson, Sylvie Winslow, and Carol Adam put up with my never-ending questions for years with patience and humour. Discussions and diversions with the friends I have made in graduate school have been invaluable. At York I met Liza Piper, James Muir, Kristen Burnett, Lisa Rumiell, Julie Devaney, and others. Erin Millions, Karine Duhamel, Krista Walters, Heather Graham, Paul Burrows, Susie Fisher Stoesz, Kyle Gibson, Jon Malek and Jeremy Wiebe all provided diversions and good conversation here. Peter Warren was not only a distinguished physician but a keen graduate student. I miss him. Ryan Eyford, Mary Jane McCallum, Chris Dooley, and Sharon Wall at the University of Winnipeg have all been generous with their resources and time.

Dissertations (unfortunately) do not write or fund themselves. Brett Lougheed and Lewis St. George Stubbs at the University of Manitoba Archives & Special Collections and Jordan Bass at the NJM Archives were helpful and I thank the Social Planning Council of Winnipeg for giving me access to their records. Elsa Crichlow at the Riverview Hospital Archives was instrumental in providing access to the records of the Winnipeg Municipal Hospitals. All of the members of the Post-Polio Network (Manitoba) and especially those who shared the stories that I used in this dissertation have my gratitude. This dissertation was funded by a number of fellowships and scholarships. I was lucky to receive a Hannah General scholarship before AMS stopped granting them. From the University of Manitoba, I have received a UMGF, the J.S Ewart memorial fellowship, the Faculty of Arts thesis write-up award, and the Raymond F. Currie award. From the Department of History I received the Drummond award and the PhD completion award. I would not have been able to complete this dissertation without financial support from the Canadian Research Chair in Western Canadian Social History.

Sometimes, especially at the end of it all, doctoral candidates have to be selfish with their time and my family has put up with a lot. My parents, Larry and Marilyn Morton, have always been generous with their time, money, and babysitting. I could not have done this without their support. My son Kurt has been my tech guy since he was four and has grown into a responsible, selfless, handsome young man, about to start his own university journey. I started this program when my daughter Katie Rose was six months old and she has since turned into a gregarious, captivating, imaginative, beautiful, and funny eight year old who doesn't like that my work often cuts into our reading time. My beautiful, younger sister Carolyn always took the time to ask how my work and teaching was going no matter what she was facing. She passed away in 2010 and I miss her more than words could ever express.

Dedicated to

my sister Carolyn Ann Morton  
1979 – 2010

and

my grandfather Thomas Robert King, who had polio  
1917 - 2003

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## Chapter One: Introduction

In late June of 1953, Mrs. Leitch, a resident of East Kildonan, a Winnipeg suburb, took her sons, Brent, aged two and a half, and four-year-old Dale, on a trip to Ottawa, Ontario. What was supposed to be a fun vacation quickly turned tragic when Brent contracted polio on 12 July and died four days later. His parents made plans to return to Winnipeg with his body for burial, but before they could go, four year old Dale contracted polio and Brent had to be buried by his grandparents. Despite these tragedies, polio was not done with the Leitch family: on 22 July, Mrs. Leitch, still reeling from the unexpected death of her youngest son, also contracted polio, and had to be placed in a respirator. Mrs. Leitch's fate is unknown, and while Dale was reported to have survived, albeit with paralysis in one leg, it is clear that polio affected the Leitch family intimately and irreversibly.<sup>1</sup> Most families did not suffer so many polio-related illnesses; however, this one family's story encapsulates many of the ways Manitobans were affected by the multiple epidemics of the disease that occurred in the province in the first half of the twentieth century. Primarily understood as a disease that affected young children, adults were not immune to polio. Often, people recovered completely, but others were left with paralysis of a limb, as was Dale Leitch. While polio did have a relatively low mortality rate, people did die from it, as did little Brent; although, by the 1940s, the introduction of respirators helped keep people with respiratory polio alive, at least for a while. The widespread use of respirators represents one of

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<sup>1</sup>The story of the Leitch family's multiple encounters with polio was told in brief snippets in the pages of one of Winnipeg's two daily newspapers, the *Winnipeg Free Press*. See for example: "Polio now Termed Epidemic," *Winnipeg Free Press*, 18 July 1953, 2; "Polio Strikes Leitch Family Second Time," *Winnipeg Free Press*, 20 July 1953, 3; "Mother of 2 Boys Stricken with Polio Gets it Herself," *Winnipeg Free Press*, 25 July 1953, 1; "Young Dale 'Improving' in Ottawa," *Winnipeg Free Press*, 29 July 1953, 1.

two major medical interventions designed to ameliorate the effects of epidemic polio, but for the most part, despite the increased scientific understanding about some aspects of the disease, there was little medicine could offer patients. Many were often left with visible disabilities, generally in the form of temporary or permanent paralysis of the limbs or the respiratory system. These disabilities shaped people's daily lives, and the way they were viewed by experts and others, long after the epidemics abated.

The 1953 epidemic was the largest polio epidemic the province had seen in terms of virulence and mortality, but it was not the first; in fact, the 1953 epidemic was the last outbreak of the disease prior to the development and implementation of the Salk vaccine in 1955. Manitoba's first epidemic occurred in 1928, and while the province did not record a polio-free year until the early 1960s, six major epidemics occurred in the twenty-five year period between 1928 and 1953, a period I refer to as the epidemic era. That epidemic era and the ways polio shaped and affected people's lives in the years that followed are the focus of this dissertation. Using institutional records, oral histories, the records of social agencies, newspapers, medical and nursing journals, oral interviews and a number of other sources, I argue that polio and the disabilities it engendered are useful windows into twentieth-century social history, particularly in terms of the capacities and limits of the state – notably the provincial and municipal infrastructures– to control and manage disease, illness, and health, and the myriad ways the family negotiated illness and disability. It does this by examining the ways people with polio negotiated family life, work, and ideologies about gender and disability. This dissertation further argues that nurses' work was transformed throughout the epidemic era, and that the intersection of gendered ideas of caring for the sick and the introduction of new technologies of care led to the public and contentious nursing shortage of 1953. This dissertation examines public health



officials' attempts to respond to this illness, which they perceived as a growing threat society, and argues that while the state was unable to prevent or control polio, the growing importance of rehabilitation in the later part of the epidemic era worked to transform polio patients into people with disabilities, a discursive shift with important social implications for children and adults. In order to make these claims, I suggest that it is imperative to examine the six major epidemics which occurred in Manitoba together rather than as singular events. I also suggest that in order to understand the many ways polio affected people socially, and how ideas about disability intersected with ideas about gender to inform people's lived experiences, it is imperative to broaden the lens through which historians view polio. The introduction of the Salk vaccine may have ended the era of polio epidemics, but it did not end an individual's engagement with the various social meanings ascribed to polio and its long-term impact on adults and children.

This dissertation is informed by the following broad research questions. How did multiple epidemics of a disease for which there was no cure, that seemed impervious to the usual public health tools, and that targeted young seemingly healthy people, often leaving them with permanent paralysis, impact the medical community, nurses, individuals, and families in Manitoba? How did treatment for polio and the care of patients change in the epidemic era? How did individuals make sense of and negotiate their polio-related disabilities as children, and as adults, throughout the twentieth century? This chapter sets out the main arguments and goals of this dissertation, the rationale for the study, and it outlines the reasons why Manitoba is an important place in which to study the impact of a disease that was epidemic in North America and beyond. Because I examine a number of topics, from public health to the lived experiences of patients, this project necessarily engages with a number of literatures. This chapter, therefore,

sets the historiographical context of the dissertation and highlights some of the bodies of literature that inform my research. It also provides an outline of the chapters to follow.

In order to understand the social impact of polio, it is imperative to examine a broad time period in which there were multiple epidemics and to widen the methodological lens with which historians view epidemics to include not just the actual outbreaks, but also the years that followed. Despite, or perhaps because of, public health officials' inability to control or contain the disease, polio engendered transformations in the way the physicians treated the disease, the work nurses performed on the wards of hospitals, and led to a shift in the way patients were viewed by medical and social experts. The discursive shift, from 'people with a disease' into 'people with disabilities' had a profound effect on individuals and families in Manitoba, and certainly living with disabilities and paralysis affected many facets of people's lives in multiple ways, particularly in terms of education, work, and raising a family.<sup>2</sup> Discourses about gender and disability, in particular, worked to shape and sometimes circumscribe some women's experiences with motherhood; however, I argue that while polio had a profound impact on many aspects of people's lives, it did not wreck or shatter families. Rather, while polio and its related disabilities certainly complicated and informed peoples' daily lives, and the ways other people viewed them long after the epidemics abated and polio faded from the broader collective mindset, those with polio-related disabilities continued to form relationships, parent, work, and live their daily lives. This dissertation makes a fundamental contribution to the broader social

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<sup>2</sup> Here, I borrow Mona Gleason's definition of discourse, which she states "denotes statements, practices, and assumptions that share a linguistic coherence and work to identify and describe a problem or an area of concern," to think about the particular ways social workers and experts constructed the various rehabilitation programs such as summer camps and clubs. Mona Gleason, *Normalizing the Ideal: Psychology, Schooling, and the Family in Postwar Canada* (Toronto: University of Toronto Press, 1999), 15.

history of Canada, by bringing people with disabilities, long on the margins, into the fabric of social history.

Poliomyelitis, commonly referred to as polio, appeared as an epidemic disease in the late nineteenth century.<sup>3</sup> It is caused by a virus, the *poliovirus*, which enters the body via the oral-fecal route.<sup>4</sup> If not killed in the gastrointestinal tract, which it often is, the poliovirus can attack the central nervous system, resulting in paralysis, usually of the limbs, shoulders, or abdominal area, although it could also attack the parts of the central nervous system that control breathing and respiration. This type of polio, often referred to as bulbar polio, was almost always fatal until the widespread use of respirators. The early symptoms of polio, including stomach upset, stiffness, general malaise, and headaches are innocuous, and similar to those of a number of other illnesses. Most immune systems are able to fight off the disease at this early juncture, although individuals could be healthy carriers. When polio did breach the body's defenses and

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<sup>3</sup>Throughout its early history, poliomyelitis was known by a variety of names. The earliest names, including 'debility of the lower extremities,' are quite vague mainly because a consensus that this was a specific illness, rather than signs of other problems, was lacking. For some time, it was known as Heine-Medin disease, named after two Swedish researchers, and then infantile paralysis, because of its tendency to produce paralysis in the limbs of children under the age of five. Finally, poliomyelitis was used because of the inflammation of the grey matter of the anterior horn of the spinal cord: 'polios' is the Greek term for grey, 'myelos' for marrow, and 'itis' for inflammation. The term poliomyelitis was used in the scientific and medical literature, although the disease was popularly referred to as infantile paralysis well into the 1940s, at which time the colloquial polio came into favour. John R. Paul, a Yale scientist who in 1972 published the classic *History of Poliomyelitis*, argues that polio is not the correct nomenclature. However, for the sake of brevity and continuity, I refer to it throughout this dissertation as polio, unless quoting directly from a source. Paul, *A History of Poliomyelitis*, 7 and 8.

<sup>4</sup> That is, it enters through the mouth, multiplies in the mouth and leaves through the rectum. This theory was hypothesized, correctly, in by Swedish researchers using data from a large epidemic which occurred in Scandinavia in 1911. Although they were correct, American researcher Simon Flexner who "could not replicate" the Swedish researchers' tests, disregarded them as "amateurs" thus setting back epidemiological research into the disease immeasurably. Per Axelsson "'Do not eat those apples; they've been on the ground!': Polio Epidemics and Preventative Measures, Sweden 1880s-1940s" *Asclepio, Revista de Historia de la Ciencia* 61,1 (June 2009): 31.

engage the central nervous system, pain, headaches, hallucinations, and paralysis were the hallmarks of the acute stage –believed to be approximately two or three weeks in duration. Once the acute stage ended, individuals entered into what was often referred to as the convalescent stage, the length of which depended on a number of variables, including the location and severity of any paralysis, age, and when, temporally, the individual contracted polio.<sup>5</sup> From the late 1880s, when it was identified as a specific disease until the late 1950s, scientists and researchers in various parts of the world laboured to find its cause, understand its epidemiology and find a cure, public health officials worked to prevent and contain polio, nurses cared for patients in the midst of worsening epidemics and families struggled to make sense of the multiple short and long-term impacts of the disease.

Originally a harmless endemic illness, polio became epidemic in the early years of the twentieth century. The reasons for this change are not entirely clear, but it is accepted generally that the decrease in breastfeeding in industrializing countries, coupled with the rise of public health and increased cleanliness, contributed to its mutation from an unremarkable gastrointestinal illness to epidemic disease. As Naomi Rogers explains:

Most children were infected by the polio virus through maternal antibodies or as infants. This early infection usually produces only a mild fever and then lifelong immunity. But, like measles, polio infection is most dangerous when it occurs among those who have developed no immunity in infancy. If children, protected from the virus, are infected at a later age, they are more likely to develop the paralytic symptoms we call “polio,” as the virus spreads from the intestines to the nervous system. In the twentieth century, as more children in industrialized Western countries were protected from disease through improved sanitation [...] diseases such as cholera and

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<sup>5</sup> The clinical description of polio is taken from a number of sources, including Paul, *A History of Poliomyelitis*, 3 and 4; Christopher J. Ruddy “‘Do Something! ... Do Anything!’ Poliomyelitis in Canada, 1927-1962” (PhD diss., University of Toronto, 1995), 27-8; and R. G. Cadham, “Epidemiology of Poliomyelitis,” *University of Manitoba Medical Journal* 25, 2 (December – January 1953-54):14-17.

typhoid began to decline, but polio cases grew.<sup>6</sup>

Winnipeg in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries was neither sanitary nor healthy. In *Winnipeg: A Social History of Urban Growth, 1874 – 1914*, Alan Artibise argues that in the years prior to the Great War, the city’s municipal leaders directed “public resources [...] almost exclusively toward growth-producing programs,” rather than ones that “would have ensured a healthy” city and that “an active civic health department was undertaken only in 1905, in the wake of a severe typhoid epidemic.”<sup>7</sup> Indeed, typhoid, referred to in Winnipeg as ‘Red River fever,’ after the name of one of the rivers that cuts through the city, and from which Winnipeggers drew their water, represented a major problem for reformers. It was not until 1919 when the city finally began to receive water from the Shoal Lake aqueduct, a branch of the Lake of the Woods in Ontario, that typhoid outbreaks decreased.<sup>8</sup> That the era of epidemic polio began shortly after the introduction of a cleaner water supply and sanitary reforms that went along with the new city health department confirms Rogers’ claims and represents a useful and credible hypothesis as to why polio took a heavy toll on Manitoba, and the city of Winnipeg in particular.

In order to understand the transformative impact of polio, it is imperative to examine the epidemics together, rather than as distinct, discrete occurrences, or as an unchanging illness. I suggest that rather than examining each epidemic on its own, it is important to look at them in concert – as an era. Here, I employ the term *epidemic era* both as a measurement of time and as an organizational tool in order to argue that it is in examining the epidemics together that the transformative nature of polio emerges. Others have approached different diseases in a similar

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<sup>6</sup> Naomi Rogers, *Dirt and Disease: Polio before FDR* (New Brunswick: Rutgers University Press, 1992), 2.

<sup>7</sup> Alan Artibise, *Winnipeg: A Social History of Urban Growth, 1874-1914* (Montreal: McGill-Queen’s University Press, 1975), 223.

<sup>8</sup> Artibise, *Winnipeg: A Social History of Urban Growth*, 221.

manner, although not necessarily explicitly. The impact of tuberculosis (TB), and the broad social and public health movements focused on decreasing its incidence are one such example, but TB was endemic rather than epidemic. Katherine McCuaig places her examination of the anti-TB campaign in Canada first within the broader reform movement of the early decades of the twentieth century, and then within the developing state infrastructures devoted to the health of the nation.<sup>9</sup> As such, the anti-TB campaigns were ongoing rather than reactionary. Although he does not employ the same terminology, Charles Rosenberg's *The Cholera Years* examines New York City, and the United States more generally, between 1832 and 1866, a thirty-four year span in which cholera became epidemic three times. Looking not only at each epidemic but at the whole time period allowed Rosenberg to delineate the shifting ways cholera was understood, the different ways it was approached socially and medically, and to "understand something of America" in that period.<sup>10</sup> Similarly, examining polio in Manitoba from the vantage point of a twenty-five year period, rather than by focusing on each epidemic in isolation, allows for a nuanced understanding of the myriad ways it engendered change and stymied officials. Examining one epidemic can be useful, but doing so obscures the broader shifts in how polio was viewed, treated, and experienced. Looking at reactions to and constructions of polio along a continuum of a twenty-five year era allows me to examine these changing concepts from a multi-thematic perspective.

Others have approached polio in different ways. Christopher J. Ruddy, for example, hypothesized four different "waves" of polio epidemics, with the first three waves corresponding to a "distinctive phase in how various provincial governments responded to this disease" and the

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<sup>9</sup> Katherine McCuaig, *The Weariness, the Fever, the Fret: The Campaign against Tuberculosis in Canada, 1900 – 1950*, (Montreal: McGill-Queen's University Press, 1999).

<sup>10</sup> Charles E. Rosenberg, *The Cholera Years: The United States in 1832, 1849, and 1866*, (Chicago: The University of Chicago Press, 1962), 4.

final wave, 1947 – 1953, which he positions as unique, not only because of “the further expansion of provincial polio policies,” but because those years saw both an increase in federal interest and the number of adults contracting polio.<sup>11</sup> Many American authors use Franklin Delano Roosevelt (FDR), who contracted polio in 1921, as the pivotal moment in how Americans understood the disease. Rogers posits that before Roosevelt, polio was seen as a disease that originated in the dirt of urban tenement slums, and Amy Fairchild argues that FDR’s public claim that he had conquered polio impacted the way people with polio wrote their memoirs, as they too believed they could overcome their polio-related disabilities.<sup>12</sup> The title of Daniel J. Wilson’s book *Living with Polio: The Epidemic and its Survivors*, provides a clue as to how he approached the multiple epidemics in the United States: he makes few demarcations, either temporally or thematically, between the different epidemics. For Wilson, because polio led to paralysis, it does not matter when individuals contracted the disease – only that they did.<sup>13</sup> While these conceptualizations clearly have purchase, the idea of an epidemic era in which continuities, change, and nuanced shifts in understandings of, and approaches to, the disease and people with polio-related disabilities can be discerned and unpacked is germane to the arguments presented in this dissertation, namely, that while public health may not have been able to control or contain polio in Manitoba, the disease was transformative in many ways, particularly in terms of medical and nursing care, the way polio patients were viewed by rehabilitation and social work experts, and on the quotidian lives of those who contracted the disease.

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<sup>11</sup> Ruttly, “Poliomyelitis in Canada,” 23.

<sup>12</sup> Rogers, *Dirt and Disease*; Amy L. Fairchild, “The Polio Narratives: Dialogues with FDR,” *Bulletin of the History of Medicine* 75 (2001): 488-534.

<sup>13</sup> Daniel J. Wilson, *Living with Polio: The Epidemic and its Survivors*, (Chicago: University of Chicago Press, 2005).

As useful as the epidemic era concept is in understanding the multiple ways polio impacted the broad medical community and engendered change in the treatment of people with polio, this project further indicates that in order to understand the long-term impact of polio on people's bodies and lives, it is important to rethink the way polio epidemics are conceptualized. Charles Rosenberg suggests that epidemics, like plays, have a concrete beginning, middle, and end. "As a social phenomenon," he writes, "an epidemic has a dramaturgic form. Epidemics start at a moment in time, proceed on a stage limited in space and duration, following a plot line of increasing and revelatory tension, move to a crisis of individual and collective character, then drift toward closure."<sup>14</sup> Certainly, many epidemic diseases such as cholera and smallpox fit into this rubric, as do some aspects of the broader medical and public health attempts at managing polio during the epidemic era. The Salk and Sabin vaccines, for example, are commonly seen as the end of the polio threat in North America. This dissertation posits that polio was more than an *enterovirus* that entered the nervous system, caused paralysis and was neutralized with a vaccine. Indeed, that it caused paralysis, sometimes temporary, but often permanent, means that in order to assess its broader social impact, it is important to look beyond that concrete point in time when the epidemics subsided in Manitoba.

Polio continued to shape people's lives in multiple and important ways long after the epidemics faded from the headlines and parents presented their children for the vaccine. Marc Shell, writing about the impact of polio on American culture, suggests that "the usual view is that a person contracts polio, then has the virus [and] has 'classic' polio symptoms for a couple of weeks. Then follow "obviously discernible" effects – like paralysis. Then it is over." This "view

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<sup>14</sup>Charles E. Rosenberg, *Explaining Epidemics and other Studies in the History of Medicine* (New York: Cambridge University Press, 1992), 279.



of polio,” he argues, “is wrong.”<sup>15</sup> Shell suggests that it is erroneous because of the development in the 1980s of post-polio syndrome, which is defined by a constellation of symptoms including “increased muscle weakness and pain, [and] debilitating fatigue” in those who had contracted the disease decades before.<sup>16</sup> This is an important observation, but it too ignores the quotidian lives of people who had contracted the disease. The young ages of most people who contracted polio during the epidemic era means, quite simply, that people with polio-related disabilities had a lot of living left to do after they were released from the hospital. Their lived experiences, and how ideas about gender intersected with ideas about education, work, parenting, and disability is one of the main foci of this dissertation. Following Shell, this project suggests that a person’s engagement with polio and the effects of polio did not end even though they were no longer a patient; rather, I suggest that there is not a discernible end to the impact of epidemic polio.

Moving away from Rosenberg’s concept of the epidemic as dramaturgy is useful to a study of the long-term effects of polio. There is a particularly poignant photograph that highlights the importance of viewing polio through a different, wider lens. In the photograph, a jubilant nurse is holding up a copy of a newspaper that reads, in bold print, “Vaccine ‘Triumph’ Ends Polio Threat.”<sup>17</sup> Here is the end of the polio dramaturgy! And yet, she is holding the newspaper up for a man to read. His arms lying by his side, paralysed, and a portable chest respirator covering his torso, he clearly had multiple polio-related disabilities and the incredulous look on his face indicates that for him, and for countless others, the long complex engagement with polio was not ending. Rather, it was just beginning. Polio, because it led to visible and

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<sup>15</sup> Marc Shell, *Polio and its Aftermath: The Paralysis of Culture* (Cambridge: Harvard University Press, 2005), 22.

<sup>16</sup> Wilson, *Living with Polio*, 228.

<sup>17</sup> Sally Aitken, Helen D’Orazio, and Stewart Valin eds., *Walking Fingers: The Story of Polio and Those Who Lived With It* (Georgetown, Ontario: Vehicule Press, 2004), 196.

often permanent disabilities, continued to affect individuals' lives long after they ceased to be considered sick. The vaccines did not make a difference for those individuals who had already contracted the disease, and who had polio-related disabilities. As such, the vaccines do not figure prominently in this project.

Life in the epidemic era was complex, quite often messy, and impacted by ideas about gender, race, class, and ethnicity. Joy Parr, in her germinal work *The Gender of Breadwinners* argues that privileging one analytic category, such as gender or class, over others means that “we lose sight of the ‘multiple determinants’ that constitute any individual’s social position and access to power and also of the ways in which social identities are simultaneously formed from a multiplicity of elements.”<sup>18</sup> Moving away from the idea that epidemics were fixed moments in time with observable endings allows for a deeper, more nuanced understanding of disability as one of those important, intersecting multiple determinants of a person’s identity. It allows for a fuller understanding of how polio-related disabilities, and ideas about disability, informed and shaped people’s lives. Importantly, moving away from understanding polio solely as a distinct moment of epidemic crisis provides for a richer understanding of its long-term impact on families and allows for the articulation of the argument that while the emergence of the symptoms of polio may have been a medical crisis, living with its effects did not ruin families or render people less useful citizens than those who did not contract the disease.

This dissertation engages with the burgeoning literature on the history of disability in Canada, which as Geoffrey Reaume’s recent overview of the state of Canadian historiography indicates, has led to a heavy focus on certain topics, such as eugenics, “mad history,” and

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<sup>18</sup> Joy Parr, *The Gender of Breadwinners: Women, Men and Change in Two Industrial Towns 1880 -1950* (Toronto: University of Toronto Press, 1990), 9.

physical disabilities.<sup>19</sup> The focus on physical disabilities is largely due to Mary Tremblay's analysis of disabled Second World War veterans. Tremblay examines the development of a "folding self-propelled" wheelchair and its impact on the lives of spinal cord injured veterans within the broader context of the federal government's focus on post-war reconstruction.<sup>20</sup> Reaume's commissioned account of the development of the rehabilitation program for people with spinal cord injuries at Lyndhurst Lodge in Ontario builds on Tremblay's work by examining the experiences of patients, as well as the medical and rehabilitation programs offered. While Lyndhurst began as a centre for veterans, it was also involved in the rehabilitation of people with polio-related disabilities. Lyndhurst was pivotal in that its "rehabilitation philosophy was geared towards returning people to the community from which they came rather than leaving them institutionalized for the rest of their lives." Although Reaume points out that this goal was not always achieved, he argues that it did "improve access for many people with disabilities through their various educational and employment programs."<sup>21</sup> This dissertation builds on this focus, arguing that broad ideas about citizenship, work, and gender informed the development of similar programs for both children and adults.

The American literature on the history of disability focuses on many of the same themes Reaume suggests are beginning to be analysed in the Canadian context in order to move it out of the margins of social history. The political and social imperatives to prevent immigrants with

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<sup>19</sup> Geoffrey Reaume, "Disability History in Canada: Present Work in the Field and Future Prospects," *The Canadian Journal of Disability Studies* 1, 1 (2012): 35-81.

<sup>20</sup> Mary Tremblay, "Going Back to Civvy Street: A Historical Account of the Impact of the Everest and Jennings Wheelchair for Canadian World War II Veterans with Spinal Cord Injury," *Disability and Society* 11, 2 (1996):154. See also Mary Tremblay, "The Canadian Revolution in the Management of Spinal Cord Injury," *Canadian Bulletin of Medical History* 12 (1995): 125-155.

<sup>21</sup> Geoffrey Reaume, *Lyndhurst: Canada's First Rehabilitation Centre for People with Spinal Cord Injuries, 1945 – 1998* (Montreal: McGill-Queen's University Press, 2007), 191.

disabilities from entering the United States have been examined by Amy L. Fairchild and Douglas C. Baynton, and in the Canadian context by Valentina Capurri.<sup>22</sup> Paul K. Longmore and Lauri Umansky have made significant contributions to reconciling the “pervasive presence of disability” in society and its “conspicuous absence from the historiography.”<sup>23</sup> Moving the history of disability out of the medical model, which locates disability both as a problem to be corrected by physicians and as an “alleged social incapacity within ‘afflicted’ individuals” and into the social model, which positions people with disabilities as historical actors with agency, allows Longmore and David Goldberger to demonstrate that “like gender, race, and class,” disability “must become both a subject of comparative historical study and a [...] tool of historical analysis.”<sup>24</sup> Elsewhere, Catherine J. Kudlick makes a similar argument, suggesting that “in terms of raw numbers and lived experience, it occupies a place comparable to gender and race in defining the human condition.”<sup>25</sup> I also use disability as an analytic category, particularly in order to understand the intersections of disability and gender in the contexts of rehabilitation and lived experiences, both of which illuminate ways various experts constructed people with polio-related disabilities, and the ways in which these individuals negotiated their daily lives.

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<sup>22</sup> Douglas C. Baynton, “Defectives in the Land: Disability and American Immigration Policy, 1882 – 1924,” *Journal of American Ethnic History* 24,3 (Spring 2005): 31-44; Valentina Capurri, “Canadian Public Discourse and Issues around Inadmissibility for Potential Immigrants with Diseases and Disabilities,” (PhD diss., York University, 2010); Amy L. Fairchild, *Science at the Borders: Immigrant Medical Inspection and the Shaping of the Modern Industrial Labor Force*, (Baltimore: The Johns Hopkins University Press, 2003).

<sup>23</sup> Paul K. Longmore and Lauri Umansky, “Disability History: From the Margins to the Mainstream,” in *The New Disability History: American Perspectives*, eds., Paul K. Longmore and Lauri Umansky (New York: New York University Press, 2001), 2.

<sup>24</sup> Paul K. Longmore and David Goldberger, “The League of the Physically Handicapped and the Great Depression: A Case Study in the New Disability History,” *Journal of American History* 87, 3 (2000): 889.

<sup>25</sup> Catherine J. Kudlick, “Disability History: Why we Need another Other,” *American Historical Review* 108,3 (June 2003): 767.

The calls to establish disability as a central category of analysis coalesce with Reaume's argument that the social experiences of people with disabilities needs to be foregrounded in the history of disability. While he points to valuable collections of "first person accounts by people who lived with polio," Reaume suggest that these sorts of accounts and narratives can be immensely useful to academics as long as they are subjected to the usual standards of historical analysis, lest they become simple "overcoming" disability narratives that "tend toward the hagiographical."<sup>26</sup> Rather, Reaume argues that in order for the history of disability to gain traction as a part of the broader Canadian social history, "a wide variety of histories need to be told," including ones where "disabled people lead lives that are as mundane and full of contradictions as that of most people who are not disabled."<sup>27</sup> This project approaches the analysis of the lives of people with polio-related disabilities in this vein.

In order to understand the multiple ways in which disability and gender intersected in the lives of people with polio-related disabilities in Manitoba, this dissertation is deeply grounded in Canadian social history, particularly the interconnecting literatures on childhood, motherhood, and the family. Over the past several decades, social historians have written the histories of those individuals and groups once deemed unimportant to the history of Canada. Originally focused on demographic studies, twentieth century social history is a broad field that challenges the "top-down narrative so long typifying [Canadian] historiography," and the 'new' social historians of the 1960s and 1970 opened new avenues of study and provided new insights into a number of different areas of historical inquiry.<sup>28</sup> Of particular import to this project are the histories of

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<sup>26</sup> Reaume, "Disability History in Canada," 44.

<sup>27</sup> Reaume, "Disability History in Canada," 39.

<sup>28</sup> Cynthia Comacchio, "Foreword," in Neil Sutherland, *Children in English-Canadian Society: Framing the Twentieth Century Consensus* (Waterloo: Wilfrid Laurier University Press, 2000), vi.

disability, childhood, and the family in Canada. Childhood historians have long engaged with ideas about the health of Canadian children. Neil Sutherland was one of the first to examine early twentieth century reformers and public health officials' interest in children, positing that this interest was displayed through regulation and reform in three main areas, including public health. Sutherland frames this focus on the health of children as a success, highlighting the positive impact of health and social reformers in their goal of improving the health of children and the nation. Polio became epidemic in the timeframe Sutherland studies, and I argue that it threatened both the health of children and officials' views of a strong, future citizenry.

Other historians have examined how public health officials and other 'experts' have long been interested in shoring up infant and child health in order to create a strong and useful citizenry. Cynthia Comacchio and Denyse Baillargeon examine different parts of the country, but both argue that those working to decrease infant mortality were interested in creating a stronger, better nation.<sup>29</sup> Tarah Brookfield and Veronica Strong-Boag have also framed interest in child welfare in terms of citizenship and nation. Brookfield's *Cold War Comforts* argues that Canadian women and women's groups were invested in protecting "children's health and safety" from "Cold War threats"; whereas Strong-Boag's work on adoption and fostering examines the "child protection efforts by Canadians and their governments as they confronted the specter of children judged neglected, abused, deficient, and delinquent."<sup>30</sup> Mona Gleason has also examined how

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<sup>29</sup> Cynthia Comacchio, *Nations are Built of Babies: Saving Ontario's Mothers and Children, 1900-1940* (Montreal: McGill-Queen's University Press, 1993); Denise Baillargeon, *Babies for the Nation: The Medicalization of Motherhood in Quebec, 1910-1970* (Waterloo: Wilfrid Laurier University Press, 2009).

<sup>30</sup> Tarah Brookfield, *Cold War Comforts: Canadian Women, Child Safety, and Global Insecurity* (Waterloo: Wilfrid Laurier Press, 2012), 12; Veronica Strong-Boag, *Fostering Nation? Canada Confronts its History of Childhood Disadvantage* (Waterloo: Wilfrid Laurier University Press, 2011), 3. See also Veronica Strong-Boag, *Finding Families, Finding Ourselves: English Canada*

experts “represented children labelled disabled from the turn of the 20<sup>th</sup> century to the Second World War.”<sup>31</sup> The focus on reforming less desirable childhoods was, according to Gleason, a “multi-dimensional social, cultural, political, and economic project of modernizing states.”<sup>32</sup> Gretchen Krueger has made similar findings in the context of children with cancer in the United States, arguing that during the mid-twentieth century, childhood cancer “revealed the value of children in America – as individuals, [...] and as future citizens” and that cancer deaths were constructed as a “tragedy that deeply affected the family as well as the prospering nation.”<sup>33</sup> Children with disabilities, Strong-Boag argues elsewhere, were often judged unable to “live a normal existence and become a self-supporting citizen.”<sup>34</sup> Thus, she positions children with disabilities in the broader category of at-risk, or vulnerable individuals who did not conform to the idealized version of childhood disseminated and promoted by experts. In examining the shifting meanings ascribed to rehabilitation programs aimed at children, this dissertation adds to the literature on Canadian childhood.

Another place we can find traces of children with disabilities is in the literature on fundraising initiatives. Interestingly, the children who became the faces of fundraising campaigns were constructed as the opposite of the vulnerable child: they had ostensibly beaten disease and disability and were constructed as the hope for the future, although that promise

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*Encounters Adoption from the Nineteenth Century to the 1990s*, (Don Mills: Oxford University Press, 2006).

<sup>31</sup> Mona Gleason “Failed Body, Failed Childhood? Medicine, Education and the Disabled Child in English Canada, 1900-1950” paper presented at the Canadian Historical Association meeting, 2009, 2. (Permission to cite this paper was granted by the author.)

<sup>32</sup> Gleason “Failed Body, Failed Childhood?” 2.

<sup>33</sup> Gretchen Krueger, “For Jimmy and the Boys and Girls of America: Publicizing Childhood Cancers in Twentieth-Century America,” *Bulletin of the History of Medicine* 81 (2007): 85.

<sup>34</sup> Veronica Strong-Boag, “Children of Adversity: Disabilities and Child Welfare in Canada from the Nineteenth to the Twenty-First Century,” *Journal of Family History* 32, 4 (October 2007): 418.

hinged on individuals' willingness to donate financially.<sup>35</sup> The American March of Dimes was the most successful in this regard. Every year, two children were chosen as the March of Dimes poster children, and they were represented as having beaten of polio, with 'before and after' pictures appearing on the posters and in the media. Gretchen Krueger, however, suggests that historians have "harshly criticized mismatches between the depictions of ill children and the lived experience of the disease, such as the poster children carefully selected, posed, and displayed by the March of Dimes to promote the possibility of rehabilitation and recovery."<sup>36</sup> Oshinsky's analysis of one such poster child called "Donald" speaks to this disjuncture. While Donald was publicly positioned as having conquered his disabilities, in reality he, like many other children with polio-related disabilities, wore leg braces and needed daily physical therapy.<sup>37</sup> The dichotomy created by these two constructions—troubled, disabled child who will not contribute to the good of the nation versus the smiling, healthy poster child poised to leave their disabilities behind – is not illustrative of the experiences of the majority of children who had polio. I suggest that there did not exist one overarching childhood experience with polio; rather, most of the lived experiences of people with polio-related disabilities fell somewhere in the middle of this continuum. This dissertation adds to the historiography on childhood in Canada by positing another type of historical child, using not simply records created about children with disabilities, but the recollections and memories of those who grew up with a polio-related disability.

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<sup>35</sup> Veronica Strong-Boag, "Forgotten People of all the Forgotten": Children with Disabilities in English Canada from the Nineteenth Century to the New Millennium," in *Lost Kids: Vulnerable Children and Youth in Twentieth-Century Canada and the United States*, eds., Mona Gleason, Tamara Myers, Leslie Paris and Veronica Strong-Boag (Vancouver: University of British Columbia Press), 39.

<sup>36</sup> Krueger, "Publicizing Childhood Cancers," 76.

<sup>37</sup> Oshinsky, *Polio: An American Story*, 83.



The voluminous literature on motherhood in Canada is germane to this project, particularly in terms of women's experiences in negotiating motherhood and disability and the ways in which women with disabilities were judged by social experts. The creation of a discourse of the 'ideal' mother has caught the attention of a number of historians: Cynthia Comacchio, Katherine Arnup, Dianne Dodd, and Denyse Baillargeon have all examined aspects of the development of the discourse about ideal motherhood in twentieth century Canada.<sup>38</sup> The historiography is largely a critical examination of the campaigns to decrease infant and child mortality, both of which led to the development of ideologies about ideal mothers and ideal families, and the race and class based exclusions that were inherent in these dominant discourses. This project aims to add disability to the problematic of the ideal mother. If, as feminist labour historians Ava Baron and Eileen Boris suggest, the "laboring body" was marked as white and male, the ideal mothering body was marked as, amongst other things, not disabled.<sup>39</sup> How women with polio-related disabilities negotiated both the ideologies that constrained their mothering and the day-to-day issues they faced in mothering are central to this dissertation.

In 1992 Bettina Bradbury suggested that "there are no traditional families" and called upon social historians to study the multiple types of family arrangements that have long existed

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<sup>38</sup> Katherine Arnup, "Educating Mothers: Government Advice for Women in the Inter-war Years," in *Delivering Motherhood: Maternal Ideologies and Practices in the 19<sup>th</sup> and 20<sup>th</sup> Centuries*, eds., Katherine Arnup, Andrée Lévesque, and Ruth Roach Pierson (London: Routledge, 1990): 190-210; Katherine Arnup, *Education for Motherhood: Advice for Mothers in Twentieth Century Canada* (Toronto: University of Toronto Press, 1994); Katherine Arnup, "Raising the Dionne Quintuplets: Lessons for Modern Mothers," *Journal of Canadian Studies* 29, 4 (Winter 1994): 65-85; Baillargeon, *Babies for the Nation*; Comacchio, *Nations are Built of Babies*; Dianne Dodd, "Advice to Parents; The Blue Books, Helen MacMurchy MD, and the Federal Department of Health, 1920 -34," *Canadian Bulletin of Medical History* 8 (1991): 203-230.

<sup>39</sup> Ava Baron and Eileen Boris, "The Body as a Useful Category for Working-Class History," *Labour: Studies in Working-Class History of the Americas* 4, 2 (2007): 24.

in Canada.<sup>40</sup> While there may be no such thing as a traditional Canadian family, certain family formations have been privileged historically, and dominant discourses posited a normative family that Canadians were encouraged to emulate. Many medical and social experts constructed and disseminated an ideal version of the family that Canadians were supposed to aspire to. If they did not, then they were judged to be in need of correction. What was this ideal family? As Gleason and Mary Louise Adams suggest, it was white and middle-class, headed by a breadwinning father and a mother who ensured that her children were healthy, heterosexual, and involved in school.<sup>41</sup> There was no room for disabled people, particularly disabled women, in this ideology. Nevertheless, disabilities have long been part of the fabric of many families and this dissertation, in examining the ways families made sense of and lived with polio-related disabilities, represents an important addition to the historiography.

The history of adoption, one of the newer themes in the social history of the family, is also useful to this dissertation. Veronica Strong-Boag has addressed the racialized, classed, and gendered assumptions that accompanied the adoption of children in Canada and she examines the ways in which children with disabilities were marginalized and problematized.<sup>42</sup> Elsewhere, Strong-Boag indicates that adults with polio-related disabilities were viewed as suitable adoptive parents for children with polio-related disabilities.<sup>43</sup> In examining the adoption experiences of three women with polio related-disabilities, this dissertation adds to Strong-Boag's work, suggesting that the degree of disability a woman had factored into experts' categorizations of who would or would not be a 'good' adoptive mother. Examining the experiences of these

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<sup>40</sup> Bettina Bradbury, "Introduction," in *Canadian Family: History Selected Readings*, ed., Bettina Bradbury (Toronto: Copp Clark Pittman, 1992), 2 and 3.

<sup>41</sup> Mary Louise Adams, *The Trouble with Normal: Postwar Youth and the Making of Heterosexuality*, (Toronto: University of Toronto Press, 1997); Gleason, *Normalizing the Ideal*.

<sup>42</sup> Strong-Boag, *Finding Families, Finding Ourselves*, x.

<sup>43</sup> Strong-Boag, "Forgotten of the Forgotten," 42.

women, as well as a number of other women with polio-related disabilities who had children, before, during, and after contracting polio represents an important and original addition to the social history of the family and motherhood in Canada.

This project engages with and counters the notion that polio shattered families. The idea that polio shattered or irreparably damaged families is informed by the dominant discourses of disability that existed in the epidemic era, as well as the literature on polio. Kathryn Black's *In the Shadow of Polio* is a memoir of her life after her mother, Virginia Black, contracted polio and lived in a respirator – sometimes at a hospital, and sometimes in her grandparent's living room – for four years until she died. According to Black, polio shattered her family, particularly because her father abandoned the family, leaving his paralysed wife and two young children in the care of their grandparents. While her mother was alive, Black felt as if she had a family, but after her Virginia Black's passing, she felt as if she did not, despite the love and care provided by her grandparents.<sup>44</sup> Fred Davis, a sociologist who studied a number of families that had a child with polio-related disabilities in the late 1950s, concluded that while most families tried to act as if they were 'normal,' the illness, long separation due to hospitalization, and the belief, even among parents, that the child was "just a poor crippled kid" affected families so much that even if they did not literally break apart they were forever changed, often in profoundly negative ways.<sup>45</sup> Similarly, Richard Altenbaugh argues that the "fundamental transformation" people with polio-related disabilities underwent, physically, emotionally, and financially "could, and did, shatter

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<sup>44</sup> Kathryn Black, *In the Shadow of Polio: A Personal and Social History* (New York: Addison-Wesley Publishing Co., 1995).

<sup>45</sup> Fred Davis, *Passage Through Crisis: Polio Victims and their Families* (Indianapolis: Bobbs-Merrill, 1963), 73.

many families.”<sup>46</sup> Certainly polio strained families and without taking away from the lived experiences of people like Black, this dissertation posits that individuals and families found multiple ways to negotiate the disruptive elements of the disease and its related disabilities. It is impossible and inadvisable to speak to a Canadian or Manitoban polio experience, but I argue that despite the disruptions and problematics that polio undoubtedly engendered, families endured.

Beyond the multiple impacts polio had on families, this dissertation is interested in discerning the capacities and limitations of provincial and municipal public health infrastructures in attempting to control the spread of polio and limit its debilitating effects. As such, this project also engages with the extant literature on public health and polio. The literature on the development of public health in North America is voluminous. In the 1960s, historians such as Charles Rosenberg and John Duffy chronicled the development of the public health infrastructure in the United States. Rosenberg’s *The Cholera Years* is particularly useful in identifying the move from a focus on the alleged personal and moral failings of those who contracted the disease to the reluctant admission on behalf of state and medical officials that better sanitation would lead to a marked decrease in epidemic disease and ill-health.<sup>47</sup> Duffy examines the rise of the sanitary ideal, but he also discusses some of the factors that led to the development of the germ theory, arguing that while the “bacteriological revolution [...] strengthened the position of the medical profession, it also firmly ensconced physicians in charge of public health.”<sup>48</sup> Bacteriology took place in the laboratory, and the many public health

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<sup>46</sup> Richard Altenbaugh, “Home Sweet Home: Poliomyelitis, the Family, and Disability,” 13. Paper presented at the Canadian Historical Association meeting, 2008.

<sup>47</sup> Rosenberg, *The Cholera Years*.

<sup>48</sup> John Duffy, *The Sanitarians: A History of American Public Health* (Chicago: University of Illinois Press, 1990), 196.

‘victories’ that occurred in the context of the laboratory meant that the “optimism spurred by the study of microorganisms led public health physicians, who were in direct confrontation with infectious disease [...] to search out answers from the new science and from the laboratory whenever possible.”<sup>49</sup> The decrease in the late nineteenth and early twentieth centuries of a number of infectious diseases meant that this unbridled optimism was often replicated by those who sought to chronicle the rise of public health.

Public health historians have shown that the Canadian public health infrastructure developed along similar lines. Jay Cassel’s work indicates that the attention paid to public health during the cholera epidemics was temporary and it was not until late in the nineteenth-century that the state, particularly provinces, began to pay attention to public health, largely through an emphasis on quarantine and legislation designed to “assure a minimum standard in living conditions.”<sup>50</sup> The influenza pandemic of 1918-19 has been characterized, like cholera, as a pivotal moment. Mark Osborne Humphries argues that the influenza epidemic of 1918-19 was the catalyst that spurred not only the creation of a federal department of health but also a shift in understanding the way public health could be used to safeguard the nation.<sup>51</sup> According to Humphries the influenza epidemic led to the shift away from the belief that maritime quarantines were the most efficacious way to protect the health of a nation. Of course, this had been argued almost a century previous, in the context of cholera. As Geoffrey Bilson indicates, outbreaks of cholera in British North America between 1832 and 1834 showed that maritime quarantines were not enough to keep the disease at bay and led to increased “demands for public health and

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<sup>49</sup> Judith Walzer Leavitt, *Typhoid Mary: Captive to the Public’s Health* (Boston: Beacon Press, 1996), 6.

<sup>50</sup> Jay Cassel, “Public Health in Canada,” in *The History of Public Health and the State* ed., Dorothy Porter (Atlanta: Rodolphi B.V, 1994), 279.

<sup>51</sup> Mark Osborne Humphries, *The Last Plague: Spanish Influenza and the Politics of Public Health in Canada* (Toronto: University of Toronto Press, 2013).

sanitary measures.”<sup>52</sup> This continual (re)discovery of the import of public health resonates with this study, which begins with a focus on the limits of the capacity of the provincial and civic public health apparatus in Manitoba and Winnipeg to deal effectively with the threat posed by polio. Throughout the epidemic era, public health officials, determined to halt the spread of the disease and ameliorate the disabilities that often followed polio, relied heavily on the promise of bacteriology and the laboratory. Throughout the epidemic era, they continued to present prophylactics of dubious efficacy and relied on a mixture of sanitary and bacteriological prescriptives, yet there is no indication that the years in between each outbreak were used to develop any sort of comprehensive program of action against the threat of polio. This dissertation, therefore, inserts polio into the public health historiography with a focus on the largely reactive approach adopted throughout the epidemic era.

Despite the attention paid to the history of public health, historians are still finding new ways to approach it, particularly through the use of the tools of social history. Marion McKay argues that while the voluminous literature on public health in North America might indicate “that there is little left to be said about the history of public health in Canada,” it should not be taken as the “last word on the subject,” but rather as the “foundation upon which further work” occurs, particularly that which promotes “a deeper understanding of the many social and political forces which have shaped the discipline of public health.”<sup>53</sup> Judith Walzer Leavitt’s work on Mary Mallon, constructed by the media and the medical profession as ‘Typhoid Mary,’ complicates the argument that bacteriology was an efficient and unproblematic way to protect

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<sup>52</sup> Geoffrey Bilson, *A Darkened House: Cholera in Nineteenth-Century Canada* (Toronto: University of Toronto Press, 1980), 4.

<sup>53</sup> Marion McKay, “Saints and Sanitarians: The Role of Women’s Voluntary Agencies in the Development of Winnipeg’s Health Care System, 1882-1945,” (PhD diss., University of Manitoba, 2005), 6.

the public. Walzer Leavitt argues that the ability – developed in the laboratory – to find healthy carriers of disease led to Mallon’s long confinement as a healthy carrier of the typhoid bacillus, but also that Mallon’s “lower class and immigrant status [...] seem to have influenced public as well as scientific opinion about her.”<sup>54</sup> Esvyllt Jones’ examination of the social impact of influenza in Winnipeg suggests that ideas about class were central to the ways medical officials thought about health, as the “districts where European immigrants congregated were viewed as loci of disease and individual immigrants as disease carriers.”<sup>55</sup> Gender has also proven to be a useful analytical tool in complicating the history of public health. In her examination of the development of the public health infrastructure in Winnipeg, McKay argues that “although women played a major role in the creation of public health programs,” such as milk depots and visiting nurses programs, they did not hold political or social power equivalent to males and that “male dominated” public health bureaucracies “turned their attention to the public health programs organized and financed by women, and redefined those as legitimate responsibilities of the state.”<sup>56</sup>

The work performed by nurses and gendered ideas about nurses are a major focus of this project. Kathryn McPherson’s *Bedside Matters: The Transformation of Canadian Nursing, 1900-1990* interrogates “the everyday lives of ‘ordinary’ nurses at work,” by locating the “social history of nursing at the juncture of three related bodies of scholarly literature, those of labour, women’s and medical history.”<sup>57</sup> In doing so, McPherson highlights the way the profession negotiated a multitude of changes and preconceived ideas about women, nurses, and care. Since

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<sup>54</sup> Walzer Leavitt, *Typhoid Mary*, 9.

<sup>55</sup> Esvyllt W. Jones, *Influenza 1919: Disease, Death and Struggle in Winnipeg* (Toronto: University of Toronto Press, 2007), 35.

<sup>56</sup> McKay, “Saints and Sanitarians,” 25 and 26.

<sup>57</sup> Kathryn McPherson, *Bedside Matters: The Transformation of Canadian Nursing, 1900-1990* (Toronto: Oxford University Press, 1996), 2.

the publication of *Bedside Matters* in 1996, nursing history has flowered in Canada. The editors of two recently edited collections on nursing history – *Place and Practice in Canadian Nursing History* and *Caregiving on the Periphery: Historical Perspectives on Nursing* – acknowledge McPherson’s ground-breaking contribution to the field, while calling for less of a focus on hospital-based nursing, arguing instead for the importance of examining nursing and nurses, broadly defined, beyond the hospital. Elliott, Toman, and Stuart, for example, suggest that *Place and Practice* “seeks to disrupt and decentre assumptions about the relationship of nurses to hospitals and to the medical profession.”<sup>58</sup> Similarly, in focusing on the analytic categories of race, ethnicity, as well as the impact of colonial projects on nursing and nurses, the contributors to *Caregiving on the Periphery* examine “settings that were considerably distant from the typical hospital context” such as “nursing stations, [...] community centres, school gyms, patients’ homes, church basements, and traplines.”<sup>59</sup> This foregrounding of non-hospital settings has led to broader definitions of nursing and works to further our understanding of the experiences of many women who provided nursing care in a wide variety of instances, places, and contexts.

Despite the widening scope of their work, nurses continued to work in hospitals, and that work was not static. Focusing primarily on non-hospital settings obscures the ever-changing world of nurses in hospitals, particularly in terms of their relationships with technology, which McPherson argues increased dramatically in the post-war period.<sup>60</sup> Margarete Sandelowski’s work on nurses, gender, and technology is also germane to this project. Sandelowski suggests that in many ways, the advent of new technologies “seemed to promise a cleaner, less intimate,

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<sup>58</sup> Jayne Elliott, Cynthia Toman, and Meryn Stuart eds., “Introduction,” in *Place and Practice in Canadian Nursing History* (Vancouver, University of British Columbia Press, 2008), 2.

<sup>59</sup> Myra Rutherford ed., “Introduction,” in *Caregiving on the Periphery: Historical Perspectives in Nursing and Midwifery in Canada* (Montreal: McGill-Queen’s University Press, 2010), 4-5.

<sup>60</sup> McPherson, *Bedside Matters*, 221.



and more scientific form of caring” because “with technology nurses no longer had to encounter their patients bare handed and they could scientize and sanitize nursing.”<sup>61</sup> I argue that the technologies of care nurses used in caring for polio patients did not remove them from intimate contact with patients; instead, the Kenny method and respirators necessitated both intimate care and increased scientific and technological understanding, making nurses work all the more complicated and fraught. Caring for polio patients has caught the interest of historians practicing the history of nursing or the social history of health. Those that have examined nurses and polio, such as Joy Jaipaul and Lynne Dunphy, focus almost exclusively on nurses’ recollections of respirators.<sup>62</sup> In analysing the work performed by nurses on polio wards throughout the epidemic era, this dissertation adds to the nursing historiography in a number of important ways, particularly in terms of their evolving relationship to the new technologies of care.

This project also identifies shifting ideas about gender and care. Elylt Jones and Linda Quiney suggest that constructed ideologies concerning women’s biological role as caregivers and nurturers influenced the work they were expected to perform during medical emergencies. Jones argues that “caring for the diseased [...] was seen as a female responsibility” during the influenza epidemic and Quiney shows that all women, including nurses, were expected to provide nursing care both during the influenza outbreak and the Halifax explosion in 1919.<sup>63</sup>

Brookfield argues that the privileging of trained nurses as the best responders to a theoretical

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<sup>61</sup> Margarete Sandelowski, *Devices and Desires: Gender, Technology, and American Nursing* (Chapel Hill: University of North Carolina Press, 2000), 2.

<sup>62</sup> Joy Jaipaul, “In the Shadows: Poliomyelitis Epidemics and Nursing Care in Edmonton, 1947 – 1955,” 53, 3 (June 2005): 2-8; Lynne M. Dunphy, “‘The Steel Cocoon’: Tales of the Nurses and Patients of the Iron Lung, 1929-1955,” *Nursing History Review* 9 (2001): 3-33.

<sup>63</sup> Jones, *Influenza 1919*, 65; Linda J. Quiney, “‘Filling the Gaps’: Canadian Voluntary Nurses, the Halifax Explosion, and the Influenza Epidemic of 1918,” *Canadian Bulletin of Medical History* 19:2 (2002): 352.

nuclear attack in the 1950s “challenged the assumption that nursing came naturally to women.”<sup>64</sup>

These assumptions, however, were difficult to disrupt. This dissertation adds to the literature on gender and nursing, particularly through an analysis of the 1953 nursing shortage, which was blamed on women’s unwillingness to volunteer. I suggest that the nursing shortage was a result of long-standing gendered assumptions combined with the impact of the new technologies of care on nurses’ work.

The dramaturgical rubric, with a distinct beginning and end holds considerable purchase with historians who study polio particularly in the United States. In much of the historiography, the American experience is bookended by the 1916 epidemic in the northeastern states and the success of the Salk and Sabin vaccines, respectively. Within this broad expanse, the American historiography is largely informed by three dominant and inter-related tropes: Franklin Delano Roosevelt’s polio; the National Foundation for Infantile Paralysis (NFIP) and its successful fundraising branch, the March of Dimes; and, the importance of finding a useable, safe vaccine, which is often constructed as a race between two rivals, Jonas Salk and Albert Sabin.<sup>65</sup> This

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<sup>64</sup> Brookfield, *Cold War Comforts*, 36.

<sup>65</sup>The American literature regarding polio is extensive. See for example: Richard Carter, *Breakthrough: The Saga of Jonas Salk* (New York: Pocket Books, 1967); Hugh Gallagher, *A Splendid Deception: A Moving Story of Roosevelt’s Massive Disability and the Intense Efforts to Conceal it from the Public* (New York: Dodd, Mead and Co., 1985); Richard Thayer Goldberg, *The Making of Franklin D. Roosevelt: Triumph over Disability* (Cambridge: Abt Books, 1981); Tony Gould, *A Summer Plague: Polio and its Survivors* (New Haven: Yale University Press, 1995); Jean Gould, *A Good Fight: The Story of FDR’s Conquest over of Polio* (New York: Dodd, Mead and Co., 1960); Dorothy M. Horstmann, “The Poliomyelitis Story: A Scientific Hegira” *Yale Journal of Biology and Medicine* 58 (1985): 79-90; Aaron Klein, *Trial by Fury: The Polio Vaccine Controversy* (New York: Charles Scribner and Sons, 1972); Jeffrey Kluger, *Splendid Solution: Jonas Salk and the Conquest of Polio* (New York: G.P. Putnam’s Sons, 2004); Theo Lippman Jr., *The Squire of Warm Springs: FDR in Georgia, 1924-1945* (Chicago: Playboy Press, 1977); David Oshinsky, *Polio: An American Story* (Oxford: Oxford University Press, 2006); Paul, *A History of Poliomyelitis*; Nina Seavey, Jane Smith and Paul Wagner, *A Paralyzing Fear: The Triumph over Polio in America* (New York: T.V. Books, 1998); Jane Smith, *Patenting the Sun: Polio and the Salk Vaccine* (New York: William Morrow and Co.,

multi-part trope has informed all of the literature on polio in the United States, from the earliest studies to the most recent monographs and articles.<sup>66</sup> These overarching themes have a strong currency and they are not necessarily static. Roosevelt, for example, is no longer represented as having conquered polio, but instead as having carefully managed his image to downplay his disability.

While this three-pronged trope continues to dominate the structure of the American historiography, researchers have recently broadened the scope of their analyses, examining the polio epidemics through the lenses of other analytic categories including class, race, and gender. Class is paramount to Rogers' argument concerning the application of public health principles during the 1916 epidemic. Framed in a discussion about the transition of public health based on the sanitary ideal to public health based on the germ theory, Rogers argues that even though officials knew that the germ theory meant anyone, regardless of where or how they lived, could contract a disease, they continued to function within the old class-based parameters of public health that targeted immigrants and the poor. Anti-polio work during the 1916 epidemic, therefore, "drew on the traditional methods of sanitary science" including quarantines, advocating clean homes, a war on flies, fresh air, and conducting "extensive cleanup campaigns

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1990); David Sills, *The Volunteers: Means and Ends in a National Organization* (Glencoe: Free Press, 1957); Daniel J. Wilson, "A Crippling Fear: Experiencing Polio in the Era of FDR" *Bulletin of the History of Medicine* 72,3 (1998): 464-495; John R. Wilson, *Margin of Safety: The Story of the Poliomyelitis Vaccine* (London: Collins, 1963); Heather Green Wooten, *The Polio Years in Texas: Battling a Terrifying Unknown* (College Station: Texas A&M University Press, 2009).

<sup>66</sup> See for example, Susan L. Smith and Stephen Mawdsley, "Alberta Advantage: A Canadian Proving Ground for American Medical Research on Mustard Gas and Polio in the 1940s and 50s," in *Locating Health: Historical and Anthropological Investigations of Health and Place*, ed., Erika Dyck (London: Pickering and Chatto, 2011), 89-109. Here, Smith and Mawdsley investigate Alberta's cooperation in the NFIP's field trials of the Salk vaccine.

focused on both public and private hygiene.”<sup>67</sup> Indeed, some of these ideas were so deeply entrenched in the minds of the public and officials that they continued to be used in the 1950s in Manitoba.

The examination of the intersection of race and disease has expanded the focus of the American literature within the three-pronged trope. Rogers complicates the overarching narrative which posits Roosevelt as a benevolent philanthropist who created a haven for anyone affected by polio because Warm Springs – the facility he founded – was for whites only.<sup>68</sup> The creation of the NFIP in 1937 which funnelled monies back into communities, rather than directly to Warm Springs, provided FDR with an out that appeased the directors of Warm Springs who refused to consider admitting Black patients, even on a segregated basis. Despite popular belief, Blacks were not immune to polio, and when they did contract the disease, they were treated according to segregation laws and customs, often housed in hospital basements, with parents rather than nurses caring for them even during the acute stage of the illness.<sup>69</sup> Heather Green Wooten argues that the Texas Scottish Rite hospital in Dallas was committed to “traditional guidelines established in the Freemason credo [and] served all children, regardless of economic status, creed or color.”<sup>70</sup> This “socially responsive approach to medical delivery,” according to Wooten, “broke with traditions of a segregated South”; however, it was more of an exception than a rule during the epidemic era.<sup>71</sup> Stephen Mawdsley complicates further this argument, suggesting that

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<sup>67</sup> Rogers *Dirt and Disease*, 33 and 46.

<sup>68</sup> Naomi Rogers, “Race and the Politics of Polio: Warm Springs, Tuskegee, and the March of Dimes” *American Journal of Public Health* 97, 5 (May 2007): 787.

<sup>69</sup> Stephen E. Mawdsley, “‘Dancing on Eggs’: Charles H. Bynum, Racial Politics, and the National Foundation for Infantile Paralysis, 1938 – 1954,” *Bulletin of the History of Medicine* 84, 2 (Summer 2010): 222.

<sup>70</sup> Wooten, *The Polio Years in Texas*, 27.

<sup>71</sup> Wooten argues that the inclusiveness of the Scottish Rite Hospital is an example of Texas exceptionalism; however, it seems to have occurred due to the specific ideals of its founders

hospital treatment during polio epidemics was fluid and contingent upon a number of variables, including geography, local custom, and the severity of an outbreak, and he concludes that care during the convalescent stage was “restricted” along racial lines “across the nation.”<sup>72</sup>

The gendered dimensions of health and disease represent another useful way to approach the broad impact of polio. Both Oshinsky and Wooten, for example, situate March of Dimes fundraising within the domesticity of the Cold War era, even though that concept has been challenged by historians.<sup>73</sup> Oshinsky situates the fight against polio in the “larger post-war mosaic of raising healthy” children, suggesting that mothers, cast as the “front-line defenders of family health,” were the “ideal foot soldiers of the polio campaign”; indeed, thousands of middle-class mothers canvassed their suburban neighbourhoods once a year to raise funds for the March of Dimes.<sup>74</sup> Wooten’s discussion of the “Mothers March on Polio,” part of the NFIP’s fundraising strategy, largely echoes Oshinsky’s. “Women of all races,” she writes, “assumed the bulk of domestic responsibility within their respective households, including the safeguarding of family health.”<sup>75</sup>

Others have examined the gendered impact of polio on patients. Situating the effects of paralytic polio within larger cultural ideals of manliness and masculinity, Daniel Wilson suggests that the term infantile paralysis, the ‘helplessness’ engendered by disability, and long hospital stays all challenged male patients’ “emerging masculinity both physically and psychologically”

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rather than a general state-wide belief in the equality of care across racial lines. Wooten’s discussion of the white-only Children’s Hospital, as well as the “Negro Hospital,” with its “small ward for Crippled African American Children” does not support her claim of any exceptionalism in Texas, at least in the context of Black people and polio. Wooten, *Polio Years*, 27 and 39.

<sup>72</sup> Mawdsley, “Dancing on Eggs,” 223.

<sup>73</sup> See for example Joanne J. Meyerowitz, *Not June Cleaver: Women and Gender in Postwar America, 1945-1960*, (Philadelphia: Temple University Press, 1994).

<sup>74</sup> Oshinsky, *American Story*, 81, 85 and 86.

<sup>75</sup> Wooten, *Polio Years*, 94.

and prevented them from engaging in “traditional ways of demonstrating one’s manhood.”<sup>76</sup> Cultural and literary analysts have also used gender to interrogate the broader construction of polio in American films and novels, arguing that polio was so disruptive that its physical, cultural and psychological impacts have been forgotten or erased.<sup>77</sup> While I do not engage with cultural history here, this project uses gender as a category of analysis to argue that gendered ideologies were integral to the ways medical and social experts viewed women with polio related disabilities, and that gender and disability often intersected in the context of these women’s lives.

The growing Canadian historiography on polio focuses on a number of inter-related themes which this project builds on. Christopher J. Rutty’s 1995 dissertation examines polio in Canada from a national perspective, focussing on the “evolution of a state led Canadian response” to polio between 1927 and the early 1960s.<sup>78</sup> A broad examination of provincial and federal initiatives to control the disease as well as Toronto-based Connaught Laboratories contribution to the development of the Salk vaccine, Rutty’s work focuses on several themes including the development and distribution of a number of therapeutic ‘polio weapons’ which were supposed to help contain or lessen the effects of polio. The work of public health officials is also central to Rutty’s argument that the fight against polio in Canada differed significantly from that in the United States. “The Canadian response to polio,” Rutty argues, was “shaped by a number of key individuals with common public health education and values, which tended to favour strong government leadership and broad intervention in the protection of public health.”<sup>79</sup> Rutty is right that there were important differences, but, he also points to the importance of

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<sup>76</sup> Daniel J. Wilson, “Crippled Manhood: Infantile Paralysis and the Construction of Manhood,” *Medical Humanities Review* 12, 2 (Fall 1998): 9, 23-4.

<sup>77</sup> Jacqueline Foertsch, *Bracing Accounts: The Literature and Culture of Polio in Postwar America* (Madison: Fairleigh Dickinson University Press, 2008); Shell, *Polio and its Aftermath*.

<sup>78</sup> Rutty, “Poliomyelitis in Canada,” 7.

<sup>79</sup> Rutty, “Poliomyelitis in Canada,” 6.

partnership between the two countries, particularly the centrality of Connaught to the Salk vaccine. Susan L. Smith and Stephen Mawdsley's examination of Alberta's participation in the NFIP's massive trial of the Salk vaccine indicates that while Ruttly is correct in emphasizing the linkages between the United States and Canada, it is important to complicate and interrogate that narrative. Banking on the assumption that parents "were desperate for a way to protect their children against polio," the Canadian federal government allowed the experimental American vaccine developed by Jonas Salk into Canada without going through the necessary regulatory process. That, coupled with the forms parents had to sign – they were worded not to give consent, but to request that their child be allowed to participate in the trial – raises, for the authors, "troubling questions about medical ethics."<sup>80</sup>

Others have focused on the impact of polio on health care workers and patients. In her 1994 Master's thesis, Gillian Liebenberg examines the impact polio epidemics in 1941 and 1942 had on the development of services for people with disabilities in New Brunswick. Liebenberg argues that these epidemics brought issues concerning disability and rehabilitation to the attention of the provincial government. Combined with the increasing attention given to disabled veterans, the polio epidemics spurred the New Brunswick government "to implement new health care policies for people with physical disabilities."<sup>81</sup> Arguing that the "valiant contribution of nurses performing their gruelling work during epidemic of poliomyelitis have not been particularly well documented," Joy Jaipaul examines nurses recollections of working on the polio wards in Edmonton's Royal Alexandra Hospital. More recently, Valérie Poirier has examined the impact of the 1946 Montreal epidemic from three vantage points: the hospital, the

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<sup>80</sup> Smith and Mawdsley, "Alberta Advantage," 104.

<sup>81</sup> Gillian Liebenberg, "Disease and Disability: Poliomyelitis, Rehabilitation and Social Reform for Disabled Persons in New Brunswick, 1941-1955," (MA Thesis, University of New Brunswick, 1994), 7.

family, and the school, representing, as does this project, the desire to bring polio into mainstream Canadian social history.<sup>82</sup>

This dissertation focuses on the polio experience in Manitoba, but it was far from the only place to experience epidemics of this disease. Epidemics occurred in Manitoba in 1928, 1936, 1941, 1947, 1952, and 1953, yet it was not the only province faced with seemingly random epidemics of the disease. Every province and geographical region in Canada, including what is now Nunavut, reported at least one, but mostly several, epidemics. Polio was not unheard of prior to 1924, but it was not until that year that the federal government began collecting statistics. British Columbia and Alberta recorded the first post-1924 epidemics, each recording a few hundred cases in 1927. Ontario and Quebec faced multiple epidemics until the advent of the Salk vaccine: over 2000 cases were reported in Ontario in 1937, for example, while Quebec's largest epidemic with just over 1600 cases occurred in 1946.<sup>83</sup> Both Ontario and Quebec recorded more cases than Manitoba between 1927 and 1962; however, as Table One indicates, in the context of per 100,000 population, Manitoba certainly felt the brunt of epidemic polio strongly.<sup>84</sup> In 1948, an epidemic occurred in the eastern Arctic, resulting in an attempted quarantine of the whole area. In a move reminiscent of the way the federal government approached Indigenous people with tuberculosis, Inuit with polio-related paralysis were removed from their homes and sent to Edmonton and Winnipeg to convalesce.<sup>85</sup>

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<sup>82</sup> Jaipaul, "In the Shadows"; Valérie Poirier, "'Secourons Nos Enfants Malade': Responses à L'épidémie de poliomyélite à Montréal en 1946," (MA thesis, Université du Québec à Montréal, 2011).

<sup>83</sup> The numbers here are taken from 'Table 2 Poliomyelitis Reported Cases: Canada and by Province, 1927 – 1962,' in Ruddy, "Poliomyelitis in Canada," 397.

<sup>84</sup> Ontario's total number of cases for that period was 14,981; Quebec's was 9,336; and Manitoba recorded 7,260 total cases. Ruddy, "Poliomyelitis in Canada," 397.

<sup>85</sup> Pat Grygier, *A Long Way from Home: The Tuberculosis Epidemic among the Inuit* (Montreal: McGill-Queen's University Press, 1994).



Table 1: Canada’s Provincial Polio Case Rates per 1000,000 Population, Selected Years<sup>86</sup>

<b>Province</b>	1928	1936	1937	1941	1944	1947	1952	1953
British Columbia	15.9	3.6	3.4	7.1	2.0	29.9	49.6	63.1
Alberta	13.7	2.1	21.5	20.9	12.0	9.9	76.3	145.5
Saskatchewan	3.3	9.6	54.5	6.2	2.0	33.1	142.9	139.6
Manitoba	65.4	73.8	37.3	132.7	13.6	79.4	105.1	286.4
Ontario	2.6	5.8	70.0	3.8	8.5	19.1	14.7	42.7
Quebec	1.4	3.9	5.5	1.4	1.3	3.9	3.0	11.4
New Brunswick	1.2	0.7	37.5	91.6	18.4	4.1	81.2	16.5

While Manitoba was not the only place affected by multiple epidemics of polio, examining one province is a useful way to understand the transformative impact of the disease. Investigating polio in Manitoba allows for the examination of changing conceptions of the disease and a provincial focus allows for an understanding of how a relatively small medical community adapted over time to recurring epidemics of the same illness. The existence of the Winnipeg Municipal Hospitals positions Manitoba as a fruitful place of enquiry. Established in 1914, the Winnipeg Municipal Hospitals consisted originally of the King Edward Hospital for tuberculosis and the King George Isolation Hospital (KGH), which was used to house patients with communicable diseases. Throughout the epidemic era, most cases of paralytic polio in the province were sent to the KGH. In 1950, the Princess Elizabeth Hospital, also a part of the Winnipeg Municipal Hospitals, opened. Originally conceived as a long-term care facility for the elderly, the high percentage of those left with paralysis during the 1952 and 1953 epidemics meant the hospital was seconded to be a rehabilitation hospital for people with polio. Only the

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<sup>86</sup> Adapted from Table 1 in Ruty, “Poliomyelitis in Canada,” 396.

Princess Elizabeth still stands today, housing the administrative offices of the Riverview Health Centre. This concentration of physicians, nurses, patients, therapists, and social workers in one institution that was in operation for the whole of the epidemic era is incredibly useful for an understanding of the shifting ideas about the disease, the implementation of new technologies, and the transformations polio engendered.

The existence of the Manitoba Post-Polio Network (PPN), a group for polio ‘survivors’ is also an important reason why Manitoba is a useful place in which to ground a study of the long-term impacts of this disease. In the 1980s, as those who contracted polio in the epidemic era aged, many began to develop symptoms similar to those associated with polio, including muscle weakness and breathing problems.<sup>87</sup> Some who had been able to discard the mobility devices associated with polio found themselves once again having to use wheelchairs, leg braces, rocking beds, and portable respirators. Although this constellation of symptoms has been termed post-polio syndrome, many individuals have had a hard time finding physicians able to diagnosis and treat it. The PPN was founded in 1984, partly as a social group, but mainly as a way to lobby the provincial government to bring a neurological specialist with experience with post-polio syndrome to the province. In 2005-2006, the PPN was able to secure enough funding to undertake an oral history project which aimed to capture the experiences of Manitobans who had contracted polio. The oral interviews for that project were conducted by two undergraduate students from the University of Winnipeg and supervised by Dr. James Hanley.<sup>88</sup> Although I was not involved in the project, these sorts of projects are pivotal to the study of the social history of disability, illness, and family.

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<sup>87</sup> Lauro S. Halstead and Gunnar Grimby, eds., *Post-Polio Syndrome* (Philadelphia: Hanley and Belfus, 1995).

<sup>88</sup> Thea Hoogstraten and Alana Lajoie-O’Malley, “Polio and Post-Polio: An Oral History,” (Winnipeg: Post-Polio Network (Manitoba) Inc., 2006).

The PPN oral interviews are pivotal to this project. While some of the interviewees requested that their interviews be restricted, I was able to utilize twenty-two interviews, which ranged from half an hour to three hours in length. These interviews allowed me to flesh out how some Manitobans remembered their engagement with polio-related disabilities over time and in different contexts, including at school, work, and in terms of relationships. Certainly, the interviewees were looking back on their memories through a filter of time, but as Marlene Epp suggests, “rather than setting up a dichotomy between the true or false aspects” of “memory sources,” it is “helpful” to recognize that we are what we remember.”<sup>89</sup> While ‘illness narratives’ do have limitations, they are valuable in a number of ways. In *Second Wind: Oral Histories of Lung Transplant Survivors*, Mary Jo Festle speaks to their usefulness. Beyond hoping that narratives will help the medical community provide empathetic and effective care, she suggests that “formally telling one’s story can be beneficial to ill people. It can give voice to one’s body, help make sense of and give meaning to devastating experiences, and possibly even improve one’s health.”<sup>90</sup> This coalesces with Reaume’s suggestion that personal narratives and histories, particularly of those often marginalized in society and in history, “form the core of why disability historical scholarship exists.”<sup>91</sup>

This dissertation is divided into eight chapters, including this introductory one. Between 1928 and 1953, Manitoba experienced six epidemics of polio, an infectious disease which often led to disability. I argue that in order to understand fully the effects of polio in Manitoba, it is necessary to look not at each epidemic on its own, but together. As such, I use the concept of the

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<sup>89</sup> Marlene Epp, *Women Without Men: Mennonite Refugees of the Second World War* (Toronto: University of Toronto Press, 2000), 10.

<sup>90</sup> Mary Jo Festle, *Second Wind: Oral Histories of Lung Transplant Survivors* (New York: Palgrave MacMillan, 2012), 5.

<sup>91</sup> Reaume, “Disability History in Canada,” 44.

epidemic era to examine and trace the shifting changes in the way polio was understood and approached by public health officials, nurses, and social workers involved in patient rehabilitation. This dissertation also examines the impact polio had on individuals, especially in the context of going to school, work, and establishing families. In order to do so, I argue that it is necessary to expand the lens through which historians normally view epidemic diseases to include the years following the epidemic event. This chapter has laid out these arguments, explained why Manitoba is a fruitful place of analysis and outlined the historiographies which inform this project.

Chapter two provides an overview of Manitoba's era of epidemic polio by tracing some of the public health responses to the six major epidemics that occurred in Manitoba during the epidemic era. Based on provincial annual reports, articles from medical journals, newspaper articles, and city of Winnipeg archival records, it provides a chronological overview of the epidemic era, highlighting the major epidemics of the era. While this chapter is largely narrative, it is a useful base for the following chapters, which are organized chronologically but are thematic in nature. This chapter provides a base for understanding particularly the limits of the provincial and municipal public health infrastructures to ameliorate the disease.

Building on the narrative and chronological overview of the epidemic era, chapter three examines the way provincial and municipal public health officials responded to polio during the epidemic era and argues that these groups were unable to prevent or control the effects of epidemic polio. The chapter is organized thematically, and interrogates that response from two vantage points: the use of laboratory based prophylactics and the debates over the efficacy of closing schools and other public places. Here I argue that throughout the epidemic era the province and the city of Winnipeg failed to develop a measured or efficacious response to polio.

Despite evidence that the preventatives they favoured were ineffective, the state relied heavily on the laboratory in their attempts to prevent and control polio. Despite having access to a growing body of scientific literature about polio, public health officials in Manitoba clung both to the promise of the laboratory and to older notions of polio causation, leading to public debates and confusion over a number of their public health measures.

The debate over the inclusion of polio on the list of communicable diseases treated without charge at the Winnipeg Municipal Hospitals is examined in two ways in this chapter. First, it illuminates the disconnect between the medical community in Manitoba and larger international developments. Although the communicability of polio had been established by 1937, a lengthy debate in the early 1940s over whether or not polio ought to be included on the list of communicable diseases eligible for free treatment hinged on questions over its potential communicability. I also read this as evidence that Manitoba's polio policy was neither comprehensive nor clear. Ongoing debates over funding and patient expense between various state bodies throughout the epidemic era, indeed, even in the midst of the 1953 epidemic, indicate that Manitoba's policies were anything but clear.

Chapter four functions as a topical bridge between the examination of the public health response and the examination of the transformative nature polio had on nursing. It examines medical and nursing responses to polio from the beginning of the epidemic era until the late 1930s, and suggests that these responses – specifically the focus on preventing deformities through rest, immobilization, and surgery – were informed largely by mainstream ideas about people with disabilities. This chapter then examines the nursing care provided by nurses at the KGH in Winnipeg during the early part of the epidemic era. Like other hospitals of this time period, student nurses performed the bulk of the labour at the KGH. This chapter examines the

records of the Winnipeg Municipal Hospitals, including those of the Nursing Superintendent and the records from the affiliated nursing courses offered at the KGH to student nurses to suggest that, like the public health response to the disease, providing instruction to student nurses about polio only occurred when it was clear an epidemic was already underway and it focused heavily on both the convalescent serum, privileged by public health officials, and the immobilization of patients, privileged by the medical community.

Chapter five examines the changing nature of the work performed by nurses and the implications these changes had in terms of the labour they were expected to perform and the gendered ideologies about nurses and work during epidemics. I argue that the introduction of two new technologies of care – the respirator in 1936 and the Kenny method in 1941 – transformed greatly nurses' work on the polio wards of both the KGH and Winnipeg's Children's Hospital. In the early part of the epidemic era, nurses, for the reasons outlined in chapter four, were limited in the care they could provide. The introduction of the respirator meant, however, that nurses had to engage with sophisticated new technologies. Caring for patients in respirators, particularly those who also had tracheotomies, was extremely time consuming and considerably more involved than ensuring that immobilized patients were getting enough rest. In 1941, Dr. Bruce Chown, frustrated by the lack of progress made against polio, travelled to Minneapolis to observe the work being done by Elizabeth Kenny, an Australian nurse who did not think the mainstream method of immobilization was useful to polio patients. Chown invited Kenny to demonstrate her method in Winnipeg, where it was implemented in the middle of the 1941 epidemic. This development was profound especially for patients, but I argue that it also transformed the work of nurses, particularly the amount of labour they were required to perform. The latter part of the epidemic era was characterized by growing nursing shortages. Physicians publicly pleaded for

nurses and retired nurses to volunteer their time, leading to the perception that reluctance on the part of nurses to enter the isolation wards during each epidemic was the cause of the shortages. In this chapter I use the protracted and public 1953 nursing shortage to argue that nurses were not reluctant to work on the wards. Rather, the combination of the two new technologies of care, combined with the lingering gendered ideology that women were biologically suited to care for the ill during times of emergency all contributed to the nursing shortage.

Chapter six examines the development of rehabilitation programs for both adults and children with polio-related disabilities in the later part of the epidemic era. I first use the example of a sanatorium for “crippled children” in British Columbia which focused heavily on the educational and vocational rehabilitation of children so that they would become productive citizens to indicate what some early programs were like. These early programs were informed by discourses about disabilities, examined in chapter three, but by the post-war period the rehabilitation ideology had shifted to focus on the emotional rehabilitation of children particularly through summer camps and highly structured programs led by experienced social workers. The discourses developed by these experts indicate that the focus was on developing emotionally stable normative future citizens. Rehabilitation for adults focused on vocational programs, and was informed by gendered ideologies about work and family, particularly with the introduction of medical social workers to the wards. The successful rehabilitation of males hinged on their ability to come to terms with their disability and to find paid work that would allow them to feel useful. Women too were expected to accept their limitations while still performing their gendered duties as wives and mothers. The rehabilitation of polio patients in the later years of the epidemic era was premised on gendered ideas about creating good citizens and

worked to transform polio patients from people with an illness into people with disabilities who ostensibly needed professional advice or assistance.

The discursive transformation of people with polio into people with disabilities had many important implications for the individuals who contracted the disease during Manitoba's epidemic era. Chapter seven, which is based on interviews conducted with members of Manitoba's PPN, examines the lived experiences of people with polio-related disabilities. Gender often intersected with ideas about disability to inform the experiences of the PPN interviewees, and while often times their choices were circumscribed by overarching beliefs about disability, often broader gender-based ideologies did as well. Nevertheless, the PPN interviewees were able to express their agency in multiple ways and here I examine their experiences with school, work, and parenting, to argue that despite the ideologies about people with disabilities, and despite the literature that suggests polio ruined the threads that hold families together, these individuals negotiated their lives in multiple ways, both as children and adults.

One of the main arguments articulated in this project is the necessity of widening the lens through which we view epidemic polio. This allows for a nuanced examination of the myriad ways it affected people's lives long after the outbreaks abated. Keeping a family together, or creating one, was a difficult process for people with polio-related disabilities. Examining the limitations and capacities of the PPN interviewees in terms of education, work and parenting is a useful way to understand their lived experiences. Conceptions of motherhood and the interviewees' experiences with motherhood are of particular interest here. While I examine some of the strategies women with polio-related disabilities utilized while parenting their children, the adoption narratives of three of the women were particularly fruitful as they reveal the ways ideas



about gender and disability worked to constrain the choices of women with visible markers of disability. Negotiating polio, its physical effects, and the discourses surrounding it was not easy, particularly for those with more severe disabilities, but I conclude that polio was not as destructive as is often claimed. Regardless of how the lives of the interviewees unfolded, I argue, following Reaume, that the lives and experiences of people with disabilities, long hidden from the mainstream world and history, deserve to be included in the broad fabric of Canadian social history.

## **Chapter Two: “The Saddest of Diseases”: An Overview of Manitoba’s Era of Polio, 1928 – 1953<sup>1</sup>**

This dissertation suggests that examining the epidemic era as a whole reveals shifts in the way polio was managed, approached, constructed, and experienced. The multiple epidemics that occurred in Manitoba lend themselves to a critical study of the many ways Manitobans were affected by the disease, over the short and long term. In the introduction, I established the importance of examining the epidemics together rather than separately. Approaching polio from the vantage point of the epidemic era is useful because it reveals many of the transformations, changes, and continuities that would not be observable by looking at one epidemic alone. Manitoba’s engagement with polio was severe and protracted. During the epidemic era, the province did not experience even one polio-free year and epidemics occurred in 1928, 1936, 1941, 1947, 1952 and 1953. In 1941, Manitoba had over half of the nation’s reported cases, with 969 out of 1881. The size and severity of the 1953 epidemic – the national case rate per 100,000 was 59.9 but in Manitoba it was 286.4 per 100,000 – was made worse only by the large epidemic in the year preceding it.<sup>2</sup> Using provincial Department of Health and Public Welfare (DHPW) Annual Reports, City of Winnipeg archival records, articles from medical journals, and two special reports on polio created in Manitoba in 1928 and 1941, this chapter outlines each epidemic and highlights the ways provincial and civic health officials approached polio during the epidemic era. It traces the geographical and temporal contours of the major epidemics during the epidemic era in order to contextualize the thematic approach of the rest of the dissertation.

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<sup>1</sup> The phrase “the saddest of diseases” is taken from Morley R. Elliott, “Report of Poliomyelitis Outbreak in Morton Municipality, 1936,” *Manitoba Medical Association Review* (October 1936): 200. Elliott suggests he is paraphrasing Simon Flexner, however, no reference is given.

<sup>2</sup> Christopher Ruttly “Poliomyelitis in Canada.” Please see appendices on pages 396-399 of Ruttly for further information concerning statistical representations of the polio epidemics in Canada.

Table 2: Polio in Manitoba, 1927 – 1955<sup>3</sup>

Year	Reported Cases	Case Rate/ 100,000
1927	6	0.9
1928	434	65.4
1936	525	73.8
1937	267	37.3
1938	160	22.2
1941	969	132.7
1944	99	13.6
1947	587	79.4
1948	142	19.0
1949	119	15.7
1952	839	105.1
1953	2,317	286.4
1954	114	13.9

Although polio was not unheard of in the 1910s and 1920s, Manitoba’s first large scale epidemic did not occur until 1928. Confirmed cases of polio had been reported in Manitoba in previous years but they were few and far between. As Table 2 indicates, only six cases were confirmed in 1927, and there are “no complete epidemiological reports on poliomyelitis in Canada prior to 1924.”<sup>4</sup> Epidemics in British Columbia and Alberta in 1927, with 182 and 313 cases respectively, might have served as an indication of what was to come in Manitoba, but officials were not prepared for an outbreak in 1928. Nevertheless, between late June and early November of that year, over 430 confirmed cases were reported to health authorities across the province. In the first week of July 1928, reports of cases of poliomyelitis in the city of Winnipeg began to surface. This news was not necessarily troubling to Dr. Edward W. Montgomery, the minister of the DHPW. Although the department had been created just that year, a provincial board of health, whose mandate was to function during “any formidable epidemic, endemic or

<sup>3</sup> All figures from Ruddy, “Poliomyelitis in Canada,” 396-399.

<sup>4</sup> O.J. Day, “Poliomyelitis in Manitoba in 1928,” *CMAJ* (1929): 554.

contagious disease,” had existed since 1893.<sup>5</sup> Despite the lack of a formal provincial department, Manitoba, particularly under the Board of Health, had experience dealing with epidemic disease. Montgomery, who had been a school teacher prior to entering medicine, was, in 1919, named the first “professor of medicine in the new University of Manitoba Faculty of Medicine” and he, along with Dr. Gordon Bell, had been on the Board of Health when influenza became epidemic in Winnipeg in the late fall of 1918.<sup>6</sup> Jones argues that other than Bell, all the “prominent physicians on the Provincial Board of Health avoided any visible involvement” in managing that epidemic. Jones suggests that they were, in fact, “remarkable for their absence.” Nevertheless, the Provincial Board of Health “declared Spanish influenza a contagious or infectious disease,” giving authorities the power to enforce a number of measures including isolation, disinfection, and the banning of public meetings.<sup>7</sup>

In light of Montgomery’s previous experience with epidemic disease, it is perhaps not surprising that the newly formed DHPW did very little when faced with increasing numbers of polio cases in the summer of 1928. By the end of July, with fourteen cases in Winnipeg, four in the suburbs, and only three in the rest of the province, members of the department may have been hoping the small outbreak would simply peter out.<sup>8</sup> By mid-August, it was clear that polio was not going to disappear, and under Montgomery, the DHPW did what its predecessor, the Board of Health, did in 1918: it passed the responsibility on to others. This time it was to the Medical Research Committee (MRC) of the University of Manitoba’s Faculty of Medicine,

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<sup>5</sup> R. Mitchell “Public Health in Manitoba” in *The Development of Public Health in Canada* ed. R. D. Defries (Toronto: Canadian Public Health Association, 1940), 90.

<sup>6</sup> Jones, *Influenza 1918*, 42.

<sup>7</sup> Jones, *Influenza 1918*, 43; Jones, “Searching for the Springs of Health,” 50.

<sup>8</sup> Mary McKenzie, A. T. Cameron, and A. J. Douglas, “The Distribution of Cases in the Manitoba Epidemic of Poliomyelitis, July-October 1928” *Province of Manitoba Report on the Poliomyelitis Epidemic in Manitoba – 1928* (Winnipeg: Great-West Life Assurance Company, 1929), 23.

which was comprised of a number of notable professors and physicians, including Drs. Bruce Chown, C. R. Gilmour, Fred Cadham, and A. T. Cameron. The MRC was asked to control, contain, and study the epidemic.

The polio outbreak in 1928 unsettled Winnipeggers deeply even though the city was not known for its commitment to health and cleanliness. Prior to the twentieth century, “matters of public health were considered to be of little importance,” and the city suffered from multiple epidemics of typhoid fever, which, as Alan Artibise notes, was commonly referred to as “Red River Fever.”<sup>9</sup> Nevertheless, in the early 20<sup>th</sup> century some civic authorities began to pay closer attention to matters related to public health and, while problems still remained, a new epidemic disease, particularly one which left young children paralyzed, was concerning. In 1928, there was nothing that could be done for individuals who contracted respiratory or pharyngeal polio; until the introduction of respirators in 1936 those individuals died almost immediately. The forty-three deaths attributed to polio in Manitoba in 1928 were most likely due to these types of polio and they certainly contributed to the unease in Winnipeg; however the paralysis which often accompanied the illness was particularly disturbing.<sup>10</sup> Dr. O. J. Day, a member of the MRC and a practicing physician at Winnipeg’s Children’s Hospital, spoke to the concerns engendered by polio, suggesting that while other diseases had noticeably higher death rates, “the public is decidedly perturbed by the knowledge that poliomyelitis is about.”<sup>11</sup> Day further expanded on this idea, writing “I do not believe that there is any disease that can frighten the

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<sup>9</sup> Artibise, *Winnipeg: A Social History of Urban Growth*, 227 and 228. See also “Saints and Sanitarians.”

<sup>10</sup> In 1928, Manitoba’s death rate per 100,000 was 6.5, a number not reached again until 1953, when the death rate was 11.2. The forty three deaths in Manitoba in 1928 would almost certainly have been due to pharyngeal or respiratory paralysis. Ruttly, “Poliomyelitis in Canada,” 398 and 399.

<sup>11</sup> Day, “Poliomyelitis in Manitoba in 1928,” 555.

people so profoundly, as poliomyelitis. In Winnipeg, last year, it incited a terror among them much like that caused by the air raids during the war.”<sup>12</sup> Day was born in 1891 and graduated from the University of Toronto medical school in 1914. Like many other physicians of his era, he had joined the Canadian Expeditionary Force and served overseas during the Great War, winning a Military Cross for bravery at Vimy Ridge and a bar was added to it for further acts of bravery at Ypres.<sup>13</sup> Day was clearly cognizant of the horrors and fear associated with the Great War and for him to compare polio to wartime anxieties indicates that there was more than a sense of unease in Winnipeg during the 1928 epidemic.

Polio did not solely frighten the general public. It also stymied Winnipeg’s physicians and health officials, many of whom presumed the poorest communities in the city would be the hardest hit. This was consistent with the popular view of the disease in the early part of the epidemic era. As Naomi Rogers explains, it was assumed that infantile paralysis, as polio was often referred to in the early years of the epidemic era, was a disease that was generated in the slums and poor parts of a city.<sup>14</sup> Health officials preferred that children be cared for and isolated in their homes, and as Dr. A.J. Douglas, Winnipeg’s long-serving city Health Officer stated, only “cases where home surroundings were not satisfactory were hospitalized.” A satisfactory home was one where presumably there was enough space to establish a sick room which would have to undergo a “thorough cleansing, sunning and airing,” once the individual recovered.<sup>15</sup> The

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<sup>12</sup> Day, “Poliomyelitis in Manitoba in 1928,” 555.

<sup>13</sup> University of Manitoba Faculty of Medicine Archives (UMFMA), Biographical Series D, Oswald Day, 219, *Winnipeg Clinic Quarterly*, 4 (December 1952): 118-9.

<sup>14</sup> Rogers, *Dirt and Disease*.

<sup>15</sup> A. J. Douglas, “Methods of Control in the City of Winnipeg,” in *Report on the Poliomyelitis Epidemic in Manitoba - 1928*, 71. Douglas had been the Health Officer for the City of Winnipeg since 1900 and was fully convinced of the connection between ill-health and the largely immigrant population of the city’s North End. Jones, *Influenza 1918*, 34-5.

crowded homes in the city's North End, long viewed as a hive of dirt and disease, would not have had the space nor the amenities to comply with those directives.<sup>16</sup>

Civic health officials believed that polio would be most pronounced in the North End. The form the Winnipeg Health Department inspectors filled out upon visiting the home of each confirmed case is instructive. Besides identifying the individual's symptoms, inspectors were asked to note the number of occupants on the premises, the sanitary conditions of the home and yard, whether or not they saw flies, whether the family bought their food from stores or "hawkers," and if the home was "detached" or not.<sup>17</sup> The Winnipeg Health Department documented the geography of the outbreak by placing pins on a map of the city, with each pin representing an individual case. Douglas had used this method, known as the "spot system," during the influenza epidemic.<sup>18</sup> In 1928, the spot system was used to map the polio epidemic, and once again, the case distribution confounded officials. Upon considering the general distribution of cases throughout Winnipeg, the MRC conceded that it "would be extremely difficult to relate the incidence of cases in different parts of the City of Winnipeg and its suburbs to the density of population," because "*certain densely populated areas* of the city were practically free" of cases.<sup>19</sup> The long-standing ideology concerning connections between poverty and disease informed physicians and health officials in Winnipeg, and they were surprised that

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<sup>16</sup> A quote from Alan Artibise sums up this point of view succinctly. An early twentieth century civic Board of Health Report indicated that in the North End, "the filth, squalor, and overcrowding among the foreign elements is beyond our power of description." Artibise, *Winnipeg: A Social History of Urban Growth*, 229. Others have analysed Winnipeg's elite and ruling classes' construction of the North End as diseased. See for example, Jones, *Influenza 1918*, 35.

<sup>17</sup> "Acute Anterior Poliomyelitis form," in A.J. Douglas, "Methods of Control in the City of Winnipeg," 72.

<sup>18</sup> Jones, *Influenza 1918*, 46 and 47.

<sup>19</sup> McKenzie, Cameron, and Douglas, "The Distribution of Cases in the Manitoba Epidemic of Poliomyelitis," 34. A copy of the map used to plot the cases is found on page 33 of the *Report*. Italics mine.

cases were spread throughout the city and its suburbs. Reflecting a year later upon the 1928 epidemic, Day suggested that “we must reconcile ourselves to the fact that we cannot escape an annual visitation of [polio] at some point in our large country.”<sup>20</sup> Day, who died in May 1952, lived to see that happen.

The summer of 1936 was dry and hot in Manitoba. In the midst of the Depression, the daily newspapers brought Manitobans reports of low wheat prices and rumblings of war from overseas. In the spring of 1936, Manitobans were concerned with crops, municipal aid, unemployment, and international affairs. Polio was not a concern and the first few cases reported in the spring of that year were not enough to worry the authorities. Health officials knew that since it had become a reportable disease in 1924, polio appeared in the summer months every year, rarely reaching epidemic numbers. In the two years following the 1928 epidemic, for example, fifty-five and forty-five cases had been reported, and “cases were reported in each of the succeeding years up to 1936, [although] the figures were relatively small.”<sup>21</sup> By December of 1936, though, when the last case was reported to the DHPW, 539 Manitobans had contracted polio in one of the largest epidemics of the disease the country had seen up to that point, with two waves that were distinctive both temporally and geographically.

The previous epidemic in Manitoba had been centred almost exclusively in the city of Winnipeg; however, the 1936 epidemic differed with more cases presenting in rural parts of the province. It was concentrated exclusively in one geographic area, the Rural Municipality (RM) of Morton in southwestern Manitoba, for just under two months, at which time cases began occurring in other locales across the province, with the peak occurring in the last week of

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<sup>20</sup> O. J. Day, “Poliomyelitis in Manitoba in 1928,” 554.

<sup>21</sup> C. R. Donovan, “Poliomyelitis in Manitoba 1936,” *The Manitoba Medical Association Review* (August 1937): 143.



September. By the time the epidemic waned in the late fall of 1936, over eighty municipalities across the province had confirmed cases of the disease.<sup>22</sup> The first wave, centred in the southwestern part of the province, lasted from June until August. The RM of Morton, including the town of Boissevain, was at the centre of the first wave of the epidemic. Founded in 1885, Boissevain is south-west of Winnipeg, south of Brandon, and not far from the international border with the United States. The first few cases in the RM of Morton, which in 1936 had a population of 2,666, were reported in mid-June and by the end of that month it “became apparent that the disease would likely reach epidemic proportions.”<sup>23</sup> The province did not call on the MRC to spearhead the fight against the disease in 1936 as it had in 1928; nevertheless, action was taken. By late July, an assistant provincial epidemiologist was sent to Boissevain where he “was given charge of the public health aspects of the situation, with power to insist on rigid observance of quarantine regulations” and asked to liaise with “local practicing physicians.”<sup>24</sup> Despite the implementation of these measures, the number of cases continued to rise unabated. By 9 August, thirty-six cases had been reported, and by the time the epidemic subsided, several deaths had occurred, and sixty-one confirmed cases were reported in the area, resulting in an almost unbelievable case rate of 2,000 per 100,000.<sup>25</sup>

In 1928, the majority of cases occurred in very young children; however, that was not the case in the RM of Morton in 1936. According to Dr. Donovan, the provincial epidemiologist, the first case was a sixteen year old boy, and the next two cases were that of a nineteen year old and

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<sup>22</sup> Polio was reported in a total of 84 municipalities in Manitoba during the 1936 outbreak. Manitoba, Department of Health and Public Welfare (hereafter DHPW), *Annual Report 1935-1936* (Winnipeg: King’s Printer, 1938), 60.

<sup>23</sup> F. W. Jackson, “Control Measures,” in “The 1936 Epidemic of Poliomyelitis in Manitoba” *Canadian Public Health Journal* 28,8 (August 1937): 363.

<sup>24</sup> F. W. Jackson, “Control Measures,” 363.

<sup>25</sup> C. R. Donovan, “Epidemiological Features,” in “The 1936 Epidemic of Poliomyelitis in Manitoba” *Canadian Journal of Public Health* 28, 8 (August 1937): 371.

his sister, who was “employed as a school teacher.”<sup>26</sup> The age of these three individuals was not an anomaly: of the sixty-one cases Donovan counted in the RM of Morton, fifty percent were older than fourteen and nine were over twenty-five. This tendency to affect older individuals was somewhat unique to the RM of Morton: of the eighty four cases in Winnipeg, approximately 70% were aged nine and under, although the majority of them were between five and nine rather than under the age of five.<sup>27</sup> The medical community attributed this to a lack of immunity in rural Manitoba as Winnipeg had sustained a number of cases in 1928 while Boissevain had not.

The Great Depression complicated the fight against polio in the Morton-Boissevain area. Established as a railway town by the Canadian Pacific Railway, Boissevain quickly became a small railway hub: in the first two decades of the twentieth century, three other rail lines, including the Great Northern, appeared, allowing farmers in the surrounding areas to ship grain directly to the United States.<sup>28</sup> By the 1930s, the town’s fortunes reversed. In the early 1930s, the railway companies began to leave the area, and the town “began a steady decline.” The Great Northern’s last passenger train left town on 17 June 1936, the day before the first case of polio was reported.<sup>29</sup> The severe economic downturn meant that many in the community could ill-afford to pay for medical services. This hampered the public health initiatives as medical officials insisted, much as they had in 1928, that a physician needed to be called as early as

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<sup>26</sup> C. R. Donovan, “Epidemiological Features,” 368.

<sup>27</sup> Table II “Age Grouping of Cases in Various Areas 1936 and 1928” in C.R. Donovan, “Epidemiological Features,” 371.

<sup>28</sup> Gail McCallum, “Historical Tour – Boissevain, Manitoba,” *Manitoba History* 20 (Autumn, 1990): [http://www.mhs.mb.ca/docs/mb\\_history/20/boissevain.shtml](http://www.mhs.mb.ca/docs/mb_history/20/boissevain.shtml)

<sup>29</sup> The information about the train is found in Gail McCallum, “Historical Tour – Boissevain, Manitoba,” *Manitoba History* 20 (Autumn, 1990); the “onset” of the first individual’s symptoms “was believed to be,” according to Dr. Donovan, “on June 18<sup>th</sup>.” See Donovan, “Epidemiological Features,” 369.

possible in order to prevent polio-related paralysis. Dr. F. W. Jackson, the province's Deputy Minister of Health, decried the population's reluctance to contact a physician:

A detailed study, in the field, revealed that far too many people delayed calling a physician until the onset of paralysis. It was not that medical aid was not available, but that the people in this particular district, which is part of the "dried-out" area, would not call a doctor because they did not have the money to pay for his services.<sup>30</sup>

Jackson's argument that people were reluctant to call a physician until paralysis was obvious ignores the fact that most lay people would not have considered polio *until* the onset of paralysis. The vague early symptoms mirrored those of a cold, and paralysis was how individuals recognized the presence of polio.

Despite the undercurrent of blame, the province was intent on ensuring people felt they could contact a doctor. On 1 September 1936, the Manitoba *Free Press* reported that Jackson advised the Minister, I. B. Griffiths, that the best way to beat the "scourge" was to convince the municipal councils to offer "free diagnosis and treatment of infantile paralysis."<sup>31</sup> It is not clear how forceful the province was in this context, but a number of municipalities offered free diagnosis and treatment and area physicians, who under the scheme accepted a "special scale of fees, which was about two-thirds of the regular charges," paid by the municipalities.<sup>32</sup> The general population was then notified in a number of ways, including advertisements in local newspapers, post offices, and by telephone. Manitobans who resided in municipalities that participated in the scheme were notified that:

Any resident of this municipality who believes he or any member of his household may be developing infantile

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<sup>30</sup>F.W. Jackson, "Control Measures," 363

<sup>31</sup>"Free Treatment of Paralysis is Urged by Jackson," Winnipeg *Free Press*, 1 September 1936, 5.

<sup>32</sup>F.W. Jackson, "Control Measures," 364

paralysis, the symptoms of which are upset stomach, headache, fever, rapid pulse, and stiffness in the neck or back, has the right to call his own doctor at the expense of the municipality to make a visit to decide what the illness is. If it should be infantile paralysis, the municipality will also be responsible for the cost of any further medical attention required.<sup>33</sup>

Rutty characterizes this arrangement as a “unique achievement, particularly as the province did not cover the costs and local governments were under intense financial pressure for basic relief in one of the worst years of the Depression.”<sup>34</sup> Many families were likely quite appreciative to be relieved of the financial pressures of a doctor’s call; however, the lack of financial assistance from the province can be read as one of many attempts to offload costs onto municipalities during the Depression.

Along with the lack of financial assistance from the provincial government, distance from urban centres meant rural physicians were at a distinct disadvantage during the 1936 polio outbreak. At a September 1936 meeting of the Northwest Manitoba Medical Association, Dr. V. F. Bird recounted how “medical science battling with inadequate equipment and without hospital facilities” fought “a good fight” against polio in the RM of Morton.<sup>35</sup> Dr. Bird, who also served as the mayor of Boissevain during the 1930s, was not exaggerating: his personal home was the only ‘hospital’ in the RM of Morton until one, comprised of thirteen beds and two cribs, was built in 1948.<sup>36</sup> The lack of medical facilities hampered the care of those who contracted polio in rural Manitoba. When young Duncan Henderson of Boissevain contracted a “severe form” of polio, he had to be transported to Ninette Sanatorium, approximately fifty kilometres north-east,

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<sup>33</sup>F.W. Jackson, “Control Measures,” 364

<sup>34</sup>Rutty, “Poliomyelitis in Canada,” 100.

<sup>35</sup>“Doctor tells of game fight with paralysis in Boissevain area” *Winnipeg Free Press*, 11 September 1936, 3.

<sup>36</sup>Gail McCallum, “Historical Tour – Boissevain, Manitoba,” *Manitoba History* 20 (Autumn, 1990). [http://www.mhs.mb.ca/docs/mb\\_history/20/boissevain.shtml](http://www.mhs.mb.ca/docs/mb_history/20/boissevain.shtml)

for “special” treatment. After treatment in Ninette, he was sent home. Shortly thereafter, however, “he complained of a pain in his neck and within a few minutes he was dead.”<sup>37</sup> Opened in 1910 for the treatment of individuals with tuberculosis, the Ninette Sanatorium owned one of the earliest types of respirators, indicating that the boy had been taken there in a desperate attempt to save his life. With thirty-seven deaths and a death rate of 5.2 per 100,000 population, it is clear that the grief this boy’s family undoubtedly experienced was replicated multiple times in the summer 1936.<sup>38</sup>

The reports from southwestern Manitoba began to decrease in late August 1936 but that was not the end of the epidemic. As case reports dwindled in the Morton-Boissevain area, they increased in other areas in the province. By 1 September, provincial health officials acknowledged “the general extension [of the outbreak] from Morton was East and North-East.”<sup>39</sup> Beyond these geographic waves, the 1936 epidemic was characterised by a distinctive rural-urban divide. With 83 of the 539 total provincial cases, Winnipeg was not as hard hit as the rest of the province and in his 1937 report on the disease, Donovan theorized that this uneven distribution had much to do with prior “opportunities for the development of immunity” in Winnipeg, which “had 233 cases in 1928 while no case of the disease had been reported in the Morton area for at least twenty years.”<sup>40</sup>

Polio once again became epidemic in the summer of 1941 and two distinct occurrences that year made it a unique outbreak. The 1941 outbreak was characterized by two main features:

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<sup>37</sup> “Paralysis Death List in Province Added to Tuesday” *Winnipeg Free Press*, 26 August 1936, 1.

<sup>38</sup> Information on deaths and death rates is taken from Tables 3 and 4 in Ruddy, “Poliomyelitis in Canada,” 398 and 399.

<sup>39</sup> C. R. Donovan, “Anterior Poliomyelitis – Manitoba 1936,” *Manitoba Medical Association Review* (October 1936): 204.

<sup>40</sup> Donovan, “Epidemiological Features,” 371

the arrival of Sister Elizabeth Kenny and her ‘unorthodox’ treatment for patients, and a concurrent outbreak of encephalitis. This combined epidemic of polio and encephalitis led to considerable publicity and a report based on a symposium arranged by the DHPW. The double epidemic placed Manitoba in the spotlight, attracting significant national and international attention. Health officials from “all over Canada and the United States,” including the Director of the NFIP, descended on Manitoba to observe cases and meet with provincial medical bureaucrats.<sup>41</sup> J.P. Leake, the American Surgeon-General, and Dr. John R. Paul, who was involved in polio research at the Yale School of Medicine, both visited Winnipeg to observe and offer any necessary assistance. The rarity of the double epidemic, combined with the similarity in the symptoms of polio and encephalitis made Manitoba the place to be in 1941, at least in the world of medico-scientific disease prevention. Dr. C. R. Donovan, then the province’s Medical Director of Health, and Dr. Maxwell Bowman, the acting director of Manitoba’s division of preventative medical services, explained:

The outbreak in 1941 differed very little from those in previous years but is of interest mainly because there appeared concurrently more than 500 cases of epidemic encephalitis and also because considerable attention was given to a different treatment technique for those patients showing muscle involvement following the poliomyelitis.<sup>42</sup>

There were some important epidemiological differences between the 1941 epidemic and the previous outbreaks. Over 950 Manitobans were diagnosed with polio, a considerable increase

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<sup>41</sup>DHPW, *Annual Report for the Calendar Year 1941*, 49.

<sup>42</sup>C. R. Donovan and Maxwell Bowman, “Some Epidemiological Features of Poliomyelitis and Encephalitis, Manitoba, 1941,” in *Poliomyelitis and Encephalitis Manitoba, 1941* (Winnipeg: Department of Health and Public Welfare, 1942), 6.

compared to the previous two epidemics, with 434 and 525 cases respectively.<sup>43</sup> Despite the higher case rate, the death rate was lower than it had been in the two previous epidemics, and it was shorter, lasting from June until October, with the majority of cases occurring in the two month period from July 15<sup>th</sup> to September 16<sup>th</sup>.<sup>44</sup> The geography differed as well, with the disease first becoming epidemic in Winnipeg and its suburbs before spreading through the rest of the province. The RM of Morton was spared in 1941; however, there were more rural than urban cases.

By July 1941, as the polio case rate increased the DHPW created an Advisory Committee. Comprised of physicians and officials already knowledgeable about polio, the Advisory Committee resembled the 1928 Medical Research Committee. Indeed, many members of the 1941 Advisory Committee, particularly Drs. Bruce Chown, O. J. Day, and F. T. Cadham had been involved directly in the 1928 epidemic. Despite the similarities in personnel, the thrust of the Advisory Committee differed significantly. Rather than working on a research problem connected to the epidemic, the Advisory Committee focused on issues pertaining to hospitalization, controlling “newspaper publicity,” and the provision of muscle tests to all those with confirmed cases of the disease.<sup>45</sup> The Advisory Committee, which met weekly for the

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<sup>43</sup> There is some discrepancy in the official records as to the exact number of people diagnosed with polio in 1945. The DHPW *Annual Report* first states that 954 cases were confirmed, although that number was reduced by one later in the report. Donovan and Maxwell posit that there were 966 cases of polio, whereas Rutty, who relied on Dominion Bureau of Statistics numbers, puts the number at 969. The discrepancies are statistically insignificant, and most likely due to probable cases being erroneously confirmed as polio, as well as some overlap between polio and encephalitis, which often presented with similar symptoms. See for example DHPW, *Annual Report for the Calendar Year 1941*, 9 and 48; C.R. Donovan and Maxwell Bowman, “Some Epidemiological Features of Poliomyelitis,” 7; Rutty, “Poliomyelitis in Canada,” 397.

<sup>44</sup> In Manitoba, there were twenty deaths from polio in 1941, with a death rate of 2.7 per 100,000 population. See Tables 3 and 4 in Rutty, “Poliomyelitis in Canada,” 398 and 399. The length of the 1941 epidemic is detailed in DHPW, *Annual Report for the Calendar Year 1941*, 48.

<sup>45</sup> F. W. Jackson, “Introduction,” in *Poliomyelitis and Encephalitis Manitoba, 1941*, 2-3.

duration of the outbreak, “decided to send a circular letter to all the doctors in the province informing them of the probable epidemic; suggesting that tonsillectomies be discouraged until the epidemic was over; and giving instruction on the disinfection of stools and urine” of all infected persons. The Committee, in a bid to assert their control over the developing situation, placed a “uniform advertisement” in all “local newspapers in the province” reminding parents to “seek medical advice for any illness which might occur amongst their children.”<sup>46</sup> Despite these measures, close to 1,000 Manitobans contracted the disease during this wartime epidemic.

Polio did not become epidemic in Manitoba again until 1947, and from a medical perspective, that outbreak was seemingly unremarkable in both length and virulence. The 1947 outbreak began in mid-July and was over by the end of September. With 587 cases, it was comparable to the 1936 outbreak, when 525 individuals contracted polio. The death rate, however, was significantly lower, with a total of seven deaths in the province.<sup>47</sup> Despite the daily attention to the epidemic, and the increasing number of cases in late July and August, the press consistently referred to the outbreak as being mild in nature.<sup>48</sup> This belief was held by provincial health officials, who considered the epidemic to have been “comparatively mild.”<sup>49</sup> This characterization was based on the number of individuals with residual paralysis. The province indicated that in 1948, out of all the patients they had data for, only seven had been left with

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<sup>46</sup> Jackson, “Introduction,” 3.

<sup>47</sup> The numbers are taken from the tables in the Appendix of Ruddy, “Poliomyelitis in Canada,” 397-99. Manitoba’s Annual Report pegged the total number of cases in 1947 as 599. The difference between 587 and 599 is not great, and is most likely due to reporting discrepancies or the fluidity of the categories of suspected and confirmed cases. The province, however, reported eight deaths: four males and four females. DHPW, *Annual Report, 1947*, 107.

<sup>48</sup> See for example, “Infantile Paralysis Committee Planned,” *Winnipeg Free Press*, 14 August 1947, 3; “Province Working to Aid Under-Staffed Hospitals,” *Winnipeg Free Press*, 18 August, 1947, 6; “Polio Cases in Manitoba Total 290; City has 97,” *Winnipeg Free Press*, 20 August 1947, 3; “Seven New Polio Cases Reported,” *Winnipeg Tribune*, 24 July 1947, 1; “Manitoba Polio Cases Now 59,” *Winnipeg Tribune* 2 August 1947, 1.

<sup>49</sup> DHPW, *Annual Report, 1947*, 107.



“marked paralysis,” fifteen had “moderate paralysis,” eighty-eight had “slight paralysis or weakness,” but the majority – 380 individuals – had “no paralysis or made a complete recovery.”<sup>50</sup> The *Annual Report* does not indicate the criteria which they followed for these categories; nevertheless, this indicates the official preoccupation with disabilities.

Even though the provincial and civic health officials downplayed the notion that a polio outbreak was imminent, they still had to contemplate a possible epidemic. In early July, Dr. Morley Loughheed, Winnipeg’s health officer, stated that he did not think there would be an epidemic, nor did Bruce Chown, although he qualified his opinion by stating that medical personnel “fear an epidemic every year.”<sup>51</sup> As the number of confirmed cases began to rise, health officials seemed less sure of their prediction that polio would not become epidemic in the province. Medical authorities, according to an early August report in the *Winnipeg Tribune*, “were still hopeful, but not so sure that the disease might not reach near epidemic proportions.”<sup>52</sup> By late July, health officials were more attuned to the developing situation, and members of the provincial and civic health departments met with officials from the Children’s and Municipal Hospitals to discuss the growing outbreak.

Despite this initial meeting and the mounting evidence of an epidemic, it was not until 15 August, by which time approximately 200 cases had been reported, that the province announced the creation of an Advisory Committee. The Advisory Committee consisted of physicians and administrators who had experience with polio epidemic: Dr. F. W. Jackson, the provincial Deputy Minister of Health, was the chair, and the other members were Dr. Dugald McIntyre, Superintendent of the Winnipeg Municipal Hospitals, Dr. W. Gant, Superintendent of the

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<sup>50</sup>DHPW, *Annual Report, 1947*, 108.

<sup>51</sup>“City Doctor’s Opinion: Polio Epidemic Scare Unfounded.” *Winnipeg Tribune*, 9 July 1947, 2.

<sup>52</sup>“Manitoba Polio Cases Now 49,” *Winnipeg Tribune*, 2 August 1947, 1.

Children's Hospital, Dr. Roper Cadham from Winnipeg's Health Department (and son of Dr. F. T. Cadham, the previous head of the provincial laboratory), and Dr. C. R. Donovan, from the provincial Division of Health.<sup>53</sup> The Advisory Committee acted in much the same manner as it had in 1941, overseeing the developing situation, and reiterating the need for an early diagnosis. To this end, they made sure that rural physicians understood that "consultative service was supplied, as usual, by the DHPW to all physicians outside of the Winnipeg area who requested the same."<sup>54</sup> Dr. Jackson, the chair of the Advisory Committee, toured the province in late August to assess the overall polio situation. At the time of his tour, there were close to 400 cases scattered throughout the province and on his return to Winnipeg, Jackson assured the press and public that the epidemic was, indeed, mild in so far as there was little residual paralysis.<sup>55</sup> Shortly thereafter, case reports dropped significantly, signalling the end of Manitoba's fourth large polio epidemic.

If officials hoped the moderate 1947 epidemic would be representative of any future epidemics, they were incorrect. The next epidemic, in 1952, registered fewer cases than in 1941, but in terms of virulence and mortality, it was worse than previous outbreaks, and would be surpassed only by the 1953 epidemic. Towards the end of June 1952, the DHPW began to receive reports of polio from around Winkler, a community in the southern part of the province. Health officials believed that an outbreak in an area that had not been affected by the earlier epidemics might stay confined to that location, but by the end of the epidemic "all parts of the province" had been affected.<sup>56</sup> The final count of confirmed cases for the 1952 epidemic was

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<sup>53</sup>DHPW, *Annual Report, 1947*, 108.

<sup>54</sup>DHPW, *Annual Report, 1947*, 108.

<sup>55</sup>"26 Manitobans Stricken in Day," *Winnipeg Free Press*, 29 August 1947, 3.

<sup>56</sup>DHPW, *Annual Report, 1952*, 73.

around the 800 mark.<sup>57</sup> Historically, polio tended to affect children under the age of ten, and the majority of the 1952 cases were in this age range, with 427 out of the 794 cases occurring in children between one and nine but polio in the post-war era was not confined to young children. More older youths and young adults contracted the disease in 1952: 128 patients were between ten and fourteen, and ninety-three were between the ages of twenty and twenty nine.<sup>58</sup>

The first reports from the Mennonite community near Winkler did not suggest to officials that a province-wide epidemic was imminent. Two factors led officials to believe that the outbreak might be confined to that particular community. First was an “earlier outbreak among Mennonites” in the neighbouring province of Saskatchewan. Second was the lack of a history of polio amongst Mennonites. As noted in the Department’s 1952 *Annual Report* “doctors practising in the area [around Winkler] stated that they had never been troubled to any great extent by poliomyelitis in former years.”<sup>59</sup> It was believed that this lack of history made the people of the area more susceptible to polio, leading to the localized outbreak. Despite the largest proportion of cases occurring in that area, the epidemic did spread throughout Manitoba.

The 1952 epidemic was remarkable for both its length and its virulence. Polio usually began in July and dropped off by late September. In 1952, however, case reports began to filter in to the DHPW in June and although the peak week was 13 – 20 September, “really there was a high incidence from July 12<sup>th</sup> until November 15<sup>th</sup>.”<sup>60</sup> The DHPW indicated that while polio did drop off significantly by mid-November, cases continued to be reported until the end of the year.

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<sup>57</sup> The province pegged the number of confirmed polio cases at 794, whereas Ruty, using Dominion Bureau of Statistics records, states the total number of cases in Manitoba in 1952 was 839. See DHPW, *Annual Report, 1952*, 73; and Ruty, “Poliomyelitis in Canada,” 397.

<sup>58</sup> “Table A: Poliomyelitis Cases by Age Groups, Sex and Paralysis,” DHPW, *Annual Report, 1952*, 73.

<sup>59</sup> DHPW, *Annual Report, 1952*, 73.

<sup>60</sup> DHPW, *Annual Report, 1952*, 73.

Ten cases, for example, were reported for the week ending 20 December, and one the following week.<sup>61</sup> In terms of virulence, the 1952 outbreak was characterized by provincial officials as “one of our most severe” with twenty-seven deaths.<sup>62</sup> This placed the death rate at 3.1 per 100,000, which was lower than the death rates recorded in 1928 and 1936, respectively with 6.5 and 5.2 per 100,000.<sup>63</sup>

The 1952 epidemic led to more cases of residual paralysis and pharyngeal, or bulbar, polio than had been seen in previous epidemics. Prior to the 1930s, bulbar polio, which affects the muscles associated with swallowing, was almost always fatal. The introduction of respirators to Manitoba in 1936 gave physicians a chance to prolong the life of those with bulbar polio and they were certainly put to use in 1952. That year the KGH had forty patients in respirators, and half of them needed tracheotomies.<sup>64</sup> For these reasons, hospital administrators and provincial health officials believed that the 1952 polio epidemic had been extremely taxing. The severity of the residual paralysis was also problematic to health officials in the province. As in 1947, officials categorized cases according to degree of paralysis. Without explaining the criteria, provincial health officials noted that 130 individuals had “slight” paralysis, 110 had “moderate” paralysis, and 125 had been left with “marked” paralysis.<sup>65</sup> The severity of the 1952 epidemic could not prepare officials, medical professionals, or the public for what was to happen in the following year.

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<sup>61</sup>“Manitoba 1952 Poliomyelitis Cases by Week of Onset,” DHPW, *Annual Report, 1952*, 74.

<sup>62</sup>DHPW, *Annual Report, 1952*, 73.

<sup>63</sup>“Table 3: Poliomyelitis Death Rates per 100,000 Population Canada and by Province, 1927-1962,” in Ruddy, “Poliomyelitis in Canada,” 398.

<sup>64</sup>Riverview Hospital Archives (hereafter RHA), Winnipeg Municipal Hospitals, Annual Reports, The Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1952, J.A. Hildes, “Report,” np.

<sup>65</sup>DHPW, *Annual Report, 1952*, 75.

Polio had never been epidemic in two consecutive years in Manitoba and an outbreak was not expected in 1953. When case reports began trickling in to the DHPW in June, they were described as normal for that time of year; indeed, a few cases in June were not cause for alarm as Manitoba had not experienced a polio free year since it had become a notifiable disease.<sup>66</sup> Health officials in the City of Winnipeg, however, did feel uneasy about the high number of cases presenting so early in the year. Dr. R. G. Cadham, the city's Deputy Medical Health Officer, wrote that the "sudden appearance of 16 cases in the last week of June, a greater number than had been reported for June in any previous epidemic years, was a disturbing indication that the city was to experience a major epidemic."<sup>67</sup> Cadham was correct. The number of cases continued to increase and the Advisory Committee, created during previous epidemics to provide advice and guidance to health authorities, was re-established in the first week of July.<sup>68</sup> By the end of the year, over 2,300 Manitobans, 763 of them in Winnipeg, had contracted the disease. When case reports finally began to decline in December, the province was, sadly, able to lay claim to having had the worst polio epidemic in Canadian history.<sup>69</sup>

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<sup>66</sup> Rutty, "Table 2: Poliomyelitis Reported Cases Canada and by Province, 1927 -1962" in "Poliomyelitis in Canada," 397.

<sup>67</sup> City of Winnipeg Archives [hereafter CWA], City of Winnipeg Health Department, Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953, R. G. Cadham, "Epidemiology of the Poliomyelitis Epidemic in Winnipeg in 1953 and a Report on the Use of Gamma Globulin in that Epidemic," 15.

<sup>68</sup> The Special Advisory Committee on Poliomyelitis was similar in composition and scope to the Technical Advisory Committee set up during previous epidemics. The full committee is not listed in the press or the Department's Annual Report, but the Chair was Dr. J. D. Adamson, and Dr. Henry Medovy, the vice-chairman. In 1953, the committee met "once a week to discuss various problems and advise the minister [of health and public welfare, H.C. Bell] what their recommendations were." DHPW, *Annual Report – 1953*, 71.

<sup>69</sup> CWA, City of Winnipeg Health Department, Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953, R.G. Cadham, "Epidemiology of the Poliomyelitis Epidemic in Winnipeg in 1953 and a Report on the Use of Gamma Globulin in that Epidemic," 14.

The KGH, an infectious disease hospital that had opened in 1914 as part of the Winnipeg Municipal Hospitals, was the main centre for polio patients during the acute stage of the disease and the 1953 epidemic taxed heavily its staff and resources. At the outset of the epidemic, one hundred beds were available at the KGH, although one quarter of them were still being used by patients from the previous epidemic. It soon became clear to Dr. J. Hildes, the Medical Director of the Municipal Hospitals, that that was not enough and in short order two hundred more beds were cleared in the KGH and Princess Elizabeth Hospitals, forty extra beds had been set aside at the Children's Hospital, and a decision had been made to send all non-paralytic cases home.<sup>70</sup> In previous epidemics, many rural cases had been sent to the KGH, but the sheer size of the 1953 epidemic meant that that was not possible. Rural cases, except for the most serious ones requiring respirators, were re-routed to the General Hospital in Brandon, approximately two hundred kilometres west of Winnipeg. The high number of cases also meant that the KGH, which usually only kept a "skeleton staff" on duty, had to look elsewhere for staff. The nursing shortage will be discussed fully in a later chapter; however, it is important to note that doctors, interns, and nurses were brought in from other hospitals and the armed forces to ease the situation engendered by the polio epidemic in 1953.

In terms of size, virulence, and paralysis, the 1953 epidemic far surpassed all of the previous outbreaks. Just over 2,300 Manitobans contracted polio in 1953, leading to an astonishingly high case rate of 286.4 per 100,000 population. Winnipeg's case rate was 318 per 100,000 population.<sup>71</sup> In 1953, polio was not only more widespread, it was also more virulent. In

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<sup>70</sup> J.A. Hildes, "Inside the King George Hospital – 1953," *University of Manitoba Medical Journal* 25, 2 (December-January 1953-54): 6.

<sup>71</sup> CWA, City of Winnipeg Health Department, Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953, R.G. Cadham, "Epidemiology of the Poliomyelitis

1941, close to 1,000 cases were confirmed, however, officials termed that epidemic mild, due to the low levels of residual paralysis. This was not the case in 1953, when 59% of Winnipeg cases were left with some degree of paralysis and the provincial death rate was 11.2 per 100,000 population, even though respirators were widely available.<sup>72</sup> The increased incidence of the most dangerous, and fatal, type of the disease – bulbar polio – is noteworthy. One hundred and eighty-five individuals required the use of respirators in 1953, many of which were borrowed or bought from other locations, including an American manufacturer in Boston.<sup>73</sup> RCAF planes were used more than once to transport newly made respirators from Boston to Winnipeg.

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Epidemic in Winnipeg in 1953 and a Report on the Use of Gamma Globulin in that Epidemic,” 14.

<sup>72</sup> CWA, City of Winnipeg Health Department, Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953, R.G. Cadham, “Epidemiology of the Poliomyelitis Epidemic in Winnipeg in 1953 and a Report on the Use of Gamma Globulin in that Epidemic,” 17; Ruddy, “Poliomyelitis in Canada,” 398.

<sup>73</sup> DHPW, *Annual Report, 1953* (Winnipeg: King’s Printer, 1954), 73. A picture from the Riverview Hospital Archives shows members of the armed forces unloading a newly made respirator during the 1953 epidemic. The information on the back of the photograph reads as follows: “Front entrance to the King George Hospital, 1953. The Armed Services were called in to assist during the polio epidemic of 1953. A[n] iron lung (Emerson Respirator is unloaded by Army personnel. This equipment was flown in from the manufacturer as soon as they were produced in Cambridge Massachusetts USA.” RHA, Winnipeg Municipal Hospital, Polio Epidemic Photographs.

Table 3: Polio Deaths – Manitoba, 1953<sup>74</sup>

Age	Total Cases in the Age Bracket	Total Deaths in the Age Bracket	Percentage of Fatal Cases
Under 1 year	66	2	3.0
1-4 years	484	6	1.2
5-9 years	641	10	1.5
10-14 years	292	5	1.7
15-19 years	157	11	7.0
20-24 years	174	8	4.5
25-29 years	197	14	7.1
30-39 years	253	20	7.9
40-49 years	62	7	11.2
50-59 years	7	1	14.2
60-69 years	4	2	50

The 1953 epidemic was also unique in that more adults than ever before contracted the disease. By the immediate post-war era, the name infantile paralysis had fallen out of favour, but the overarching belief that children were most susceptible to the virus remained.<sup>75</sup> Rutty argues, for example, that polio garnered so much attention, even though other diseases were more of a threat, precisely because of “its unique predilection to suddenly strike and permanently paralyze healthy middle-class children.”<sup>76</sup> Hundreds of young children did contract polio during this epidemic; however, the incidence of the disease in adults was markedly high in 1953. The numbers compiled by the Winnipeg Health Department are illustrative of this trend. In 1936, approximately four percent of the total cases in the city occurred in persons over the age of

<sup>74</sup> Numbers taken from “Table A Poliomyelitis Cases by Age Groups, Sex and Degree of Paralysis – Province of Manitoba, 1953” in DHPW, *Annual Report, 1953*, 72.

<sup>75</sup> This can be seen in the media, the beliefs of health officials, and the historiography. Most articles in the *Free Press* and the *Tribune* regarding prevention focus on keeping children away from crowds, and cold swimming pools, and they almost always cautioned mothers to make sure their children did not over-exert themselves. The public debates over closures invariably focused on school-aged children, and medical officials cautioned against tonsillectomies.

<sup>76</sup> Rutty, “Poliomyelitis in Canada,” 3.



twenty-five; in 1941, approximately seven percent of all Winnipeg cases were twenty-five or older. In 1953, however, almost thirty percent of all city cases were in persons aged twenty-five and over.<sup>77</sup> This was a substantial and sobering increase, particularly since the provincial figures, as shown in Table 3, indicate that older people were more likely to die from polio.

The 1953 epidemic was the last major outbreak of polio in Manitoba, but it did not end the province's engagement with the disease. Although the vaccine developed by Jonas Salk was used starting in 1955, Manitoba experienced another outbreak in 1958, with 107 cases and eleven deaths. Manitoba's engagement with the Salk vaccine has been documented extensively by Rutty, but it is important to note the interest of Winnipeg's public health officials in the process.<sup>78</sup> In 1954, the NFIP asked the Canadian government if it was interested in participating in its "placebo-controlled trial" of the Salk vaccine; however, each province was given the choice as to whether or not they wanted to be involved. According to Rutty, the members of Manitoba's 1953 Advisory Committee "initially recommended declining the offer"; however, "political expediency forced the Manitoba Minister of Health F. C. Bell, to accept the NFIP offer" although it was up to the municipalities if they wanted to participate.<sup>79</sup> Not all of

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<sup>77</sup> CWA, City of Winnipeg Health Department, Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953, R.G. Cadham, "Epidemiology of the Poliomyelitis Epidemic in Winnipeg in 1953 and a Report on the Use of Gamma Globulin in that Epidemic," "Chart III Poliomyelitis – Winnipeg Percentage Distribution of Cases by Five year Age Groups for the Epidemic Years 1936, 1941, 1953, np. All the pages in the civic *Annual Reports* are numbered, except for the ones containing charts and graphs. Chart III, from which these statistics have been taken, can be found between pages 18 and 19. The way the graph was drawn makes it difficult to ascertain the exact percentage points for each year, but the increase between 1936 and 1953 is obvious and profound.

<sup>78</sup> Rutty's main focus is the involvement of Toronto-based Connaught Laboratories in the cultivation of safe batches of the Salk vaccine, but he does discuss Manitoba's involvement in the vaccine trials. See in particular, section 8.2 of chapter 8 of Rutty, "Poliomyelitis in Canada," 330-343.

<sup>79</sup> Rutty, "Poliomyelitis in Canada," 333 and 334. Rutty does not go into any detail as to how the trial was carried out in Manitoba, and because the province has denied access to Department of

Winnipeg's health officials agreed that city children should participate in the NFIP trial. In a letter to the members of the civic Committee on Health, Winnipeg's Medical Health Officer Dr. Morley Lougheed provided a lengthy and measured analysis of the situation. Lougheed knew firsthand the impact of polio, and he believed Salk's vaccine to be safe; however, he argued that, for multiple reasons, vaccinating the 5,000 children in grades one through three was logistically impossible. Lougheed explained:

Waivers of liability must be given by parents. At least 5,000 will have to be sent out, received and tabulated and careful records kept, otherwise the trial is of little or no value, It would mean inoculating 1,000 children a day and sterilizing at least 500 to 1,000 syringes a day, and no place could do that except the Hospitals, probably already pushed to the limit. The best we could do at this late date would be one dose of vaccine before school closed. The number of children receiving the vaccine would be about 1 in 400 of those in the City and it appears to me that this great effort would be of little value to anyone.<sup>80</sup>

A written response to Morley's letter is not extant; however, his logic must have been persuasive as city officials, who had already received the NFIP forms meant to be distributed to parents, decided ultimately to not participate in the trial.

Non-participation in the trial notwithstanding, health officials in Winnipeg were interested in the vaccine. In April 1954, Lougheed requested funding to travel to Minneapolis to watch the announcement of the trial results on closed circuit television and once the vaccine had been cleared, the city entered into an agreement with a candy company to supply each child who

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Health records, I do not know the particulars. In any case, the vaccine trial, documented heavily in the American literature, is outside the scope of this project.

<sup>80</sup> CWA, Committee on Health, Pack File 1976, letter "re: Poliomyelitis Vaccine" from Dr. M.S Lougheed, Medical Health Officer, to Chairman and Members of the Committee on Health, 9 June, 1954, 3.

received the vaccine with a “kiddy pop” sucker.<sup>81</sup> Health officials organized vaccination campaigns, estimated in 1956 to cost the city \$16,000, indicating that they were desirous to prevent any re-occurrences of epidemic polio.<sup>82</sup> Despite the time and money spend on the city’s vaccination program, by 1957 city officials worried that the general public was not interested in being vaccinated against the disease. In January of that year, R. G. Cadham, the city’s deputy health officer, sent a memo to the civic Committee on Health, voicing his frustration with the lack of desire on the part of parents to vaccinate their children. Cadham wrote that “for those who recall the unhappy days of the poliomyelitis epidemics of 1941, 1952 and 1953 when no protective vaccine against this disease was available, it is difficult to understand the sense of complacency which now exists in the minds of the pubic in regard to this crippling disease.”<sup>83</sup> The memo does not mention the efforts of Cadham’s father to produce convalescent serum in 1928, but his frustration that people seemed to forget easily the anxiety, fear, and dread that existed during an outbreak of polio was palpable.

This narrative outline of the six significant outbreaks in the epidemic era uses multiple official documents to paint a necessarily broad overview of polio in Manitoba. It helps to illuminate the impact polio had on the province and indicates how provincial and civic health officials confronted the disease. As useful as this overview is for delineating the broad impact of the disease, it does not tell the whole story. Put another way, it hints at, but does not reveal completely, the multiple stories that unfolded during the epidemic era, and long after epidemic

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<sup>81</sup> CWA, Committee on Health, Pack File 1976, letter from Clerk of Committee to McGillis Western Distributors, 28 April, 1955, np.

<sup>82</sup> CWA, Committee on Health, Pack File 1976, letter re: Salk Vaccine Inoculation Program from R.G. Cadham, Deputy Health Officer, to the Committee on Health, 13 January 1956, np.

<sup>83</sup> CWA, Committee on Health, Pack File 1976, letter “re: Poliomyelitis Vaccine” from R.G. Cadham to Chairman and Members, Committee on Health, 8 January 1957, 1.

polio was brought under control by the vaccines. The response of provincial and civic health officials to polio throughout the epidemic era is the focus of the following chapter.

### Chapter Three: “Conquering this Dread Malady”: The Public Health Response to Polio in Manitoba, 1928-1953<sup>1</sup>

During the massive polio epidemic in Manitoba in 1953, more people died from the disease than in previous outbreaks. While death is always a complex issue, deaths caused by polio had extra complications. In 1953 a number of funeral directors in Winnipeg expressed reservations about holding visitations and open funerals for polio victims. Deaths related to communicable diseases could be treated differently than others as the Manitoba Health Act held that if a person died from a communicable disease, a closed funeral was acceptable, the body did not have to be embalmed, and the burial had to take place within twenty-four hours. Funeral directors expressed a desire to treat the deaths of those with polio in this manner; however, polio was not on the communicable diseases list, even though by 1953 it was accepted to be a communicable disease. The funeral directors were incensed. They worried, for example, that family members of the deceased would attend the funerals “thereby increasing the chances of the disease being spread.” Beyond this, there was a more intimate reason why some funeral directors were reluctant to hold open funerals. They were worried about the health of their own families. One funeral parlour director summed up this fear, arguing: “I live above the funeral parlour. Why should I bring the body into the parlour and endanger my four children?”<sup>2</sup> His remarks exemplify the fear that accompanied a polio epidemic, but they also speak to the uncertainty about the etiology and epidemiology of the disease and the uneven application of public health measures designed to ameliorate the effects of the disease throughout the epidemic era.

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<sup>1</sup> F. C. Cadham, “Immunity Problems of Poliomyelitis,” *Manitoba Medical Association Review* (October 1936): 206.

<sup>2</sup>“Closed Funerals Asked for Polio Victims,” *Winnipeg Free Press*, 7 August 1953, 7.

Drawing on the outline provided in the previous chapter, this chapter argues that throughout the epidemic era, the actions of provincial and civic health officials indicate that they were ill-prepared for each epidemic, approached each outbreak in a reactionary adhoc manner, relied on public health tools that did not work against polio, and failed to engage meaningfully with the knowledge created by the wider medico-scientific community. This reactive approach to polio meant that public health in the province had little to offer to Manitobans and worked only to increase the anxiety surrounding the disease particularly in their failure to effectively develop and publicize a hospitalization plan for polio patients. This chapter focuses first on the use of three experimental preventatives – convalescent serum, a nasal spray, and gamma globulin – all of which were used at different times during the epidemic era and intended to lessen the effects of paralytic polio. Public health officials in Manitoba, influenced by the clinical experimental model of polio advanced in the United States, relied heavily on these products, and there was a definite expectation that the laboratory would contribute to the containment of polio and its effects. Despite their faith in bacteriology, public health officials also used other methods of control such as inspections and the closures of public places and schools, albeit on an uneven basis, and not without substantial debate. This chapter also examines a debate over which diseases were to be deemed eligible for free treatment at the Municipal Hospitals. In doing so, this chapter argues that throughout the epidemic era little progress was made in preparing for future polio outbreaks, preventing the spread of the disease, or the development of stable provisions for patient care.

Throughout the epidemic era, public health officials placed great faith in the ability of laboratory based preventatives to both contain the spread of the disease and decrease the chances of paralysis. In Manitoba, public health officials used three such preventatives. In 1928 emphasis

was placed on ‘convalescent serum,’ made from the blood of individuals who had reportedly ‘recovered’ from the disease. Although its effectiveness was questioned, public health officials in Manitoba asserted that it was useful, and continued to use it well into the 1940s. In 1936, physicians in Manitoba touted a nasal spray as the best way to prevent the effects of polio. This was based on the prevailing belief that the nose was the portal of entry. Although the nasal spray did not supplant convalescent serum as the preventative of choice, it was a part of the province’s attempt to ameliorate the effects of the disease. Finally, during the massive epidemic of 1953 hope was placed in gamma globulin, a highly concentrated part of human blood where antibodies are located. Health officials at both the federal and provincial levels were involved in the regulation and distribution of gamma globulin and while they believed that this involvement meant they were doing something concrete against the threat of polio, the confusion that developed around gamma globulin in Winnipeg indicates that this was not necessarily the case.

This emphasis on attempts to prevent and control the spread of polio speaks to a number of key issues which will be explored further, in particular, the desire of the Manitoba medical community to contribute meaningfully to understandings of the disease, the developing importance of the laboratory, and the choices public health officials could make in light of a developing polio epidemic. As Ruttly suggests, there was a desire on the part of medical officials to look like they were doing something to halt polio; however, the focus on prevention was related to three interconnected issues. First, it was grounded in the ascendancy of the laboratory. In the early twentieth century, a number of discoveries had led to the eradication or control of a number of diseases and the assumption, at least in the earliest part of the epidemic era, was that polio would be dispatched similarly. Second, overarching assumptions about the usefulness of people with disabilities informed the desire to ameliorate the paralysis that oftentimes

accompanied polio. Third, the use of potential preventatives was grounded in the broad assumption, expressed most strongly in the aftermath of the Great War and the influenza pandemic of 1918, that preventative medicine and disease prevention were the most useful ways to keep Canadian citizens and the nation healthy. Mark Osborne Humphries argues that the shift away from maritime quarantine “caused dominant public health ideologies and strategies to shift,” particularly in the context of the development of the federal Department of Health, which led to a focus on prevention of disease, and “closer working relations among all three levels of government” in terms of public health and disease prevention.<sup>3</sup> This chapter complicates this argument by showing how polio laid bare the limits of the province in preventing and controlling epidemic disease.

The 1928 epidemic provided medical officials in Manitoba with the chance to prove the efficacy of the laboratory in preventing, or at least controlling, epidemic polio. As the cases mounted in Manitoba, the DHPW turned to the Medical Research Committee (MRC) of the University of Manitoba’s Faculty of Medicine for assistance in controlling the disease. The MRC was asked to “prepare a convalescent serum for use in the treatment of poliomyelitis” and to undertake an “investigation of the present epidemic as to etiology, clinical course, and treatment of the disease.”<sup>4</sup> Once the parameters of the study were established, the MRC embarked on a course that they hoped would enhance the Faculty of Medicine’s reputation in the world of medical research. In his Master’s thesis, Peter Warren surveyed the state of medical research in Canada in the period leading up to 1945, and other than the University of Toronto and McGill,

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<sup>3</sup> Humphries, *The Last Plague*, 193-4.

<sup>4</sup>C.R. Gilmour and A. T. Cameron, “The Organization of the Work Concerned with the Preparation and Distribution of Convalescent Serum and the Investigation of its Action during the Winnipeg Epidemic of Poliomyelitis, 1928,” *Report on the Poliomyelitis Epidemic – 1928*, 11.



found it wanting. The Canadian discovery of insulin in 1921, Warren argues, may have “inspired many medical students” to believe that “laboratory research could save the lives of desperately sick children” but it did not lead to the development of a widespread research tradition in Canadian medical schools.<sup>5</sup> The University of Manitoba was not an exception. Established as a medical college in 1883, it became a Faculty in 1922. Perhaps momentarily spurred on by the discovery of insulin, the MRC was also created in 1922 but Warren suggests that “very little research was done” by the MRC, mainly due to a lack of funds.<sup>6</sup> The 1928 polio epidemic, then, presented the MRC with a unique opportunity: along with the authorization to conduct research on the use and efficacy of the serum, the provincial government provided the MRC with an initial fund of two hundred dollars in August, five hundred more in September, and the promise of more grant money if necessary.<sup>7</sup> Armed with a mandate and funding, the MRC turned its attention to the developing epidemic and its actions were informed largely by the American focus on bacteriology and the importance of the laboratory in the quest to solve the problems brought about by infectious disease.

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<sup>5</sup> C. Peter Warren, “The Birth of a Medical Research Programme: The Rhesus (RH) Factor Studies, Dr. Bruce Chown, and the Faculty of Medicine, University of Manitoba, 1883-1946,” (MA Thesis, University of Manitoba, 2011), 37.

<sup>6</sup> Warren, “The Birth of a Medical Research Programme,” 60.

<sup>7</sup> In a letter dated August 31, 1928 and addressed to Dr. C. R. Gilmour, Dr. Montgomery, the Minister of Health and Public Welfare mentioned that the province would take care of the financials related to the study, and had already forwarded \$200.00 to the Secretary of the MRC, Dr. McLeod. The minutes of the August 31<sup>st</sup> meeting of the poliomyelitis Sub-Committee of the MRC indicate that \$500.00 more was to be forthcoming. UMFMA, Medical Research Committee of the University of Manitoba, Research- Correspondence, Minutes, Reports, 1929-1936 10.2.2(3). It is important to note, however, that the outpouring of research funding is not an indication that the provincial government was all of a sudden interested in medical research on a broad scale. According to Warren, the government was obligated to meet its responsibility of dealing with outbreaks of contagious diseases and that was the only time they funded medical research. See Warren, “The Birth of a Medical Research Programme,” 61.

Polio was not the first disease that the medico-scientific community believed could be controlled by laboratory-based advances. In his examination of the way the media presented Pasteur's treatment for rabies in late nineteenth century New York, Bert Hansen argues that while scientists had been working on medically-related problematics prior to the 1880s, the particular circumstances surrounding the treatment of several boys from New Jersey, bitten by a potentially rabid dog in 1885, was the catalyst that helped North Americans to believe that science could have an impact on their daily lives.<sup>8</sup> Money was raised to send four of the boys to France to be treated by Louis Pasteur. Prior to this trip, Pasteur's discovery of the rabies vaccine had garnered little attention in the American media; however, the trip was headline news and upon their return at least three of them were put on display for several months at a dime museum in the Bowery.<sup>9</sup> Hansen argues that this incident placed the "role of the medical researcher [into] the American public consciousness," indicating to the general public that developments in the laboratory could affect society in positive, immediate ways.

Despite the interest in the boys' successful treatment at the hands of Pasteur, medical historians generally situate the diphtheria antitoxin as the catalyst for the ascendancy of the laboratory in North America. The Canadian historiography on diphtheria is more limited than the American historiography, despite it being a disease that affected children on both sides of the border. The American experience reveals much about the development of bacteriology and the growing belief that science could help medicine in the prevention of illness and death. The 1892 diphtheria epidemic in Philadelphia was viewed by William Ford, the head of the city's Board of Health, as environmental in origin. Despite having an organized group of sanitary inspectors, the

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<sup>8</sup> Bert Hansen, "America's First Medical Breakthrough: How Popular Excitement about a French Rabies Cure in 1885 Raised New Expectations for Medical Progress," *American Historical Review* 103, 2 (April 1998): 373-418.

<sup>9</sup>Hansen, "America's First Medical Breakthrough," 395.

disease had become epidemic, leading Ford to declare the epidemic was due to “vague atmospheric disturbances, something in the so-called epidemic constitution of the atmosphere.”<sup>10</sup> This miasmatic understanding of disease causation was soon eclipsed by work performed in the laboratory. In the context of diphtheria, serotherapy – the attempt to “transmit immunity passively by injection of the serum of people who had survived serious infections,” – made this a reality.<sup>11</sup> The success of the diphtheria serum in reducing the number of annual cases across North America undoubtedly influenced the MRC as they considered their options in terms of controlling the effects of polio.

The Manitoba medical community believed in the usefulness of serology. The diphtheria “antiserum was first used in the province in the 1890s,” and by the mid to late 1920s, the idea that serums and anti-toxins could be useful against multiple diseases was generally accepted.<sup>12</sup> The Winnipeg Municipal Hospitals utilized serums and anti-toxins in the course of treatment of a number of diseases, including diphtheria and cerebro-spinal meningitis. The write-up about diphtheria in the *Synopsis of Communicable Diseases*, created in 1928 for the staff of the Winnipeg Municipal Hospitals, highlights the importance placed on the laboratory. Under the heading “Etiology” the pamphlet names the causative agent – the Klebs Loeffler bacillus – and provides a quick lesson in bacteriology, stating:

- We know this to be the germ at fault for [diphtheria because]:
- (1) We find it in cultures made from the nose and throat in cases of diphtheria.
  - (2) We grow it in the laboratory.
  - (3) If we inoculate animals with the germ we produce the disease.

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<sup>10</sup> Gretchen A. Condran, “The Elusive Role of Scientific Medicine in Mortality Decline: Diphtheria in Nineteenth - and Early Twentieth- Century Philadelphia,” *Journal of the History of Medicine and Allied Sciences* 63, 4 (October 2008): 487-8.

<sup>11</sup> Ian Carr and Robert Beamish, *Manitoba Medicine: A Brief History* (Winnipeg: University of Manitoba Press, 1999), 80.

<sup>12</sup> Carr and Beamish, *Manitoba Medicine*, 167.

(4)The same organism will be found in specimens taken from the animal inoculated.<sup>13</sup>

Despite this textbook description, sanitary ideas of causation persisted. Following the four point treatise on the usefulness of the laboratory, “emanations from drains and bad smells generally” are listed as predisposing factors to diphtheria.<sup>14</sup> Despite this enduring link between sanitation and disease, the Winnipeg Municipal Hospitals utilized the diphtheria anti-toxin, and nurses caring for patients were reminded to watch for any developing rash, increase in temperature, or “jointy pains” after the administration of the anti-toxin.<sup>15</sup> A serum made from the blood of horses that had been “immunized by injection of many strains of meningococci” was also administered in the case of cerebro-spinal meningitis, indicating that serotherapy had much potential in the treatment of many illnesses.<sup>16</sup> The medical community believed that it might work against polio too.

The development of an ‘anti-polio’ serum fits into the context of the successful use of serums in the treatment of bacteria-based infections in the early twentieth century. Hope in convalescent serum for polio began to grow in 1910, when two German scientists were able to show that “immune bodies are present in the blood of recovered cases.” Building on these early results, Simon Flexner’s experiments seemed to show that “the injection of such serum delays and may altogether prevent the onset of paralysis in monkeys previously inoculated with the

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<sup>13</sup> Riverview Hospital Archives [hereafter RHA], History of Nursing Education, Practice Techniques during the Communicable Diseases Era, “Diphtheria,” *Synopsis of Communicable Diseases*, (Winnipeg: Winnipeg Municipal Hospitals, 1928), 3.

<sup>14</sup> RHA, “Diphtheria,” *Synopsis of Communicable Diseases*, (Winnipeg: Winnipeg Municipal Hospitals, 1928), 3.

<sup>15</sup> RHA, “Diphtheria,” 4.

<sup>16</sup> RHA, History of Nursing Education, Practice Techniques during the Communicable Diseases Era, “Diphtheria,” and “Epidemic Cerebro-Spinal Meningitis,” 23.

virus.”<sup>17</sup> Despite Flexner’s exclusive testing on monkeys, his experiments were seen as evidence of the possible efficacy of “passive immunity” in humans through convalescent serum.<sup>18</sup> It was suggested that, during epidemics, the serum made from the blood of recovered cases should be injected either subcutaneously or intramuscularly. With shades of heroic medicine from the 18<sup>th</sup> century, physicians tried many seemingly questionable practices and procedures designed to alleviate the symptoms of polio, meningeal irritation, and paralysis in particular.<sup>19</sup> Patients were injected with sodium chloride, hypertonic glucose, and adrenalin, amongst other things; one physician’s preferred treatment method revolved around “repeated lumbar puncture,” which he felt produced favorable results.<sup>20</sup>

The belief in the efficacy of anti-toxin sera indicates why physicians and public health officials dealing with polio pinned so much hope on convalescent serum. Simon Flexner and other American scientists had been testing serum on animals, and it was first used on humans in 1910. The notion that human convalescent serum might be a potentially effective prophylaxis against polio developed during the massive 1916 epidemic in the north-eastern United States, when the high number of reported cases allowed physicians to treat enough individuals so that

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<sup>17</sup>John McEachern, Bruce Chown, Lennox Bell and Mary McKenzie “The Results of Convalescent Serum Therapy in Acute Poliomyelitis in the Manitoba Epidemic, 1928,” *Report on the Poliomyelitis Epidemic – 1928*, 44.

<sup>18</sup>Josephine B. Neal, “Treatment” in *Poliomyelitis* (Baltimore: The Williams and Wilkins Company, 1932), 217

<sup>19</sup> Neal “Treatment” in *Poliomyelitis*. See pages 218 – 225 for a discussion of some of the substances injected into people as part of the treatment for poliomyelitis, all of which Neal characterizes as unhelpful. John R. Paul also discusses some of the early treatments used by physicians to treat the fevers and “lameness” associated with illnesses he argues were poliomyelitis, including purges, blisters and poultices. See Paul, *History of Poliomyelitis*, 23-45 for early clinical descriptions and treatments for the disease and its effects.

<sup>20</sup> Neal “Treatment,” in *Poliomyelitis*, 224.

their findings carried more weight than simple anecdotal observations.<sup>21</sup> The results from 1916 were considered “promising” and scientists began to debate the best way to introduce serum into the body, how much serum to use, and when. The medical literature on the subject suggests that most physicians using convalescent serum injected it either “intrathecally or intravenously” and most acknowledged that the earlier it was administered the better and dosages were constantly being tinkered with.<sup>22</sup>

The focus on convalescent serum in Manitoba was bolstered by the existence of the Provincial Laboratory in Winnipeg. While most provinces had provincial laboratories by the interwar period, Manitoba had been the first province to set one up, in 1897, under the direction of the esteemed Dr. Gordon Bell.<sup>23</sup> When Bell unexpectedly passed away, Dr. F. T. (Fred) Cadham, a professor of biology, was nominated as the head of the Provincial Laboratory, which was located in close proximity to the medical school. Cadham volunteered with the Canadian Expeditionary Force during the Great War, working as a physician at a casualty clearing station; however, medicine was not his only passion. He had been a member of the Winnipeg Victorias hockey team that won the Stanley Cup in 1901, and had served as the President of both the Winnipeg and Fort Garry Gun Clubs.<sup>24</sup> As Provincial Bacteriologist in 1928, F. T. Cadham was named to the Poliomyelitis Sub-Committee of the MRC and tasked with preparing the convalescent serum. Under his direction, the Provincial Laboratory was freed up to focus on the

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<sup>21</sup> William Russell MacAusland, *Poliomyelitis with Especial Reference to the Treatment* (Philadelphia: Lea & Ferbiger, 1927), 127.

<sup>22</sup> Day, “Poliomyelitis in Manitoba,” 557; Neal “Treatment” in *Poliomyelitis*, 228.

<sup>23</sup> M.R. Elliott, and R.D. Defries, “The Manitoba Department of Health and Public Welfare,” *Canadian Journal of Public Health* 49 (November 1958): 459.

<sup>24</sup> Carr and Beamish, *Manitoba Medicine*, np. A photograph between chapters four and five identifies F.T. Cadham as an officer of Number Four Casualty Clearing Station, CEF, 1916 ; “Memorable Manitobans: Frederick Todd Cadham (1880-1961,)” Manitoba Historical Society website, mhs.mb.ca; also see the Manitoba Hokey Hall of Fame website mbhockeyhalloffame.ca

serum, even “establishing a 24-hour service [...] for the issue of serum” beginning in the first week of September as case reports spiked and demand for the serum increased.<sup>25</sup>

Despite the existence of the provincial laboratory, the creation of convalescent serum depended on cooperation from other provinces and the public. The MRC’s attempts to procure serum from other provinces were met with mixed results. The Alberta Department of Health, for example, refused to send any serum to Winnipeg and while British Columbia sent “seven tubes of blood” to Cadham they were rendered unusable.<sup>26</sup> Connaught Laboratories in Toronto also sent several vials of serum to Cadham, who appreciated the gesture, but he soon realized that it was not enough for the MRC’s undertaking. Cadham then turned to the citizens of Manitoba in order to accumulate enough blood to make suitable amounts of the serum. On 4 September 1928, the members of the MRC’s Poliomyelitis Subcommittee, along with Dr. Mary McKenzie, the medical school’s Gordon Bell Fellow, met to discuss the “serum situation” and they decided to place ads soliciting donors on the front pages of both Winnipeg daily newspapers. Under the bolded headline “Blood Urgently Needed” the following appeal was published:

Former cases of infantile paralysis who are willing to give a little blood to assist in the treatment of the disease, are requested to phone the Medical Research Committee, phone 26-923. The procedure is simple and there is no risk to the person giving blood.<sup>27</sup>

As the write-up suggests, the MRC needed blood from people who had contracted and supposedly recovered from poliomyelitis. This proved somewhat problematic for the MRC for three reasons: incomplete records; the location of potential donors; and their age. Case reports

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<sup>25</sup> Gilmour and Cameron “Preparation and Distribution of Convalescent Serum,” 17.

<sup>26</sup> Gilmour and Cameron “Preparation and Distribution of Convalescent Serum,” 15.

<sup>27</sup> UMFMA, Faculty Medical Research Committee, 10.2.2(2), Research – Correspondence, minutes, reports, 1926-1928, Minutes, Meeting of the Poliomyelitis Sub-Committee, September 4, 1928.

prior to 1924 were irregular and it was difficult for physicians and public health officials to “surmise how many cases [had] actually occurred” prior to 1928.<sup>28</sup> The Winnipeg Health Department furnished the MRC with a “fairly complete list of previous cases of poliomyelitis,” which proved somewhat useful; however, the MRC also had to locate the “presumptive donors” from that list, many of whom had moved away, or lacked “sufficiently definite medical verification of the disease.”<sup>29</sup> Because the average age of individuals who contracted polio in the early epidemic era was under ten, some of the potential donors were minors, and parents were asked to sign a form giving their “consent to the withdrawal of blood [from the child] by [a laboratory worker] acting on behalf of the Medical Research Committee of the University of Manitoba for the purpose of preparation of a serum for the treatment of acute poliomyelitis.”<sup>30</sup> It is not clear how many parents refused the request; however, the MRC reported that they were able to make enough serum so that any Manitoba physician who requested it would not be turned down.<sup>31</sup>

As provincial biologist, Cadham was responsible for convalescent serum in Manitoba, and as a scientist he believed he could make a tangible contribution to the knowledge about the treatment of polio. In 1928, Cadham chose to inject Manitoba patients intramuscularly. While intramuscular injection was not unprecedented, the literature of the times generally recommended spinal or intravenous injections.<sup>32</sup> Cadham’s recommendation for intramuscular injections of serum was premised on five reasons: “that the serum is absorbed into the blood

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<sup>28</sup> Day “Poliomyelitis in Manitoba in 1928,” 554.

<sup>29</sup> Gilmour and Cameron “Preparation and Distribution of Convalescent Serum,” 14.

<sup>30</sup> Gilmour and Cameron “Preparation and Distribution of Convalescent Serum,” 16.

<sup>31</sup> Fred Cadham “The Preparation of Convalescent Serum for the Poliomyelitis Epidemic in Winnipeg, 1928” *Report on the Poliomyelitis Epidemic in Manitoba – 1928*, 39.

<sup>32</sup> Both Neal and MacAusland, published in 1932 and 1927 respectively, discuss intrathecal and intravenous injection of the serum. The *Report on the Poliomyelitis Epidemic in Manitoba – 1928* does, however, reference two studies in which the serum was injected intramuscularly: 44.



stream swiftly; that the administration is easily accomplished; that no undesirable symptoms or accidents occur; that no matching is required; and that intraspinal injection does not get directly at the lesions, as one might think it would.”<sup>33</sup> Despite being influenced by the American treatment of polio, Cadham chose to alter the way serum was used, indicating that the MRC believed it could add to the existing knowledge about polio. Several members of the MRC published the methodology and results of their serum study in medical journals, further indicating the centrality of the serum to the MRC’s approach to containing the threat of polio, and their belief that they had contributed to the advancement of knowledge about the disease.

In their final analysis, despite a relatively small sample and less than stellar results, the MRC concluded that the serum had worked to prevent paralysis. The MRC chose 161 patients from Winnipeg who had received the serum, and divided them into four groups: group one was comprised of fifty-seven cases who were given the serum intramuscularly in the “pre-paralytic stage of the disease”; the second group consisted of seventeen people who received one or more doses of serum, but not necessarily intramuscularly; the third group of fifty-seven did not receive serum until after paralysis began; and the fourth group did not receive any serum at all.<sup>34</sup> The MRC had hypothesized that those who had been injected with the serum early enough would have less residual paralysis than those who did not receive serum, or who received it late. Members of the MRC followed up with each patient approximately four to six weeks after the epidemic abated in order to gauge how many individuals had permanent paralysis. The MRC reported that out of the eighty-two individuals in the third and fourth groups who had “early paresis or paralysis,” only 20% had recovered, and 80% had either died or been left with residual

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<sup>33</sup> Day, “Poliomyelitis in Manitoba,” 557.

<sup>34</sup> McEachern et al., “Results of Convalescent Serum Therapy,” 45.

paralysis. In comparison, out of the twelve individuals in the treated groups who had also presented with early paralysis or paresis, 62% had recovered fully. These numbers allowed the MRC to conclude that “convalescent serum is of value when administered in the pre-paralytic stage of the disease.”<sup>35</sup> For the MRC, this validated their focus on controlling polio with an experimental preventative and it was central to the province’s public health response to polio for much of the epidemic era.

By 1936, the year of the next Manitoba epidemic, a new preventative was being touted by American scientists. By that time, the wider medico-scientific community knew that polio was caused by a virus and while the mode of transmission had not been proven, most of the medical community accepted Flexner’s “neurotropic” model, which was based wholly on experiments performed on monkeys, and suggested that “once the virus gained a foothold in the body, it immediately made its way via nervous pathways [...] to the central nervous system. This included the olfactory nerves along which the virus was supposed to go straight to the brain.”<sup>36</sup> In the 1930s, the hypothesis that “the virus enters through the nasopharynx” was accepted widely by the Canadian medico-scientific community.<sup>37</sup> John R. Paul, a member of the Yale Poliomyelitis Research team, and author of the standard medical history of the disease, indicates that while it was ultimately proven erroneous, the neurotropic view of the disease “held sway for a generation and even provided the rationale for a preventative approach – the spraying of various chemicals into the nose, which was supposed to block the virus” from establishing

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<sup>35</sup> McEachern et al., “Results of Convalescent Serum Therapy,” 53.

<sup>36</sup> Paul, *History of Poliomyelitis*, 382.

<sup>37</sup> See for example F. C. Cadham, “Immunity Problems of Poliomyelitis,” *Manitoba Medical Association Review* (October 1936): 205; Lennox Bell “Clinical Features,” *Manitoba Medical Association Review* (October 1936): 197. An editorial in a national medical journal also supports the neurotropic hypothesis: “Poliomyelitis in Canada,” *Canadian Public Health Journal* 28, 9 (September 1937): 457.

itself.<sup>38</sup> Based on this understanding, a nasal spray made from a solution of picric acid and sodium alum was tested by the United States Public Health Service. The spray captured the attention of the Manitoba medical community, as the American Public Health Service's statement concerning the nasal spray was reprinted in their journal, the *Manitoba Medical Association Review*. In part, it read:

The evidence regarding this method is as yet based entirely upon animal experimentation and the proposed spray is not at present to be regarded as of proved value in the prevention of Poliomyelitis in man. It may be advisable to await the results of further trials before giving the method general application.<sup>39</sup>

Despite this caution, the American statement provided the recipe for the solution, as well as detailed instructions on how to use the spray.

Although nasal sprays had only been tested on monkeys, the spray was used during the 1936 epidemic in Manitoba, particularly during the first wave in the Morton-Boissevain area. The nasal spray in question was made by mixing picric acid, salt, and alum, and the resulting mixture was to be sprayed into the nose several times a day. The DHPW recommended that the nasal spray be made by a "competent physician" and administered by a doctor. Nevertheless, the *Free Press* reported not only the dosage, but the 'recipe' for the solution, although it did, at least, include the caveat that "home-made concoctions are not favoured."<sup>40</sup> The picric acid nasal spray used in Manitoba led to a somewhat amusing result: it turned people's noses bright yellow. Luckily for Manitobans, that was the only way the nasal spray altered their bodies. People in

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<sup>38</sup> Paul, *History of Poliomyelitis*, 382.

<sup>39</sup> "Epidemic Poliomyelitis," *Manitoba Medical Association Review* (September 1936): 198.

<sup>40</sup> "Antiseptic in Boissevain District Makes Noses Go Yellow," *Winnipeg Free Press*, 15 August 1936, 3.

other places were not so lucky: some formulations of nasal sprays contained lead while others made people lose their sense of smell, sometimes permanently.<sup>41</sup>

In 1936, the nasal spray was not as central as convalescent serum had been to Manitoba's previous effort to prevent the paralysis associated with epidemic polio; nevertheless, medical officials in the province were clearly interested in its potential as a preventative. They monitored American experiments, published results in their own medical journal, and dispatched provincial public health nurses to the RM of Morton to educate people on the use of the nasal spray and the importance of having a physician administer the dosage. In September 1936, the Winnipeg Medical Society met for a symposium on polio and much of the proceedings were recorded in the *Manitoba Medical Association Review*. When an unnamed physician asked as to the "efficiency of the Picric Acid nasal spray as prophylactic against" polio, "Dr. M.R. Elliott stated that it had been recommended by various medical men who had experience of epidemics in other places." Despite this vague statement, and the caveat that at least two children who had been given the spray contracted polio, Elliott concluded that there was "sufficient justification as a result of the experience of others and the experience with the present epidemic to recommend its use as prophylactic agent."<sup>42</sup>

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<sup>41</sup> The 'yellow noses' in the above footnote refers to the tendency of the solution to turn people's noses a bright yellow. While the effect was temporary, and there is a slight element of humour in the situation, it could have been much more serious: the zinc based nasal spray used in some parts of the United States, and tested in a wide-ranging trial in Toronto in 1937 had the potential to make people ill or lose permanently their sense of smell. For further reading on the zinc based nasal spray and the Toronto experiment, see F. F. Tisdall et al., "Zinc-Sulphate Nasal Spray in the Prophylaxis of Poliomyelitis," *Canadian Public Health Journal* 28, 11 (November 1937):523-543. Beyond the obvious issues involving breathing in zinc, Ruttly reports that one of the most "devastating" outcomes of the Toronto trial was "it was found that among those children losing their sense of smell and/or taste (anosmia) soon after the trial, many had not regained it months later." Ruttly, "Poliomyelitis in Canada," 112.

<sup>42</sup>"Epidemic Poliomyelitis," 208. Ruttly concluded that the provincial government in Manitoba was disinterested in the nasal spray, stating "the Manitoba government did not seem to pay a

Despite the appearance of the nasal spray, convalescent serum continued to be used in 1936. Indeed, it was still the favoured preventative, likely because many of the physicians who had been a part of the MRC were once again involved in the efforts to control the disease in 1936. Fred Cadham was still the head of the Provincial Laboratory, and he was still convinced of the efficacy of convalescent serum. Cadham acknowledged that “our only hope in conquering this dread malady” lay in the development of a vaccine; however, there was nothing on the horizon.<sup>43</sup> Cadham’s support of the convalescent serum was not based solely on the 1928 research, in which he had played a vital role. Citing Australian and Danish studies, he demonstrated that while he was aware of the doubts of some American scientists, he was well-versed in the international use of serums. Cadham’s support of the serum also hinged on his belief in laboratory-based work, indicating that his twelve years of serum preparation and the inoculation of over 1,200 patients was justification enough for its continued usage during outbreaks. Drawing a comparison to the diphtheria anti-toxin, Cadham reasoned that while neither was “infallible,” the laboratory had shown that in the absence of a safe proven vaccine, the “transfer of human serum is the only practical method of therapy aside from prevention that at present is available.”<sup>44</sup> Convalescent serum, therefore, continued to be used in the later epidemics until the post-war period, when another blood based product was posited as an effective preventative.

Neither convalescent serum nor the nasal spray had proven effective in controlling the effects of polio and the medical community continued to search for a useful preventative. By the

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great deal of attention to the spray and made no attempt to control or evaluate its use.” Ruddy, “Poliomyelitis in Canada,” 108. It is true that convalescent serum was also used in 1936, and that a body comparable to the MRC was not involved to the degree it had been in 1928; however, it is clear that there was medical and official interest in the nasal spray.

<sup>43</sup> Cadham, “Immunity Problems of Poliomyelitis,” 206.

<sup>44</sup> Cadham, “Immunity Problems of Poliomyelitis,” 206.

early 1950s, it seemed that, once again, the laboratory could offer hope in the face of epidemic polio, this time in the form of another blood based serum called gamma globulin. Gamma globulin, a fraction of blood plasma, was viewed as a method of providing passive immunity against polio.<sup>45</sup> In 1953 much hope was placed in gamma globulin; however, the vast amounts of blood needed to make it meant that its distribution and use were controlled closely by the federal and provincial governments. Although it was not presented by medical authorities as a cure, it was often interpreted as such by the media and the public, leading to dissention and debate surrounding its use in 1953.

By 1952, over twenty years of research had uncovered a substantial amount of information about polio, but nothing in the way of a cure or a preventative. By the post-war period researchers had discovered, for example, that the various strains of the poliovirus could be categorized into one of three groups, each one “named for the previously studied prototype strains as Brunhilde (Type I), Lansing (Type 2), and Leon (Type 3).”<sup>46</sup> Researchers also knew that their best bet, in terms of prevention was active immunization; however, this had been a problematic endeavour. In 1934, two American researchers, working separately, believed they had created vaccines. The first, created by Dr. Maurice Brodie, was essentially harmless, but the second, created by Dr. John Kolmer, contained only a “diluted” strain of the poliovirus. Kolmer vaccinated 12,000 children in a haphazard and dangerous manner: he “did not use control groups, did not monitor the vaccine program, nor instruct physicians how to properly administer the vaccine.”<sup>47</sup> Tragically, many of the children injected with Kolmar’s ‘vaccine’ contracted polio and several died, effectively curtailing polio vaccine research for several years. By the

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<sup>45</sup>A.J. Rhodes, “Recent Progress in the Study of Immunization against Poliomyelitis,” *Canadian Medical Association Journal* 67 (August 1952), 156.

<sup>46</sup> Rhodes, “Recent Progress in the Study of Immunization against Poliomyelitis,” 155.

<sup>47</sup>Rutty, “Poliomyelitis in Canada,” 96.

early 1950s, several groups of scientists, many funded by the NFIP, were again working on a useable safe vaccine. In the meantime however passive immunization, specifically through gamma globulin, another potential blood based preventative, offered some hope.

Gamma globulin was not developed with polio in mind. It had been developed “as a result of the war time experiments on the fractionation of blood” which had shown that the “concentration of serum globulins” meant that, unlike the less potent convalescent serum, “a great increase in the amount of antibody could be administered in a small volume.”<sup>48</sup>

Researchers had conducted small generalized trials during the war, but it was not until the post-war period that American scientists turned their attention to gamma globulin and polio, implementing testing under the auspices of the NFIP. The trials showed that the dosage provided “had greatly reduced the incidence of the disease when administered within a suitable time period preceding exposure” to the poliovirus; however, Paul suggests that the time and amount of blood necessary to make gamma globulin, combined with the inability to “predict epidemics, and therefore inoculate enough people in enough time” meant that gamma globulin was “used only occasionally [...] and then abandoned altogether.”<sup>49</sup> While this may have been the American experience, Manitoba’s engagement with gamma globulin was more complex. Gamma globulin was highly touted and promoted widely in Manitoba, leading to the development of a number of controversies surrounding its distribution and use.

In the early 1950s, the Canadian state and private laboratories expressed interest in the possibilities offered by gamma globulin. In 1952, Dr. A. J. Rhodes from the University of Toronto promoted the possible use of gamma globulin as a way to “confer short term protection against the disease.” Echoing the 1928 hypothesis that serums had worked against diseases such

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<sup>48</sup> Paul, *History of Poliomyelitis*, 390.

<sup>49</sup> Paul, *History of Poliomyelitis*, 393-4.

as diphtheria and should, therefore, help prevent polio, Rhodes noted that “gamma globulin acts as an efficient preventative in measles, mumps, and infectious hepatitis,” and could possibly be used in the same manner during a polio outbreak.<sup>50</sup> An editorial in the April 1953 edition of the *Canadian Medical Association Journal* announced that Dr. G.D.W. Cameron, the federal Minister of Health, had decided that “every effort should be made to increase the available supply of gamma globulin,” effectively granting Rhodes’ suggestion the seal of approval. This was to be accomplished in part by a \$67,000 grant from the federal Public Health Research Grant to Connaught Laboratory where the gamma globulin was to be produced.<sup>51</sup> Connaught began its work immediately, although the time consuming process, combined with the virulence of the polio epidemics across Canada in 1953 and the publicity surrounding the new prophylactic meant that discussions about gamma globulin were extremely fraught.

Questions about the Canadian supply of gamma globulin led to increased anxieties during the 1953 epidemic. Although the American trials had shown that gamma globulin was of some value if administered early enough, the amount of blood necessary to make gamma globulin combined with the complicated blood fractionating process meant that gamma globulin was in short supply always. Compounding this, Connaught’s gamma globulin made was regulated heavily by the federal government. The National Technical Committee, established by the federal Department of Health to oversee the rationing of gamma globulin, decided to distribute it “to the provinces reporting the greatest polio attack rate.”<sup>52</sup> Despite Manitoba receiving “well over a third of the national supply” of gamma globulin, the province felt the need to regulate

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<sup>50</sup> Rhodes, “Recent Progress in the Study of Immunization against Poliomyelitis,” 157.

<sup>51</sup> “Editorial,” *Canadian Medical Association Journal* 68 (April 1953): 390.

<sup>52</sup> Ruddy, *Poliomyelitis in Canada*, 238



further the distribution of its supply.<sup>53</sup> From the beginning of the 1953 epidemic in June until mid-July gamma globulin was given only to children under the age of eleven if they were a household contact of a confirmed polio case. At the end of July, with the epidemic worsening, this was expanded to include all household contacts aged thirty and under.<sup>54</sup> In a bid to entice nurses to work on hospital polio wards, it was announced in mid-August that all nurses and the children of any married nurses would also receive gamma globulin injections.<sup>55</sup> Adding to these strict controls, the only place in Winnipeg that approved individuals could receive their doses was at the gamma globulin clinic established temporarily at the Princess Elizabeth Hospital.<sup>56</sup>

The sudden publicity and interest surrounding Connaught's gamma globulin rendered the already available commercial gamma globulin desirable and extremely problematic. Limited amounts of gamma globulin had been available for sale since the mid-1940s, although very few people knew about it or were interested in it. The increasing publicity surrounding gamma globulin, combined with the size and severity of the 1953 epidemic in Manitoba, made it an extremely sought after commodity. In the midst of the epidemic, rumours abounded that gamma globulin was available on the black market for twenty-five dollars a dose. These rumours became so divisive that the provincial government felt it had to respond. When the Winnipeg branch of the Trades and Labour Congress publicly questioned the sale of private gamma globulin stock, Dr. M. R. Elliott insisted emphatically that the sale of non-Connaught gamma globulin was "not

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<sup>53</sup>Rutty, "Poliomyelitis in Canada," 242.

<sup>54</sup>"Anti-Polio Use Extended," Winnipeg *Free Press*, 24 July 1953, 1.

<sup>55</sup>"Polio Nurses to Receive Inoculations," Winnipeg *Free Press*, 15 August 1953, 1.

<sup>56</sup>DHPW, *Annual Report 1953*, 71.

a scandal,” that it had always been available for purchase, and that only Connaught manufactured gamma globulin was not available for purchase.<sup>57</sup>

Its limited availability, combined with the publicity it garnered in the Winnipeg press, led to heightened anxieties about gamma globulin during the 1953 epidemic, particularly because of the public perception that it was a cure for polio. Medical officials like Elliott may have understood that gamma globulin was not a cure, but Winnipeggers seemed to hold a different view. Part of the problem had to do with the way gamma globulin was presented in the daily newspapers. The *Free Press*, for instance, referred consistently to gamma globulin as an “anti-polio serum.”<sup>58</sup> Some citizens of Winnipeg clearly believed that gamma globulin might cure people of polio. The story of the man who tried in vain to purchase gamma globulin for his young daughter who had already contracted polio is indicative of how it was viewed by the public.<sup>59</sup> Despite the official pronouncements, the belief that a potential polio antidote was being withheld from the general public persisted. At least one enterprising individual tried to profit from the confusion over gamma globulin by selling an unknown substance, possibly water, in old Connaught vials that had been taken from the garbage of the Princess Elizabeth Hospital clinic.<sup>60</sup> It is unclear how many vials were sold or if the individual was apprehended. Nevertheless, these

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<sup>57</sup>“Marketing of Anti-Polio Serum Dubbed Perfectly Legitimate,” *Winnipeg Free Press*, 5 August 1953, 3.

<sup>58</sup> See for example “Anti-Polio Serum Seen Here Shortly,” *Winnipeg Free Press* 9 July 1953, 3; “Preventative for Polio Available,” *Winnipeg Free Press*, 11 July 1953, 3; “Anti-Polio Use Extended,” *Winnipeg Free Press*, 24 July 1953, 1; “Polio Serum Available – At A Price,” *Winnipeg Free Press*, 1 August 1953, 1; “Marketing of Anti-Polio Serum Dubbed Perfectly Legitimate,” *Winnipeg Free Press*, 5 August 1953, 3; “Gamma Globulin Lacking for Mass Immunization,” *Winnipeg Free Press* 7 August 1953, 3; “Polio Nurses to Receive Inoculations,” *Winnipeg Free Press*, 15 August 1953, 1; “Canadian Polio Serum Not For Sale, Says Government,” *Winnipeg Free Press*, 18 August 1953, 2.

<sup>59</sup> “Marketing of Anti-Polio Serum Dubbed Perfectly Legitimate,” *Winnipeg Free Press*, 5 August 1953, 3.

<sup>60</sup> “City Warned Against Polio Serum Pedlars,” *Winnipeg Free Press*, 10 August 1953, 1 and 9.

two examples underscore how, despite the medico-scientific community's understanding of gamma globulin as a preventative with limited capabilities, lay people were frightened by polio and wanted to do everything possible to protect themselves and their families from its effects.

In 1928, the MRC focused heavily on the use and study of convalescent serum, but they also employed more traditional public health measures in an attempt to control the spread of polio. In terms of control and containment, the DHPW placed the onus onto municipal health officers across the province. In August, when it was clear that Manitoba was in the midst of a polio epidemic, Dr. T. A. Pincock, the deputy Minister of Health, sent a letter outlining the proper steps to be taken to every municipal health officer with the goal of putting them “on their guard,” while at the same time “avoiding undue alarm.” The letter identified six “general preventative measures” that health officers would be well advised to undertake, including: the isolation of the patient; the “concurrent disinfection” of individuals and their belongings; the observation of close contacts; the exclusion of contacts from schools for two weeks; and, the “disinfection of outdoor closets in country towns and [the] destruction of flies where possible.” Finally, the letter suggested that patients either be cared for by one person, or be taken to a hospital. A second letter was sent to all medical health officers and physicians across the province reminding them that since “poliomyelitis had appeared at a number of points in the province [...] definite and suspicious cases should be isolated and disinfection of discharges thoroughly carried out.”<sup>61</sup> None of these recommendations were specific to polio – the provincial department was reiterating standard medical practice and they had nothing new to offer for the specific threat of polio.

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<sup>61</sup> T. A. Pincock, “Appendix II Methods of Control Recommended by the Department of Health and Public Welfare,” in *Report on the Poliomyelitis Epidemic in Manitoba – 1928*, 75-6.

Beyond reminding physicians of these measures, health officials decided to author a number of articles to be printed in Winnipeg's daily newspapers so as to prevent widespread panic about the epidemic.<sup>62</sup> The articles, which gave a brief history of the disease, indicate how little was known about the disease in 1928. The authors, unnamed members of the Winnipeg Medical Society, wrote that while the infection enters "through the nose and throat," authorities were "still very much in the dark as to the method of spread." While the "general belief is that the disease is spread by contact," they conceded that "there are epidemiological features of infantile paralysis that cannot be explained on the theory of contact infection."<sup>63</sup> For this reason, health officials sought to employ a variety of public health measures, including killing flies, isolation, disinfection, getting rid of dust, avoiding the use of "public drinking cups," and the "careful supervision of the food supply." Public health officials in Winnipeg, and across the province, were asked to implement these measures; however, the main focus was the convalescent serum, which was described in the newspaper write-ups as a "valuable" tool that "may prevent paralysis."<sup>64</sup> The lack of knowledge surrounding the cause and spread of polio meant that public health officials employed a wide variety of measures in the hope that one, or more, might work to check the spread of the disease, or at least lessen its effects. Despite these interventions, some of which were more useful than others, the convalescent serum was central to the methods employed in Manitoba in 1928.

These same methods were presented by public health officials throughout the epidemic era, indicating that Manitoba's methods of controlling and containing the disease changed little.

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<sup>62</sup> Day, "Poliomyelitis in Manitoba," 555.

<sup>63</sup> "Appendix III, "Brief articles on the nature and treatment of Poliomyelitis prepared by a committee of the Winnipeg Medical Society and published in the Winnipeg daily newspapers during the height of the epidemic (September 1<sup>st</sup> to 7<sup>th</sup>, 1928," in *Report on the Poliomyelitis Epidemic in Manitoba – 1928*, 79 and 83.

<sup>64</sup> "Appendix III in *Report on the Poliomyelitis Epidemic in Manitoba – 1928*, 79.

In 1953, once it became obvious that the province was in the midst of an epidemic, the newly convened Advisory Committee released to the public a list of preventative measures that would ostensibly help keep them safe from the menace of polio. These recommendations were similar to those that had been issued in 1928. Winnipeggers were warned, for example, not to swim in polluted water, and to avoid fatigue and chilling. Even though researchers had long believed flies were not vectors in the spread of polio, the 1953 Advisory Committee reminded citizens to not only keep flies away from their food, but to also “keep garbage and waste covered so it won’t attract flies.”<sup>65</sup> The only addition to the 1953 list was the reminder that people should wash their hands “after going to the toilet,” and to “avoid contact with known polio cases.”<sup>66</sup>

Questions about polio’s communicability, which researchers and physicians had debated for decades, affected the ways Manitoba health officials approached the epidemics.

Longstanding questions about the communicability of the disease, exacerbated by the different views of leading researchers and physicians, affected Manitoba’s approach to polio throughout the epidemic era. In 1868, a Scandinavian physician suggested that polio was not contagious as he had been unable to establish any links between those who had developed paralysis, and early American public health officials tended to agree.<sup>67</sup> In his report on the 1894 epidemic in Vermont, Dr. Charles Caverly stated that “the element of contagium does not enter into the etiology either. I find but a single instance in which more than one member of a family had the disease, and as it usually occurred in families of more than one child, and as no efforts were made at isolation, it is *very certain that it was noncontagious.*”<sup>68</sup> Despite these early assertions,

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<sup>65</sup> “Here’s How to Guard Against Polio,” *Winnipeg Free Press*, 7 July 1953, 3.

<sup>66</sup> “Here’s How to Guard Against Polio,” *Winnipeg Free Press*, 7 July 1953, 3.

<sup>67</sup> Paul, *History of Poliomyelitis*, 73. The physician in question was Dr. Bull, who encountered a small outbreak in 1868 in Norway.

<sup>68</sup> Dr. Charles Caverly, quoted in Paul, *History of Poliomyelitis*, 85. Italics mine.

Ivar Wickman postulated that the illness, which he called Heine-Medin disease, was communicable, offering as evidence a high number of aborted cases and healthy carriers observed during a sizeable 1905 epidemic in Scandinavia.<sup>69</sup> Wickman's work was ignored by American Simon Flexner whose experimental laboratory work on polio in monkeys meant that he had "convinced himself and his colleagues that the virus was a strictly neurotropic one that entered the body through the nose" and was not necessarily contagious.<sup>70</sup> Flexner's model dominated scientific and medical work on polio for many years. Although it was ultimately found to be erroneous, physicians and medical officials in Manitoba were influenced heavily by Flexner's hypothesis throughout the majority of the epidemic era.

The confusion over the potential communicability of polio can also be seen in the debate over whether or not to include it on the Winnipeg Municipal Hospitals list of communicable diseases which were to be treated free of charge. Historically, the Municipal Hospitals were not free of charge as patients were billed for their services, although the charges were waived often. While polio was not central to the conversations in the early 1940s aimed at creating a bylaw to cover the cost of communicable disease care, its shifting place within these conversations attests to the long-term uncertainty the Manitoba medical community had about its potential communicability. In September 1942, the City of Winnipeg's Committee on Health wanted to convene a committee to "consider and report to Council, as soon as possible, on the advisability and practicability of free hospitalization and treatment of cases of infectious diseases discovered in the city of Winnipeg, at the cost of the City of Winnipeg, with a view to more efficient control and cure of such for the benefit of our citizens generally and for the prevention

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<sup>69</sup> Paul, *History of Poliomyelitis*, 89. For background on Wickman, see Paul, Chapter 10.

<sup>70</sup> Paul, *History of Poliomyelitis*, 117.

of undue hardship now involving the citizens and families affected by such diseases.”<sup>71</sup> A bylaw regarding free hospitalization was the goal, and a committee was struck. Reports from physicians, groups, a study of the financial aspects of the Winnipeg Municipal Hospitals, and communications with health departments from across Canada and the United States were all taken into consideration and by 1944 the committee had prepared a draft bylaw. One of the sticking points that engendered debate throughout the process was whether or not polio ought to be included on the list of illnesses to be treated free of charge. Polio was included in draft of the by-law dated 30 March 1944, but when it was presented by the Committee on 4 May 1944, it had been removed.<sup>72</sup> A later draft indicated that poliomyelitis was to be included in the list of diseases available to be treated free of charge, but only in the acute stage, which was generally held to be two to three weeks in duration.

Correspondence between the civic sub-committee responsible for drafting the by-law and the Winnipeg Medical Society speaks to the confusion over how to define polio. In early May, the Winnipeg Medical Society provided to the civic sub-committee a revised list of diseases which they believed should be eligible for free hospitalization. Polio had been removed from the list. Yet, in a letter that accompanied the revised list, the Secretary of the Winnipeg Medical Society recommended not striking the disease entirely, writing:

Recommendation covering certain diseases not on the revised list but which occur in epidemic form, this to be determined by the Health Officer, these diseases being, viz: *Anterior Poliomyelitis*, Meningococcal Meningitis, Encephalitis, and Septic Sore Throat, to be admitted to *any* hospital, including Municipal Hospitals for free

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<sup>71</sup> CWA, Pack File H1738(2), Free Treatment Infectious Diseases, Committee on Health, 30 September 1942, 1.

<sup>72</sup> CWA, Pack File H1738(2), Free Treatment Infectious Diseases, Committee on Health, 3 May 1944, 2.

treatment.<sup>73</sup>

This letter indicated that in the case of an epidemic, persons diagnosed with polio would be eligible for free treatment; however, it is not clear if all physicians believed it to be a communicable.<sup>74</sup> If there was a consensus on polio, it would have been recommended that patients be housed in the KGH, a hospital specifically for patients with communicable diseases. It is possible that the Medical Society was asked for further clarification, as a second letter was sent in late May from Dr. W. F Tisdale, the Secretary of the Medical Committee, to Dr. Morley Lougheed, Winnipeg's Medical Health Officer. In that letter, Tisdale acknowledged that the issues required "careful consideration"; however, the Society's position did not change. Tisdale explained:

In view of the urgency of an expression of opinion on the question, referring in particular to Poliomyelitis, Cerebro Spinal Meningitis and Encephalitis, I made personal contact with a number of the doctors and their opinion was, with the newer knowledge concerning these diseases, they should not be looked upon as suitable for hospitalization in the Municipal Hospitals only but that they are cases suitable for any general hospital, unless due to epidemic proportions the Health Officer decided to institute more strict supervision.<sup>75</sup>

In arguing that individuals diagnosed with polio could be admitted to non-isolation hospitals, Tisdale was recommending a measure that had already been put in place, as polio patients had been treated to other hospitals, including Winnipeg's Children's Hospital, during

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<sup>73</sup> CWA, Pack File H1738(2), Free Treatment Infectious Diseases, Committee on Health, letter from Winnipeg Medical Society to City Health Committee, 5 May 1944. Italics mine.

<sup>74</sup> CWA, Pack File H1738(2), Free Treatment Infectious Diseases, Committee on Health, letter from the Winnipeg Medical Society to City Health Committee, 5 May 1944.

<sup>75</sup> CWA, Pack File H1738(2), Free Treatment Infectious Diseases, Committee on Health, letter from Dr. W.F. Tisdale, Secretary of the Winnipeg Medical Society to Dr. M.S Lougheed, Medical Health Officer, Winnipeg, 23 May, 1944.



previous epidemics.<sup>76</sup> This points to a belief that polio was not communicable; however, that patients were kept in isolation for two to three weeks, regardless of which hospital they were in, does speak to the potential communicability of the disease. If the medical community was certain that polio was not a communicable disease, there would not have been a need to isolate polio patients. The lack of consensus over communicability in the Manitoba medical community is troubling. In 1937 an editorial in the *Canadian Public Health Journal* announced that it “is established that the disease is communicable [and] the most important avenue of transmission is through the contact of persons with other persons.”<sup>77</sup> That the Manitoba medical community was discussing and debating the potential communicability of polio long after it had been accepted by the international and national scientific communities indicates that Manitoba’s public health officials were curiously ignorant of the most up-to-date information about the disease.

The debate over the cost of hospitalizing people with polio also speaks to the lack of a concrete provincial policy regarding the financial care of patients. In terms of funding, Ruttie argues that “provincial polio strategies expanded during serious epidemics with the development of specific preventative, treatment and hospitalization services that were freely available to all polio cases, regardless of income.” He further suggests that Manitoba developed one of “the most sophisticated and generous polio policies because it bore “the brunt of the worst

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<sup>76</sup> There is also evidence that some polio patients – presumably French-Catholic ones – were housed in Hôpital Saint-Roch an isolation hospital in St. Boniface, across the Red River from Winnipeg. By 1923, Hôpital Saint-Roch had 100 beds; however, it closed in 1942. [http://shsb.mb.ca/au\\_pays\\_de\\_riel/associations\\_institutions/S%C5%93urs\\_Grises/Saint-Roch\\_1923](http://shsb.mb.ca/au_pays_de_riel/associations_institutions/S%C5%93urs_Grises/Saint-Roch_1923); “St. Roch’s Hospital Aids in Checking Spread of Epidemic,” *Winnipeg Free Press*, May 1938, 10.

<sup>77</sup> “Poliomyelitis in Canada,” Editorial, *Canadian Public Health Journal* 28,9 (September 1937): 457.

epidemics.”<sup>78</sup> The debate over whether or not to pay for the hospitalization of polio patients at the KGH complicates this conclusion, as do the shifting parameters of what exactly the provincial government was willing to pay for. In 1936, the province paid for diagnostic tests to confirm the disease and in the case of paralysis, paid for a consultation with an orthopaedic surgeon. The cost of any surgeries or after care “if the family was not able to supply the treatment” was, according to Dr. F. W. Jackson, the province’s Deputy Minister of Health and Public Welfare, to be covered either by “the municipal authorities or private agencies.”<sup>79</sup> In the early 1940s, Manitoba paid for hospitalization during the acute stage of the illness only, set at three weeks in duration. By the end of the epidemic era, the province’s policy had shifted again. According to Rutty, Manitoba covered the full costs associated with respirators. For other polio patients, the province covered the first twenty-one days of hospitalization and then resumed coverage on the ninety-first day of hospitalization, with the patient responsible for costs incurred during the interim.<sup>80</sup> In 1953, Manitoba reduced “the period of patient [financial] responsibility to 39 days.” Previously, the province had paid for one set of braces or crutches for each patient who needed them, but by 1952 this cost had been shifted to the Crippled Children’s Society, a private agency.<sup>81</sup>

This continuously shifting policy was neither comprehensive nor straightforward. In the midst of the 1953 epidemic, the Municipal Hospitals Commission moved to ask the city “to set up an appropriation to cover abnormal costs of polio equipment and staff” and to press the

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<sup>78</sup> Rutty, “Poliomyelitis in Canada,” 7. Rutty was able to utilize Manitoba’s DHPW records as his research was done before the implementation of the province’s Personal Health Information Act (PHIA). Since that time, the government has restricted access to the records, which is discussed further in the conclusion of this dissertation. I draw heavily on Rutty for this part of the chapter, along with published articles and the records of the Winnipeg Municipal Hospitals.

<sup>79</sup> Jackson, ‘Control Measures,’ 367.

<sup>80</sup> Rutty, “Poliomyelitis in Canada,” 234.

<sup>81</sup> Rutty, “Poliomyelitis in Canada,” 251.

province to reimburse them for those costs. At the same meeting another motion was passed with the intention of informing the provincial government “that the hospital commission will not accept a rate for long term [care of polio patients] of less than \$6.50 per day plus \$1.50 grant.”<sup>82</sup> That civic and provincial authorities were arguing about costs and who was to be responsible for them during the 1953 epidemic indicates that Manitoba did not have a sound, comprehensive polio policy in place. If neither the city nor the province could agree to terms throughout the twenty-five year period, it is doubtful that patients were able to enter the hospital knowing that whatever happened to them, the costs associated with their illness would be covered. Indeed, the Commission approved a rate change for all polio patients in September 1953, retroactive to 1 August 1953, right at the height of the epidemic.<sup>83</sup> There is also evidence that the period of hospitalization in which patients were responsible for costs proved to be a hardship. In the wake of the 1941 epidemic, for example, several families approached the Municipal Hospitals Commission for a refund.<sup>84</sup> This trend continued throughout the epidemic era.

The debate over school closures can also be read as part of Manitoba’s haphazard and complicated reaction to polio throughout the epidemic era. Ongoing in Manitoba throughout the epidemic era, this debate centred on questions about maternal competence, and questions about the communicability of the disease. Health officials in Manitoba generally believed children were safer at school, and rarely supported the idea that schools should be closed during polio outbreaks. Nevertheless, schools were closed on occasion during some of the epidemics, particularly in rural districts, and in Winnipeg during the 1928 and 1953 epidemics. The reasons health officials used to support their position placed the blame on parents, usually mothers, and

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<sup>82</sup> RHA, City of Winnipeg Hospital Commission Minute Book, June 1953 – December 1957.

<sup>83</sup> RHA, City of Winnipeg Hospital Commission Minute Book, June 1953 – December 1957, 63.

<sup>84</sup> RHA, City of Winnipeg Hospital Commission Minute Book, August 1940 – December 1942, 19 August 1941, 278-9.

worked to bolster their own position as experts. Physicians believed that if schools were closed during an outbreak, parents would be unable, or unlikely, to prevent their children from running all over their neighborhoods, potentially coming into contact with innumerable unknown persons. During the epidemic era, health officials argued that children, families, and indeed the whole community, would benefit from the close medical inspection performed in schools and under the watchful eyes of school doctors, nurses, and teachers where they would be kept healthy and referred to a physician at the first sign of disease.<sup>85</sup> Public anxieties about polio, however, often meant that the pressure to close schools and other public places was high. Not everyone in Manitoba agreed with the medical community, leading to increased anxieties throughout the epidemic era.

The argument that communities were better served if schools remained open was first debated during the 1928 epidemic. Although some health officials were dubious of the efficacy of the measure, the “opening of the city schools, public and parochial, private schools, and Sunday schools” in Winnipeg “was delayed for a month.”<sup>86</sup> Health officials were not convinced that closures would prevent the spread of the disease, likely because there was no scientific or medical consensus as to its mode of transmission or if it was a communicable disease. According to Dr. A. J. Douglas, Winnipeg’s medical health officer, the closures were ordered as much to allay public anxieties than to prevent the spread of the disease; however, some public officials believed that public health authorities needed to go a step further. Alderman Blumberg, in particular, “questioned [Douglas] as to the practice of allowing children to attend public gatherings, movies and theatres while the schools were closed.” In response, Douglas indicated

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<sup>85</sup> This belief was not unique to polio, but was part of the public health project focused on creating a strong, healthy Canadian citizenry. See in particular, Sutherland, *Children in English-Canadian Society*.

<sup>86</sup> Douglas, “Methods of Control in the City of Winnipeg,” 72.

that neither the city nor the province had any “intention of closing any of the gathering places frequented by adults,” and he indicated further that the onus was being placed, not on the state, but on parents to keep children home, and away from the threat of disease. In an attempt to bolster his position that Winnipeggers who followed the voluntary public health directives need not worry about polio, Douglas further stated “it was his opinion that parents were co-operating splendidly in not allowing children to attend large gatherings.” Alderman Flye, however, hinted that parents were not keeping their children isolated as readily as Douglas believed, suggesting that “motion picture houses were not allowing children to attend shows now that the ban was keeping them from school.”<sup>87</sup> Flye’s implication was clear: parents were not restricting their children’s public movements, thereby increasing the danger of contracting polio.

The idea that children were safer at school than in the home held currency with the medical community but this belief was not shared by all Winnipeggers. During the 1936 outbreak, members of Winnipeg’s school board took “drastic action” on 8 September “in order to prevent the spread of Infantile Paralysis in city schools” by supporting “a motion to appoint a committee with the power to close any school where a case occurred.”<sup>88</sup> The motion caught the attention of public health officials, including Douglas, who responded quickly and forcefully to the school board’s proposal to give themselves the power to decide to close schools, rather than to follow the directives of state health officials. Douglas stated that closing urban schools would “serve no useful purpose,” and argued that:

We have almost no knowledge of how the disease spreads. Closing the schools would simply turn 39,000 children into the street, where they would congregate instead of having them under close medical supervision in the schools. With proper medical inspection and supervision, I think they are better

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<sup>87</sup> “Dr. Douglas reports situation is improved” *Manitoba Free Press* 20 September, 1928, 4.

<sup>88</sup> “School Board Acts to Halt Dread Disease,” *Winnipeg Free Press*, 9 September 1936, 1.

off in school.<sup>89</sup>

In 1936, Douglas had co-opted the arguments put forth by the city alderman in 1928, and implied that parents could not be trusted to stop their children from entering public spaces in Winnipeg. Keeping schools open during a polio epidemic was posited by public health officials as the best way they could protect children and the broader community.

In 1936 the school closure debate reflected the urban-rural geography of that year's epidemic. Despite the school board's desire to close schools, Winnipeg schools opened as planned that September. In the rural areas of the province, however, schools were closed quickly, and often without any debate or discussion. Indeed, the closure of public spaces, including schools, was handled very differently by urban and rural authorities with some rural locations closing with the first signs of the disease. While most rural schools, save for those in the RM of Morton, opened in time for the new school year, when the second wave of the disease began, officials were quick to order them closed.<sup>90</sup> Cognizant of what was occurring in the Morton-Boissevain area, school officials in Wawanesa ordered schools in the area to close and they were not opened until 11 September, a day after Boissevain schools re-opened.<sup>91</sup> In Griswold, schools were ordered closed after four cases were reported in the area in the third week of September.<sup>92</sup> When queried as to the rural-urban discrepancy, Douglas stated that he was not against the principle of rural school closures, because in closing them, the children would be "scattered" to

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<sup>89</sup> "Denies Paralysis Warrants Closing Schools in City," *Winnipeg Free Press*, 11 September 1936, 3.

<sup>90</sup> "Paralysis Death List in Province Added to Today" *Winnipeg Free Press* 26 August 1936, 1.

<sup>91</sup> "Report Infantile Paralysis Swings Toward Winnipeg" *Winnipeg Free Press*, 11 September 1936, 6.

<sup>92</sup> "Schools Closed at Griswold as Paralysis Result" *Winnipeg Free Press*, 24 September 1936, 1; "Slump in Number of New Paralysis Cases Maintained" *Winnipeg Free Press*, 6 October 1936, 1.

their “respective farm homes” far away from each other, thus lessening the potential spread of the disease.<sup>93</sup> Only children who would ostensibly be congregating in areas populated by many bodies, it seems, needed to be monitored by health authorities.

One exception to the belief that rural school closures were useful is evident in the case of Neepawa. By mid-September, polio was present in Neepawa, a small town northwest of Winnipeg. The province sent a district nurse there to “have control of the outbreak” and by the time a third case was confirmed, there were rumblings that the school ought to be closed. Although other rural schools had been closed without incident, Dr. F. W. Jackson, the provincial Deputy Minister of Health and Public Welfare, made a trip to Neepawa to speak to the town council in the hopes of persuading them to keep the schools open. Arguing that closing the schools would “mean closing churches and theatres as well,” Jackson instead suggested that the use of convalescent serum, the nasal spray, and the “daily medical inspection of school children” would better serve the community. He also promised that the province would pay for the cost of the district nurse, save for “living expenses,” which the town had to cover.<sup>94</sup> It is not clear why Jackson expressed so much interest in Neepawa. It is possible that he considered Neepawa to be too populous, thereby negating the efficacy of sending children to their homes; however, schools in the town of Selkirk, which was more populous than Neepawa, were closed without any intervention.<sup>95</sup> Indeed, the province did not intervene when Dr. D. G. Ross, Selkirk’s medical

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<sup>93</sup> “Denies Paralysis Warrants Closing Schools in City,” *Winnipeg Free Press*, 11 September 1936, 3.

<sup>94</sup> “Nine Paralysis Cases Reported During Weekend,” *Winnipeg Free Press*, 14 September 1936, 9.

<sup>95</sup> In 1931, the population of Selkirk was 4,486 and by 1941, it had grown to 4,915. Barry Potyondi, *Selkirk, The First Hundred Years*, (Winnipeg: Josten’s/ National School Services, 1981), 142. McKenzie gives the 1958 population of Neepawa and surrounding areas as between 3,000 and 3,500; it is unlikely that the population was higher in 1936. A.F. (Dick) McKenzie, *Neepawa, Land of Plenty*, (Brandon: Leech Printing, 1958), 45.

officer of health, in consultation with members of the Selkirk school board, ordered schools in that area to close.<sup>96</sup> The DHPW was adamant that some schools, such as those in Winnipeg and Neepawa, remain open during the 1936 epidemic but did not react to the closure of schools in other areas of the province. By 1936 public health officials believed that medical authorities were better suited to keep a watchful eye on children in urban areas, largely because they believed that uninformed parents would let their children enter public spaces, but their application of policies concerning school closures was uneven at best during the 1936 epidemic.

Despite the discrepancies in the 1936 debates over the efficacy of closing schools during a polio epidemic, health officials employed similar arguments during the epidemics in the 1940s. Two physicians, Dr. Roper Cadham, Winnipeg's deputy health officer, and Dr. O. S. Day, Director of Winnipeg's child health services, were despatched in the midst of the 1947 epidemic to meet with the Winnipeg school board in an effort to keep city schools open. Echoing the arguments put forth in previous epidemics, Cadham and Day suggested that children were "more likely to come into contact with the disease while running around in the streets than they were in school." Dr. Day suggested that the school board ought to send "circulars" to all teachers and any medical personnel working in the schools, reminding them to watch the children carefully for any signs and symptoms of the disease. Day's comment suggests that school officials were asked to be cautious and vigilant. Cadham, on the other hand, took his argument a step further, telling the members of the school board that school closures were unnecessary because it had never been established that polio was even "communicated from one person to another."<sup>97</sup>

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<sup>96</sup>At the time, Selkirk only had three confirmed cases of polio. It did however, have a number of suspected cases at the time Dr. Ross met with the members of the school board. "All Schools in Town of Selkirk Ordered Closed," *Winnipeg Free Press*, 5 September 1936, 1.

<sup>97</sup>"Less Danger in Classrooms Schools Open Sept. 2 Despite Polio Scare," *Winnipeg Free Press*, 20 August 1947, 3.



Medical officials in Manitoba may not have agreed that polio was a communicable disease or that schools and public places needed to be closed during an outbreak, but the general public was not so sure. In mid-August 1947, it was announced that an advisory committee, made up of a number of medical officials, would be appointed to help the DHPW navigate the epidemic. Almost immediately, rumours began to spread that schools would be closed and children would be banned from public places such as theatres and pools. Although the advisory committee recommended to parents that children should avoid crowds and chilling, closures and bans were not instituted. This did not sit well with everyone: a letter to the editor of the *Free Press*, for example, argued that it was “ridiculous” to advise people to keep children away from crowded places, but not “postpone school opening because of the polio epidemic,” particularly since “other cities and communities” have delayed their school year even though “they have not had nearly so many cases as Winnipeg.”<sup>98</sup> The arguments given by Manitoba health officials that polio might not be communicable, that children were safer in schools, and did not need to be isolated were certainly not hegemonic.

By the time of the sizeable epidemics of the 1950s, more pieces of the polio puzzle had been uncovered. By the early 1950s, scientists were certain that polio was transmitted through the oral-fecal route, not the olfactory route championed by Flexner in the early part of the epidemic era. International researchers had also discovered that the “quantity of virus present in feces” was much larger than previously believed, and that excretion of the virus continued “for a far longer time, in contrast to the brief period of its presence in the nasopharynx.”<sup>99</sup> These discoveries allowed researchers to test more conclusively for the presence of the poliovirus, and

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<sup>98</sup> “Would Delay School Opening,” Letter to the Editor, *Winnipeg Free Press*, 30 August 1947, 6.

<sup>99</sup> Paul, *History of Poliomyelitis*, 282.

they also provided more clues as to the spread of the disease during epidemic moments. The ability to grow the virus in tissue cultures, combined with the “demonstration of the viremia” of the disease during the incubation period, meant that a vaccine could probably prevent the virus from entering the bloodstream, although one was not yet available.<sup>100</sup> Despite these advances, Manitoba physicians clung to older ideas about the disease. In 1954, Dr. R. G. Cadham wrote that “despite the tremendous amount of investigation which has been carried out in an effort to disclose the portal of entry there is no definite evidence indicating one portal of entry for the virus.” He further argued, despite what was by then generally accepted, that “the method of invasion of the central nervous system by the virus once it is past a portal of entry,” and the presence of viremia, were both still up for debate.<sup>101</sup>

During the 1952 outbreak, the discussions about closures were influenced by the newer research about polio, the specific geographies of the outbreak, and jurisdictional differences. The first community in the province to report cases in the summer of 1952 was a Mennonite group just outside of Winkler, south of Winnipeg near the border with the United States. A second concentrated outbreak on the RCAF base at Rivers, slightly northwest of Brandon, began shortly after the first abated. As case notifications in the Winkler area increased, an Advisory

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<sup>100</sup> Paul, *History of Poliomyelitis*, 389. Viremia refers to the ability of a virus to enter the bloodstream. Paul suggests that the viremia of the poliovirus was “amply and convincingly confirmed” by the separate work of two scientists, Dorothy Horstmann and David Bodian, in 1952. Despite this, some physicians in Manitoba, and presumably in other places, continued to cling to the belief that it entered the nasopharynx. In a 1954 article published in the *Manitoba Medical Review*, Dr. J.C. Hilt, Associate Professor of Bacteriology at the University of Manitoba, wrote that the hypothesis that “during the viremia the most significant deposition of virus is in the central nervous system where it multiplies and produces the disease” was a “contradictory” one and that it was “impossible to state which of these apparently contradictory theories is correct.” See J.C. Wilt “Virology of Poliomyelitis,” *Manitoba Medical Review* 34, 7 (August-September 1954): 402.

<sup>101</sup> R.G. Cadham, “Epidemiology of Poliomyelitis,” *University of Manitoba Medical Journal* 25, 2 (December-January 1953-54): 14.

Committee, assembled by the province and consisting of a number of physicians, began to make public announcements dissuading people from travelling in and out of the affected area. These announcements indicate that provincial health officials may have accepted the hypothesis that the poliovirus was transmitted from person to person. A report released by the Advisory Committee to the press stated that polio was “readily carried by infected but apparently healthy people” and the best way to prevent its spread was through “strict isolation.”<sup>102</sup> Indeed, the 1952 epidemic was blamed on the movement of bodies: the Department of Health and Public Welfare’s *Annual Report* stated that “it is quite possible that the infection came from Saskatchewan to Manitoba. It was rumoured that Mennonites had returned from the southern United States and Mexico to the Saskatchewan areas and may have brought the infection with them.”<sup>103</sup> The notion of polio as a communicable disease transmitted by healthy carriers was not only emphasized by the press and technical committee, it was also discovered by physicians mapping the epidemiological route of the disease. Dr. Percy Barsky, a physician at Winnipeg Children’s Hospital, noted that “the first reported case from the second epidemic centre ( Rivers) in Manitoba, was that of a child who had spent a fortnight in the first epidemic centre. He had returned home for only two days when his symptoms developed.” Barsky’s analysis of the epidemic also highlighted that “the most severe cases occurred in families in which more than one member had been infected,” indicating that he believed the virus to be communicable.<sup>104</sup>

School closures were not an issue in Winkler as the epidemic peaked during the summer break, but other public spaces were closed. The Winkler Bible Camp, for instance, was shut down in mid-July due to the worsening epidemic, and physicians continued to emphasize

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<sup>102</sup> “Polio Peak Likely Past in Winkler,” *Winnipeg Free Press* 21 July 1952, 6.

<sup>103</sup> DHPW, *Annual Report – 1953*, 73.

<sup>104</sup> Barsky, “The Management of Poliomyelitis,” 517.

publicly the importance of “preventing persons from going in or out” of the epidemic area.<sup>105</sup>

The necessity of limited travel in and out of the Winkler area was stated often throughout the month of July and in August, and to further make their point, the Advisory Committee provided two examples of the dangers inherent in not heeding their advice. First was a story about a farmer “from the epidemic area” who had visited a friend over 100 miles away; two weeks later, the child of the family he had visited apparently developed polio. The second example was similar: a mother visited the epidemic area with two of her children and a short time later her third child, who had not made the trip, contracted the disease.<sup>106</sup> The members of the committee clearly wanted to impress upon the population the dangers of travelling during the epidemic, even if one did not exhibit any symptoms.

Provincial public health officials worked continuously and publicly to persuade people from travelling in and out of Winkler; however, they stopped short of establishing an official cordon sanitaire. The second concentrated outbreak, at the Air Force base in Rivers, was handled differently owing to the participation of Armed Forces officials in the decision making process. Put another way, the Armed Forces stepped in and made unilateral decisions without consulting provincial public health officials. The Armed Forces took decisive action as soon as the presence of polio was confirmed at Rivers. On 11 August, it was reported that there were eleven confirmed cases of polio at the base. While that number had only risen to thirteen by 26 August, the entire based was quarantined. Indeed, both the Rivers base and the Shilo base, east of Brandon, were closed indefinitely. Trainees and the public were prevented from entering the base at Rivers, all leaves and courses were cancelled, and families were told not to travel.<sup>107</sup> The

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<sup>105</sup>“Boys 3 and 5 Polio Victims,” *Winnipeg Free Press* 30 July 1952, 3.

<sup>106</sup> “Polio Epidemic Now Believed On the Wane,” *Winnipeg Free Press*, 15 August 1952, 3.

<sup>107</sup> “Shilo, Rivers Camps Closed to Block Polio,” *Winnipeg Free Press*, 28 August 1952, 1.

schools in Rivers were closed immediately, and without consultation with provincial health officials, who did not favour cancelling classes on account of polio.<sup>108</sup> This contrasted with the rest of the province, as only two other RMs, and no urban areas, cancelled classes that year. The stark difference between how polio was approached in Rivers and the rest of the province had to do with jurisdiction: the federal government had authority over the Armed Forces, meaning provincial health authorities did not have a say into the way the outbreak was handled on the bases. While the provincial Advisory Committee announced publicly that it “endorsed the government’s decision [...] to quarantine the military camps at Shilo and Rivers,” it is unlikely that they had any say in the decision making process.<sup>109</sup> The swift school closures and cordoning off of the base at Rivers is in direct contrast to the way provincial and municipal health officials approached polio epidemics in Manitoba. Despite the high incidence of polio in 1952, and the acknowledgement that polio could be passed from person to person, widespread civilian travel restrictions were not implemented, and Dr. Morley Loughheed, Winnipeg’s Medical Health Officer, did not think Winnipeg schools needed to be closed during the outbreak.<sup>110</sup>

The 1953 epidemic caught Manitobans off guard. Many individuals from the 1952 epidemic were still hospitalized, including ten in respirators, and health officials believed that the first few cases that appeared in the late spring were merely “hangover cases” from the past

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<sup>108</sup> “Nine New Polio Cases Reported in Province,” *Winnipeg Free Press*, 2 September 1952, 3.

<sup>109</sup> “Backlog Lifts Polio Total to 265 Cases,” *Winnipeg Free Press*, 28 August 1952, 6. The Department of Health and Public Welfare’s Annual Report discusses the cluster of cases in the Winkler area, but it does not mention the Rivers outbreak. This is not to suggest that there was any tension between the province and the Armed Forces. Indeed, the two groups co-operated numerous times during the epidemic era. The intention is to point out that the Armed Forces medical officials clearly took control over the Rivers outbreak and that the province did not have any jurisdiction over the way polio was approached at Shilo and Rivers.

<sup>110</sup> As the provincial *Annual Report* states, the epidemic peaked in Manitoba during the week ending 13 September, but “there really was a high incidence from July 12<sup>th</sup> until November 15<sup>th</sup>.” DHPW, *Annual Report – 1953*, 73; “Panel to Meet on Reopening of Schools,” *Winnipeg Free Press*, 22 August 1952, 1.

year.<sup>111</sup> Based on previous patterns, an epidemic was not expected in 1953; however, the “sudden appearance of 16 cases in the last week of June, a greater number than had been reported for June in any previous epidemic years, was a disturbing indication that the city was to experience a major epidemic.”<sup>112</sup> By early July, it was apparent that Manitoba was once again facing an epidemic of polio, and the Advisory Committee was re-established in the first week of July.<sup>113</sup> Despite the newer knowledge, public health issues were complicated by the ferocity of the 1953 outbreak and the uncertainty it engendered. Much of the uncertainty revolved around children: how they should be supervised, where they could play, and how they might contract the disease. This section of the chapter examines the lack of consensus over the closing of pools and schools during the 1953 epidemic to indicate that even after twenty-five years of polio epidemics, health officials were unable to develop and promote a uniform polio policy.

In July and August, the epidemic escalated, as did debate over the safety of children and the use of outdoor pools in Winnipeg. On 16 July, Dr. M. R. Elliott, the provincial Deputy Minister of Health and member of the Advisory Committee, issued a warning that it would not be wise to use wading pools in the city during the outbreak; however, neither swimming nor wading pools were closed.<sup>114</sup> This contradiction did not sit well with the general public and the

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<sup>111</sup> DHPW, *Annual Report – 1953*, 73; “11 Polio Cases in Week Hikes Province Total to 39,” *Winnipeg Free Press*, 2 July 1953, 3.

<sup>112</sup> CWA, City of Winnipeg Health Department, *Bound Health Department Reports, Annual Report of the Medical Health Officer, 1953*, R.G. Cadham, “Epidemiology of the Poliomyelitis Epidemic in Winnipeg in 1953,” 15.

<sup>113</sup> The Special Advisory Committee on Poliomyelitis was similar in composition and scope to the Technical Advisory Committee set up during previous epidemics. The full committee is not listed in the press or the Department’s Annual Report, but the Chair was Dr. J.D. Adamson, and Dr. Henry Medovy the vice-chairman. In 1953, the committee met “once a week to discuss various problems and advise the minister [of health and public welfare, H.C. Bell] what their recommendations were.” DHPW, *Annual Report – 1953*, 71.

<sup>114</sup> “Wading Pools Unwise Now Polio Committee Reports,” *Winnipeg Free Press*, 16 July 1953, 1.

following day the Committee was inundated with a “flurry of telephone calls” from citizens demanding that city pools be closed. This put officials on the defensive, forcing them to defend their position. Dr. Roper Cadham, Winnipeg’s deputy Health Officer stated that “there [was] no scientific evidence to justify” closing pools, but he attempted to mollify concerned citizens by insinuating that the decision would be revisited if necessary. Dr. Elliott of the DHPW supported Cadham’s decision, stating that “no scientific evidence exists that wading pools serve as a medium of transmission.”<sup>115</sup> Despite the use of science to bolster their opinions, it is clear that Winnipeggers did not agree necessarily with medical officials and overall pool attendance numbers dropped sharply in the city.<sup>116</sup>

The debate over pool closures indicates that while officials and the general public were both concerned with the safety of children, there was, even in 1953, a definite lack of consensus as to how best to minimize the risk of polio. In Winnipeg, some city officials favoured a heavy-handed approach. Alderman Stan Carrick, for example, “urged banning children from city churches and theatres.”<sup>117</sup> Other civic officials did not agree, suggesting instead that it was “up to the parents to keep children away from places where they thought there might be danger.”<sup>118</sup> The problem was that despite the warnings issued by the Advisory Committee, no one actually knew what constituted a dangerous space. During the month of July, as case reports mounted, Cadham reported receiving “frequent inquiries as to dust on the streets and the possible relationship of such dust and to the present incidence of poliomyelitis.”<sup>119</sup> The volume of calls about the potential connection between dirt and polio must have been quite high as Cadham’s response to

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<sup>115</sup>“Wading Pools to Stay Open, Winnipeg Decides,” *Winnipeg Free Press*, 17 July 1953, 3.

<sup>116</sup>“Pool Attendance Plunges Sharply,” *Winnipeg Free Press*, 20 August 1953, 3.

<sup>117</sup> “Close Churches to Children, City is Urged,” *Winnipeg Free Press*, 27 August 1953, 1.

<sup>118</sup> “Close Churches to Children, City is Urged,” *Winnipeg Free Press*, 27 August 1953, 1.

<sup>119</sup> CWA, Committee on Health, Pack File 2274, letter from Dr. R.G. Cadham, Deputy medical officer of health, city of Winnipeg, to the Mayor and City Council of Winnipeg, 20 July, 1953.

the Advisory Committee was forwarded immediately to the *Winnipeg Free Press* for dissemination to the general public.<sup>120</sup> Evidently, not everyone was prepared to accept the word of provincial and civic health officials and some citizens, “including representatives from various community clubs and city suburbs,” decided to take matters into their own hands. In the summer of 1953, fifty concerned citizens started a grassroots “Polio Prevention Committee.” Although it is not clear how long the group lasted, they conducted “drives” in the suburbs of Fort Garry and West Kildonan “to enforce sanitary regulations.”<sup>121</sup> Public health officials, bolstered by scientific studies and the laboratory, believed they knew what was best for the health of the wider community. The letters to the editor, phone calls, and the creation of the grassroots committee all indicate that there was a definite lack of unanimity and agreement on the part of the general public.

This discord over how to best protect children against the threat of polio played out in the context of public spaces such as outdoor pools, and it was also evident in the discussions concerning school closures in 1953. As with past epidemics, provincial health officials in Manitoba urged schools to remain open; however, in 1953 many chose to ignore that advice. Schools in Selkirk, Mapleton, St. Andrews, Headingly, Lockport, and Gonor, for example, decided to postpone the start of the school year because of the epidemic.<sup>122</sup> Despite the arguments against school closures put forth by medical officials, the start date for Winnipeg

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<sup>120</sup> CWA, Committee on Health, Pack File 2274, letter from Dr. R.G. Cadham, Deputy medical officer of health, city of Winnipeg, to the Mayor and City Council of Winnipeg, 20 July, 1953. Dr. Cadham’s letter was addressed to the “His Worship the Mayor and Members of Council”; however, the City Clerk forwarded the letter to the civic committee on health the following day. City of Winnipeg Archives, Committee on Health, Pack File 2274, memo from the City Clerk to the committee on health, 21 July 1953. On the same day, an article appeared in the *Free Press* quoting Cadham’s letter. See “No Evidence Disease is Dust Spread,” *Winnipeg Free Press*, 21 July 1953, 1.

<sup>121</sup> “Anti-Polio Group Planned in Winnipeg,” *Winnipeg Free Press*, 25 August 1953, 3.

<sup>122</sup> “2 Deaths 59 Cases Boost Toll,” *Winnipeg Free Press*, 24 August 1953, 1.



schools was delayed until mid-September, and when school began many team sports were cancelled for the year. Provincial and civic health officials argued that they consented to close city schools not on “medical grounds,” but because of the myriad “anxious mothers [who were] begging school trustees to keep” schools closed.<sup>123</sup> In essence, public health officials argued that public opinion had forced them to go against what they considered best public health practices. The provincial funding formula for schools further complicated the situation in 1953. W. C. Miller, the provincial Minister of Education, explained to the *Free Press* that if the “local health officer orders a school closed with the consent of the minister of health, grants and teacher’s salaries will not be affected”; however, when a “school board decides on its own authority to close a school, the school will lose some of its educational grant and teachers will lose pay.”<sup>124</sup> Parents, mothers in particular, were to shoulder the blame if their children contracted polio, and for any potential loss of salaries on the part of teachers.

Over the course of twenty-five years, officials in Manitoba faced six epidemics of polio; despite this lengthy engagement, however, a clear, comprehensive public health policy did not emerge. The views of health officials often clashed with those proffered by other officials and the general public, meaning there was often very little consensus as to what should be done during each outbreak. There was a difference of opinion, for example, over whether or not swimming pools should be closed during an epidemic, or if school-aged children should be allowed to enter public spaces. The protracted debate over the efficacy of school closures is also indicative of the lack of consensus as to how polio ought to be approached and handled. Public health officials in Manitoba clearly believed physicians and school nurses were in the best position to keep children healthy. This belief did not develop solely in the context of the polio

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<sup>123</sup> “Open School or Not? \$64 Question,” *Winnipeg Free Press*, 26 August 1953, 1.

<sup>124</sup> “Open School or Not? \$64 Question,” *Winnipeg Free Press*, 26 August 1953, 1.

epidemics: keeping a watchful eye over children, while blaming mothers for illness, was very much a part of the broader public health regime in early twentieth century Canada.<sup>125</sup>

Public health officials in Manitoba were influenced by laboratory-based medicine and subscribed to the belief that the lab could help ameliorate the effects of polio. This is evidenced by the adoption of several experimental preventatives over the course of the epidemic era. While public health officials in Manitoba did utilize public health measures in 1928, the MRC's exclusive focus on studying the efficacy of convalescent serum signaled their adherence to the influence of the laboratory. Laboratory-based preventatives offered health officials the chance to do something to prevent the worst effects of the disease, but they were also extremely contentious. Civic officials, labour leaders, and the lay public reacted to the preventatives, and the way the preventatives were portrayed publicly in multiple ways, indicating that the faith officials placed in them was not necessarily shared by everyone in the community. The lack of a consensus as to the communicability of polio and its methods of spread also worked to destabilize officials' prescriptions and pronouncements. Widespread unrest as a reaction to the implementation of public health measures did not occur in Manitoba, at least not to the degree experienced during outbreaks of other diseases; however, the decisions made by public health officials in their attempts to control and contain epidemic polio were not necessarily accepted by the general public, as the debates about public spaces, school closures, and even funerals indicate.

Polio became epidemic in Manitoba at least six times between 1928 and 1953, and during each outbreak officials used public health tools as well as laboratory-based experimental products in their bids to halt its spread and its effects. Over the course of the epidemic era,

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<sup>125</sup> See for example Arnup, *Education for Motherhood*; Comacchio, *Nations are Built of Babies*; and Comacchio's introduction to Sutherland, *Children in English-Canadian Society*.

despite a developing international understanding about the disease, health officials in Manitoba reacted to each outbreak in a reactionary manner. They relied continuously on bacteriological tools that were ineffective, and the public debates over methods of control combined with the unevenly applied directives concerning school closures indicates that this approach did not become better organized as the epidemic era wore on. The inconsistency surrounding the classification of polio as a communicable disease is revealing. While it shows that officials were concerned with the costs of lengthy hospitalizations, it indicates how far removed Manitoba officials were from broader understandings about polio. These issues prevented Manitoba from developing a clear or comprehensive polio policy throughout the epidemic era.

Despite this inability to develop a concrete policy regarding hospital care and costs, most people with polio were sent to the KGH, and it was on that hospital's wards that they were treated. This treatment was not static; it changed significantly over the course of the epidemic era. The following chapter examines the medical and nursing care provided during the early part of the epidemic, from the 1920s to the 1930s, with an emphasis on the focus on surgery to limit disability. The following chapter also considers the ethical dilemmas physicians confronted with the introduction of respirators and examines the impact the mainstream polio treatment – rest and immobilization – had on nurses' work.

## **Chapter Four: “One of the greatest scourges that affects humanity”: Medical and Nursing Care in the Early Epidemic Era, 1928-1940<sup>1</sup>**

In 1937, thirteen year old Esther Kingsley contracted polio and spent five weeks in the KGH. After this lengthy period of isolation ended, Kingsley, who had residual paralysis in both legs, was sent to the Winnipeg Children’s Hospital where she spent the next thirteen months convalescing. Rest and the immobilization of any affected limbs were the order of the day. Although her breathing, swallowing, and arms had not been affected, she was not even allowed to sit up in her bed until several months into her convalescence.<sup>2</sup> During this long recovery period, in an era when hospital visitors were restricted quite severely, Kingsley became close not only with the other patients, but the student nurses assigned to her ward.

When two year old Donna McGillivray contracted polio in 1940 she experienced paralysis in all four of her limbs. When she was five, the joint from her big toe was removed surgically and used to stabilize her ankle. That was not McGillivray’s only surgery. When she was twelve, it was discovered that the muscles in her back had been affected by the disease and she had developed scoliosis. Her physician sent her to Minneapolis for surgery to fuse her spine, using a bone fragment from her leg.<sup>3</sup> Not everyone who contracted polio in the early part of the epidemic era was hospitalized; however, most with residual paralysis did spend time in a hospital, and many underwent, or were urged to consider, surgeries to prevent the ‘deformities’ associated with the disease. These two examples are indicative of some of the larger themes that inform this chapter. Long-term immobilization to reduce any potential disabilities was central to

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<sup>1</sup> Angus A. Murray, “The Prevention and Treatment of Deformities Arising in the Course of Infantile Paralysis,” *Manitoba Medical Association Review* (September 1937): 157.

<sup>2</sup> MA, Polio Oral History Project, Esther Kingsley interview, disc one of one. All interviewees have been given pseudonyms.

<sup>3</sup> MA, Polio Oral History Project, Donna McGillivray interview, disc one of one.

polio treatment in the early epidemic era, but surgical interventions were part of physicians' options for caring for people with polio. The efforts of public health officials took centre stage in were central to the way the early epidemics were constructed in the press and in official reports, rendering nurses almost completely invisible; however, nurses, particularly student nurses, did play a central role in the care of patients, albeit within the broader framework of rest and immobilization.

The practices and techniques utilized by physicians and nurses in Manitoba during the early part of the epidemic era were a response to the unique effects of polio, particularly its tendency to cause paralysis. For a variety of reasons, in particular the emergence of new technologies of care, the medical and nursing care of polio patients changed dramatically in 1941. The impact of these transformations – the respirator and the Kenny method of care – will be examined more fully in the following chapter, but in order to understand their importance, it is necessary to think about the medical and nursing care in the early part of the epidemic era. This chapter interrogates the care provided prior to the 1940s as well as the underlying assumptions about people with disabilities which informed the dominant practices of immobilization, rest, and surgery. In doing so, I argue that the lack of a preventative or a cure for polio, combined with the prevailing discourse about people with disabilities, meant that the care provided to people with polio-related paralysis aimed first and foremost to prevent the disabilities and “deformities” which were assumed would prevent individuals from leading productive and useful lives.<sup>4</sup>

Finally, this chapter interrogates the impact that a new technology of care – the respirator – had

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<sup>4</sup> The language used to describe people with polio-related disabilities is certainly distasteful today; however, I have opted to use the terminology employed by physicians and experts when quoting directly from their work. Otherwise, I endeavour to use the terminology favoured by the disability rights movement, which argues that the person should always come before the disability, e.g. ‘person with a disability,’ rather than ‘disabled person.’ See for example, “Respectful Disability Language,” <http://www.miusa.org>

on physicians' treatment options. Respirators did not change the dominant ideologies surrounding disabilities, and they led to thorny, complicated ethical questions for physicians; however, they represent the first step in the transformation of the care of polio patients.

Due in large part to broad social ideas about people with disabilities, physicians interested in polio were largely concerned with lessening the impact of the resulting disabilities. Paul K. Longmore theorizes disability as an “elastic social category shaped and reshaped by cultural values, societal arrangements, public policies, and professional practices.”<sup>5</sup> As such, the meanings ascribed to disability are not constant; rather, it has meant different things at different times. In the early part of the epidemic era, people with disabilities were “represented as incapacitated for real participation in the community and the economy, incapable of usefully directing their lives, disruptive and disorderly, antithetical to those defined as *healthy* and *normal*.”<sup>6</sup> In her analysis of American polio narratives and memoirs, Amy L. Fairchild suggests that in the 1920s, “the handicapped were a source of ridicule and humour” and children with disabilities were either hidden away or ignored, and as Douglas C. Baynton shows, prospective immigrants with disabilities were often deported from the United States because they were “likely to become public charges.”<sup>7</sup> Migrants with visible disabilities were not welcomed in Canada either, on the assumption was that they would not be able to add to the development of

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<sup>5</sup> Paul K. Longmore, “The League of the Physically Handicapped and the Great Depression: A Case Study in the New Disability History,” *Journal of American History* (December 2000): 892-3.

<sup>6</sup> Longmore, “League of the Physically Handicapped,” 896. Italics in original.

<sup>7</sup> Amy L. Fairchild, “The Polio Narratives: Dialogues with FDR,” *Bulletin of the History of Medicine* 75 (2001):497-8; Douglas C. Baynton, “Defectives in the and: Disability and American Immigration Policy, 1882 – 1934,” *Journal of American Ethnic History* (Spring 2005): 31. A good source that illuminates the discourses associated with disability and the handicapped in this time period, see Martin Pernick, *The Black Stork: Eugenics and the Death of “Defective” Babies in American Medicine and Motion Pictures since 1915* (New York: Oxford University Press, 1996).

the nation in any meaningful way. As Veronica Strong-Boag points out, “disabilities and health impairments were used to justify the exclusion of immigrants” from entering Canada and that throughout the twentieth century, “girls and boys with disabilities continued to [be placed in] homes, residential schools, and in state care.”<sup>8</sup> People with disabilities were constructed as unable to contribute meaningfully to the social or economic world around them and were ignored, forgotten, or ridiculed. Physicians were concerned with minimizing, however possible, the “crippling deformities” associated with polio. These overarching constructions informed both social ideas about people with disabilities and the medical treatment of people with polio.

Physicians in Manitoba believed that polio patients needed proper treatment to reduce ‘deformities’ so that they could contribute positively to society. In 1937, Angus A. Murray, a Winnipeg orthopaedic surgeon who wrote about the importance of preventing polio-related deformities in the wake of the 1936 epidemic, argued that the province should develop a program for patients with residual paralysis, but this suggestion was not made for the patients’ sake.<sup>9</sup> Rather, Murray argued that “long years of crippledom reduce one’s energy, and ambition” so much so that many people with polio-related paralysis “are indolent and thriftless [and] are willing to lay down in the lap of social service organizations, municipal and government relief.” Paralytic patients, he continued, “are apt to lose their independence and capitalize on their

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<sup>8</sup> Sutherland, *Children in English-Canadian Society: Framing the Twentieth Century Consensus* (Waterloo: Wilfrid Laurier Press, 2000); Veronica Strong-Boag, “Forgotten People of all the Forgotten’: Children with Disabilities in English Canada from the Nineteenth Century to the New Millennium,” in Mona Gleason, Tamara Myers, Leslie Paris, and Veronica Strong-Boag eds., *Lost Kids: Vulnerable Children and Youth in Twentieth-Century Canada and the United States* (Vancouver: UBC Press, 2010): 35 and 40.

<sup>9</sup> “Anterior Poliomyelitis,” *Manitoba Medical Association Review*, (October 1936): 208. The October 1936 edition of the *Manitoba Medical Association Review* published papers presented at the first meeting of the Winnipeg Medical Society, which was a symposium on polio. Included in the discussion were commentaries following the papers. Dr. Murray’s remarks came in the latter portion of the symposium.

disability in order to live without work. This they do, little thinking that every dollar they get without working in return, they get at the expense of their own moral fibre.”<sup>10</sup> By 1936, Murray, who was born in Nova Scotia but took his medical training in Manitoba, was a well-respected orthopedic surgeon who ran a busy practice out of the Medical Arts Building in Winnipeg and was asked often to consult on “difficult cases from other provinces.”<sup>11</sup> While Murray’s comments were made during the Depression, a period when concerns about reliance on charity and the state was strong, they were, as Longmore indicates, commonplace. The dominant discourse concerning people with disabilities in the 1920s and 30s positioned them as useless, and a drain on the state, charity, and their families. The reoccurrence of epidemic polio in this context was particularly troubling, as it was a disease that caused paralysis and deformities, and by extension, a cohort of people who, if left untreated, would drain, rather than add to, the strength of the nation. For Murray, reducing the effects of paralysis was of paramount importance.

Complete rest and the physical immobilization of patients were constructed as the best ways to prevent the disabilities related to polio. Perhaps as a critique of the focus placed on the use of convalescent serum, Murray argued that the “prevention of deformities should form an important part of treatment in the acute stage of the disease.” He believed the best way to do this was to force the patient to rest. Rest, he opined, “is the factor par excellence that we should make use of in the prevention of deformities.” Physicians were cautioned, however, not to let their patients rest in a haphazard manner. In order to prevent deformities, patients needed “complete rest, both mental and physical.” This was best obtained by placing the patient on an extremely

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<sup>10</sup> Angus A. Murray, “The Prevention and Treatment of Deformities Arising in the Course of Infantile Paralysis,” *Manitoba Medical Association Review*, (September 1937): 158.

<sup>11</sup> “Dr. A Murray dies Saturday,” *Winnipeg Free Press*, 9 February, 1946; “Dr. Angus A. Murray,” *Pictou Advocate*, 28 February 1946.



firm bed, usually with a wooden board under the mattress. As patients with paralysis in the lower limbs often developed ‘drop foot’ where the ankle could not straighten, another board was to be placed at the foot of the bed “against which the patient can place his or her feet” so they were kept at a ninety degree angle. The knees had to be flexed slightly and a rolled up sheet placed under the spine “so as to avoid the development of scoliosis.”<sup>12</sup> In order to keep limbs in what physicians considered to be the optimal positions and to prevent the contraction of the joints, patients were either strapped to wooden boards called Bradford frames or the affected limbs were encased in plaster casts or splints. The emphasis on splinting and immobilization was not unique to Manitoba. It was used in the United States, across Canada, and favoured by eminent Australian physician Dame Jean Macnamara. Following Ontario’s 1937 epidemic, the provincial Department of Health provided three weeks of free hospitalization for “all cases that require treatment on a Bradford frame or other orthopedic care” so as to minimize “the occurrence of serious crippling.”<sup>13</sup>

Surgical interventions represented another option available to physicians hoping to ameliorate the effects of paralytic polio. Murray was not in favour of operations except as a last resort. He argued that while the prevention of deformities through rest was “much less spectacular work than the correction of them, [avoiding corrective operations] is much better for the patient.”<sup>14</sup> Nevertheless, he was not opposed to surgery if there was a chance that it would decrease the likelihood of deformities. Murray pointed in particular to spinal fusions to straighten the back and tendon transplants “so as to distribute the muscle power that remains,” and “bone

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<sup>12</sup> Murray, “The Prevention and Treatment of Deformities,” 157.

<sup>13</sup> “Poliomyelitis After-Care in Ontario,” *Canadian Public Health Journal* 28, 11 (November 1937): 70.

<sup>14</sup> Murray, “The Prevention and Treatment of Deformities,” 158.

operations” which were intended to “equalize the length of the lower limbs.”<sup>15</sup> All of these operations were designed to lessen obvious displays of disability. Tendon lengthening would ostensibly help a person to use their muscles and bone shortening would allow one to walk with a limp, rather than with the assistance of bulky and cumbersome leg braces or crutches. Murray was not alone in this belief. Orthopedic surgeons like American W. Russell MacAusland felt they could correct polio-related ‘deformities’ to some degree. MacAusland’s 1927 book *Poliomyelitis with Especial Reference to the Treatment* is indicative of this interest and the focus is largely on invasive surgeries meant to minimize the effects of the paralysis, although he too favoured rest, immobilization, and splinting following the acute stage of the illness. Complete with pictures of body parts paralysed by the poliovirus, MacAusland’s book details the many operations believed to be useful in lessening disability. Surgical measures, done to “correct a deformity [and] to improve the function of a paralysed part” of the body were generally not considered until the “two-year convalescent period had elapsed” at which time a number of invasive “operative procedures” including “tenotomy” and “osteotomy, ” the excision of part of a bone, were considered.<sup>16</sup> Spinal fusion, where the vertebrae are joined together so as to ensure there is no movement between them, was also a popular option for physicians. The goal was to straighten the affected hand, arm, leg, back, or foot enough so that the individual would not appear ‘deformed.’

The medical literature about polio in Manitoba did not privilege surgical interventions, but they were performed on patients with polio-related disabilities throughout the whole of the epidemic era. The majority of the published literature about the 1928 and 1936 epidemics,

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<sup>15</sup> Murray, “The Prevention and Treatment of Deformities,” 159.

<sup>16</sup> W. Russell MacAusland, *Poliomyelitis with Especial Reference to the Treatment* (Philadelphia: Lea and Febiger, 1927), 255 and 256.

written by members of the MRC, emphasised the various control and containment strategies they employed, especially the convalescent serum. As a result, other aspects of the response to the early epidemics, including surgical interventions, were muted or overlooked. The oral histories of individuals who contracted polio in Manitoba indicate that surgical interventions were common throughout the epidemic era. George Campbell, who was six when he contracted polio during the 1953 epidemic, underwent a “series of spinal fusions” and at least one tendon transplant in the years after he left the KGH as did a number of other interviewees who contracted polio in the late 1940s and early 1950s.<sup>17</sup> Not everyone who was seen as a good candidate for these interventions agreed to go through with them. Arthur Epp, who contracted polio as an adult in 1953 and had residual paralysis in both his arms, recalled a physician who wanted to fuse his elbows together, so that his arms would always be straight, but he refused to have the surgery.<sup>18</sup> The parents of children with polio-related disabilities often refused to allow surgeons to perform these operations. Jessica Smith’s parents did not act on the advice of a physician who suggested she have a spinal fusion, nor did Jim Loewen’s parents. Despite describing his backbone as “all crooked,” Loewen is glad that his parents did not agree to the spinal fusion.<sup>19</sup> While Murray believed that operations should be resorted to only if rest and immobilization did not correct the problems associated with polio, many physicians who worked with polio patients throughout the epidemic era did not necessarily agree that surgery should only be seen as a last resort.

Dr. Murray believed that if his prescriptions were followed closely and if operations were performed as needed, the likelihood of disability would be lessened, but he was not hopeful for

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<sup>17</sup> MA, Polio Oral History Project, George Campbell, disc two of two.

<sup>18</sup> MA, Polio Oral History Project, Arthur Epp interview, disc one of one.

<sup>19</sup> MA, Polio Oral History Project, Jim Loewen interview, disc one of one.

those individuals who had residual paralysis. While Murray believed it was important that each patient “not regard himself as a cripple,” he thought that “building these unfortunate people into the structure of society” would be particularly difficult in Manitoba:

because of the cold weather making it hard for them to get around, due to the fact that their limbs are easily frozen and they have to wear heavy clothing; because farming is carried [out] on a large scale and they do not fit into a plan of mixed farming, and because of the lack of light industrial and commercial employment. These are some of the conditions which make it hard for cripples to obtain work.<sup>20</sup>

Murray may have emphasized the importance of strict immobilization and rest, but he did not seem to give his own prescriptions much purchase. The dominant discourse that people with disabilities were unable to contribute meaningfully to society was pervasive – so much so that even those entrusted with their care did not think they would be able to make a difference.

Physicians were not the only group to care for polio patients in the early part of the epidemic era. The early emphasis on convalescent serum overshadowed almost all of the other aspects of the effort to control and minimize polio. Indeed, the after-care of paralysed patients was an after-thought to many. In 1928 the *Canadian Nurse*, the national journal for nursing professionals, opted simply to reprint the articles written by the MRC, none of which even mention nursing. While nurses were rendered almost completely invisible in the early part the epidemic era, I argue that their absence from the official record does not mean that nurses were not involved with polio patients. They were, in fact, central to the care of polio patients, although the nature of their work was informed heavily by the public health emphasis on preventative sera and the medical focus on rest and immobilization.

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<sup>20</sup> Murray, “The Prevention and Treatment of Deformities,” 159.

In May of 1928, Mary Shepherd graduated from the Winnipeg General Hospital training program as a Registered Nurse. Like many of her contemporaries, Shepherd found work as a private duty nurse. A few weeks into her job, Shepherd received a call from Elsie Robertson, the Superintendent of Nurses for the Winnipeg Municipal Hospitals.<sup>21</sup> The reason for Robertson's call was not social: she hoped that Shepherd would be amenable to working at the Municipals "for a month to help out."<sup>22</sup> Shepherd initially hesitated to accept Robertson's request as graduate nurses often preferred private duty employment; however, she eventually agreed to the move. It was a fortuitous decision: Shepherd stayed at the Municipals for almost forty years, eventually replacing Robertson as the Director of Nursing.<sup>23</sup>

The staff at the Winnipeg Municipal Hospitals had to be well-versed in caring for patients with a number of communicable diseases. The King Edward Memorial Hospital was for individuals living with tuberculosis while all other communicable disease patients were sent to the KGH. Nurses employed by the Municipals were well-versed in the treatment of TB, scarlet fever, typhoid, measles, whooping cough and diphtheria, all diseases that threatened Winnipeggers in the early decades of the twentieth century. When patients with polio began arriving at the KGH in late July of 1928, therefore, nurses would have been reasonably well-prepared to face the influx of patients. Using the records of the KGH and medical journal articles from the time period, I suggest that while nurses were invisible from the official record, they were central to patient care. Despite this centrality, the work they performed was influenced by both the focus on convalescent serum and the dominant beliefs about disability, which physicians felt could be at least partially overcome by enforcing rest and long-term immobilization.

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<sup>21</sup> Mary Shepherd, *Our Hospitals through the Years* (Winnipeg: Comet Press, 1958), 39.

<sup>22</sup> MA, Winnipeg General Hospital Alumni Fonds, "Nurses and their Work: Oral Histories of Nursing in Winnipeg, 1920-1940," Mary Shepherd interview, tape C901, Side A.

<sup>23</sup> MA, Mary Shepherd interview, tape C901, side A.

The nursing care provided during the earliest North American polio epidemics was shaped by the emphasis on asepsis, the focus of public health officials on preventatives, and the dominant discourse about disabilities which led to the strict emphasis on immobilization. Manitoba's response to the 1928 and 1936 epidemics were influenced by these criteria, as well as the experiences of the massive 1916 polio epidemic in New York. Nurses, too, were influenced by this transborder sharing of ideas. In 1918, "shortly after [Manitoba's] provincial nursing service had begun," for example, nurses from Manitoba attended courses in New York.<sup>24</sup> A year earlier, Della M. DeGraw, the Supervisor of Nurses at the Kingston Avenue Communicable Disease Hospital in New York City, and Joseph Regan, an assistant resident physician at the same institution, published a lengthy, detailed summary of the care provided at their institution, which saw an influx of 1700 patients during the 1916 polio epidemic. Their work indicates clearly that the nursing care of polio patients changed little between 1916 and 1928 and it can be used to help sketch an outline of how nurses cared for polio in the early part of the epidemic era.

Asepsis was integral to the proper functioning of an isolation hospital and it was critical during a polio outbreak. Wards, DeGraw and Regan advised, had to be kept "scrupulously clean," which meant that screens were used to keep flies out of the wards, everything that came into contact with the patients' eyes, noses, and throats had to be burned, and all clothing had to be sterilized. Doctors and nurses on the polio wards were required to wear new gowns, and, in a move that the KGH did not implement, were advised to spray their noses and throats with a hydrogen peroxide and water mixture prior to the start of their shifts.<sup>25</sup> Nevertheless, nurses, at

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<sup>24</sup> Peggy Hart, "Academic Developments," unpublished paper presented at "Seventy Years of Public Health in Canada," n.d., 2.

<sup>25</sup> Regan, Joseph C, and Della M. DeGraw, "The Treatment of the Acute Stage of Poliomyelitis from the Nurses' Standpoint," *American Journal of Nursing* 18,1 (October 1917): 6-11; and part two of the article in 18, 2 (November 1917): 94-101.

the KGH, according to Shepherd, had a “very strict technique among all communicable diseases.”<sup>26</sup> The strict techniques Shepherd alluded to were outlined in the literature published by the Municipals and disseminated to all employees. The *Manual of Technique for the Care of Communicable Diseases*, which contained information on the care of communicable disease patients, provides further insight into the work nurses performed at the KGH. The KGH was organized according to the principles of asepsis, with each contagious disease contained on its own ward in order to “prevent the transmission of infection from one unit to another.”<sup>27</sup> While the booklet covered asepsis techniques for everyone from ambulance drivers to physicians, it is clear that much of the technique nurses employed, from operating room technique to the taking of a patient’s blood pressure, worked to maintain that standard.<sup>28</sup>

During the acute stage of polio, nurses were expected to implement physicians’ orders about immobilization and rest. According to Regan and DeGraw, patients were to be kept flat on their backs, with a pillow under their knees, as “the position of slight flexion of the legs” was

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7. The emphasis on the nose and throat evolved out of the theory propagated by Simon Flexner that polio entered the body through the nose. This popular, though erroneous, theory led to the use of a number of nasal sprays, some dangerous. There is no indication that this particular step was practiced in Manitoba, and although nasal sprays were used in 1936, the records indicate that the sprays were used as prophylactics for patients only.

<sup>26</sup> MA, Mary Shepherd interview, tape C901, side A.

<sup>27</sup> RHA, History of Nursing Education, Practice Techniques during the Communicable Diseases Era, *Manual of Technique for the Care of Communicable Diseases* (Winnipeg: Winnipeg Municipal Hospitals, 1928), 3.

<sup>28</sup> RHA, *Manual of Technique for the Care of Communicable Diseases*. For example the section on page 9 on “Operations” states that the “operating room is an uninfected area, and the infection must be confined to operating table, instrument table, and etherizers stool. Everything is made ready for the operation [and] the nurse in charge of the ward is present to see that there are no errors in technique and to wait on the operators.” Nurses were instructed to wear clean gowns at all times, even when taking a blood pressure reading and to wash their hands when the procedure was finished.

found to be the most comfortable.<sup>29</sup> While adult patients could handle being moved on occasion, children “should be moved only when absolutely necessary, during the early and the painful period of the disease, but if movements are to be made, they should be carried out with the greatest care” due to the pain patients in the acute period felt.<sup>30</sup> This care extended to the changing and bathing of the patients. Detailed instructions as to how to change a young patient’s diaper, including the rejoinder that “the child should never be lifted by the feet” were mentioned, as were instructions on how to change bed linens while disturbing the patient as little as possible. The extreme focus on complete rest and immobilization led to a number of problems, bed sores in particular, and DeGraw and Regan emphasized that “all that a nurse has ever learned in preventing pressure sores is none too much for use in the nursing of cases of poliomyelitis.”<sup>31</sup>

Educational material aimed at nurses who worked with polio patients was influenced by the dual emphasis on convalescent serum and immobilization. The *Canadian Nurse*, the main periodical for nurses across the country, for example, responded to the 1928 epidemic by reprinting some of the articles that had been written for the Medical Research Committee’s report. Divided by subheadings such as “Its Cause,” “Method of Spread,” and “Treatment of Poliomyelitis,” the articles privilege heavily the work done by physicians, particularly the convalescent serum. A comprehensive summary of the serum is given, as are the general symptoms of polio. The authors then moved into a brief discussion of the treatment of paralysis, and it is clear that it was based on the methods emphasized by orthopedic surgeons.

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<sup>29</sup> Regan and DeGraw, “The Treatment of the Acute Stage of Poliomyelitis from the Nurses’ Standpoint,” 8-9.

<sup>30</sup> Regan and DeGraw, “The Treatment of the Acute Stage of Poliomyelitis from the Nurses’ Standpoint,” 9.

<sup>31</sup> Regan and DeGraw, “The Treatment of the Acute Stage of Poliomyelitis from the Nurses’ Standpoint,” 9.



Convalescing children, the articles stated, must be kept in bed and in splints “for weeks at least; more often for months and years” until the child slowly relearned how to use her affected limbs.<sup>32</sup> Nurses reading the articles would have understood that the best way to halt the spread of polio was the serum and that immobilization provided the clearest chance that the patient would not be resigned to a lifetime of disability.

Like many other hospitals of the era, the Municipal Hospitals relied heavily on the labour of student nurses. Its 1928 *Annual Report* lists the number of employed nurses at seventy-two; this number included the Superintendent of Nurses, two supervisors, eight charge nurses, and twenty general duty nurses. These seventy-two nurses were responsible for the round the clock care of the tubercular patients in the King Edward Hospital, the various communicable disease patients in the 200-bed KGH, and if the numbers warranted, the excess patients who were housed in the Logan Street Annex.<sup>33</sup> Due to the fluctuations in communicable disease rates, the KGH was not always filled to capacity; however, it was usually bustling: it averaged 160 patients in 1928, and at its lowest point that year, 103 beds were occupied. The King Edward was almost always filled to its capacity of 100; indeed, its average patient load was ninety-seven and it was not uncommon for excess TB patients to be sent to the KGH.<sup>34</sup> In 1928, 177 student nurses took the affiliated course, and 162 completed the course in 1936.<sup>35</sup> In 1947, the Municipals employed sixty-one nurses, but 179 student nurses from a variety of affiliated hospitals in Manitoba were enrolled in the eight-week long courses the Municipals offered, and they too were expected to

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<sup>32</sup> “Poliomyelitis,” in *the Canadian Nurse* 25, 8 (August 1929): 411.

<sup>33</sup> RHA, Winnipeg Municipal Hospital, Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1928, 53.

<sup>34</sup> RHA, Winnipeg Municipal Hospital Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1928, 8.

<sup>35</sup> RHA, Winnipeg Municipal Hospital Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1928, 11; and RHA, Winnipeg Municipal Hospital Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1936, np.

work on the wards.<sup>36</sup> The consistently high number of patients meant that the Municipals relied on the student nurses for assistance. In the context of the extra patients brought about by polio, the labour of student nurses, particularly those enrolled in the annual affiliated course on infectious disease, was critical.

The late inclusion of information about polio to the Municipals' affiliate course on infectious diseases indicates that while polio nursing education was premised on the efficacy of asepsis and sera, it also developed like the province's overall reaction to the disease: in a haphazard, non-systematic way. In 1928, 184 student nurses from seventeen affiliated hospitals in Manitoba, Saskatchewan, and northern Ontario took the six to eight week course on communicable diseases, although only 177 completed the course.<sup>37</sup> In late 1927 and early 1928, polio was rarely included in the lectures or demonstrations available to the student nurses.<sup>38</sup> Out of all the student nurses whose information was recorded, only the records of one student nurse who took the affiliated course on communicable diseases prior to July 1928 mention polio. Evelyn Vollet, a student nurse from the Winnipeg General Hospital, was enrolled in the affiliated course from August to October 1927. Along with lectures on meningitis, ward routine, and tuberculosis she attended a clinic on poliomyelitis on 22 September of that year. It is possible

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<sup>36</sup> RHA, Winnipeg Municipal Hospital Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1947, "Report of the Nursing Division," np.

<sup>37</sup> Nursing students were mainly from hospital nursing schools in Manitoba and Saskatchewan. The majority of the student nurses were from the Winnipeg General Hospital (83) and Children's Hospital (24). Others came from Souris MB, the General Hospital in Weyburn SK, and Kenora ON. See RHA, Winnipeg Municipal Hospitals, Winnipeg Municipal Hospital Annual Reports 1913-1930, *Annual Report* for the year ending 31 December 1928, 54.

<sup>38</sup> The Student Record book is a bound book with handwritten notes detailing the courses, demonstrations and clinics every student nurse took at the Municipals from August 8<sup>th</sup> 1927 until October 1928. Beyond those details, information concerning the student nurse's affiliated school, the date they took the course and if they had been immunized against smallpox was recorded. It is not clear who entered the information in the book, although Elsie Robertson was the Superintendent of Nurses at that time.

that the Municipals were wary of an outbreak in 1927: Alberta recorded over 300 cases that year and some polio cases had been reported in Manitoba.<sup>39</sup> Ultimately, only six cases were confirmed in Manitoba in 1927, and student nurses who started their affiliated courses even one month after Vollet did not attend clinics on the disease.

Polio was not added to the affiliated course curriculum until the following summer, at which point it was obvious that a polio epidemic was occurring in the province. The student nurses enrolled in the course from May to August 1928 were the first to have a clinic on poliomyelitis added to their curriculum. Isabelle Cameron, a student nurse from the Winnipeg General Hospital, was enrolled in the affiliate course from 16 April until 26 June 1928.<sup>40</sup> Cameron's records do not indicate that a clinic on poliomyelitis was available during her eight week stint at the WMH and it was not until a significant number of patients with polio were admitted to the KGH that the course was amended. Marguerita Gunn, from the General Hospital in Selkirk, was the first student nurse to attend the newly developed polio clinic. Gunn, who was enrolled in the course from 22 May to 31 August 1928, attended the regular laboratory clinics on syphilis, chicken pox and impetigo and she spend two days – 31 July and 1 August – in a laboratory dedicated to polio.<sup>41</sup> From July to September, all nursing students who attended the affiliated course attended at least one clinic or laboratory dedicated to poliomyelitis, and in some

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<sup>39</sup> Ruddy, "Poliomyelitis in Canada," 397 and 399. Of the six cases reported in Manitoba, five perished. This indicates that the individuals most likely contracted bulbar polio, which was almost always fatal until the advent of respirators and tracheotomies. This will be discussed later in the chapter.

<sup>40</sup> RHA, Education, History of Nursing, Education, Students Records August 8<sup>th</sup> 1927 – August 27<sup>th</sup>, 1928, "Miss Isabelle Cameron."

<sup>41</sup> RHA, Education, History of Nursing, Education, Students Records August 8<sup>th</sup> 1927 – August 27<sup>th</sup>, 1928, "Miss Marguerita Gunn." The inauguration of the laboratory clinics on poliomyelitis for the affiliated course on communicable diseases corresponds with the sudden increase in reported cases at the end of July and early August 1928.

cases, student nurses attended two clinics.<sup>42</sup> Olive Turner, enrolled in the course from 3 June until 3 September, attended two clinics, the first on 30 July, and the second on 29 August. Similarly, Janet Anderson, from Carmen, attended her first polio clinic on 18 September and the second approximately a week later on 24 September.<sup>43</sup> That more courses on polio were added in late August and early September is instructive. In June, there were no patients with polio at the KGH; by September there were over 100.<sup>44</sup> The classes on polio were added only when it became obvious that the student nurses learning and working at the KGH were going to have to care for a significant number of polio patients, indicating that there was no forethought in terms of adding polio to the course permanently when an epidemic was not imminent or occurring.

When classes on polio were added to the affiliated course, they were laboratories rather than lectures, indicating that they were shaped by the MRC's emphasis on convalescent serum. The second booklet provided by the KGH to nurses and other employees, the *Synopsis of Communicable Diseases*, was a compilation of information about a number of common communicable diseases, including rubella, diphtheria, meningitis, scarlet fever, smallpox, chicken pox and measles. Information was provided on the history of each disease, its etiology, symptoms, and how to nurse a patient suffering from that illness. While nurses were not mentioned in the MRC's official report on the 1928 epidemic, there is evidence that although physicians gave the serum injections, nurses were involved in important ways. "Preparations for

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<sup>42</sup> The Student Record book ends in September 1928 and no other similar books seem to have been kept. This does not mean, however, that poliomyelitis was taken off the syllabus, although it seems likely that it was added to the course during the years when there was a sizeable outbreak.

<sup>43</sup> RHA, Education, History of Nursing Education Students Records August 8<sup>th</sup> 1927 – August 27<sup>th</sup>, 1928 "Miss Olive Turner" and "Miss Janet Anderson."

<sup>44</sup> RHA, City of Winnipeg Hospital Commission, Minute Book No.3, January 1928 to October 1932. Pages 36, 54, and 60 contain lists of the diseases with which patients were admitted to the KGH. In May, no one was admitted with polio. In August, eight polio cases had been admitted and in September that number had risen to 103.

this procedure,” according to Regan and DeGraw, “must be carried out with the same care as for a major operation” as it generally involved injection into the “lumbar region of the back.” Nurses were responsible for sterilizing the needle, warming the bottle of serum, preparing the patient’s body by cleaning and marking off the injection area, and finally, holding the patient still.<sup>45</sup> In Manitoba, the serum injections were not carried out intrathecally, as they were in New York. Dr. F. C. Cadham, Manitoba’s provincial bacteriologist during the early epidemic, recommended and practiced intramuscular injections instead, making it, in some instances, a less invasive procedure.<sup>46</sup>

As nursing students enrolled in the affiliate course at the KGH attended lectures on serums and vaccines, it was clearly important that they be familiar with serum and related procedures. Nurses employed at KGH would also have been familiar with preparing for and assisting during serum injections, as serum was routinely given to patients suffering from other infectious diseases, such as meningitis.<sup>47</sup> They would have been asked to assist physicians, in particular the members of the MRC, with the injections of convalescent serum which was believed to reduce the paralytic effects of polio. During the early epidemic era, polio was not a permanent topic in the affiliated course. When it was added, however, it was approached in the same way medical officials approached it – with a focus on convalescent serum, rest, and immobilization.

While serum allowed physicians to feel that they were proactively preventing limb paralysis, patients with paralysis of the pharynx or chest muscles constituted a grave problem for

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<sup>45</sup> Regan and DeGraw, “The Treatment of the Acute Stage of Poliomyelitis from the Nurses’ Standpoint,” 100-1.

<sup>46</sup> F.C. Cadham, “Immunity Problems of Poliomyelitis,” *Manitoba Medical Association Review* (October 1936): 205.

<sup>47</sup> RHA, *History of Nursing Education, Practice Techniques during the Communicable Diseases Era*, “Epidemic Cerebro-Spinal Meningitis” in *Synopsis of Communicable Diseases* (Winnipeg: Winnipeg Municipal Hospitals, 1928), 23.

the medical community in the early part of the epidemic era. The focus on immobilization and rest only extended to those with paralysis of the limbs. There was nothing that physicians could do for those with pharyngeal or respiratory paralysis until the late 1930s with the introduction of respirators. Before that, patients with pharyngeal or respiratory polio, referred to generally as bulbar polio, had very little chance of surviving during the early epidemic era. The impact respirators had on nurses' work will be examined in the following chapter, but the development and implementation of respirators in Manitoba also impacted the way physicians approached the disease and patients. While respirators did not have an impact on the ideologies about people with disabilities, beginning in the 1936 epidemic, they did increase some patients' chances of survival, and provided the medical community with another avenue of care. At the same time, respirators also forced physicians and provincial health officials in Manitoba to grapple with some serious ethical conundrums.

Although not invented specifically to treat people with polio, respirators changed immeasurably the face of polio care. In 1928, Philip Drinker, an engineer at the Harvard School of Public Health, was working on a project for an American gas company that was "centered on ways to improve methods of artificial ventilation." The project was not altruistic in its intent: the company was looking into ways to "reduce the number of lawsuits brought against the company by people accidentally gassed from leaking pipes or families of attempted suicides who had stuck their heads in gas ovens."<sup>48</sup> Drinker's first attempts at artificial respiration were carried out on a cat. He paralyzed the breathing muscles of the animal, placed it up to its neck in a sealed box, and by pumping air in and out, was "able to keep the cat alive for hours." With funding from the gas company, Drinker and his colleague, physiologist Louis Shaw, created a human-sized

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<sup>48</sup> Lynne M. Dunphy, "'The Steel Cocoon': Tales of the Nurses and Patients of the Iron Lung, 1929-1955," *Nursing History Review* 9 (2001), 29 footnote 23.

respirator, which “was promptly named the ‘iron lung,’ a name which immediately caught on with all of its gruesome connotations.”<sup>49</sup> First used in the United States in “an attempt to get small infants and premature infants to breathe better,” the results were, at best, mixed.<sup>50</sup> In the early 1930s, respirators were used sporadically for people with polio-induced chest paralysis, although they were not particularly useful for those with pharyngeal paralysis until physicians realized that those patients also needed tracheotomies.<sup>51</sup> Although Toronto’s Hospital for Sick Children obtained one of the earliest Drinker models in 1930, it was one of the only ones in the country until 1937, when they, amidst great media attention, were used during an epidemic in Ontario.<sup>52</sup>

Operating on the principle of negative pressure, the respirators kept people alive by forcing air in and out of their lungs. The Drinker model respirators used “negative pressure ventilation” which produces a negative pulmonary pressure to “actively expand the chest and force air through the nose and mouth into the lungs. When the pressure is released, the chest returns to a resting position, causing air to be passively expelled out of the lungs.” The respirator was further “equipped with motor-powered blowers, also called bellows, and a control knob. When the bellows contracted, the air pressure in the tank was lowered, the chest expanded, and air flowed into the lungs.”<sup>53</sup> Polio patients experiencing respiratory distress were placed in the cylindrical machines, which opened like a waffle-maker, or a casket, and an air-tight rubber collar was

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<sup>49</sup> Paul, *History of Poliomyelitis*, 327.

<sup>50</sup> James L. Wilson, “Memoirs of the Respirator,” quoted in Paul, *History of Poliomyelitis*, 327.

<sup>51</sup> James L. Wilson, “Memoirs of the Respirator,” quoted in Paul, *History of Poliomyelitis*, 329.

<sup>52</sup> According to Ruty, the respirator at the Toronto Children’s Hospital was the only one in the country; however, the Winnipeg Municipal Hospitals’ 1936 *Annual Report* indicates that the Hospitals’ Commission purchased a Drinker respirator in 1935. Ruty, *History of Poliomyelitis*, 114; and Riverview Hospital Archives, Winnipeg Municipal Hospital, Annual Reports 1913-30, The Municipal Hospitals of Winnipeg Report for the year ended 31<sup>st</sup> December 1936, A.B. Alexander, “Report of the Medical Superintendent, np.

<sup>53</sup> Dunphy, “The Steel Cocoon,” 11.

placed around the neck. In the early years of the respirators, patients had to be removed from the machines to be cleaned and cared for, but by the mid-1940s, advancements such as portholes on the sides of the respirators meant that nurses could change sheets, bedding, and deal with catheters, for example, without taking the individual out of the respirator. Although problematic in many ways, the respirator meant that, for the first time in the epidemic era, something could be done for individuals with respiratory and pharyngeal polio.

Respirators could – and did – prolong the lives of people who would have died rather quickly; however, their use raised multiple ethical questions centred around how to choose which patients should be placed in them, and for how long. “Agonizing questions” including “who should get to use the machine” if more than one patient was in need troubled physicians, as did the possibility that someone might need to “remain in the machine forever.”<sup>54</sup> Physicians at the Winnipeg Municipal Hospitals grappled with these issues during the 1936 epidemic. The Municipals had purchased one Drinker respirator in 1935, and it had been “in constant use” throughout the epidemic; in particular, it had “been occupied for the greater part of the time by one patient who came to us in extremis. She was placed in the apparatus and, after a very stormy fight for life has, at the end of the year, at least a fighting chance to live.”<sup>55</sup> The extended use of the one respirator by one individual perplexed Dr. A. B. Alexander, the Medical Superintendent of the Municipals, who framed the ethical problematic in financial terms, stating that the single respirator:

Brings up the question of the need for more of these appliances in our Province as we are placed in the position, and I assure you

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<sup>54</sup> Dunphy, “The Steel Cocoon,” 11.

<sup>55</sup> RHA, Winnipeg Municipal Hospital, Annual Reports 1913-30, The Municipal Hospitals of Winnipeg Report for the year ended 31<sup>st</sup> December 1936, A.B. Alexander, “Report of the Medical Superintendent, np.



that it is an undesirable one, of having two patients come in with respiratory manifestations who require the use of the respirator and having to decide which one is going to be given the chance to live. As one patient's desire to live is usually as great as another's, and his right equally so, I think this phase of the situation should have the proper consideration of the Provincial Authorities. The machines are costly and can only be operated at a loss. The responsibility for their operation should therefore be placed on the whole community and not on one specific part of it.<sup>56</sup>

For Alexander, the problems surrounding respirators were clearly outweighed by the positive aspects, and he used the example of potentially having to decide who would get to use it as a springboard to lobby the province to pay for at least one additional machine. Respirators were a double-edged sword: they provided benefits to the patients, but raised complicated questions for the medical community. After 1936, respirators became integral to the treatment of patients throughout the remainder of the epidemic era. As the incidence of bulbar polio grew in the later part of the epidemic era they came to represent, at least to the public, the serious impact that the disease had in Manitoba.

During the early part of the epidemic era, public health officials attempted to contain and control each polio outbreak and the overwhelming focus on these attempts overshadowed the work of other medical professionals, specifically nurses, involved in the treatment of polio patients. Until 1940, the standard treatment for polio patients was rest and immobilization. Polio patients, even young children, were expected to stay in bed for an indeterminate period of time, even after they felt better, in order to not fatigue their muscles, which, it was commonly believed, might cause further paralysis. Similarly, the widely accepted practice of immobilizing

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<sup>56</sup> RHA, Winnipeg Municipal Hospital, Annual Reports 1913-30, The Municipal Hospitals of Winnipeg Report for the year ended 31<sup>st</sup> December 1936, A.B. Alexander, "Report of the Medical Superintendent, np.

affected limbs in casts or splints was also believed to force muscles and joints into the correct anatomical positions.

These treatments were instituted largely because of the prevailing discourse about disabled people. In the 1920s and 1930s, evidence of a disability was used to keep immigrants out of both the United States and Canada and it was assumed that people with disabilities would be a drain on their families, the state, and private charities. In this context, a disease that created disabilities in otherwise relatively healthy young people was cause for great anxiety on the part of medical officials. Public health officials attempted to halt the spread of polio and negate its paralytic effects through convalescent serum whereas physicians working with patients turned to bed rest, body boards and casts. The other option available to physicians was surgical intervention via operations on patients' backs, joints, and limbs. These operations, which were carried out throughout the whole of the epidemic era, were also premised on the belief that reducing a person's obvious, visible disabilities might allow them to avoid the fate that apparently awaited them – dependant on family, charity, or the state.

The work of nurses in the early epidemic era was influenced heavily by the emphasis on convalescent serum, and the discourse that encouraged the prevention of disabilities through rest and immobilization. Student nurses enrolled in the affiliated course at the KGH performed much of the labour on its wards. As such, they needed to be well-versed in the care of a number of infectious diseases. Polio was added as a topic to the affiliated course, but only when it became obvious to officials that an epidemic was underway, thus mirroring the reactive rather than proactive response of public health officials. When the affiliate course did offer instruction on caring for polio patients, it was based on the importance of the laboratory. Nevertheless, nurses were expected to carry out the prescriptions for keeping patients rested and immobilized.

After 1936, respirators became more commonplace in hospitals, indicating that the thorny ethical issues physicians and administrators had to deal with were outweighed by the benefits they promised to polio patients. Physicians, however, were not the only ones whose work was transformed by the widespread introduction of respirators. Respirators represent one of the new technologies of care that transformed nurses' work on the polio wards and the way nurses were viewed during polio outbreaks. That, along with the second change – the ascendancy of the Kenny method of care – are the focus of the next chapter.

## Chapter Five: “‘Crises in the midst of crises’: Polio and the Transformation of Nurses’ Work, 1928-1953”<sup>1</sup>

By the time Mary Shepherd retired from the Winnipeg Municipal Hospitals in 1958, she had risen through the ranks to become the Superintendent of Nursing. Shepherd’s long tenure meant that she cared for patients and oversaw the work of nurses throughout the whole epidemic era. From that vantage point, Shepherd was privy to the many changes that occurred on the polio wards of the KGH. In 1928, the previous Superintendent of Nursing dealt with the increase in patients with one or two phone calls to newly graduated nurses like Shepherd. In 1953, in the midst of Manitoba’s sixth major polio outbreak, the KGH once again needed more nurses. This time, however, Shepherd could not rectify the shortage with a few well-placed phone calls. In 1953, the need for nurses to work with polio patients was constructed by the press and medical officials as a disruptive and potentially devastating nursing shortage. The calm requests for additional nurses that appeared in Winnipeg’s daily newspapers in the early days of the 1953 outbreak had, by the fall of that year, been replaced by tensions between nurses and civic officials. In the report on the 1928 epidemic, nurses were scarcely mentioned; in 1953, they were positioned in the centre of two interconnected problematics: a nursing shortage and a debate with municipal officials over remuneration.

The previous chapter argued that the work performed by nurses in the early part of the epidemic era was circumscribed by the broad medical adherence to the importance of rest and immobilization for patients. This chapter examines the impact the introduction of respirators and

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<sup>1</sup> This quote is taken from an interview between Joy Jaipaul and Shirley Stinson, a nurse who worked in the Royal Alexandra Hospital in Edmonton during that city’s 1953 epidemic. Stinson was speaking to how “hard nurses work and how committed they are in together meeting crises in the midst of crises.” Joy Jaipaul, “In the Shadows: Poliomyelitis Epidemics and Nursing Care in Edmonton 1947-1955,” *Alberta History* (Summer 2005) 5.

Elizabeth Kenny's method of patient care had on nurses and argues that the introduction of those two technologies of care altered significantly the work performed by nurses. While their introduction made nurses' relationship with medical technology significantly more complex, it also made their work on the polio wards much more labour intensive. This increase in labour, combined with the increasing size of the polio epidemics, meant that a nursing shortage occurred during the last three epidemics. These nursing shortages were constructed publicly as a result of the reticence of nurses to volunteer their time to assist when patient numbers increased dramatically. I argue that while the unprecedented number of patients, particularly in 1953, was a factor, the increased labour associated with the respirators and Kenny method meant that there would never be enough nurses. This, combined with lingering ideas about the social duty of women – long considered biologically suited to caring for the ill – to nurse the sick during troubled times, led to a particularly tense shortage in 1953, one that centred around the remuneration of nurses. This chapter seeks to understand, through an analysis of the evolution of nurses' work on polio wards, nurses' engagement with new technologies of care, the sometimes fraught gendered relationship with municipal medical officials, and the transformation of nursing during the epidemic era.

In the early epidemic era, the lack of knowledge surrounding the etiology of polio limited what could be done for people in the acute stage of polio. Despite these limitations, nurses at the KGH were able to apply their knowledge concerning asepsis and general patient care as well as their education on the most up-to-date information on bacteriology and serums in order to best care for the patients. During the second phase of the epidemic era, two substantial changes – the widespread use of respirators and the introduction of the Kenny method of care – occurred. These two changes necessitated the addition of much more specialized technological

understanding, expertise, and physical labour to the work performed by nurses. These changes did not supplant, but added to, the work nurses had been performing on polio wards since the late 1920s. This section of the chapter examines the use of respirators in polio treatment, and its impact on nurses' labour. Respirators were reserved for those with paralysed chest and throat muscles. Prior to the widespread introduction of respirators, those with bulbar polio died almost immediately. Indeed, during the earliest epidemics, "bulbar cases were rarely mentioned [...] since most died when there was little that could be done to help them."<sup>2</sup> Respirators prolonged lives, leading, as outlined previously, to a number of ethical conundrums. They also made nursing on polio wards more highly technical, intensive, and fraught. After considering the impact of respirators, this chapter considers the impact Australian nurse Elizabeth Kenny had on the post-acute treatment of persons with polio-related disabilities. Most of the literature on Kenny positions the anxiety over her ostensibly radical treatment methods as intransigence on the part of (male) physicians to let a woman, particularly a nurse with murky professional credentials, tell them how to best treat patients. I approach the Kenny method from a different vantage point, arguing that her method of hot packs and movement rather than rest had an important, long-lasting impact on the work performed by nurses. Finally, this chapter looks at the nursing shortages of the last three polio epidemics, and argues that the final fractious shortage in 1953 was a particular result of these two changes, combined with lingering gendered notions of women and nursing care.

The previous chapter examines some of the ethical dilemmas medical administrators faced with the introduction of the respirator, but nurses working with polio patients were also affected by respirators. Daniel Wilson's *Living with Polio* examines briefly the impact respirators had on

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<sup>2</sup> Rutty, "Poliomyelitis in Canada," 114.

nurses, stating that “nursing patients in iron lungs was difficult for both attendant and patient”; however, the monograph is “an exploration of lives altered by their encounter with the poliovirus” and polio patients are his main focus.<sup>3</sup> Nursing educator Lynne Dunphy has examined the work of itinerant nurses hired by the NFIP and the Red Cross to work in communities in the midst of polio outbreaks. Their experiences are contextualized by Dunphy’s discussion of the development of respirators, and her useful descriptions of “the nursing involved in caring for patients in iron lungs” support the argument that the “nursing care of iron lung patients called for nurses to care concurrently for both patient and machine, and much can be learned from nursing’s response to this early technology.”<sup>4</sup> Joy Jaipaul used oral histories done for the Provincial Museum of Alberta’s 2004 exhibit on polio in that province to examine the “nursing care of patients in iron lungs,” particularly during the 1953 epidemic in the city of Edmonton.<sup>5</sup> Both Dunphy and Jaipaul utilize oral histories to stress the physical and emotional impact respirators had on the nurses who worked on polio wards.

During the epidemics of the 1940s and 1950s, respirators complicated greatly the work performed by nurses during polio epidemics as they introduced a new level of technical expertise that nurses were expected to master. Prior to the introduction of respirators, bulbar patients expired quickly, and nurses focused on keeping polio patients with paralysis of the limbs clean, fed, and in the correct body positions so as to minimize ‘deformities.’ In the 1940s and 50s, the basic care of patients was still important. The notes of E. Bennett, a nursing student enrolled in the affiliate course at the Winnipeg Municipal Hospitals in 1957 indicate, for example, that disinfecting isolation wards remained an important aspect of nurses’ work, and that two of the

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<sup>3</sup> Wilson, *Living with Polio*, 47 and 4.

<sup>4</sup> Dunphy, “The Steel Cocoon,” 4.

<sup>5</sup> Jaipaul, “Poliomyelitis Epidemics and Nursing Care,” 3.

main tenets of proper nursing care for people with paralysis of the lower limbs were the relief of pain and “good body alignment.”<sup>6</sup> The introduction of respirators did not preclude proper nursing care, but it certainly complicated it. In an article in the *Canadian Nurse*, private duty nurse Barbara Montizambert suggested that the “nursing care of these patients [in respirators] is perhaps more complex” than other types of nursing care.<sup>7</sup> Montizambert was correct.

Although physicians made the decision to place patients in respirators, nurses performed the bulk of the labour involved in caring for patients in respirators. In 1954, the Winnipeg Municipal Hospitals held an institute on polio nursing for physicians and nursing administrators. At the institute, nurses were taught that because respiratory and pharyngeal paralysis did not generally start in a sudden manner, they needed to ensure that the charts of all patients were up-to-date. They were further reminded of some of the troubling signs that often indicated the onset of respiratory paralysis including an increased respiratory rate, weak voice, flaring nostrils, and increasing shortness of breath.<sup>8</sup> Nurses also had to be vigilant for signs of bulbar involvement such as changes to the voice, inability to swallow, and cyanosis, the blue-tinged skin resulting

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<sup>6</sup> RHA, Winnipeg Municipal Hospital, History of Nursing Education, The History of Education Services 1914-1967, Practice Techniques during the Communicable Disease Era, “Techniques Employed at King George Hospital, 1957, np. Enclosed in the archival folder is a note written by the individual who collected the documents. In part it reads, “This material is a copy of an affiliating student’s class notes. This is the strict aseptic techniques carried out when in direct contact with the patient diagnosed with a communicable disease. All staff [...] had strict procedures to follow in order to prevent the spread of organisms.” The notes on each topic are typewritten and seem to be handouts. The notes on polio, however, are handwritten on the back of the typed pages, indicating that the section on polio was only added to the affiliated course on occasion. The notes on polio include information about possible vectors, the length of the isolation period, the four types of polio (low spinal, high spinal, bulbar, and combination), as well as the care and treatment of patients with each type.

<sup>7</sup> Barbara Montizambert, “Nursing Care of a Patient in a Respirator,” *Canadian Nurse* 50, 6 (June 1954): 463.

<sup>8</sup> RHA, Winnipeg Municipal Hospitals, Newsletter, The Beacon, December 1953 – April 1961, J.A. Hildes, “The Medical Basis of Nursing Care in Acute Poliomyelitis,” *The Beacon* 5, 2 (August 1955), 7.



from a lack of oxygen in the blood.<sup>9</sup> Nursing textbooks from the 1940s and 1950s often remarked on the importance of watching polio patients closely for these serious symptoms. Dunphy indicates that a 1949 edition of *Nursing: An Art and Science*, which devoted two pages to the Drinker model respirator, reminded student nurses that “the nurse is instructed to monitor the patient closely for cyanosis and any possible airway obstruction.”<sup>10</sup> Nurses in Canadian hospitals were given similar instructions. In a 1951 article in the *Canadian Nurse*, Joyce M. Campbell, a nursing instructor at Vancouver General Hospital, indicated that the general nursing care of people with polio included avoiding cross-contamination, keeping the patient clean and well-rested, preferably on a “firm mattress over a fracture board,” with a foot board “placed at the end of the bed to keep bed-clothes off the feet and prevent foot-drop,” as well as keeping meticulous records of the patient’s diet and “urinary output.”<sup>11</sup> Beyond this, “the nurse must be on the alert for signs of an increase in the rate of breathing, dilation of the nostrils, a slight respiratory grunt, or a disinclination to talk, for these are suggestive of respiratory muscle paralysis.”<sup>12</sup> Once those symptoms presented, a decision was made by a physician to place the patient in the respirator, at which point, the nursing care of the patient became even more complex.

Nurses who worked with respirator patients were required to develop a new body of knowledge and skill set beyond those necessary for taking care of patients with other types of polio-related paralysis. In the United States, the National Foundation for Infantile Paralysis (NFIP) funded the training of a nucleus of nurses who would then ‘follow the epidemics’ and

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<sup>9</sup> Hildes, “The Medical Basis of Nursing Care in Acute Poliomyelitis,” 8.

<sup>10</sup> Dunphy, “The Steel Cocoon,” 15.

<sup>11</sup> Joyce M. Campbell, “Nursing Care in Poliomyelitis,” *The Canadian Nurse* 47, 6 (June 1951): 410.

<sup>12</sup> Campbell, “Nursing Care in Poliomyelitis,” 411.

provide nurses in those areas with training in how to care for polio patients.<sup>13</sup> This centralization led to a standardization of information concerning the nursing of polio patients, particularly those in respirators. The NFIP did not fund the training of Canadian nurses; however, there was a definite flow of information across the border. In March of 1954, the DHPW and the Manitoba Association of Registered Nurses held an institute on polio nursing for “selected nursing instructors.” The instructor was Barbara Williams, a nurse and consultant with the (American) National League of Nursing’s Nursing Advisory Services for Orthopedics and Poliomyelitis.<sup>14</sup> Nurses at the KGH were also provided with a pamphlet created by the National Organization for Public Health Nursing. The pamphlet, entitled “Supplement on Poliomyelitis Nursing,” which provided detailed instructions on how to prepare beds and hot packs, was also funded by the NFIP. This information was disseminated often through institutes and classes for nurses in Canadian hospitals.

The information concerning the skills and technical knowledge shared between nursing educators, and disseminated to rank and file nurses and nursing students, indicates that caring for people with polio, particularly those in respirators, was not an easy task. Teamwork, specific knowledge, and a certain skill set were all necessary parts of nursing a patient once they had been placed in a respirator. Indeed, simply placing a patient in a respirator, regardless of the brand, was itself a difficult task. In June 1950, four senior student nurses from the Vancouver General Hospital demonstrated the care of polio patients to the Canadian Nurses’ Association biennial convention. Part of their demonstration included placing a ‘patient’ into two different types of respirators. Three nurses were needed to place a patient into a Blanchard type respirator,

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<sup>13</sup> Dunphy, “The Steel Cocoon,” 8.

<sup>14</sup> RHA, “Institute on Polio Nursing,” *The Beacon* 1, 3 (April 1954), 3. According to Dunphy, in 1941, the NFIP made a financial grant to the National League of Nursing to create an advisory service to prepare nurses for nursing during polio epidemics.

a portable one “composed of two plastic chest shields held together with clamps and rubber fittings at the openings.” Two nurses lifted the patient, “while the third places the back of the shield on the bed and smooths the bottom rubber skirt. The patient is lowered into the back part of the shield, the front piece is attached and secured with fasteners [and] eight-inch rubber sleeves are slipped over the patient’s arms.”<sup>15</sup> Drinker-Collins respirators were used extensively during the epidemic era in Manitoba, and despite the manufacturer’s claims that newer designs in the 1950s “simplified nursing care,” placing a patient in one was no less arduous.<sup>16</sup> Campbell’s explanation is instructive:

First the controls are turned off. Then the cot legs are put down, the head piece unclamped, collar band unzipped, and the cot drawn out. Three nurses lift the patient from the bed. Support is given to the head and neck. The patient is placed feet first into the lung and the head slipped through the opening. The fourth student steadies the head of the cot and places the small pillow under the patient’s head. Next the cot is pushed into the lung, the neck band zipped closed, and the clamps locked.<sup>17</sup>

The ‘patient’ at the demonstration was actually another nursing student, but patients during an epidemic would have been in respiratory distress, which added to the stress level, and the machine was not turned on until the patient was properly placed inside. To add to the intensity, the nurses placing the patient were also responsible for caring for other patients already in respirators.

The difficulties of nursing a patient in a respirator did not end once they had been positioned in it. The complications associated with pharyngeal and respiratory paralysis made

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<sup>15</sup> Campbell, “Nursing Care in Poliomyelitis,” 416.

<sup>16</sup> RHA, Winnipeg Municipal Hospital, Polio Epidemic, the Iron Lung, Drinker-Collins Respirator, 1930s – 1940s, “The Drinker-Collins Respirator for Prolonged Artificial Respiration,” np.

<sup>17</sup> Campbell, “Nursing Care in Poliomyelitis,” 416.

this care particularly fraught. In the first few years after respirators were introduced, they were not necessarily useful for individuals with respiratory polio. While they forced the lungs to breathe, people with pharyngeal polio could not swallow, and often choked on their own secretions. Thus, mortality rates were extremely high until it was realized that tracheotomies were necessary. Nevertheless, the introduction of tracheotomies both complicated nurses' work and necessitated changes to respirators. As Campbell noted, "because of the difficulty in swallowing and in the use of the other pharyngeal muscles, care must be taken when feeding the patient" with a tracheotomy. As well, "mucus in the throat will need to be suctioned off frequently to avoid the danger of aspiration and consequent pneumonia." While some hospitals chose to feed patients with tracheotomies intravenously, nurses had to be on constant guard. Campbell cautioned "*never* under any circumstances should these patients be left unattended for the [tracheotomy] tube may at any time become blocked with mucus."<sup>18</sup> This message was echoed by Dr. Jack Hildes, the Superintendent of the Municipal Hospitals, in his lectures to the Municipal Hospitals' institute on polio nursing. "Tracheotomy patients," according to Hildes, "need constant nursing attendance and care during the acute stage of the disease."<sup>19</sup> Constant supervision, particularly during a large-scale epidemic, was difficult as wards contained numerous patients with tracheotomies. In 1952, of the forty-one respirator patients admitted to the KGH, twenty needed a tracheotomy; in 1953, 117 of the 180 respirator patients were given tracheotomies.<sup>20</sup>

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<sup>18</sup> Campbell, "Nursing Care in Poliomyelitis," 412.

<sup>19</sup> Hildes, "The Medical Basis of Nursing Care in Acute Poliomyelitis," 8.

<sup>20</sup> RHA, Riverview Hospital Archives, Winnipeg Municipal Hospital, Annual Reports 1913-30, *The Municipal Hospitals of Winnipeg Report for the year ended 31<sup>st</sup> December 1952*, "Summary of the Year 1952 Winnipeg Municipal Hospitals," np; and *The Municipal Hospitals of Winnipeg Report for the year ended 31<sup>st</sup> December 1953*, np. It is unclear how many tracheotomies were

The increased labour and the caring for tracheotomised patients were not the only complex aspects associated with nursing patients in respirators. Respirators worked on the principle of negative pressure, which was “produced by a motor. Air rushes into the lungs, because of the greater atmospheric pressure, to produce inspiration. When the pressure within the respirator returns to normal the elastic recovery of the chest produces expiration.”<sup>21</sup> The literature on respirators supplied to the KGH by the manufacturer of the Drinker-Collins respirator further explained that their respirator was “safe to use at all times and especially for long periods” because it did not mechanically compress the chest, nor did it use a pumping device to inflate the lungs.”<sup>22</sup> Nurses needed to understand not only the principle of negative pressure, but how to set the proper rate and depth of respiration for each individual patient. The depth and speed of the respirator were set using a number of knobs on the machine, and indicated by a gauge which had to be monitored constantly. In his 1954 lectures to the institute, Hildes spoke to the importance of the careful nursing of patients in respirators, confirming that while each machine should be “adjusted according to the amount of pressure indicated by the doctor,” a nurse “may adjust [the] pressure if she does it cautiously.”<sup>23</sup> Thus, although nurses were unable to dictate the original settings of the respirator, they were responsible for monitoring each respirator patient, and adjusting the pressure of each respirator as necessary.

As respirators became commonplace, power outages were a constant source of anxiety during epidemics. Dunphy writes that “every nurse” she interviewed “spoke of the mental stress of being prepared for power outages” because of the emotional and physical stress that they

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performed at the King George Hospital in either 1941 or 1946 as that information was not recorded in the annual reports for those years.

<sup>21</sup> Campbell, “Nursing Care in Poliomyelitis,” 416.

<sup>22</sup> “The Drinker-Collins Respirator for Prolonged Artificial Respiration,” np.

<sup>23</sup> Hildes, “The Medical Basis of Nursing Care in Acute Poliomyelitis,” 8.

entailed.<sup>24</sup> Nurses working in polio wards were taught that respirators could be operated by hand, if necessary. In the article about the nursing students' demonstration of two types of respirators, Joyce Campbell reassured the readers of the *Canadian Nurse* that both machines could be operated by hand. In the case of the Blanchard type respirator, Campbell stated only that "in the event of a power failure the machine can be operated by hand," and for the Drinker-Collins, she stated simply that "the respirator can be operated by hand by disconnecting the bellows and attaching a handle to the box clamp."<sup>25</sup> The process of converting an electric, motor-operated respirator into a manual one, however, was more involved and time consuming than this description suggests and a potential power outage meant that nurses, in particular, would be responsible for literally keeping respirator patients alive.

Power outages indicated not only the increasing reliance on a complex technological device, but also the impact that reliance had on nurses. Both Jaipaul and R. F. Taylor, a physician who authored a brief memoir of his involvement in the polio epidemics in Edmonton, reference an incident that occurred during the 1953 epidemic in that city. In November 1953, an electrical storm knocked out the power to the Royal Alexandra Isolation Hospital, where nineteen of the 117 patients were using respirators.<sup>26</sup> When the power went out, the nineteen respirators stopped working and nursing students in the nearby residence rushed to the isolation ward to assist in the manual operation of the respirators until the power was restored.<sup>27</sup> The Edmonton power outage, while undoubtedly serious, was minor compared to what occurred at the KGH in Winnipeg earlier that same year. In an interview with historian Kathryn McPherson, Mary Shepherd, who

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<sup>24</sup> Dunphy, "The Steel Cocoon," 17.

<sup>25</sup> Campbell, "Nursing Care in Poliomyelitis," 416 and 417.

<sup>26</sup> F.R. Taylor, *Polio '53: A Memorial for Russell Frederick Taylor* (Edmonton: University of Alberta Press, 1990), 22; Jaipaul, "In the Shadows," 5. As indicated in footnote 28 of her article, Jaipaul's very brief description of the event is taken from Taylor's book.

<sup>27</sup> Taylor, *Polio '53*, 22.

had been the Municipal's Superintendent of Nursing since 1946, recalled the confusion, fear, and co-operation engendered by a much larger and longer power outage.<sup>28</sup> During the 1953 Manitoba epidemic over 180 individuals needed to use a respirator at some point. At the height of the epidemic, ninety-two respirators were in use at the same time.<sup>29</sup> It was at this time – when ninety-two respirators on three different wards were in use – that the power went out in the KGH for four hours.

During this four hour long power outage, each of the ninety-two respirators had to be operated manually, and the process was much more involved than the respirator manuals and nursing demonstrations indicated. As Shepherd recalled, it took three people to operate each respirator manually: one person operated the handle that worked the bellows, another had to watch the pressure gauge, and another had to watch the patient to make sure they did not become cyanotic, and to ensure that the tracheotomy tubes did not become blocked. The KGH did not have enough staff to facilitate the manual operation of the ninety-two respirators. When the power outage occurred, the staff from the other Municipal Hospitals “knew the George was in trouble,” and leaving “just a bare necessities staff on the other wards where there was no emergency,” rushed over to assist on the respirator wards. Hospital staff were not the only people

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<sup>28</sup> Shepherd was appointed Superintendent of Nurses upon the retirement of Miss Elsie Robertson, who had been the Superintendent since 1921. Shepherd, *Our Hospitals through the Years*, 58-9.

<sup>29</sup> The Winnipeg Municipal Hospitals Annual Report for 1953 indicates that the most respirators in operation simultaneously was ninety-two. RHA, Winnipeg Municipal Hospitals, Annual Reports, The Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1953, “Highlights of the 1953 Epidemic,” np. In her interview with Kathryn McPherson, Shepherd indicated that there were ninety-nine respirators in use at the time of the power outage: Manitoba Archives, Winnipeg General Hospital Nurses Alumni fonds, “Nurses and their Work: Oral Histories of Nursing in Winnipeg, 1920 – 1940,” Mary Shepherd tapes, C900- C902, tape 901, side B. However, in *Our Hospitals through the Years*, a compilation of information about the Winnipeg Municipal Hospitals, Shepherd states that the staff had to deal with “92 in respirators on one occasion”: Shepherd, *Our Hospitals through the Years*, 78.

who thought of the respirators when the power went out. As Shepherd recalled, “neighbours came in from all around the hospital” to offer their assistance.<sup>30</sup> Respirator wards were, on a normal day, crowded places: respirators are large, bulky pieces of technology, and alongside each one was a table and other pieces of necessary equipment meaning that “there was hardly any room to move.” It is difficult to fathom how, on the day of the four-hour power outage, approximately three hundred individuals were able to organize, with only a few flashlights to help them see, and manoeuvre themselves in such a way as to keep the ninety-two individuals in respirators alive until the power was restored. In recalling those four hours, Shepherd indicated that “it was bedlam.”<sup>31</sup>

The widespread introduction of respirators in the middle part of the epidemic era effected nurses profoundly, but they were not the only substantive change nurses in Winnipeg had to deal with. The sudden introduction in the middle of the 1941 epidemic of the Kenny method had both immediate and long term repercussions for nurses. The Kenny method, developed and advocated by Elizabeth Kenny, an Australian nurse with little formal training, shaped greatly the work performed by nurses on the polio wards. At the outset of the 1941 Manitoba epidemic, nursing polio patients had changed little since 1928, but by the time that epidemic subsided, it had been transformed quickly and profoundly. The change was due to the influence of Sister Elizabeth Kenny, whose disdain for splinting and immobilization revolutionized the care of patients with polio-related muscle weakness and paralysis. Between her arrival in the United States in 1940 and her return to Australia in 1947, Kenny garnered much attention. She was named one of *Time* magazine’s most important women, and a Hollywood movie was made about her life. More

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<sup>30</sup> MA, “Nurses and their Work: Oral Histories of Nursing in Winnipeg, 1920 – 1940,” Mary Shepherd, tape 901, side B.

<sup>31</sup> MA, “Nurses and their Work: Oral Histories of Nursing in Winnipeg, 1920 – 1940,” Mary Shepherd, tape 901, side B.



importantly, she unsettled long held notions about the nature of polio and the treatment people should receive as they emerged from the acute stage of the disease.

Despite the often sensational attention that Kenny received while in the United States there is a dearth of scholarly material about her work, although historians such as Naomi Rogers have begun to address this lacuna. Victor Cohn's *Sister Kenny: The Woman who Challenged the Doctors* is not academically rigorous, but it is based in part on interviews with Kenny, some physicians with whom she worked, and her autobiography. Kenny was born in a remote part of the Australian outback, and even though there is no evidence of formal nursing training, as a young woman she assisted her neighbours medically and worked on a ship as a nurse during the Great War.<sup>32</sup> It was in 1911, as the person her neighbours called upon for medical assistance, that Kenny first encountered a child with polio. Unsure of what the two-year old girl was suffering from, Kenny sent a telegram to her physician-mentor who messaged back that it was infantile paralysis and since there was "no known treatment," Kenny ought to do "the best you can with the symptoms presenting themselves."<sup>33</sup> Kenny applied heated blankets continuously to the girl's limbs until the pain seemed to subside, and then "very gently began trying to move the child's leg back into normal patterns."<sup>34</sup> The young girl was the first in the area to contract polio, and Kenny treated all the children she encountered in the following days and weeks in the same manner. Although the patients seemed to be appreciative of her method, Kenny faced serious

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<sup>32</sup> According to Cohn, Kenny told various stories about being trained as a nurse. In her autobiography, she wrote that she was trained as a nurse, and insinuated to the authors of *Who's Who in Australia* that she graduated as a nurse in 1911. In 1951, she further indicated that she had trained at a private hospital in Sydney, Australia, but Cohn notes that "no one has been able to find any evidence" of the hospital that Kenny named. It seems as though Kenny received informal training from a rural doctor whom she assisted, and worked as a midwife and medical worker, or 'bush nurse' in the outback. Victor Cohn, *Sister Kenny: The Woman who Challenged the Doctors* (Minneapolis: University of Minnesota Press, 1975) 32 - 36.

<sup>33</sup> Cohn, *Sister Kenny*, 41.

<sup>34</sup> Cohn, *Sister Kenny*, 42.

opposition in Australia and, along with her adopted daughter, she moved to the United States in 1940, hoping that her method would be more widely accepted there.

Kenny's method was based on a somewhat convoluted understanding of polio, and it rejected a majority of the main medico-scientific findings about the disease. Kenny did not believe that polio-related paralysis was the result of a viral engagement with the central nervous system; rather, she posited that polio-related muscle weakness was caused by "three untreated conditions": muscle spasm, mental alienation, and muscle incoordination. Kenny argued that muscle spasms, which she identified as "muscle tightness and shortening, causing pain, tenderness, and tenseness and pulling from their normal position, thus distorting the skeleton," led to the second problem, identified as "mental alienation." According to Cohn, for Kenny this was "a kind of pseudoparalysis in the opposing muscles" which made the patient forget how to use the alienated muscle. The final problem for Kenny was muscle "incoordination" the "jerky, ineffectual use of the wrong muscles, resulting in grotesque motion."<sup>35</sup> Based on this view of polio-related paralysis, Kenny argued that the immobilization of any affected limbs was detrimental to an individual's possible recovery. Instead, she advocated the use of hot packs and exercise. The hot packs, or fomentations, were made from strips of woolen blankets, immersed in very hot water and then wrung out. The fomentations were placed directly on the affected area of the patient's body for several hours a day and each fomentation had to be replaced as it cooled. The mainstream medical opinion was that people with polio needed long periods of restful

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<sup>35</sup> Cohn, *Sister Kenny*, 129 and 130. For an orthopaedist's view of Kenny's conception of polio induced paralysis, see A.E. Deacon, "The Treatment of Poliomyelitis in the Acute Stage," in *Poliomyelitis and Encephalitis Manitoba, 1941: A Symposium arranged by the Department of Health and Public Welfare of the Province of Manitoba*, 38-39. Deacon writes that "According to Miss Kenny, the spastic muscles are the ones directly affected by the disease in the central nervous system, and acute anterior poliomyelitis should be classified as spastic paralysis rather than a flaccid paralysis." Dr. Deacon did not reject the notion that polio was a disease of the central nervous system, but neither did he reject Kenny's proposed treatment.

convalescence; Kenny, however, argued that patients should begin to move even during the acute stage. She advocated in particular the careful movement and manipulation of the affected parts by a trained physiotherapist or nurse.

Some physicians, such as Dr. John Pohl in Minneapolis, supported Kenny's work. Pohl arranged for Kenny to be given a ward at the University Hospitals in Minneapolis where she worked on patients and taught her methods to therapists and nurses during that city's epidemic in 1941. In 1943, the Elizabeth Kenny Institute opened in Minneapolis, and therapists from the United States and Canada travelled there to learn how to implement her methods. By the mid-1940s, despite public adoration for Kenny and the widespread implementation of her method in hospitals across the continent, institutions which wielded significant power in the world of polio research and treatment were not happy with Kenny. Cohn claims that Kenny's method represented a "revolution almost unprecedented in medical history. All over the country, doctors and hospitals switched from splinting and inactivity to heat and activity."<sup>36</sup> Despite this fundamental change in polio treatment, the NFIP rejected a grant application that she had made for further funding for her Institute, and the American Medical Association refused to retract a negative review of her and her work.<sup>37</sup> Kenny returned to Australia in 1947, and died in November 1952.

Kenny's time in the United States is often framed in the context of her forceful personality and her clashes with the predominately male medical establishment, the NFIP and American Medical Association in particular. Kenny referred to splints as "archaic torture devices," leg braces as "medieval contraptions of leather and steel," and she fought, often publicly, with those who criticized her method. Cohn suggests that Kenny's methods, which were in direct opposition

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<sup>36</sup> Cohn, *Sister Kenny*, 150.

<sup>37</sup> Cohn, *Sister Kenny*, 187 and 189.

to the accepted notion of immobilization and rest, were ridiculed and rejected because she was a woman and a nurse who claimed to be able to do something the medical community could not: cure polio-related paralysis. There is evidence though that in Australia, it was not physicians but masseuses who took umbrage with the way Kenny treated people with polio. Philippa Martyr complicates Cohn's position, arguing that in Australia significant resistance to Kenny came largely from the Australian Massage Association, "a substantially female-based group of massage practitioners," who waged an "active, and at times, intensely personal," campaign against Kenny. Framing her argument within the larger debate about the "socio-medical perception of the child as a future citizen whose physical capacity to contribute to the workforce must be protected at all costs," Martyr suggests that the Australian Massage Association worked to discredit Kenny because she threatened their goal of establishing themselves as the sole provider of therapy for polio patients in Australia.<sup>38</sup> This, coupled with support from Dr. Jean Macnamara, a strong supporter of splinting and immobilization, eventually forced Kenny to move to the United States. Margaret Denton, a historian and physiotherapist, argues instead that Kenny was an unqualified nurse who co-opted the Australian Masseuse Association's approved methods and presented them as her own.<sup>39</sup> In her response to the Australian debate, Naomi Rogers suggests that Kenny's lack of nursing qualifications "needs to be separated from her skill, medical knowledge and competency."<sup>40</sup> While Denton refers to the debate surrounding Elizabeth

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<sup>38</sup> Philippa Martyr, "A Small Price to Pay for Peace: The Elizabeth Kenny Controversy Re-examined," *Australian Historical Studies* 27, 108 (1997): 55.

<sup>39</sup> Margaret Denton, "Further Comments on the Elizabeth Kenny Controversy," *Australian Historical Studies* 31, 114 (2000): 158.

<sup>40</sup> Naomi Rogers, "The Debate Considered," *Australian Historical Studies* 31, 114 (2000): 166.

Kenny as a “hoary old chestnut,” Rogers relishes the addition to the historiography, writing “let the Kenny debate rage on!”<sup>41</sup>

Rogers further complicates the Kenny narrative beyond the nurse/doctor/therapist debate, focusing not on who she was, but on the attention Kenny paid to pain. Prior to Kenny, the medical community focused exclusively on the visible symptoms of acute polio and did not take patients’ claims of pain seriously. Kenny, Rogers theorizes, was vilified by the American medical community because “she took [patients’] pain – the result of what she called ‘muscle spasm’ – seriously, and treated it with moist heat in the form of hot packs.” In this context it does not matter that Kenny was “later proved to be totally wrong in her proposed aetiology of poliomyelitis,” particularly concerning her argument that the virus infected the muscles rather than the nervous system.<sup>42</sup> What is important for Rogers is that Kenny gave polio patients a voice, responded to that voice, and found a way to lessen the pain associated with the acute stage of polio. This historiographical debate indicates that there is still much to consider in terms of Kenny’s work. It also suggests that there is space for further reconceptualizations of the impact of her methods. I consider Kenny’s impact, not on patients, physicians or licensing bodies, but on the daily work performed by nurses in Winnipeg, and suggest that the impact of the implementation of the Kenny method was both immediate and long-term. In the short-term, it completely transformed nursing care on the polio wards. The Kenny method, beyond being controversial, was a hands-on, labour intensive treatment, and, after its implementation in Manitoba in 1941, nursing shortages became a feature of subsequent epidemics. The 1953 epidemic, in particular, was marked by a contentious debate in which the nursing shortage was

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<sup>41</sup> Denton, “Further Comments,” 158; Rogers, “The Debate Considered,” 166.

<sup>42</sup> Rogers, “Silence has its own Stories,” 146.

framed in terms of the gendered nature of nursing and questions surrounding remuneration for nurses.

The changes in nurses' work were engendered by Kenny's visit to Winnipeg, which came about largely due to the efforts of Dr. Bruce Chown. Because the 1941 polio epidemic occurred concurrently with an outbreak of encephalitis, a number of prominent medical officials visited Winnipeg that summer and one arranged for Bruce Chown, then the Medical Superintendent of the Children's Hospital, to "visit some of the [polio] treatment centres in the United States." On that tour, Chown visited with Kenny in Minneapolis, and observed her technique. Although Winnipeg physicians had been acquainted previously with Kenny's method, largely through reading about it in medical journals, the visit to Minneapolis left Chown "with but one desire, to have Miss Kenny visit Winnipeg and give us the opportunity to try her method."<sup>43</sup> Some Canadian physicians were "openly skeptical" of the Kenny method; however, Chown was impressed by her work, and knowing that there existed preliminary studies which "suggested that immobilization speeds up the process of muscle degeneration," he arranged for Kenny to visit Winnipeg.<sup>44</sup> Kenny travelled to Winnipeg in August of 1941 and while "it was not easy to introduce the method suddenly, en masse, in the midst of an epidemic," that is precisely what happened.<sup>45</sup> The administrators of the Winnipeg Municipal Hospitals had little to say about Kenny's visit. Dr. Dugald McIntyre, the Medical Superintendent of the Winnipeg Municipal Hospitals in 1941, was decidedly non-committal in his brief remarks about Kenny, stating that "it is claimed by [Kenny] and by many who have experience in her method of treatment that it is

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<sup>43</sup> "The Kenny Method of Treatment: Experiences at the Children's Hospital of Winnipeg," in *Poliomyelitis and Encephalitis Manitoba, 1941: A Symposium arranged by the Department of Health and Public Welfare of the Province of Manitoba*, 35.

<sup>44</sup> Ruddy, *Poliomyelitis in Canada*, 151; Bruce Chown, "The Newer Knowledge of the Pathology of Poliomyelitis," in *Poliomyelitis and Encephalitis Manitoba, 1941*, 37.

<sup>45</sup> "The Kenny Method of Treatment: Experiences at the Children's Hospital of Winnipeg," 35.

superior to that practiced heretofore by the orthopedic surgeons. Nevertheless this system of treatment has not yet generally been accepted and time alone will eventually settle the problem.”<sup>46</sup> Despite this less than enthusiastic review, the Kenny method was implemented at the KGH.

Officials at the Children’s Hospital of Winnipeg embraced the new methods of care more enthusiastically, perhaps due to Chown’s endorsement of Kenny and her work. The section of the 1941 provincial report dealing with the care of patients states that despite some initial difficulties, “we have found the method good, indeed better than good – the best of which we have had experience. We and our patients owe Miss Kenny a great debt. We gladly acknowledge it.”<sup>47</sup> Five years later, Kenny wrote to both Chown and Dr. A. E. Deacon, an orthopedic surgeon at the Children’s Hospital, asking them to attend a meeting where she was to provide “literary, documentary, clinical and scientific evidence concerning [her] work.”<sup>48</sup> While neither was able to attend the meeting personally, both sent statements of support for Kenny. Deacon wrote that the Children’s Hospital had been using her treatment “exclusively” since 1941 and that “the ultimate results since using this treatment have been ten times better than those we obtained with

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<sup>46</sup> Dugald McIntyre, “Report of the Medical Superintendent,” in *Municipal Hospitals of the City of Winnipeg, Report for the year ended December 31<sup>st</sup>, 1941*, np.

<sup>47</sup> “The Kenny Method of Treatment: Experiences at the Children’s Hospital of Winnipeg,” 36. Bruce Chown’s relationship with Kenny was complex. Ruddy states that Chown had distaste for her personally, but appreciated her methods. That may have been the case when they first met; however, Chown and Kenny corresponded until at least 1946. See for example, Minnesota State Archives in the Minnesota Historical Society, Elizabeth Kenny papers, 143E -10-6F, Box 4, letter from Elizabeth Kenny to Bruce Chown MD, 25 October 1946, and letter from Bruce Chown to Elizabeth Kenny, 28 October 1946.

<sup>48</sup> Minnesota State Archives in the Minnesota Historical Society, Elizabeth Kenny papers, 143E -10-6F, Box 4, letter from Elizabeth Kenny to Alfred Deacon, M.D., 25 October 1946.

the old method”; Chown, too, was laudatory, writing that in his opinion, “the results obtained by this method are the best we have ever obtained.”<sup>49</sup>

The Kenny method, implemented in Winnipeg in the midst of the 1941 epidemic, was physically demanding and extremely time consuming for nurses. Besides the need for specific sizes and shapes of woolen material, the Kenny method necessitated the use of an “ordinary clothes boiler,” and a “two plate electric stove” to heat the water. Once the woollen pieces had been saturated with the boiling water, they were placed on an “ordinary clothes wringer attached to the centre of a home-made table frame. A chute to a pail under the table carries away the excess water. The other half of the table receives the fomentation as it comes through the wringer.”<sup>50</sup> The fomentations were then carried to the patient on a small rubber mat, and pinned to each patient’s hospital gown. The fomentations were applied continuously throughout the day to each individual – and during an epidemic, there could be hundreds of patients in one hospital at any given time – with each pack being left on for approximately two hours. The placement of the fomentation depended on where the patient was experiencing muscle weakness or paralysis, and many patients needed more than one hot pack, meaning that “the applying and changing is practically a continuous practice [and] that the acutely ill patient requires the full time of one nurse.” Nursing supervisors hypothesised that the graduate nurses trained in the creation and application of the fomentations “developed such skill and speed at applying fomentations that one of them was equal to three nurses inexperienced in the procedure”; however, because the

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<sup>49</sup> Minnesota State Archives in the Minnesota Historical Society, Elizabeth Kenny papers, 143E - 10-6F, Box 4, letter from A.E. Deacon to Elizabeth Kenny, 28 October 1946, and letter from Bruce Chown to Elizabeth Kenny, 28 October 1946.

<sup>50</sup> Dorothy I. Ditchfield and Ethel M. Hyndman, “The Nursing Procedure,” in *Poliomyelitis and Encephalitis Manitoba, 1941*, 43.



fomentations were made and applied continuously between seven o'clock in the morning and six o'clock in the evening, it was clearly a job that never ended.<sup>51</sup>

The procedures taught by Kenny and employed at the Winnipeg hospitals differed fundamentally from the way nurses had been trained previously. In their outline of the implementation of the Kenny method at the Children's Hospital, Dorothy Ditchfield, the Children's Superintendent of Nurses, and Ethel M. Hyndman, a ward supervisor at that institution, indicated that it was difficult for them to accept some of Kenny's dictates. While appreciative of the fomentations, Ditchfield and Hyndman were reticent to enact the second aspect of Kenny's method which called for the early movement and manipulation of the affected limbs. Indeed, Ditchfield and Hyndman suggest that "doing away with the taboo against 'stretching the paralyzed muscle'" was a "*negative innovation*" because "anyone who has done much nursing of patients paralyzed by poliomyelitis will know what this means in nursing care and how strongly the taboo was insisted upon."<sup>52</sup> From the beginning of the epidemic era, nurses were taught to keep the patients as still as possible for long periods of time. To suddenly suggest that not only should affected limbs be moved while the patient was still in the acute stage of the disease was anathema to nursing supervisors.

For Ditchfield and Hyndman, the hot packs were not a source of anxiety, but the proposed movement of the limbs was. Because of nursing administrators' reticence to discard all that they had been taught, Ditchfield and Hyndman hoped that physiotherapists would carry out the second part of the method – the movement of the limbs. They suggested that "while Miss Kenny's assistants are trained to do passive movements to some extent as well as to apply the fomentations, our nurses carried out no manipulations, these being left entirely to the physiotherapists.

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<sup>51</sup> Ditchfield and Hyndman, "The Nursing Procedure," 44.

<sup>52</sup> Ditchfield and Hyndman, "The Nursing Procedure," 43.

With greater experience this first step in physiotherapy may be allocated to nurses and carried out as fomentations are being changed.”<sup>53</sup> Physiotherapists, it seemed, were more open to the second prong of the Kenny method. Helen H. Ross, the chief physiotherapist at Winnipeg’s Children’s Hospital, articulated that in 1941 she followed Kenny’s method of “muscle re-education,” beginning, as Kenny suggested, “as early as twelve hours after the onset of symptoms and while the patient was still in great pain [because] if a period of three weeks is allowed to precede active treatment stiffness is often present, deformities have begun to develop, and precious time has been lost.”<sup>54</sup> Having physiotherapists perform the Kenny method of ‘re-educating’ the muscles through movement may have been the desired goal but Manitoba was lacking greatly in trained physiotherapists. The University of Manitoba did not have a school of physiotherapy until the 1960s, and while the DHPW did bring physiotherapists in from other provinces and from England, the high number of patients, particularly during the 1952 and 1953 epidemics, meant that nurses did more than create and apply the fomentations.

These two new technologies of care – respirators and the Kenny method – did more than disrupt and change the nature of nurses’ work during the epidemic era: they led to recurring nursing shortages during each polio epidemic that occurred during and after 1941. The implementation of these technologies meant that more nurses were needed on polio wards during an epidemic than in the earlier outbreaks. Despite the pool of student nurses available to Winnipeg hospitals, it seemed as though there were never enough nurses to fill the demands engendered by each outbreak after the implementation of these technologies of care. The Winnipeg Municipal Hospitals experienced its first acute nursing shortage in 1941, “when the

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<sup>53</sup> Ditchfield and Hyndman, “The Nursing Procedure,” 44.

<sup>54</sup> Helen H. Ross, “Physiotherapy in the Treatment of Infantile Paralysis: Kenny Method,” in *Poliomyelitis and Encephalitis Manitoba, 1941*, 46 and 45.

polio epidemics were at their height.”<sup>55</sup> Elsie Robertson, the Superintendent of Nursing, suggested that the shortage was due largely to “a number of resignations and because of the holiday season when many people were out of the city”; however, the seventy-seven nurses employed by the Municipals would not have been able to care for the respirator patients, implement the Kenny method, and care for all the other patients even if the full staff was on hand.<sup>56</sup> The new technologies nurses were expected to engage with during polio epidemics meant that calls for extra nursing assistance became a constant refrain during each epidemic between 1941 and 1953.

The administrators of the Municipals relied on three groups of women – student nurses, women volunteers, and ‘retired’ nurses – to help rectify the nursing shortage during the 1941 epidemic. Reliance on the labour of student nurses was not new in 1941, but the new technologies of care introduced during the polio epidemic that year highlighted the amount of work student nurses performed. Two hundred student nurses took the Municipals’ affiliated course in 1941, and those who were enrolled in the summer months worked on the polio wards. In her yearly report on the nursing division, Robertson wrote that due to the “rush of the polio” outbreak, she was unable to provide a “detailed account” of the work nurses performed, but she did mention the “special nursing care” provided by the student nurses. Nurses were generally expected to resign upon marriage, yet hospitals such as the Municipals relied on these former

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<sup>55</sup> *Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1941*, np. Although the report refers to the “polio epidemics,” it is likely that the pluralisation refers to the twin epidemics of poliomyelitis and encephalitis that occurred simultaneously that year in Manitoba.

<sup>56</sup> , Elsie Robertson, “Report of the Nursing Division,” in *Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1941*, np. According to Robertson, the seventy-seven members of the nursing staff included her, an instructress, a day supervisor, a night supervisor, two operating room nurses, ten charge nurses, twenty-one floor duty nurses, five special floor duty nurses, thirty three student nurses, and two attendants. These nurses were responsible for care at both the King Edward and King George Hospitals.

employees to come to return to the wards in times of need. “What would have happened,” the Municipal administrators wrote in the *Annual Report*, “had not a number of Ex-Employees (now married) rallied to our aid we do not know. It was one of the happy incidents of the year, in respect to matters of personnel, that so many of them left their homes and came forward with evident willingness and concern when they realized that their former institutions had need of their services.”<sup>57</sup> These two groups of nurses were expected to work on the wards, but they were not the only women expected to give of their time.

Along with nurses, lay women were also expected to donate their time to hospitals during epidemic moments. During the 1941 epidemic, the Municipals relied on Winnipeg’s Central Volunteer Bureau (CVB) to provide lay women volunteers to assist with non-medical tasks. Instituted in 1939, the CVB began as a “volunteer registry for war or emergency service”; however, because its officers worried that the patriotic fervour of wartime volunteering might overshadow the needs of the city’s other organizations, it broadened its mandate to “include community service.” Along with their war-related volunteer work, the middle-class women who joined the CVB’s registry performed tasks such as “driving babies to the milk depot and Children’s Aid workers to visit unmarried mothers.”<sup>58</sup> Assistance at the Municipal Hospitals during the polio epidemics that occurred during and after the Second World War fit the mandate of the CVB and the hospital administrators spoke highly of the efforts of the CVB members:

An organization which voluntarily assisted in the added clerical duties connected with these epidemics was the Central Volunteer Bureau, some of whose members aided the doctors in recording necessary data. One of the many good policies of that organization is to co-ordinate women’s

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<sup>57</sup> Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1941, np.

<sup>58</sup> Jody Perrun, “The Spirit of Service: Winnipeg’s Voluntary War Services during the Second World War,” *Prairie Metropolis: New Essays on Winnipeg Social History* eds. Esyllt W. Jones and Gerald Friesen (Winnipeg: University of Manitoba Press, 2009): 163.

volunteer effort and make sure that, in spite of the war, essential community services are not overlooked. It has been found that volunteers are willing and eager to meet both types of calls and it is to the everlasting credit of the Bureau that it has established an organization that achieves this.<sup>59</sup>

Despite the praise heaped on the CVB by hospital administrators, the assumption that lay women and trained nurses should volunteer their time during moments of instability was not new. As Linda Quiney demonstrates, young middle-class women were expected to perform voluntary nursing duties during two emergencies which occurred during and immediately after the Great War – the Halifax explosion and the influenza epidemic. With the outbreak of war in 1914, approximately 2,000 women, “supported by the conventional identification of nursing as an instinctive maternal endeavour,” trained as Voluntary Aid Detachment nurses (VADs). Many VADs hoped to serve in hospitals overseas, but a number of problems, including “their rejection by Canada’s overseas military medical forces” kept the majority of them in Canada.<sup>60</sup> Nevertheless, these women were expected to assist when needed. When, on 6 December 1917, a collision between two ships led to an explosion that killed 1,600 and injured thousands of others in Halifax, over 100 VADs in the area were “suddenly called upon to fill the gap until trained reinforcements could be found.” Similarly, in late 1918, as the influenza epidemic developed across the country, women – including those who had been trained as VAD and those who had not – volunteered their time to care for the sick. In this time of crisis, the assumption that women were biologically suited to provide nursing care was made clear. The mayor of Ottawa, for example, “publicly reminded women that nursing the flu victims was their duty when the city was critically short of qualified nurses.” In doing so, he “failed to recognize that the women in

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<sup>59</sup> Municipal Hospitals of the City of Winnipeg Report for the Year ended December 31<sup>st</sup>, 1941, np.

<sup>60</sup> Quiney, “Filling the Gaps,” 352.

the city had already given countless volunteer hours,” and that many were “nursing flu patients at night while putting in regular hours [working] in government offices during the day.”

Importantly, Quiney observes that “the only men called upon to do double duty were the physicians,” which indicates that women, due to their supposed maternal and caring instincts were constructed as best suited to provide any sort of assistance that resembled nursing.<sup>61</sup>

These presuppositions about laywomen and trained nurses extended from the period of the Great War into the late epidemic era. By 1947, the Kenny method was fully established in Manitoba and hospitals such as the KGH had several respirators indicating that as the epidemic developed, more and more nursing labour would be needed. As late as 28 July 1947, provincial health officials were “still hopeful,” at least publicly, that there would not be more cases of polio than what might be seen in a non-epidemic year.<sup>62</sup> Only two weeks later, it was clear that not only was Manitoba experiencing an epidemic of the disease, but there was going to be a shortage of nurses to care for the patients. On 12 August, with 142 polio cases, authorities at the Children’s Hospital and the KGH “facing a severe shortage of nurses, moved to combat the disease [by] appealing [to] married nurses to fill the shortage.”<sup>63</sup> Despite having to ‘retire’ when they married, they were expected to volunteer their time and labour without remuneration during the 1947 epidemic, as they had in previous times of crisis.

Health officials understood the systemic and specific reasons for the nursing shortage in 1947; nevertheless, they intimated that any gaps in the care of polio patients rested on the shoulders of inactive nurses who did not volunteer their labour. Dr. Dugald McIntyre, the medical superintendent of the Municipal Hospitals, understood well the underlying reasons for

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<sup>61</sup> Quiney, “Filling the Gaps,” 362.

<sup>62</sup> “Five new polio cases reported in Manitoba,” *Winnipeg Tribune* 28 July 1947, 1.

<sup>63</sup> Province wages new polio fight,” *Winnipeg Tribune* 12 August 1947, 1.

the post-war nation-wide shortage of nurses. It was due, he suggested, to a number of factors including “the marriage rate, the search for better situations in the United States, and a “general restlessness” in the profession. Despite acknowledging these broader issues, inactive nurses seemed to be held responsible for any gaps in care for hospitalized polio patients. He suggested to the *Free Press*, for example, that there was “plenty of space in the municipal hospitals, but we haven’t enough nurses to handle them [and] the result” was that “many cases were being cared for at home” by mothers who might not be aware of the proper procedures necessary to prevent paralysis and deformities.<sup>64</sup>

The spectre of children and youths with polio not being admitted to the empty, waiting wards because of the ostensible reluctance of trained nurses to assist caught the attention of politicians. On 18 August 1947, with well over 200 cases across Manitoba, Ivan Schultz, the provincial Minister of Health and Public Welfare, met with members of the Volunteer Bureau, the provincial Registered Nurses Association, the Red Cross, and nursing superintendents from both the Children’s and Municipal Hospitals to address the nursing situation. The meeting resulted in the creation of an “emergency nursing committee” designed to procure enough unpaid volunteer nurses willing to work four hours a day. The committee reported that the thirty-five occupied beds in the Children’s hospital and the sixty-five occupied beds in the KGH were “understaffed,” and in need of more nurses. On top of that, the committee estimated that a minimum of at least twenty more volunteers, of whom at least nine should be Registered Nurses, were needed to staff the ninety beds which were available to polio patients, but empty due to the

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<sup>64</sup> “Nurses needed to fight infantile paralysis: Hospitals face nursing shortage,” *Winnipeg Free Press* 11 August 1947, 1.

lack of nursing personnel.<sup>65</sup> Despite the effort put forth by the emergency committee to procure more volunteer nurses, hospital officials were unhappy with the numbers of persons coming forward. On 21 August, the secretary of the emergency nursing committee characterized the response to their call for volunteer nurses as “reasonably satisfactory,” but noted that more volunteers, Registered Nurses in particular, were “urgently needed” so that “tentative plans” to open another polio ward at the KGH could be realized.<sup>66</sup> These comments were made even though over thirty volunteers had responded to the committee’s public appeals and had been put to work applying the hot fomentation to patients.<sup>67</sup> While hospital stays for patients with paralysis were often lengthy, the recurrent calls for nursing volunteers dissipated as the epidemic petered out in September.

The 1952 epidemic, with close to 800 cases and an increase in the number of patients needing respirators, led to another shortage of nurses although health officials approached this shortage differently, offering remuneration to nurses who volunteered their time. The geographic contours of the 1952 epidemic, with the first cases occurring in the communities of Winkler and Rivers rather than Winnipeg delayed health officials’ calls for extra nurses to work on the polio wards of city hospitals, but by early September, with cases on the rise in the Winnipeg area, the call for nursing assistance rang out. Dr. Hildes indicated that while the KGH was receiving “much needed” help from civic and provincial public health nurses, more nurses were desperately needed.<sup>68</sup> In 1952, officials indicated that all available nurses who registered with

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<sup>65</sup> “Province working to aid under-staffed hospitals,” *Winnipeg Free Press*, 18 August 1947, 1 and 3.

<sup>66</sup> “New hospital ward may be opened: 21 more polio cases reported,” *Winnipeg Tribune* 22 August 1947, 11.

<sup>67</sup> “Medical men hope polio peak reached,” *Winnipeg Tribune* 25 August 1947, 11.

<sup>68</sup> “Nine new polio cases reported in Province,” *Winnipeg Free Press*, 2 September 1952, 3.



Mary Shepherd, the Municipals' superintendent of nursing, would "be paid for their services."<sup>69</sup> Even the move from volunteer to paid labour did not ease satisfactorily the paucity of nurses. On 20 September, provincial health officials issued a second call for nursing assistance because of an "increasing number of patients in respirators, [and] officials stressed that all nurses answering this appeal would be paid."<sup>70</sup>

By 1952, health officials in Manitoba had consented to pay extra and inactive nurses for their labour, but in 1953 remuneration was a contentious issue. In July, in the midst of the epidemic, the province established a gamma globulin clinic at the Princess Elizabeth Hospital in order to provide the preventative to household contacts of polio patients. Both physicians and nurses were needed to staff the clinic. On 21 July, R. G. Cadham, Winnipeg's deputy medical health officer, requested that the city's committee on health make funds available to reimburse physicians at the clinic at a rate of fifteen dollars per session, with an estimate that there would be two or three sessions per day, with one doctor in attendance per session to oversee the clinic's operations. In just two days this amount had been approved by both the committee on health and the city's finance commissioner without any problems.<sup>71</sup> Remuneration for nurses staffing the same clinic proved to be more problematic as no one, it seemed, wanted to pay the nurses for their work. A memo entitled "Poliomyelitis Nursing Bonus" sent by Cadham to the committee on health indicated that "the administrators of the Municipal Hospitals feel that they are in no way responsible for the Gamma Globulin clinic and hence do not feel that the Municipal

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<sup>69</sup> "Appeal goes out for polio nurses," *Winnipeg Free Press*, 9 September 1952, 3.

<sup>70</sup> "Government pleads for nurses to help with polio victims," *Winnipeg Free Press*, 20 September 1952, 3.

<sup>71</sup> CWA, Committee on Health, Pack File 1976, 21 July 1953, letter from Dr. R.G. Cadham, deputy medical health officer, to the committee on health; CWA, Committee on Health, Pack File 1976, memo from the clerk of committee to J.H. McInnis, the commissioner of finance and V. Driver, the city auditor.

Hospitals should pay any suggested bonus for poliomyelitis nursing to the nurses working in the G.G. clinic.” As a result, Cadham requested that the “City Health Department be permitted to reimburse City Health Department nurses employed in the Gamma Globulin Clinic in a similar manner to any policy adopted by the Municipal Hospitals for a bonus for poliomyelitis nursing.”<sup>72</sup>

In addition to the differences in language – the physicians’ money was called pay while the nurses’ was simply a bonus – the time it took to resolve the two issues in pay is indicative of a lack of interest in paying nurses for their work. In his letter, Cadham acknowledged the difficult work performed by the nurses at the gamma globulin clinic, noting that “in addition to working in the clinic, the clinic nurses are responsible through the medical staff for reporting all cases of poliomyelitis admitted to the King George Hospital to the various Health Departments concerned, [a job which] requires frequent visits throughout each day to the Poliomyelitis Wards.” Nevertheless, while questions resolving the particularities of physicians’ pay had been finalized before the clinic opened, Cadham’s first inquiry into the issue of nurses’ pay was dated 12 August, a full week after the “municipal hospitals commission had authorized a bonus” of twelve dollars for every five days worked.<sup>73</sup> That amount, however, was only for Registered Nurses. Practical Nurses received only \$8.00 for every five days worked whereas “all other nursing personnel” received only \$6.00 for the same five days.<sup>74</sup> The committee on health did not recommend the nursing bonus to the city’s committee on personnel and legislation until 20

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<sup>72</sup> CWA, Committee on Health, Pack File 1976, 12 August 1953, memo from R. G. Cadham to the City of Winnipeg Committee on Health.

<sup>73</sup> Memo from R. G. Cadham to the City of Winnipeg Committee on Health;

<sup>74</sup> RHA, City of Winnipeg Hospital Commission Minute Book, June 1953 – December 1957, 35.

August.<sup>75</sup> Jurisdictional issues may have played a role in the delay surrounding remuneration for nurses stationed at the gamma globulin clinic, but the exigency with which the physicians' pay was figured out, combined with the very low remuneration offered to the nurses, indicates that ideas concerning the voluntary nature of women's work, such as nursing the sick in times of emergency, lingered in the post-war years.

Officials may have believed that they could attract more inactive nurses to the polio wards with the promise of a bonus, but there existed other opinions as to why nurses were ostensibly not volunteering to help during the polio epidemics. The belief that a fear of contagion was holding nurses back was pervasive during the post-war epidemics. In 1947, the emergency nursing committee set up to find enough nurses to volunteer on the polio wards in city hospitals reminded nurses publicly that "the danger of contagion to those working in hospitals [is] no greater than being in contact with the general population."<sup>76</sup> The assumption that more nurses were not volunteering because of the possibility of contracting polio was made again in 1952. On 9 September, the *Winnipeg Free Press* published an article asking for any inactive nurses to report to the KGH. Alongside that appeal was a mention that officials in Saskatchewan had "squashed rumours that doctors and nurses were falling victim to the disease in large numbers."<sup>77</sup> The dissemination of that particular piece of information in an article asking for more nurses in Winnipeg is revealing, as it suggests that the fear of contracting polio was potentially holding nurses back.

During the 1953 epidemic, the promise of gamma globulin for all nurses working at the KGH was used as incentive to attract inactive nurses to the polio wards, indicating that if nurses

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<sup>75</sup> CWA, Committee on Health, Pack File 1976, 20 August 1953, memo from the Clerk of Committee to the Committee on Personnel and Legislation.

<sup>76</sup> "Plea made for volunteers to fight polio," *Winnipeg Free Press*, 19 August 1947, 3.

<sup>77</sup> "Appeal goes out for polio nurses," *Winnipeg Free Press*, 9 September 1952, 3.

could be assured of their safety, enough might volunteer their services. Others viewed the ‘nursing bonus’ in this way as well. In late August 1953, when word of the nursing bonus reached the union that represented non-medical Municipal Hospital Employees, they approached the Hospital Commission for an explanation. Two shop stewards and the “business agent” of the Federation of Civic Employees appeared in front of the Commission “on behalf of employees who have not been accorded the bonus for work on the polio flats. They pointed out that all are subject to the same hazards of employment and consider it discriminatory to single out any one group” for extra pay.<sup>78</sup> The use of the phrase ‘hazards of employment’ indicates that many employees thought there was a danger inherent in working on the polio wards of the KGH and that nurses were being enticed to volunteer their time through a sort of danger pay that was not available to other employees.

The mounting tensions surrounding the nursing shortage and ideas concerning remuneration, fear of contagion, and the possibility that nurses were unwilling to work on the polio wards came to a head immediately following the 1953 epidemic. In November 1953, Lillian MacKenzie, Winnipeg’s Director of Public Health Nursing, sent a letter to Cadham outlining the work city nurses performed at the gamma globulin clinic and at the KGH in order to alleviate any doubts as to the “response of the City Health Department Nursing Division to requests for assistance” during the 1953 epidemic. In it, MacKenzie explained that most of her forty-eight nurses had worked at either the KGH or the clinic. Twenty-six staffed the gamma globulin clinic every day of the week from seven o’clock in the morning until nine o’clock at night and the remaining thirteen “gave active ward service in King George Hospital for periods ranging from one week to three and a half months, from July to November.” Further, two city

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<sup>78</sup> RHA, City of Winnipeg Hospital Commission Minute Book, June 1953 – December 1957, 37.

public health nurses “were required for each of the four districts to help with camp examinations and to investigate sick calls, many of them coming from anxious parents fearing polio,” and several others were either ill, pregnant, or staffing the city’s home care program.<sup>79</sup>

MacKenzie may have believed her letter was enough to assuage any lingering concerns about the participation of city public health nurses, but it was not. In March of 1954, MacKenzie re-sent the letter she had written the previous November “because of repeated unfavorable publicity in the press regarding the contribution of nurses in the polio epidemic,” along with a memo stating that while she had hoped copies of the letter had been distributed to all the city aldermen, it was “neither read at a Committee meeting,” nor distributed.<sup>80</sup> The lack of a response to the November letter was not the only reason why MacKenzie felt the need to communicate with civic officials in late March 1954: two days previous, she had received a list of sixteen questions from G. C. Chown, a city alderman and the acting head of the civic Committee on Personnel and Legislation, asking her to account for the activities of the city public health nurses during the epidemic. The wording of the first three questions is instructive.<sup>81</sup> While the first question simply asked how many public health nurses were on staff during the epidemic, the second asked “How many *actually* worked on the polio epidemic,” and the third queried “on what grounds did the others refuse” to work, indicating an assumption that public health nurses

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<sup>79</sup> CWA, Committee on Health, Pack File H1942 (5), 24 November 1953, letter from Lillian MacKenzie, Director, Public Health Nursing, to Dr. R. Cadham, Deputy Health Officer, 1.

<sup>80</sup> CWA, Committee on Health, Pack file H1942 (5), 31 March 1954, memo from Lillian MacKenzie to “Members of Committee on Personnel and Legislation.”

<sup>81</sup> CWA, Municipal Manual 1953, “Standing Committees for the Year 1953,” 39. C.G. Chown is listed as an Alderman for Ward One and as the acting chairman for the Committee on Personnel and Legislation. While he was also on the Committee for Public Safety, he was not a member of the Committee on Health.

did not want to work with polio patients.<sup>82</sup> MacKenzie's responses indicate that the majority of city nurses did work during the outbreak: out of forty-eight public health nurses employed by the city in 1953, forty-seven volunteered to work at either the gamma globulin clinic, or on the wards of the KGH. One even worked at the KGH over her holidays. The ninth question posed to MacKenzie – whether any “Public Health Nurses [were] asked to work on wards and refused it on physical *or other grounds*” – further presupposed that city nurses were adverse to assisting at the Municipal Hospitals; yet, as MacKenzie wrote, “all nurses were asked to volunteer for service in King George Hospital [...] as Director of the Nursing Division, I was aware that it was physically not advisable for some – e.g. (5 pregnant nurses) and impossible for others, e.g. (5 nurses had been under stress with serious illness in their family – 4 of these relatives died.)”<sup>83</sup> Nurses who were physically able to work at the Municipals did just that.

MacKenzie's response to the question concerning nurses and gamma globulin speaks to the way nurses and gamma globulin both were presented to Winnipeggers as well as the tensions between MacKenzie and city officials. Throughout the epidemic, the press in Winnipeg focused largely on the “critical” nursing shortage and the problems associated with the distribution and use of gamma globulin, which was often referred to, erroneously, as an “anti-polio serum.”<sup>84</sup> These two contentious issues coalesced when it was reported that nurses who worked with polio patients would be given shots of the serum, which was regulated heavily due to its limited availability. Gamma globulin was in short supply and it was wanted desperately by a population

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<sup>82</sup> CWA, Committee on Health, Pack file H1942 (5), 29 March 1954, “Questions Regarding Public Health Nurses,” 1. Italics added.

<sup>83</sup> “Questions Regarding Public Health Nurses,” 1. Italics added.

<sup>84</sup> See for example “Week-end polio cases total 95,” *Winnipeg Free Press*, 4 August 1953, 1; and “Marketing of anti-polio serum dubbed perfectly legitimate,” *Winnipeg Free Press*, 5 August 1953, 3. Additionally, a *Free Press* editorial stated that gamma globulin's value as a polio “preventative” had “been proven.” “Polio menace,” Editorial, *Winnipeg Free Press*, 21 July 1953, 15.

made increasingly anxious by the growing epidemic; however, from July until mid-August, only household contacts of individuals with polio-related paralysis were given gamma globulin injections. In mid-August, however, it was reported that the polio advisory committee had decided it would provide “protective inoculation of the polio preventative, gamma globulin” to all “nurses treating polio epidemic victims in Winnipeg hospitals.”<sup>85</sup> Nurses were presented as shirking their duties by not volunteering on the polio wards even though they were being provided with the very thing regular citizens could not get: gamma globulin. Given that the provincial Advisory Committee asserted publicly that all nurses who volunteered would receive gamma globulin, it is surprising that MacKenzie’s answer to Chown’s question “were all public health nurses injected with gamma globulin?” was “no.”<sup>86</sup> While the press and the province suggested that all nurses who worked on the polio epidemic would receive the preventative, MacKenzie’s answer highlights yet another disconnect between various levels of government in their reactive approach to polio during the epidemic era. Despite the confusion, MacKenzie believed firmly that her nurses went above and beyond what was expected of them, in the face of extensive criticism, and, with the child of at least one of the city’s public health nurses contracting polio, at great personal cost.<sup>87</sup>

Beyond perceived issues with volunteering and gamma globulin, the alderman’s questions also suggested that the public health nurses had knowingly been overpaid and did nothing to rectify the situation. As outlined in her memorandum, MacKenzie had been advised to not answer the question “How many public health nurses received duplicate overtime paycheques;

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<sup>85</sup> “Polio nurses to receive inoculations,” *Winnipeg Free Press*, 15 August 1953, 1.

<sup>86</sup> “Questions Regarding Public Health Nurses,” 1 and 2.

<sup>87</sup> At least two nurses working at the KGH contracted polio as did the child of one of the city public health nurses stationed there. “Polio count reaches 836; 2 nurses hit,” *Winnipeg Free Press*, 17 August 1953, 1; “Questions Regarding Public Health Nurses,” 2.

one from the Health Department and one from the Municipal Hospitals?” However, because she “considered the implications too serious to disregard,” she did answer Alderman Chown’s thirteenth question: “Did any of the Public Health Nurses, paid such overtime, voluntarily bring the obvious duplication to the attention of the Health Department or Municipal Hospitals authorities?”<sup>88</sup> Implicit in the way the question was worded was the assumption that MacKenzie’s nurses knew that they were being paid the bonus by both the city and the Municipal Hospitals but chose not to do anything about it. MacKenzie explained that the “duplication of overtime pay was not obvious to any nurse” because they had been advised in writing that “the Municipal hospital only would be paying the bonus.” Further city nurses were not paid until several weeks after they had started working at the Municipals, and once all the deductions were made from their paycheques, it was not clear “what the original amount was supposed to be.”<sup>89</sup> Despite working for very little remuneration at a job that brought with it heavy physical labour, and even personal danger, the city’s public health nurses were almost accused of stealing money from the city, even though the duplication in pay was likely an inadvertent result of neither group wanting to take responsibility for paying the nurses for their work.

In 1958, Mary Shepherd had been employed by the Winnipeg Municipal Hospitals for thirty years. From her first days as a newly hired Registered Nurse to her retirement in 1958 as the Director of Nursing, Shepherd had been involved in the care of patients throughout Manitoba’s epidemic era. An article in the August 1958 edition of the *Beacon*, the newsletter Shepherd edited for the employees of the Municipals, outlined parts of the affiliated course student nurses took at the KGH. The care of polio patients was central to the 1958 class as

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<sup>88</sup> “Questions Regarding Public Health Nurses,” 1.

<sup>89</sup> “Questions Regarding Public Health Nurses,” 1.



student nurses watched demonstrations of the hydrotherapy pool, “the various types of respirators, rocking bed and the exsufflator” an artificial coughing machine.”<sup>90</sup> They also sat through a lecture on polio and were given the opportunity to view the teaching film “Nursing Care in Poliomyelitis.” This was a far cry from the 1928 affiliate class, when polio was added to the list of topics only when it was apparent that Winnipeg was in the midst of an outbreak and only a few nurses attended laboratory demonstrations about the disease. Indeed, Mary Shepherd’s career spanned the era of epidemic polio and she witnessed the many changes in the nursing care of individuals with polio.

The nature of polio nursing transformed dramatically in the twenty-five year epidemic era. During the two earliest epidemics in Manitoba, in 1928 and 1936, nurses were circumscribed in the care they could provide due in part to a lack of scientific knowledge about the disease, the mainstream medical insistence on immobilization and rest, and the focus on potential prophylactics such as convalescent serum. During the earliest epidemics, nurses focused on maintaining an aseptic environment and keeping patients clean, well-fed, and well-rested. Despite the dearth of information concerning the work of nurses in the medical literature on the earliest epidemics, it is clear that nurses were involved in the care of polio patients, from assisting physicians to disseminating information about nasal sprays.

In the middle of the epidemic era, two simultaneous but separate occurrences – the introduction of respirators and the Kenny method of care – transformed greatly the work performed by nurses and had profound implications for nurses during the later part of the epidemic era. The introduction of respirators gave those with pharyngeal and respiratory polio a chance to live. At the same time, it transformed the work of nurses, and added greatly to the

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<sup>90</sup> Louise King, “Teaching Program – Nursing Department,” *The Beacon*, 5, 5 (August 1958), 6.

technical knowledge and labour of nurses, as they had to learn how to operate the complex respirators and care for the patients who literally depended on the machines to live. Not only did nurses have to understand the science behind the negative-pressure machines, and be able to adjust the pressure accordingly for each patient, they needed to be able to keep the patients clean and dry without removing them from the respirators. As the incidences of pharyngeal and respiratory polio increased in the post-war period, nurses had to contend with larger numbers of patients in respirators, all of whom needed round-the-clock nursing. The introduction of the controversial Kenny method of care also had important implications, previously unexplored by historians, for nurses. The Kenny method, which called for the use of hot packs and the early movement of affected body parts, overturned traditional understandings about the nursing care of patients. Its implementation in Manitoba meant that nurses had to forget everything they had learned previously about how to treat polio patients. The discomfort the Children's Hospital nursing supervisor felt in the context of this reversal was palpable, and speaks to the impact this change had on nurses. The Kenny method did not just represent a change in the orthodoxy of nursing care, it also added greatly to the labour of nurses on polio wards of the KGH and Children's Hospital.

These two pivotal changes led to an unintended consequence – nursing shortages – which put nurses in an often uncomfortable, and public, position. The nursing shortages of the later epidemics were a direct result of the implementation of the Kenny method of care and of the increasing use of respirators; however, lingering ideas about the role of women and the voluntary nature of caring for the ill during times of emergency complicated the way nurses were viewed in the press and by provincial and medical officials. Women, particularly those who had some nursing training, were expected to step up and volunteer their services, without worrying about

remuneration, as they had during the influenza pandemic and the aftermath of the Halifax explosion. When, particularly during the 1952 and 1953 epidemics, not enough nurses could be found to staff the polio wards of the KGH, it was insinuated that they were afraid of the disease. Many inactive nurses did volunteer and many active nurses, including those from the Armed Forces and Winnipeg's health department, worked long hours on the polio wards of the KGH and the gamma globulin clinic; however, there were too many cases and the work too time consuming and labour intensive for those nurses, however numerous, to ease the shortage.

The decision in 1952, and again in 1953, to compensate nurses for their services could be read as a move away from the mindset that women were naturally suited to care for the sick and did not need to be remunerated for what was ostensibly a biologically natural activity. The very small nursing 'bonus,' particularly compared to the pay afforded to the physicians who 'volunteered' to work at the clinic, combined with the bureaucratic haggling between the city and the Municipals over who was responsible for the bonus indicates, however, that it was only extended to try and entice nurses, who were constructed as reluctant to assist, to work during the epidemic. The exchange between Mary MacKenzie and city officials reveals further the tensions that developed in the context of the nursing shortage. MacKenzie believed that the press and city officials were unappreciative of their work and painted nurses in a negative light by continually reporting on the nursing shortage. More importantly, she read the questionnaire sent to her by a city official as almost accusing public health nurses of not only shirking their duties, but stealing money in the form of extra bonus pay. While the double payment can be explained as a result of the dispute between the city and the Municipals over who had to pay the nursing bonus, the whole incident is indicative of the complicated way women nurses were viewed in the early and mid-twentieth century, and the lack of understanding medical and political officials had in

regards to the changing nature of polio nursing during the epidemic era. Nursing transformed greatly during the epidemic era; so too did the treatment of patients with polio-related paralysis. The following chapter examines the rehabilitation of people with polio-related disabilities as well as the underlying assumptions, beliefs and principles which guided the development of rehabilitation programs, particularly during the later years of the epidemic era.

## **Chapter Six: “To help return any victims of the disease back to normal living”: The Development of Rehabilitation Programs in Manitoba<sup>1</sup>**

In 1952, Peter, a forty year old farmer from rural Manitoba, contracted polio. After passing through the acute stage of the illness, he received some physical therapy from a local physiotherapist, although the muscles in his left leg were weakened significantly enough that he walked with the aid of crutches or a cane, and was unable to stand for a long period of time without them. The physical therapy Peter received was not the extent of his rehabilitation. Peter was given an IQ test, and based on the score, it was recommended that he receive training to become a general accountant. Although he had “a great deal of difficulty adjusting to the routine of study and his progress was poor at first,” Peter graduated from the program.<sup>2</sup> Despite this successful retraining, Peter was judged to be a failure by those involved in his rehabilitation, mainly because he did not want to leave his farm. Peter found part-time work with a rural real estate lawyer; however, because he was “receiving indirect support from [his] relatives in the community,” Peter was not seen as adequately supporting his family. It was not until he considered moving to Winnipeg to find a “satisfactory job” that Peter’s rehabilitation was deemed to be successful. Eileen, a young girl who had contracted polio and was “left lame in one leg,” was characterized by social workers running a rehabilitation program as aggressive and unable to control her emotions. It was only through the emotional rehabilitation offered by the

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<sup>1</sup> MA, Social Planning Council of Winnipeg (hereafter SPCW), P651/8, Post Polio Children Committee, Minutes, YMHA Community Centre, Thursday Morning Club Report, 10 December, 1954.

<sup>2</sup> The vignette about Peter and rehabilitation is taken from: SPCW, T-44-B, The Society for Crippled Children Manitoba 1952-55, Conference on Rehabilitation held at the University of Manitoba, August 17-19, 1955, “Group Session II – Peter – Age 40.”

program that she was ostensibly able to (re)learn how to control her emotions and “take her turn with the other children.”<sup>3</sup>

These two examples are illustrative of the importance placed on the rehabilitation of people with polio in the post-war period. Individuals who had passed through the acute stage of the illness but had residual muscle weakness or paralysis occupied a liminal space where they were neither sick nor well; polio-related disabilities altered the way people with polio were viewed in the wider society and in the medical world. In the early part of the epidemic era until the late 1940s, very little attention was paid to non-surgical rehabilitation in Manitoba. By the 1950s, physicians, social workers, and psychologists had become interested not only in the medical and physical rehabilitation of people with disabilities, but also in their emotional, social, and vocational rehabilitation. This increased attention led to a discursive shift in the way people with polio-related disabilities were viewed, with different implications for adults and children. This chapter argues that rise of rehabilitation worked to transform people with a disease into people with disabilities who needed to be remolded into useful citizens. For adults, this rehabilitation rubric focused particularly on vocational rehabilitation and in gendered ways, whereas children with polio-related disabilities were constructed as in need of emotional rehabilitation. This chapter also suggests that the reliance on private organizations is a further example of the limits of the province’s capacity in dealing with the health of its citizens.

The idea that people with disabilities needed to be rehabilitated has been addressed by historians of disability. Rehabilitation, Susan Burch and Ian Sutherland suggest, is part of the larger medical model of disability which holds that disability is a “sickness or defect that

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<sup>3</sup> Eileen’s story is excerpted from SPCW, T-44-B, The Society for Crippled Children Manitoba 1952-55, YMHA Community Centre, “Thursday Morning Club Report.”

requires medical intervention in order to cure the problem.” The “rehabilitation model” views medicalized disabilities as deficiencies “that could be alleviated by professional, rehabilitative assistance [implying] that if an individual’s disabilities could be cured, all related problems could be cured.”<sup>4</sup> People with polio in Manitoba were thought to have multiple issues stemming from and related to their polio-related disabilities and rehabilitation programs were created with the hope of curing these problems. These issues differed depending on the age and gender of the individual. Adults, for example, were believed to need some physical rehabilitation, but the various experts involved in the creation of the rehabilitation rubric in Manitoba— mainly physicians and social workers – focused on vocational rehabilitation in particularly gendered ways. For men, constructed mainly as breadwinners, the focus was on (re)developing the vocational ability to provide for their families. Gendered anxieties surrounding women with polio-related disabilities centred mainly on their ability to be good wives and mothers. Children with polio-related disabilities were also positioned as in need of rehabilitation. Teenagers were sometimes pushed toward vocational training, but for most, the main focus was on emotional and psychological rehabilitation in order to correct the myriad problems ostensibly brought about by polio, particularly shyness and poor behaviour.

The historiographical shift from the medical model to a social model of disability has allowed historians of disability to uncover and complicate the lived experiences of people with a variety of disabilities; however, in the context of the development of rehabilitation programs, the medical model is a useful tool, mainly because doctors, social workers, and other experts worked within this framework in their approaches to people with polio related disabilities by focusing on issues such as “relationship to work, family, political participation, and education mainly in

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<sup>4</sup>Susan Burch and Ian Sutherland, “Who’s Not Here Yet? American Disability History,” *Radical History Review* 94 (Winter 2006): 128.

terms of the condition of the person.”<sup>5</sup> Approaching the rehabilitation framework that was built in Manitoba from this perspective allows for a fuller understanding of the transformative effects of polio.

Encounters with the poliovirus transformed people, in the eyes of medical professionals and social workers, into a group of people who were in need of assistance and restoration in order to re-enter society. Daniel Wilson has argued that for a variety of reasons, “regaining the ability to walk, even with braces and crutches, became by the 1940s the mark of recovery from polio.”<sup>6</sup> Social prejudices against people with disabilities, inaccessible homes, schools and work places all, according to Wilson, factored into the pressure physicians and therapists placed on people with polio to (re)learn how to walk; however, one of the most important reasons why walking was emphasized was the example of Franklin Roosevelt who had positioned himself as ‘cured’ of polio.<sup>7</sup> Although Wilson concludes that those who used wheelchairs were often able to challenge successfully the ambulatory norm, walking was the goal, the hallmark, of a successful rehabilitation program for people with polio in the United States. Physical therapy aimed at (re)learning how to use the muscles affected by the poliovirus was an important part of the growing focus on rehabilitation in Canada and Manitoba. I argue that the rehabilitation process, including the beliefs and theories which undergirded its development, was more complex, and hinged on a number of variables and gendered social norms. People who had been sick with a viral disease came to embody, in the eyes of experts, the effects of the disease and were transformed discursively into people with disabilities who needed to be re-integrated into society.

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<sup>5</sup> Burch and Sutherland, “American Disability History,” 128.

<sup>6</sup> Daniel Wilson, “And they shall walk: Ideal versus Reality in Polio Rehabilitation in the United States,” *Asclepio Revista de Historia de la Medicina y de la Ciencia* 61, 1 (2009): 176.

<sup>7</sup> Wilson, “Ideal versus Reality in Polio Rehabilitation,” 177.



Successful rehabilitation did not hinge solely on strengthening weak muscles or (re)learning how to walk or feed one's self, although those were important parts of the process. The rehabilitation of injured men centred on the ability of the individual to support themselves and their families without having to rely on private charity, pensions, or relief. While women were less represented in the documents pertaining to the rehabilitation of people with polio, there is evidence that the rehabilitation process was highly gendered, and adult women with polio-related weakness or paralysis were rehabilitated to, once again, take their place as wives and mothers. The rehabilitation of children differed significantly from that offered to adults. Physical rehabilitation was important, but the main focus was the proper emotional and social adjustment of the individual because they represented the future of the nation. Education was a tertiary goal, often pushed aside by the emphasis on re-socializing the child, whose emotional growth had been deemed stunted by the disease. This chapter first examines the origins of rehabilitation in North America as well as the development of rehabilitation programs for those with polio in post-war Manitoba. As the opening examples indicate, ideas that informed the development of rehabilitation programs differed for adults and for children; as such, these will be examined separately. Despite the multiplicity of categories that informed the professionals invested in the rehabilitation process, there existed an overarching principle that guided the rehabilitation processes regardless of age, gender, or degree of disability: the desire to create, and in some cases, recreate, useful, 'normal' Canadian citizens able to contribute meaningfully to the nation.

Interest in the rehabilitation of adults with disabilities developed largely in response to the casualties of the two world wars and was grounded in two inter-related concepts: the redemptive value of work and ideas about masculinity. Hundreds of thousands of young men were killed during The Great War (1914-1918); however, innumerable participants were also

maimed and injured, leading in part to a response by countries on both sides of the conflict to focus on the physical rehabilitation of veterans. In North America, the development of rehabilitation was not simply a humanitarian reaction to the horrors of war, but a way to prevent injured and disabled soldiers from becoming dependant on charities and government funds. As Beth Linker suggests, in the United States “Progressive reformers believed that the government could (and should) rebuild war cripples, curing them of their disabilities so that veterans of the war would make a speedy return to work and rely on their own wage-earning capacity rather than on government pensions,” and that with the “proper physical and vocational reconstruction, blind men, deaf men, and dismembered men could all produce wealth and contribute to society.”<sup>8</sup> Similarly, “finding regular employment in the mainstream economy” was one of the goals of the rehabilitation of spinal-cord injured Canadian veterans of the Second World War.<sup>9</sup> The development of “collapsible wheelchairs and hand controlled automobiles” for spinal-cord injured Canadian veterans led to a “new independence,” and as veteran Lorenzo Robichaud recalled in an oral interview with Mary Tremblay, “well once they could go out, drive a car, then they found that maybe they could work at something.”<sup>10</sup> The end goal of employability, combined with the belief that work prevented a descent into pauperism, informed heavily the development of rehabilitation programs.

Ideas about masculinity, often intertwined with the belief in the redemptive nature of work, also informed the development of rehabilitation programs in Canada and the United States.

In his study of the American Blind Veterans Association and the Canadian Paraplegic

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<sup>8</sup> Beth Linker, *War's Waste: Rehabilitation in World War I America* (Chicago: University of Chicago Press, 2011), 2.

<sup>9</sup> David A. Gerber, “Disabled Veterans, the State, and the Experience of Disability in Western Societies, 1914-1950,” *Journal of Social History* 36,4 (Summer 2003): 908.

<sup>10</sup> Tremblay, “Going Back to Civvy Street,” 157.

Association, David A. Gerber contends that the “ideology of disability” put forth by these organizations were “frequently expressed in heavily gendered language, [particularly] in terms of masculine identity.”<sup>11</sup> The Canadian Paraplegic Association, the “first organization in the world founded and administered by individuals with spinal cord injury” was formed in 1945, and Gerber argues that the Canadian Paraplegic Association pushed its members to embody ideas of masculinity despite their injuries.<sup>12</sup> The Canadian Paraplegic Association asserted that spinal-cord injured men could, and should, compete with able-bodied workers for jobs, and in order to counteract the belief that sitting was “synonymous with inactivity, and hence feminizing,” made certain that “the organization’s magazine *Caliper* routinely contained feature stories on members who from their wheelchairs hunted, fished, sailed, and piloted their own planes.”<sup>13</sup> The message was clear: men with disabilities could, through work and appropriately gendered activities, reclaim their status as men.

The work of groups such as the Canadian Paraplegic Association led to a developing interest in the rehabilitation of civilians who were disabled and, in 1951, a national conference on the subject was convened by the federal Minister of Labour. The Canadian Welfare Council (CWC), which began as the Canadian Council on Child Welfare, had long been interested in issues regarding the well-being of Canadian families and had been anticipating the organization of such a conference. Recognizing “the important step which the calling of the conference represents,” the CWC prepared a report detailing the need for a national rehabilitation program. Despite noting that the CWC preferred the use of the term disabled over “handicapped,” their policy statement defined rehabilitation as “the restoration of the handicapped to the fullest

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<sup>11</sup> Gerber, “Disabled Veterans, the State, and the Experience of Disability,” 908.

<sup>12</sup> Tremblay, “The Canadian Revolution in the Management of Spinal Cord Injury,” 141.

<sup>13</sup> Gerber, “Disabled Veterans, the State, and the Experience of Disability,” 909.

physical, mental, social, vocational and economic usefulness of which they are capable.”<sup>14</sup> The Canadian Welfare Council’s report is indicative of the belief that the main thrust of such a program must be the vocational rehabilitation of adults. Although they conceded that “the early education and vocational training of disabled children is important,” the CWC expected “private agencies to focus on children” as their focus was a rehabilitation “program for adults of working age.”<sup>15</sup> Further, the CWC’s position indicated that their notion of the re-establishment of adults with disabilities was based on socially constructed ideas about gender roles. The CWC defined their ideal national rehabilitation program as “limited to a program for adults of working age who, although suffering from disabilities, either are or may become employable. Employable in this sense refers to housewives, as well as paid workers.”<sup>16</sup> Women with disabilities could, it seemed, be rehabilitated to become useful housewives, able to take care of their breadwinner husband and children.

The increasing number of adults who contracted polio in the immediate post-war period established this cohort as a group in need of rehabilitation. Private groups such as the Welfare Council of Greater Winnipeg used the existence of adults with polio-related disabilities as evidence of the need for comprehensive rehabilitation programs and services. In a 1952 memo concerning the need for a province-wide survey of public and private rehabilitation programs to

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<sup>14</sup> SPCW, P651-9, Rehabilitation 1950-51, “Statement of Policy of the Canadian Welfare Council in regard to a National Program for the Rehabilitation of the Disabled,” 2. This seems to have been the accepted definition of rehabilitation in Canada in the late 1940s and the 1950s. It was adopted, for example, by the Society for Crippled Children and Adults of Manitoba, the National Council on Rehabilitation, and proponents of rehabilitation in other provinces, including Saskatchewan. See for example, Lorne Miller, “The Role of the Society for Crippled Children and Adults of Manitoba in the Rehabilitation of Disabled Persons in Manitoba,” (MA Thesis, University of Manitoba, 1964), 2; and, T.E. Hunt, “The Importance of Rehabilitation in Medical Practice Today,” *Manitoba Medical Review* 35,8 (October 1955): 487.

<sup>15</sup> SPCW, P651-9, Rehabilitation 1950-51, “Statement of Policy of the Canadian Welfare Council in regard to a National Program for the Rehabilitation of the Disabled,” 2.

<sup>16</sup> SPCW, “Statement of Policy,” 2.

Manitoba's provincial Minister of Health and Public Welfare Ivan Schultz, the Rehabilitation Committee of the Welfare Council of Greater Winnipeg pointed to the Society for Crippled Children's Poliomyelitis Committee as "further evidence of an awakening concern about disabling conditions."<sup>17</sup> For the province, the existence of the Society for Crippled Children (SCCA) meant that the development of a similar group that focused on adults was unnecessary. At a meeting between the provincial deputy Minister of Health and various welfare agencies, it was discovered that the SCCA, due to their funding set-up, "was already assuming responsibility for polio patients up to twenty-one years of age." For this reason the development of another administrative organization to handle polio patients over twenty-one years of age was decided against. The province agreed to ask the SCCA to extend its services to provide a program for the rehabilitation of all polio patients, regardless of age.<sup>18</sup> The SCCA agreed, and although its name was not formally changed to the Society for Crippled Children and Adults until 1955, it broadened its mandate to function as a central, integrated rehabilitation agency for Manitobans of all ages with disabilities.<sup>19</sup>

The SCCA was not a state-run organization although it did have ties to the provincial government. In particular, the DHPW developed a "central registry of disabled persons" that the SCCA utilized. The province also provided financial assistance to the SCCA, in the form of monies from Manitoba's share of the federal Medical Rehabilitation Grant, an "annual federal

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<sup>17</sup> SPCW, P651/12, Rehabilitation 1953, "Brief," from the Rehabilitation Committee, Health Division, Welfare Council of Greater Winnipeg to Ivan Schultz, Minister of Health and Public Welfare, Manitoba, February 1952, 1.

<sup>18</sup> Miller, "The Role of the Society for Crippled Children and Adults," 5.

<sup>19</sup> S.C. Sparling, "Report of the Executive Director," *Annual Report of the Society for Crippled Children and Adults of Manitoba January 1<sup>st</sup> 1955 to March 31<sup>st</sup> 1956* (Winnipeg, 1956), 8. Even though its name was not changed to include adults until 1955, I refer to the Society throughout the chapter as the Society for Crippled Children and Adults (SCCA) for continuity, and to indicate that adults came under its purview well before the official name change occurred.

grant to the provinces for the training of personnel, the purchase of essential equipment, and the extension of medical rehabilitation services.”<sup>20</sup> Nevertheless, the SCCA relied on private funds and fundraising, particularly the monies raised from the yearly Easter Seals campaigns, run by the Kinsmen’s Clubs of Manitoba.

The focus on vocational training was not limited to those working with adults with disabilities. During the interwar period and throughout the Second World War, Canadian psychologists, heavily influenced by American and Weimar Germany psychologists, championed what historian Jennifer Stephen terms “vocationalism” for the good of the broader Canadian society. Vocationalism, particularly as espoused by Dr. Olive Ruth Russell, was positioned as a central part of the creation of a “well and truly governed society,” which “demanded a comprehensive program of citizen-formation.”<sup>21</sup> In this ideology the construction of ‘normal,’ useful, responsible, citizens was premised on a multi-faceted approach, including rigorous testing, guidance, and personality assessments. Vocational counselling was an important part of this approach as it “provided a crucial conduit through which the mental hygiene program could merge with the liberal education projects to promote good citizenship and social order.”<sup>22</sup> Psychologists applied these concepts broadly: schoolchildren, service people during the Second World War, and women during the post-war reconstruction period were all subject to the testing and categorization psychologists used in their particular type of social planning. Polio, a disease that led to a number of visible disabilities, disturbed the vision of Canada posited by adherents to vocationalism. It was a disease that caused physical pain, led to long periods of isolation, loss of employment, and physical disabilities that were either temporary or permanent, and in any case,

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<sup>20</sup> Miller, “The Role of the Society for Crippled Children and Adults,” 6.

<sup>21</sup> Jennifer A. Stephen, *Pick One Intelligent Girl: Employability, Domesticity, and the Gendering of Canada’s Welfare State, 1939-1947* (Toronto: University of Toronto Press, 2007), 74.

<sup>22</sup> Stephen, *Pick One Intelligent Girl*, 80.

necessitated intensive physical interventions. All of this meant polio had the potential to take away from the liberal citizenship project championed by social experts because it disordered people physically and emotionally. Vocational rehabilitation, then, was a way to remold people with polio back into useful citizens who could contribute to the nation in a meaningful way.

Grounded in the belief that people with disabilities should support themselves as much as possible, the SCCA developed a rehabilitation program that guided its clients towards finding paid employment. Vocational training was premised on the results of social and medical examinations conducted by psychologists and physicians, and individuals were categorized based on the results. The results of the tests were used to classify people as either non-employable or potentially employable. Those deemed potentially employable were given further psychological and vocational assessments and then funnelled into one of three streams: competitive employment, vocational training, or the industrial workshop.<sup>23</sup> Those who scored lowest, or who showed less desire, ability, or intelligence were guided towards the industrial workshop, where “the handicapped person” was given further training to “improve his work habits, attitudes, and skills.”<sup>24</sup> Even those deemed unemployable or “unable to benefit from vocational training” were not insulated from the broad-based belief that some work was better than none.<sup>25</sup> They were channelled into “sheltered workshops,” where individuals did not compete for jobs, and often performed repairs or simple tasks for not-for-profit agencies. Rarely were people recommended for direct entry into ‘competitive employment,’ that is, applying for jobs in the mainstream workforce without assistance from a social agency. Rather, most people

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<sup>23</sup> Miller, “Figure 1: Society’s Program of Rehabilitation Service for Disabled Adults,” in “The Role of the Society for Crippled Children and Adults,” 22.

<sup>24</sup> Miller, “The Role of the Society for Crippled Children and Adults,” 24.

<sup>25</sup> Miller, “The Role of the Society for Crippled Children and Adults,” 13.

with disabilities who had been referred to the SCCA were sent for either vocational training or to an industrial workshop to gain experience.

Vocational training programs were premised on finding work – any work – for program clients. “D.G.” had been referred to the SCCA and was examined by a psychologist as to his “vocational potential.” His test results and habit of changing jobs frequently suggested an “intellectual capacity that was extremely limited” and that he was of “below average functioning.” These test scores indicated to SCCA experts that D. G. was best suited for “very routine, unskilled jobs, under strict supervision.”<sup>26</sup> Accordingly, he was not offered vocational training, as was Peter whose case study was mentioned at the opening of the chapter. Instead, D.G. was funnelled to the industrial workshop in Winnipeg until a position, which paid seventy cents an hour, was found for him. D.G. quit that job, and several others, yet the SCCA worked continually to find employment for him. Why the SCCA did not enquire as to why he was unhappy at these worksites, or offer D.G., a recent immigrant from Italy, language classes is unknown.

Another example, that of “P.W.,” further exemplifies the emphasis the SCCA placed on employment. Unlike D.G., P.W. scored well in his intelligence and aptitude tests, and his “test scores also showed an aptitude for mechanical drafting, an occupation in which he expressed an interest.” Because his disability affected the use of his hands and neck, P.W. “felt incapable of participating in any [long-term] training plans.”<sup>27</sup> Nevertheless, P.W. was referred to the Manitoba Technical Institute, where a company was found to provide on-the-job training, and P.W. was quickly employed as a diesel fuel injector, a potentially dangerous job. Rather than suggesting further physical therapy or other options, individuals participating in the rehabilitation

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<sup>26</sup>Miller, “The Role of the Society for Crippled Children and Adults,” 51.

<sup>27</sup>Miller, “The Role of the Society for Crippled Children and Adults,” 61.



program were encouraged strongly to find paid employment as anxiety over people with disabilities relying on support or charity was high.

Although neither of the two men mentioned above had polio, rehabilitation programs focused on people with polio-related disabilities. Of the 1,900 individuals referred to the SCCA between 1950 and 1954, 780 or 41% had had polio, compared to 22% of referrals for individuals with “congenital malformations,” and 19% for cerebral palsy.<sup>28</sup> The 1953 epidemic in particular brought more people into contact with the SCCA, and reinforced the need for a strong rehabilitation program in Manitoba. Rehabilitation experts decried the lack of any sort of comparable program in the earlier part of the epidemic period. This point of view was expressed by S. C. Sparling, the Executive Director of the SCCA, in his report presented at the third annual meeting of the society:

During the past epidemics there has been no complete rehabilitation program available to polio patients left with severe disability. Where the patient had been given full treatment, medical personnel concerned with polio patients had little alternative but to allow these patients to return to their homes. Five or ten years of living a life of dependence is enough in most instances to establish a life-time pattern in such people. To effect their rehabilitation our program is designed to provide them now with the services necessary to re-establish them insofar as possible as self-sustaining, contributing members of society.<sup>29</sup>

In 1955, Sparling acknowledged the importance of the Salk vaccine in controlling the disease; however, he also cautioned against forgetting “those who were born too soon,” particularly those “who, as a result of past epidemics are left with severe paralysis and the terrific job of re-

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<sup>28</sup>J. K. Martin, “Report of the Medical Director,” *Annual Report of the Society for Crippled Children for Manitoba, 1954* (Winnipeg, 1955), 10.

<sup>29</sup>S. C. Sparling, “Report of the Executive Director,” *Report – Third Annual Meeting of the Society for Crippled Children of Manitoba and the Canadian Foundation for Poliomyelitis (Manitoba Chapter)*, (Winnipeg, 1953), 6. Emphasis in original.

establishment still ahead.”<sup>30</sup> Individuals who had been viewed as ill during the epidemics had, from the point of view of social workers and medical workers, been transformed into people with disabilities in need of assistance and training.

The amount of money spent on rehabilitation programs provides further evidence of this dominant ideology. The SCCA spent considerable amounts of money on its rehabilitation program: between 1 June 1952 and 31 May 1953, its total revenues amounted to \$113,805, and its expenditures totalled \$127,540. Of the latter, over \$40,000 was spent on casework and rehabilitation programs.<sup>31</sup> Some of the resources were spent proactively. Rather than waiting until the 1952 epidemic abated, for example, the SCCA mobilized its resources during the outbreak. As noted in chapter two, the 1952 epidemic occurred first in and around the town of Winkler, Manitoba. The 1952 polio committee, chaired by Dr. J. D. Adamson, wanted to keep patients at Winkler, rather than send them to Winnipeg, even though the local hospital was not prepared to care for a high number of polio cases. In light of this, the SCCA worked to provide the hospital in Winkler with what it considered to be the necessities purchasing an electric hot pack machine and supplies such as wool blankets. The SCCA also provided the hospital with a nurse, a physiotherapist, and an assistant for the physiotherapist. The decision to retain the services of the latter two was fortuitous: between July 1952 and March 1953, “the physiotherapist and her assistant [gave] 782 treatments to 166 people at Winkler, Manitou, and

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<sup>30</sup>S. C. Sparling, “Report of the Executive Director,” *Annual Report of the Society for Crippled Children for Manitoba, 1954* (Winnipeg, 1955), 8.

<sup>31</sup>Society for Crippled Children of Manitoba, “Exhibit C - Statement of Revenue and Expenditure,” *Report – Third Annual General Meeting of the Society for Crippled Children of Manitoba*, (Winnipeg, 1953), np.

Rivers.”<sup>32</sup> As the epidemic grew beyond anyone’s expectations, the SCCA secured six respirators and five more physiotherapists for the KGH and Children’s Hospitals, the two main sites where polio patients from the city and the province were sent. This assistance speaks to the impact of the Kenny method of treatment and the limits of the province in developing a thorough polio policy, but it also points to the commitment of the SCCA to its rehabilitation program. “The Society’s goal with these polio patients,” Sparling wrote, “as in all others is total rehabilitation, including psychological and vocational assessment, vocational training where indicated, and eventual placement in suitable self-sustaining employment.”<sup>33</sup> Even as the epidemic raged, the individuals who contracted polio and were ill were actively constructed as potentially becoming dependent on others.

Rehabilitation programs for people with polio-related disabilities stressed vocational training; however, physical therapy was another key component of the program. The two were inextricably linked. The more complete a person’s physical recovery, the better their chances at establishing themselves in the social roles they were expected to fill. Physical therapy began when people with polio were still hospitalized. Once the acute stage had passed, patients were transferred from the KGH to the Princess Elizabeth Hospital for rehabilitation. Both hospitals were on the same property so the transfer was not notable in terms of geography but it was momentous in that it represented the transformation of a sick person into a person with a disability. It was at the Princess Elizabeth that people with polio-related disabilities were asked to stretch, exercise, and swim their polio-related disabilities away the best they could, so as to give themselves the best possible change at social reintegration. In 1952, the Princess Elizabeth

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<sup>32</sup> Sparling, “Report of the Executive Director 1951-52,” *Annual Report of the Society for Crippled Children for Manitoba, 1951-52* (Winnipeg, 1953), 10.

<sup>33</sup> Sparling, “Report of the Executive Director, 1951-52” 11.

Hospital was the newest of the Winnipeg Municipal Hospitals buildings. The Municipal Hospital Commission had, ironically, argued that as medical science quickly dispatched the communicable diseases such as tuberculosis, diphtheria, and scarlet fever that had threatened Winnipeggers in previous decades, the Municipal Hospitals would need to change their orientation away from communicable diseases towards long-term care. Planned as a hospital for the “elderly and chronically ill,” the Princess Elizabeth was supposed to be representative of this new direction.<sup>34</sup> Construction of the Princess Elizabeth building was barely complete when the 1950 Winnipeg flood rendered it unusable, and by the time it was cleaned up, the 1952 and 1953 polio epidemics meant its original purpose had to be put aside for several more years.

The use of the Princess Elizabeth Hospital as a rehabilitation centre for people with polio, along with the hiring of Dr. M. H. Desmarais in 1952, cemented the Municipal’s growing commitment to rehabilitation in the post-war period. Occupational therapy had been used sporadically at the Municipal Hospitals since its earliest days, although the original impetus for these programs was not the increasing number of adult polio patients, but those with tuberculosis. Occupational therapy was mentioned in the Municipals’ 1919 *Annual Report* and “some form of diversional therapy continued to be provided in succeeding years,” at least unofficially, but it was not until 1943, as occupational therapy and the rehabilitation of injured veterans became more widespread, that a Director of Rehabilitation was named.<sup>35</sup> In 1947, a “temporary” physiotherapy department was set up at the KGH “to treat the 288 poliomyelitis patients” and its success meant that physiotherapy became a permanent feature of the rehabilitation program at the hospital.<sup>36</sup> Following the 1952 epidemic, Dr. Maxwell Desmarais

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<sup>34</sup> RHA, Riverview Health Centre, Calendar Books, *Profiles* Calendar Book, 1986, 14.

<sup>35</sup> *Profiles* Calendar Book, 1986, “Occupational Therapy,” 50.

<sup>36</sup> *Profiles* Calendar Book, 1986, “Physiotherapy,” 34.

joined the staff of the Municipals and was named Director of Physical Medicine in early 1953.

Desmarais, a graduate of the University of London, England who had trained at St.

Bartholomew's Hospital did not have experience with polio patients; he had, however, "engaged at research work in Rheumatism [and his] main interest in medicine lies with disease of the locomotor system."<sup>37</sup> Desmarais was responsible for the broadening of the program, which had previously been run by volunteers, to include professional physical therapists, and to focus on the issue of the rehabilitation of individuals with polio-related disabilities.

As Director of Physical Medicine, Desmarais was interested in both the physical and social effects of rehabilitation. Desmarais' focus was not the acute period of the disease, but the "common complications and deformities" that developed in people's bodies as a result of the poliovirus, and the "physical methods of treatment" employed to "overcome some of these deformities."<sup>38</sup> Desmarais' goal was to help individuals recover as much movement and strength as possible in the parts of the body that had been weakened or paralyzed by the poliovirus. Under Desmarais, physical therapy at the Princess Elizabeth hospital focused on postural alignment, shortened leg muscles, and the necessity of strengthening the abdominal muscles. He cautioned, too, against early weight bearing exercises as they could impact negatively the recovery of the upper limbs. Despite his focus on the physical aspects of polio-related weakness and paralysis, Desmarais also promoted what he believed were the positive social benefits of rehabilitation, arguing that "the cure of the patient, however, does not end with the achievement of good function only. The necessity of vocational training to get the patient back to work is of paramount importance and all steps taken in his medical care must aim at making it easier for

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<sup>37</sup> SPCW, 650/7, Health Division 1952-53, Correspondence and Miscellaneous, "Dr. M.H.L. Desmarais," 30 September 1953, np.

<sup>38</sup> M .H. L. Desmarais, "Some Rehabilitation Problems of the Polio Patient," *Manitoba Medical Review* 33, 10 (December 1953): 550.

him to earn his living and become again a useful member of the Community.”<sup>39</sup> Much like the orthopedic surgeons interested in the problem of men with flat feet during the Great War who “promised to put an end to [the] system of government hand-outs by rehabilitating defective and injured soldiers, putting them back into the workplace, and making them into wage-earning citizens,” the rehabilitation of people with polio-related disabilities in the early 1950s focused not solely on the physical results of the disease, but on their broader reintegration into society.<sup>40</sup>

The main goal of the rehabilitation program was the (re)creation of employable, self-sufficient adults; however, this goal was threatened by the dearth of physiotherapists in Manitoba. Physiotherapy was tied intimately to the main goal of self-sufficiency. It was believed that physiotherapy minimized disability and provided individuals with the best chance at ‘recovering’ from polio. The increased focus on physical therapy in the context of the 1952 and 1953 epidemics meant that there was a great need for physiotherapists in Manitoba. Because very few trained physiotherapists lived in the province, it was necessary to bring them in from across Canada, and from Britain. Despite the lack of trained physical therapists, the Great War had been an important stimulus to the occupation of physiotherapy. In 1915, Prime Minister Robert Borden created the Military Hospitals Commission, a civilian agency whose mandate involved a broad commitment to rehabilitation. This rehabilitation was premised on both vocational rehabilitation, and “functional re-education,” which was “defined as the retraining of disabled men on the physical side.”<sup>41</sup> The push to professionalize physiotherapy had to do with the lack of “suitable personnel [available] to assist the medical staff” in the physical

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<sup>39</sup> Desmarais, “Some Rehabilitation Problems of the Polio Patient,” 552.

<sup>40</sup> Beth Linker, “Feet for Fighting: Locating Disability and Social Medicine in First World War America,” *Social History of Medicine* 20, 1 (2007): 107.

<sup>41</sup> Ruby Heap, “Training Women for a New ‘Women’s Profession’: Physiotherapy Education at the University of Toronto, 1917-40.” *History of Education Quarterly* 35,2 (Summer 1995) 139.

rehabilitation of people with disabilities, but it was also centred on notions of morality. Physiotherapy generally involved electrotherapy, hydrotherapy, and “gymnastics,” but a significant component was the massaging and manipulation of patients’ limbs, and “there was widespread skepticism within the medical profession as to the clinical worth of massage, even as to its morality.”<sup>42</sup> While the literature focuses on some men who were instrumental in the development of physical re-training for people with disabilities, it is clear that, from the outset, physiotherapy was considered a female profession.<sup>43</sup>

Creating a professional program tied to a university would go a long way to proving the respectability of a feminized occupation that involved intimate contact with male bodies, and programs, generally one year in length, were established at both McGill University and the University of Toronto. Throughout the twentieth century, physiotherapy in Canada was premised on the British model, with a focus on credentials and a professional organization of physiotherapists as part of the overall push towards professionalization.<sup>44</sup> This professionalization project, with its focus on accreditation, professional membership, small classes, and developing links with the medical profession and hospitals worked to create chronic shortages of qualified practitioners. While the polio epidemic in Toronto in 1937 “created an

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<sup>42</sup> Heap, “Physiotherapy Education,” 154 and 138.

<sup>43</sup> See for example, Fred Mason’s work on R. Tait McKenzie, a pioneer in the field. Fred Mason, “R. Tait McKenzie’s Medical Work and Early Exercise Therapies for People with Disabilities,” *Sport History Review* 39 (2008): 45-70; and “Sculpting Soldiers and Reclaiming the Maimed: R. Tait McKenzie’s Work in the First World War Period,” *Canadian Bulletin of the History of Medicine* 27,2 (2010): 363-383.

<sup>44</sup> Heap focuses especially on the push for professionalization in the post-war period, but the desire had existed earlier. See Ruby Heap, “Physiotherapy’s Quest for Professional Status in Ontario, 1950-80,” *Canadian Bulletin of the History of Medicine* 12 (1995): 69-99. Others who have written about the history of physiotherapy have likewise focused on the goal of professionalization and the tensions between physiotherapists and medical practitioners. See for example C. Miles-Tapping, “Sponsorship and Sacrifice in the Historical Development of Canadian Physiotherapy,” *Physiotherapy Canada* 41, 2 (March-April 1989): 72-80.

immediate need for trained practitioners,” only thirty-six students had graduated from the University of Toronto’s program the year prior.<sup>45</sup> This shortage was felt keenly in Manitoba during epidemic outbreaks and in the push to develop substantive rehabilitation projects. The University of Manitoba’s physical therapy program was instituted in 1960, “as a response to the increasing need for occupational and physical therapists.”<sup>46</sup>

The impact of the multiple polio epidemics in Manitoba, combined with the post-war desire to implement broad rehabilitation programs, led to an emphasis on physiotherapy, despite the dearth of trained physiotherapists in the province. The DHPW, apparently recognizing that many people with polio “will be left with a severe handicap and require rehabilitation in order to live anything like normal life,” worked to bring more physiotherapists to Manitoba in the wake of the two massive outbreaks.<sup>47</sup> Using Manitoba’s portion of the federal medical rehabilitation grant, which in 1953 was close to \$32,000, the province hired Desmarais and four physiotherapists for the Winnipeg Municipal Hospitals.<sup>48</sup> The SCCA, in their ongoing commitment to the development of a full rehabilitation program also worked to bring more physiotherapists to the province. During the “height of the [1953] epidemic, the Society was able to obtain the services of six full-time physiotherapists from all parts of Canada” and the salaries and expenses of these physiotherapists, one of whom was sent to Brandon, were covered by the SCCA.<sup>49</sup> That the physiotherapists were busy during the epidemic is an understatement. Prior to the 1953 epidemic, the Department of Physical Medicine at the Municipal Hospitals had a staff of four: two physiotherapists, a technician, and an aide. This increased to fourteen during the

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<sup>45</sup> Heap, “Physiotherapy Education,” 150.

<sup>46</sup> University of Manitoba, “History the School of Medical Rehabilitation,” [umanitoba.ca/faculties/medicine/units/medrehab/history.html](http://umanitoba.ca/faculties/medicine/units/medrehab/history.html) (Accessed 17 December 2012)

<sup>47</sup> DHPW, *Annual Report, 1952* (Winnipeg: Queen’s Printer, 1953), 75.

<sup>48</sup> DHPW, *Annual Report, 1953* (Winnipeg: Queen’s Printer, 1954), 18.

<sup>49</sup> S.C. Sparling, “Report of the Executive Director (1953),” 7.



outbreak, but it probably was not enough: in September of 1953, 5,627 treatments were given.<sup>50</sup> As the 1953 epidemic abated, many of the recruited physiotherapists, some of whom were from England, left Manitoba; however, the demand for physiotherapists and physiotherapy programs continued well into the future.

The physiotherapy programs created by the SCCA and the Winnipeg Municipal Hospitals did not focus on one specific goal such as walking; rather, the implementation of a number of practices, including physical therapy and hydrotherapy, were an integral part of the broader rehabilitation rubric. The SCCA further cemented its commitment to rehabilitation in Manitoba by setting up a physiotherapy treatment centre in Deer Lodge Hospital, a physiotherapy home visiting service “for patients so severely disabled that they cannot be transported to a regular treatment centre,” and continued the services of the two rural treatment centres that had been established in Steinbach and Winkler, Manitoba in the previous year.<sup>51</sup> Physiotherapists in rural and urban Manitoba worked with individuals to restore strength in muscles affected by the poliovirus, and helped individuals to walk using various assistive devices including crutches and braces. In many cases, the paralysis associated with the poliovirus was temporary and people were able to regain strength in their limbs.<sup>52</sup> For those with more permanent paralysis, physiotherapy meant working to master new methods of eating, for example, and recreation. The auditorium of the Princess Elizabeth Hospital was used as a gymnasium and many residents, under the guidance of the physiotherapists and Mr. Williamson, the head of the Municipal Hospitals physical training program, took part in activities such as wheelchair volleyball. The physical activity component of the program was popular and when the Princess Elizabeth

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<sup>50</sup> RHA, Newsletter, *The Beacon* December 1953 – April 1961, Dr. Desmarais, “Physical Medicine News,” *The Beacon*, 1,3 (April 1954), 5.

<sup>51</sup> S.C. Sparling, “Report of the Executive Director (1953),” 8.

<sup>52</sup> DHPW, *Annual Report, 1952* (Winnipeg: Queen’s Printer, 1953), 75.

wheelchair volleyball team, called the Rockets, beat their Deer Lodge rivals in the inter-hospital league, the victory was reported in the Municipal Hospitals' newsletter *The Beacon*.<sup>53</sup>

Hydrotherapy was an important part of the physical rehabilitation program in the post war era. The use of water as a therapeutic tool was not a new concept in the late epidemic era. Written in 1927, W. Russell MacAusland's book about polio references, albeit briefly, hydrotherapy as a potentially useful tool in the prevention of muscle atrophy as it was believed to stimulate circulation. Hydrotherapy, particularly in salt water, was, according to MacAusland, "of value as a means of eliminating gravity in exercising muscles that are too weak to function under normal conditions, [and] very often the patient learns to swim before he can walk."<sup>54</sup> Despite his positive view of hydrotherapy, MacAusland categorized it as simply therapeutic and useful if used in conjunction with, rather than as an alternative to, orthopedic interventions.<sup>55</sup> Elizabeth Kenny's early methods for treating polio-related muscle weakness apparently included repeated warm baths, and Franklin D. Roosevelt's search for a 'cure' for polio took him to Warm Springs, Georgia where the warm water was reputed to have healing qualities. By the post-war period, it was generally believed that two features of hydrotherapy, "the warmth of the water and the buoyancy obtained by immersion facilitate to a great extent the practicing of the various exercises used to restore to normalcy the affected parts."<sup>56</sup> The warm water eased the pain and spasm-like feelings associated with muscle weakness and paralysis and the buoyancy, as alluded to in the above quote, allowed individuals to move their limbs, which they were often unable to do in regular physical therapy classes.

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<sup>53</sup> "News Notes," *The Beacon* 1, 2 (April 1954), 5.

<sup>54</sup> MacAusland, *Poliomyelitis with Especial Reference to the Treatment*, 227.

<sup>55</sup> MacAusland, *Poliomyelitis with Especial Reference to the Treatment*, 145.

<sup>56</sup> "Red Cross Hydrotherapy Project H.M.C.S Chippawa," *The Beacon* 1,6 (October 1954), 1.

By the latter part of the epidemic era, ‘therapeutic’ interventions such as hydrotherapy were implemented as an important part of the total rehabilitation process in Manitoba. The Princess Elizabeth Hospital did not have a pool but a trial hydrotherapy program was set up at the HMCS Chippawa, Winnipeg’s naval division, which had a pool. In the wake of the 1952 epidemic, the Red Cross, Navy, and the SCCA combined to create an “experimental hydrotherapy project for hospital outpatients.”<sup>57</sup> The program was successful and the following year it was expanded greatly, due to the high number of people who contracted polio in 1953. Twice a week, people with polio were bussed from the Princess Elizabeth Hospital to the HMCS Chippawa where a group of volunteers went through a variety of exercises with them in the water.

The hydrotherapy program, a collaborative project made possible by a number of groups, was popular but it was an important part of the overall rehabilitation project. In 1954, the Water Safety Division of the Manitoba Red Cross provided approximately 200 volunteers to assist with the weekly water treatment of eighty-four people living at the Princess Elizabeth and ninety-two “outpatients.”<sup>58</sup> Other volunteers were recruited from outside the Red Cross, and they too worked with people with polio on their water-based exercises. Although the official policy was for instructors to “carefully administer individualized exercises, prepared and approved by Dr. Desmarais,” the volunteers clearly viewed themselves as autonomous from the medical director.<sup>59</sup> As one stated, once the volunteers got to know the participants better, they made up their own exercises for them.<sup>60</sup> Transportation for the participants was provided by the SCCA

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<sup>57</sup> “Red Cross Hydrotherapy Project H.M.C.S Chippawa,” 1.

<sup>58</sup> SPCW, P-705, (T-36) Red Cross 1952-54, “Report of Red Cross Activities Manitoba Division for January, February, March, 1954,” 3.

<sup>59</sup> “Red Cross Hydrotherapy Project H.M.C.S Chippawa,” 7

<sup>60</sup> *Profiles* Calendar Book, 1986, “Hydrotherapy,” 33.

and a coffee break followed the hydrotherapy, with coffee donated by the Red Cross and carbonated beverages donated by Coca-Cola.<sup>61</sup> The warm temperatures associated with the therapeutic value of hydrotherapy took a rapid toll on the facilities of the HMCS Chippawa and by 1954 the plaster walls in the pool area began to crumble and break. The Kiwanis Club of Fort Garry, then a suburb of Winnipeg, began a fundraising drive in conjunction with the Winnipeg Municipal Hospitals to raise money for the construction of a hydrotherapy pool and a centre “with other essential physical medicine services” at the Princess Elizabeth Hospital.<sup>62</sup> In a few short years, the Kiwanis had collected donations totalling \$68,000, and an architecture firm designed the pool that a construction company had agreed to build at cost. Combined with federal and provincial contributions of \$13,500 each, the new hydrotherapy pool, along with two whirlpools, officially opened at the Princess Elizabeth Hospital in October of 1957.<sup>63</sup> Three years after the last major epidemic, the pool was greatly needed as hydrotherapy had developed into an integral part of the full rehabilitation ideology that focused on the total rehabilitation of adults with polio-related disabilities. J. McIntyre, the Administrator of the Municipal Hospitals, hoped that the new hydrotherapy centre would put the Municipals in the “position to do all possible to aid our handicapped population in their tedious journey back to self-reliant, self-supporting citizens.”<sup>64</sup> Hydrotherapy is still used for people with polio-related disabilities, even though their numbers have decreased, indicating its centrality to a rehabilitation program designed to (re)create people with polio-related disabilities into full-fledged, useful citizens.

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<sup>61</sup> “Red Cross Hydrotherapy Project H.M.C.S Chippawa,” 7.

<sup>62</sup> RHA, Winnipeg Municipal Hospital, Annual Reports 1950-1959, Winnipeg Municipal Hospitals Report for the year ended December 31<sup>st</sup> 1954 (Winnipeg, 1955), np.

<sup>63</sup> “Hydrotherapy Pool Opens,” *The Beacon* 4,6 (October 1957), 5.

<sup>64</sup> Winnipeg Municipal Hospital, Annual Report, 1954 (Winnipeg, 1955), np.

As rehabilitation gained currency in the latter part of the epidemic era, people with polio came into contact with a growing number of groups who claimed their expertise could assist with their reintegration into mainstream society. One of these groups was medical social workers. The aims and goals of the medical social workers who worked with people with polio were similar to those involved in other aspects of the rehabilitation program in Manitoba. Medical social work developed in the United States in the context of Progressive era reformers' belief that poverty was rooted, not in immorality, but "in social and economic conditions," many of which, such as illness and disease, could be remedied with professional assistance above and beyond what physicians could provide.<sup>65</sup> Although some early physicians and hospital administrators resented the intrusion of the (mainly) female medical social workers on the wards, these women used tact and diplomacy to ensure that they were able to meet with patients in hospitals, often negotiating issues such as language differences and poverty in order to develop an understanding of the patient's "resources or environment" in order to help facilitate their recovery.<sup>66</sup>

The beginning of social work as a profession in Canada was signalled by the development of undergraduate programs at the University of Toronto and McGill University in 1914 and 1918, respectively. The earliest social workers in Canadian hospitals functioned mainly as "buffers between the hospital and the patients with regard to administrative and financial matters," but by the mid-twentieth century, medical social workers used casework to broaden the scope of their activities "into a more comprehensive type of counselling."<sup>67</sup> Like other social

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<sup>65</sup> Laura J. Praglin, "Ida Cannon, Ethel Cohen, and Early Medical Social Work in Boston: The Foundations of a Model of Culturally Competent Social Service," *Social Service Review* 81,1 (March 2007), 28.

<sup>66</sup> Praglin, "Ida Cannon, Ethel Cohen, and Early Medical Social Work in Boston," 34.

<sup>67</sup> Julien Prud'homme, "What is a "Health" Professional? The Changing Relationship of Occupational Therapists and Social Workers to Therapy and Healthcare in Quebec, 1940 – 1985," *Canadian Bulletin of Medical History* 28, 1 (2011), 74 and 79.

workers, the broader goal of the medical social worker was to help the “individual in social, economic or emotional stress to find his own best solutions”; however, the work performed by the medical social worker, particularly in regard to people with disabilities, differed in significant ways.<sup>68</sup> More specifically, the hospital social worker played a number of roles: along with assisting the individual patient to “work through the problems he faces,” they were to offer basic social services; act as a support-providing “accessory” to the medical team; to liaise with other community agencies; and help the patient both directly and indirectly by providing the physician with knowledge of the patient’s wider social background.<sup>69</sup>

Polio wards proved a fruitful arena for the development and implementation of such a project. Polly Kay, a graduate student from the University of Manitoba’s School of Social Work, spent several weeks on the wards of the Princess Elizabeth in September 1952, during the height of the epidemic. Her focus was on the development of recommendations for setting up a social work department in a hospital, but because her casework focused solely on people with polio, the resultant Master’s thesis, based on her lengthy interactions with thirty-four people with polio, twenty-one of whom were adults, provides insight into the way people with polio were viewed by medical social workers. The post-war polio epidemics occurred at the moment when social workers were consciously expanding their professional range, and the sudden influx into hospitals of hundreds of adults and children, many of whom had polio-related disabilities and complications, allowed medical social workers to expand their work and participate in the broader rehabilitation process.

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<sup>68</sup> Gloria Stern, “Social Work in a Poliomyelitis Rehabilitation Program,” *The Beacon*, 1.6 (October 1954), 6.

<sup>69</sup> Stern, “Social Work,” 7.

Medical social workers believed that they could bring something to the rehabilitation process that was lacking. Kay acknowledged the well-intentioned, but often sporadic, attempts at the non-medical rehabilitation of patients at the Winnipeg Municipal Hospitals. She pointed in particular to the recreational activities instituted by various volunteer groups, and the diversional aspect of the small occupational therapy program; however, Kay also believed that much was lacking on the wards of the Princess Elizabeth Hospital. A psychologist was sometimes available to do an initial assessment of the patients, but according to Kay follow-ups were rarely done, and while social workers from “outside agencies” were helpful, physicians often made referrals too late, usually as the patient was being discharged. Even when a referral was made when the individual was still hospitalized, it was “difficult for a social worker [from] outside the hospital to have a thorough understanding of the patient and his illness.”<sup>70</sup> Kay believed that for social and emotional rehabilitation to begin, an individual with polio needed to be in contact with a medical social worker immediately after they passed through the acute stage of the disease.

The polio epidemics convinced medical social workers of the necessity of their professional interventions. From a social worker’s perspective, polio epidemics were severe social disruptions. Gloria Stern, a registered nurse who was involved in the medical social work program at the Princess Elizabeth Hospital, wrote that because polio “attacks suddenly and devastatingly, the young and the strong, it throws into dramatic relief the tragedy of crippling illness and the wonders of readjustment of which the human organism is capable, both physically and mentally, when concerted help is provided at critical moments.”<sup>71</sup> Despite the overwrought language, this passage is indicative of the positive impact medical social workers believed they

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<sup>70</sup> Polly Kay, “Social Work with Patients Hospitalized for Poliomyelitis: An Account of a Student Social Worker’s Experiences in the Princess Elizabeth Hospital, Winnipeg,” (MA thesis, University of Manitoba, 1953), 18.

<sup>71</sup> Stern, “Social Work,” 7

could have in such an unsettling moment. If they were able to provide their expert assistance early, while people were still in the midst of the crisis, there was hope that the individual would be able to cope with the changes.

Medical social workers believed that the best way they could assist adults with polio was to help them accept the disabilities that were often the result of the poliovirus' engagement with the central nervous system. Upon her arrival at the Winnipeg Municipal Hospitals, Kay was struck by the toll the disease took on individuals, arguing that "it soon became apparent that the patient's inability to accept his disability was the major psychological problem to be faced in approximately 70% of the cases" she worked with. In this context, her broader goal was to "enable a patient to feel like a whole and useful person despite his disability; to help him return to a normal life in the community" by working with them to accept the nature of their polio-related disabilities.<sup>72</sup> Stern cautioned that the process of acceptance could not be rushed, suggesting that "some people who are relatively mature" were successful in "reconstructing their lives" quickly, whereas others who "have to struggle with a great poverty of inner resources" take longer to "come to terms with the fact that he will remain disabled."<sup>73</sup>

Stern may have been advocating for an understanding attitude, but here is an indication of the pathologizing of those who had difficulty in coming to terms with any lingering muscle weakness or polio-related disabilities they experienced. Adults who were constructed as unable to come to terms with their disabilities were represented by Kay as angry, and as failures. "Mr. B.," one of the adult males she interviewed, fits into this trope: he is described as being "extremely depressed about his disability," and "entirely defeated by his situation." Instead of graciously accepting the disability, Mr. B. was openly "bitter about the treatment and care he

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<sup>72</sup> Kay, "Social Work with Patients," 14-5.

<sup>73</sup> Stern, "Social Work," 7.



received” and he ended up developing a “peptic ulcer.”<sup>74</sup> A female patient who “constantly maintained she would be cured,” rather than accepting her polio-related disability as permanent, is described as eventually “retiring to a passive existence in hospital.”<sup>75</sup> Those who refused to accept their disability were constructed as bitter and unable to progress.

Those who accepted the advice of medical social workers seemed to fare better. “Mrs. W.,” according to Kay, contracted polio immediately after giving birth to her first child. She was not given the opportunity to see her new baby because she was “isolated immediately after giving birth.” On top of this devastating event, she developed “extensive paralysis of the back and lower limbs, [although her] prognosis was hopeful.” After working extensively with both Mrs. W. and her husband, Kay reported that “Mrs. W. gradually came to accept that she would likely be left with some disability, that she would likely be unable to do all the things that she had hoped and planned for.” This acceptance, which medical social workers believed was the right way to react to polio-related disabilities, ostensibly allowed Mrs. W. to “find new strength to enable her to fight and regained more strength in her limbs than the doctor had anticipated.”<sup>76</sup> The message was clear: those who followed the advice of medical social workers were positioned as able to overcome their disabilities whereas those who reacted negatively not only continued to be disabled, but were in danger of further compromising their health.

Stationed at the Princess Elizabeth Hospital, Kay approached her work from a decidedly gendered position, focusing exclusively on men as breadwinners and women as wives and mothers. Working from the position that the “bewildering fear which engulfs the patient finding himself disabled may be more damaging and disabling psychologically than the physical

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<sup>74</sup> Kay, “Social Work with Patients,” 34 - 35.

<sup>75</sup> Kay, “Social Work with Patients,” 38.

<sup>76</sup> Kay, “Social Work with Patients,” 43.

handicap,” medical social workers believed that the best way an individual could accept their disability was to work towards (re)establishing themselves within the framework of mainstream gender roles.<sup>77</sup> Men with polio-related disabilities were doubtlessly concerned about the well-being of their families; however, masculine identity was intimately tied to concerns about employment and the position of the male in the family. Kay states that men with “extensive paralysis were concerned about their jobs.” While this was a legitimate worry, particularly since a specific timeframe for hospitalization did not exist, Kay links the anxieties about employment to concern with “whether they would ever be an adequate husband and father again.”<sup>78</sup> A man’s ability to work was linked inextricably to his role as head of the household and polio-related disabilities threatened this position in multiple ways.

Polio-related disabilities disrupted popular and deeply-held ideals about masculinity. Dependence on other people for assistance with daily tasks was seen as anathema to virile masculine fathers and husbands. Daniel Wilson argues, “if American men were primarily defined by their role as the family breadwinner, how could [they] return to previous jobs or find meaningful and lucrative work imprisoned in their crippled bodies? It was not simply a matter of earning a living, but of earning the respect of male peers, a spouse or fiancé, and one’s children.”<sup>79</sup> This argument, in spite of the outdated language used by Wilson, is useful to this analysis of the construction of men with polio-related disabilities in Manitoba. One man, despite his lengthy hospitalization, did not want his daughter to visit him at the Princess Elizabeth Hospital because he “did not want her to see her father in this helpless crippled condition,”

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<sup>77</sup> Kay, “Social Work with Patients,” 38.

<sup>78</sup> Kay, “Social Work with Patients,” 34.

<sup>79</sup> Wilson, “Crippled Manhood,” 10.

dependent upon others for every little thing.<sup>80</sup> The language used to describe some of the men indicates how deeply ingrained was the idea that men were not supposed to need assistance from others. In her description of twenty-six year old Randy, Kay states that he constantly portrayed himself as being able to “manage on his own,” but “behind his bravado [she] found an insecure, frightened boy, frightened about his incapacity.”<sup>81</sup> Another patient, Howard, had recently moved to Winnipeg with his fiancée, however, Kay believed it was in his best interests to move back to Ontario to live with his mother who was “most anxious to help him and look after him.”<sup>82</sup> Some men with polio-related disabilities were positioned as child-like individuals who needed assistance from capable adults until they were ready to re-establish themselves as breadwinners.

Medical social workers were concerned with the effect polio-related disabilities had on men but their gaze extended to adult females as well, focusing mainly on potential disruptions to their capacities as wives and mothers. In the immediate post-war period, as Magda Fahrni reminds us, “women’s social citizenship often depended on their roles as wives and mothers.”<sup>83</sup> For myriad experts, the ideal white, middle-class mother laboured in the home to raise well-adjusted children and provide her husband with a welcome respite from the outside world but polio unsettled these discursive prescriptions about ideal womanhood. Women with polio-related disabilities spoke to the ways polio complicated their ideas about motherhood during their encounters with medical social workers in the Princess Elizabeth hospital. Mrs. W., the twenty-one year old woman who had given birth to her first child prior to contracting polio, provides of a useful example of the importance many women placed on motherhood when she

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<sup>80</sup> Kay, “Social Work with Patients,” 34.

<sup>81</sup> Kay, “Social Work with Patients,” 29.

<sup>82</sup> Kay, “Social Work with Patients,” 56.

<sup>83</sup> Magda Fahrni, *Household Politics: Montreal Families and Postwar Reconstruction* (Toronto: University of Toronto Press, 2005), 19.

indicated to Kay that she “was fearful that she would not be able to be the mother and wife that she hoped to be.”<sup>84</sup> Other women with polio related disabilities expressed feelings of inadequacy in the context of parenting. In the case of Mrs. J., already the mother of three children and pregnant when she contracted polio, the fear that she could not live up to idealized notions of motherhood was expressed in her desire to have an abortion. According to Kay, “Mrs. J. could not see how she would ever be an adequate mother to her children and feared the dangers involved in bringing another child into the world.”<sup>85</sup> Women like Mrs. W. and Mrs. J. expressed their concerns in what sociologist Carla Malacrida characterizes as pervasive social “assumptions about the inadequacy and inappropriateness of disabled mothers.”<sup>86</sup> Mothers with disabilities struggled to think of where they would fit in, particularly during the immediate post-war period which, as Fahrni suggests, was “steeped in domesticity.”<sup>87</sup>

Although the effects of polio threatened to disrupt the pervasive discourse of motherhood and domesticity, Kay’s work with female patients at the Princess Elizabeth indicates that women with polio-related disabilities were expected to conform to these dominant ideologies. Mrs. W. wondered if her husband “could still love her even though she may be crippled,” and worried that “she would not be able to give her baby the things she needed.” According to Kay, arranging to have the baby brought to the Princess Elizabeth Hospital helped Mrs. W. to accept her disability, which in turn allowed her to “accept that she was still very important to her husband and child, and had a great deal to offer them. Although it would be some time before she could help them physically, [she] still could share things with her husband and offer him and their child

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<sup>84</sup> Kay, “Social Work with Patients,” 42.

<sup>85</sup> Kay, “Social Work with Patients,” 33.

<sup>86</sup> Carla Malacrida, “Negotiating the Dependency/Nurturing Tightrope: Dilemmas of Motherhood and Disability,” *Canadian Review of Sociology and Anthropology* 44, 4 (2007): 472.

<sup>87</sup> Fahrni, *Household Politics*, 14.

the love and tenderness which is such an important part of living.”<sup>88</sup> Mothers who had contracted polio were still able to provide some of what was expected of them. In this context, Mrs. W was still expected to nurture her family, a key characteristic of the ideal mother. Despite Kay’s exhortations that adult men and women with polio-related disabilities were still useful to their families, she characterized these families as “broken,” indicating that social experts worried about the impact polio had on the fabric of the Canadian family.<sup>89</sup> There is some evidence that a few women with polio-related disabilities were channelled into vocational rehabilitation programs. The SCCA’s 1955 *Annual Report*, for instance, includes a photograph of a woman with braces on her legs doing someone’s hair. The caption accompanying the picture reads: “polio patient completing hairdressing course at Manitoba Technical Institute and doing exceedingly well.”<sup>90</sup> Most of the vocational programs were aimed at men; however, when women were retrained, it was in the occupations deemed appropriate for their gender. Most rehabilitation for women, though, was aimed at teaching them to reclaim their proper place in the home.

Adults with polio were not the only concern for experts in the post war period. Children with polio related-disabilities posed particular problems for medical practitioners, social workers, and various organizations although the ideas that informed programs for children shifted throughout the epidemic era. An example of a rehabilitation program in British Columbia during the late 1920s indicates that in the early part of the epidemic era, vocational training was directed at youths between the ages of fourteen and eighteen, whereas educational rehabilitation was the focus for younger children. The lack of a comparable program in Manitoba indicates that the

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<sup>88</sup> Kay, “Social Work with Patients,” 43.

<sup>89</sup> Kay, “Social Work with Patients,” 55.

<sup>90</sup> Annual Report of the Society for Crippled Children and Adults of Manitoba, January 1<sup>st</sup> 1955 to March 31<sup>st</sup>, 1956 (Winnipeg, 1956), 10.

rehabilitation of children with polio was not necessarily a universal concern. Manitoba's almost singular focus on convalescent serum in the early epidemic era seems to have precluded other potential options. By the later part of the epidemic era, the focus had shifted considerably and rehabilitation was constructed as not just important but necessary. This section of the chapter examines closely the programs that were put in place in Manitoba, specifically Winnipeg, for children with polio-related disabilities. This is followed by an examination of post-war programs set up for children at the Princess Elizabeth Hospital, as well as camp and day programs run by the SCCA, and other social welfare groups such as the Young Men's Hebrew Association, in order to flesh out the ideas behind their development. Doing so shows that, in contrast to the 1920s, post-war rehabilitation programs for children in Manitoba were premised on the belief that engagement with a debilitating disease stunted a child's emotional and mental growth. As such, the focus of the later programs was on (re)creating emotionally balanced children who, as future citizens, could make their own way in the world.

Chapter four analysed the way polio-related deformities were viewed and approached in the early part of the epidemic era in Manitoba; however, the emphasis on surgical intervention was not the only option available to those interested in mitigating the effects of disabilities. An analysis of the Queen Alexandra Solarium in British Columbia, which emphasised the prevention of disabilities and technical training for young people with disabilities, provides a useful example of the earliest types of rehabilitation programs aimed at children with disabilities in Canada. The Queen Alexandra Solarium, located on Vancouver Island, was established in 1927 by the various Women's Institutes of the province so that "crippled children," defined by its founders as children "whose normal physical activities are crippled by illness, accident, or birth, whether physical deformity is present or not," would have a place, other than an

impersonal hospital or a home governed by a well-meaning but ignorant mother, to convalesce.<sup>91</sup>

The Solarium took a three-pronged approach to the rehabilitation of children with disabilities:

The founders of the Solarium recognized from the outset that there were certain principles which should govern their work on behalf of the crippled children: (1) the great importance of the prevention of illness in childhood; (2) the need for the prolonged treatment and education of children suffering from certain chronic types of disease; (3) the training of the cripple in some useful handicraft or trade that will make him or her independent of charity and dependence on others in later life, and an economic asset to the community.<sup>92</sup>

With its beds on an enclosed verandah, rest periods, and emphasis on fresh air and proper nutrition, the Solarium was designed originally for the convalescence of young tuberculosis patients; however, children with polio were also identified by the Board of Directors as a group who would benefit from the program. In the late 1920s, the approach to polio taken at the Solarium did not differ significantly from the mainstream medical perspective, advocating, for example, not walking during the first year of convalescence, the “importance of rest,” and “safeguarding the weak muscles” through immobilization.<sup>93</sup> Indeed, rest and the immobilization of affected limbs was the standard treatment for polio patients across Canada, at least until the early 1940s, when Kenny’s transformative methods were established.

Early efforts at the rehabilitation of children with polio at the Solarium differed from the mainstream medical perspective in significant ways too, particularly in its resistance to surgical interventions and the focus on training. While the Solarium adhered to the principles of rest and immobilization, the Board of Directors eschewed invasive surgery, arguing that although “the

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<sup>91</sup> C. Wace, “The Queen Alexandra Solarium for Crippled Children,” *Canadian Medical Association Journal* (1929): 702.

<sup>92</sup> Wace, “The Queen Alexandra Solarium,” 702.

<sup>93</sup> Wace, “The Queen Alexandra Solarium,” 703.

orthopedic surgery of the present day is a marvel in reconstruction, [when] it becomes necessary to remedy deformities after infantile paralysis it is a confession of the failure of early treatment.”<sup>94</sup> Beyond the tendency to de-emphasize surgical corrections, the Solarium also recognized that the education of children with disabilities was ignored when they spent long periods of time in hospital settings. Instead, the position taken at the Solarium was that education was paramount to a full recovery. “Education for the cripple,” board members argued, “is of vast importance whatever the primary disease might have been. We find these children have had practically no education for years, and yet if, as is so often the case, they must face a life time of physical disability, is it not our bounden duty to give them every help to attain a degree of mental activity that shall in some degree compensate them for the want of physical activity.”<sup>95</sup> The Solarium retained the services of two teachers who ran classes in the morning and afternoon. Although it is not clear how effective these classes were, especially considering that the Solarium housed close to 150 children of varying ages and education levels, the belief that the education of children with disabilities was important differentiated British Columbia’s approach to children with polio-related disabilities from Manitoba’s focus on the serum. Indeed, in 1928 the MRC referred to “after-care” as following up on those who had been given convalescent serum in order to prove its efficacy – it does not seem as if any attention was given to how the children were faring in their day-to-day lives.<sup>96</sup>

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<sup>94</sup> Wace, “The Queen Alexandra Solarium,” 703.

<sup>95</sup> Wace, “The Queen Alexandra Solarium,” 703.

<sup>96</sup> After the 1928 epidemic in Manitoba, the MRC sent a letter to the parents of children who had been injected with the serum. In part, the letter read: “The Medical Research Committee wish to make certain that as far as possible further treatment is being given to all cases whose after-condition renders that desirable”; however, the study based on parent response to the letter does not mention or refer in any way to any rehabilitation program, in the context of either vocational or physical rehabilitation. Their sole focus was on figuring out if their hypothesis that the serum was effective was correct. See Mary McKenzie, “Late Results of the Manitoba Epidemic of



The Solarium's focus on education was important; however, the core of the program was its emphasis on providing training for youths so that they would become useful members of society. The Board of Directors' description of the technical training part of the program presented it as a thorough apprenticeship program with immeasurable benefits:

From the education of the cripple to the training of the cripple, our third principle, is a direct and logical step, and no scheme can be complete that does not provide for the technical training of the cripple between the ages of fourteen and seventeen or eighteen years. The training must be a real apprenticeship, of not less than three years, and experience has indicated that bootmaking, tailoring, and leather work are the most suitable occupations.<sup>97</sup>

From the Board's perspective, the benefits for the young adult were clear. Youths entered into an apprenticeship with experienced masters from England, and would be well-positioned to find employment after their convalescence ended. Yet, the benefits to the individual were not the only reason why the Solarium invested vast amounts of time and energy into the technical training part of the rehabilitation project. The main goal was to prevent people with disabilities from becoming dependent on charity. The purpose of such a "strict and thorough apprenticeship [was] to fit the cripple to become a wage earner in the open market and an economic asset in the social state [as] a self-supporting citizen."<sup>98</sup> Children would progress through the classes to the apprenticeship and ostensibly emerge from the rehabilitation program as a useful citizen, able to care for him or herself.

Rehabilitation programs for disabled children in Manitoba in the post-war period were influenced less by the model advanced by the Solarium than by the burgeoning post-war psychological emphasis on constructing balanced families and children. In her examination of

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Poliomyelitis of 1928," *CMAJ* (1929), 292. Convalescent serum was also used in British Columbia. See "Serotherapy in Poliomyelitis," *CMAJ* (1928), 75.

<sup>97</sup> Wace, "The Queen Alexandra Solarium," 703.

<sup>98</sup> Wace, "The Queen Alexandra Solarium," 703-04.

the ways psychologists constructed an idealized definition of the Canadian family, Mona Gleason suggests that the “normal family constructed through psychological discourse had full-time mothers, well-adjusted, bright, industrious children, and attentive fathers. Those outside the ideal, such as working-class, immigrant, or Native families, were not only excluded but pathologized, labelled as abnormal and poorly adjusted.”<sup>99</sup> While this “particular model of the Canadian family” was presented as “normal,” Gleason concludes that the “normal family that was constructed through psychological discourse was idealized and therefore largely unattainable.”<sup>100</sup> This discourse of the idealized family had important repercussions for children with polio-related disabilities and their families. Gleason’s more recent research suggests that children with physical disabilities were “often assumed, rightly or wrongly, to suffer negative psychological ramifications.”<sup>101</sup> The rehabilitation programs aimed at children in Manitoba were constructed around this premise.

The theory that disease and disability worked to disorder children, both emotionally and behaviourally, replaced the earlier emphasis on vocational training and undergirded the development of the rehabilitation programs created by social agencies and the work performed by medical social workers at the Princess Elizabeth Hospital in Winnipeg. The editors of the collection *Lost Kids: Vulnerable Children and Youth in Twentieth-Century Canada and the United States* argue that the “experiences of disadvantaged youths,” including those with disabilities, “are centrally implicated in state formation, [and] citizenship debates” and that children’s bodies were “employed as symbols of both a strong citizenry and one in need of

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<sup>99</sup> Gleason, *Normalizing the Ideal*, 5.

<sup>100</sup> Gleason, *Normalizing the Ideal*, 4.

<sup>101</sup> Gleason, “Failed Body, Failed Childhood,” 8.

treatment and repair.”<sup>102</sup> Although they do not engage specifically with polio, or the cohort of young people with polio-related disabilities, the argument put forth by Strong-Boag and Cheryl Krasnick Warsh in *Children’s Health Issues in Historical Perspective* that the health of children “was constructed in terms of a national resource to be nurtured and guided for the civic good” holds currency here.<sup>103</sup> The early goal of moulding children with disabilities into useful, independent future citizens continued in the later epidemic era; what had changed, particularly in the context of rehabilitation programs for children with polio-related disabilities, were ideas about how best to achieve that goal. According to social workers and other experts, the best way to bolster the Canadian family and nation, both of which had been rocked by the consequences of the epidemic era, was to bring children with polio-related disabilities in line with the idealized version of normal children: emotionally sound, balanced, and not overly dependent on their mothers or the state. Rehabilitation programs, particularly summer camps and group therapy sessions, were influenced by ideas of normalcy and which were aimed at restoring children, physically and emotionally, to a pre-polio ideal, discursively turning young people with polio into people with disabilities who were in need of emotional reform so that they could become useful to the nation as adults.

The impetus for rehabilitation programs aimed at children with disabilities in Manitoba grew not out of concern over polio, but out of a joint grassroots effort between parents of children with cerebral palsy and the Kinsmen Clubs of Winnipeg. Early fundraising success for this group, called the Cerebral Palsy Parents Council, led to the development of a treatment

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<sup>102</sup> Mona Gleason, Tamara Myers, Leslie Paris, and Veronica Strong-Boag, “Introduction,” in *Lost Kids: Vulnerable Children and Youth in Twentieth Century Canada and the United States* (Vancouver: University of British Columbia Press, 2010), 2 and 8.

<sup>103</sup> Cheryl Krasnick Warsh and Veronica Strong-Boag, “Introduction: The Spotlight on Children,” in *Children’s Health Issues in Historical Perspective* (Waterloo: Wilfrid Laurier University Press, 2005), 13.

centre in 1946 at Winnipeg's Children's Hospital, but the long-term costs associated with the maintenance of the centre meant the group had to look elsewhere for funding. The timing was fortuitous: the worst of Manitoba's polio epidemics occurred at the same time the fledgling cerebral palsy group was looking for funding and they managed to secure funding from the provincial Easter Seals Campaign.<sup>104</sup> This partnership, combined with the creation of a provincial registry of 'crippled children,' made clear the number of children with disabilities in Manitoba and as a result, the "Kinsmen Club of Winnipeg met with the Welfare Council of Greater Winnipeg to discuss the problem of rehabilitating disabled persons."<sup>105</sup> The partnership between the Kinsmen and the Easter Seals was also premised on the Kinsmen's promise to set up a provincial chapter of the Canadian Foundation for Poliomyelitis (CFP), which was ostensibly modelled after the American National Foundation for Infantile Paralysis (NFIP), and its successful March of Dimes fundraising arm.

Social welfare groups and members of the medical profession who had long been involved with polio, including Bruce Chown, viewed the fledgling CFP as problematic.<sup>106</sup> In 1951, the CFP tried to start a provincial chapter in Manitoba; however, it had been mired in controversy from its inception. The idea of a Canadian counterpart to the immensely successful

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<sup>104</sup> Miller, "The Role of the Society," 3.

<sup>105</sup> Miller, "The Role of the Society," 4.

<sup>106</sup> Bruce Chown, as detailed in the previous chapters, had been intimately involved in Manitoba's 'fight' against polio throughout the epidemic era. In 1928, he was a member of the University of Manitoba's Medical Research Council which undertook to study the province's first major epidemic and the efficacy of convalescent serum. In the 1940s, Chown's interest in polio continued. In his role as Director of the Children's Hospital, Chown was responsible for bringing Elizabeth Kenny and her method of treatment to the province. Although he had moved on to other research and medical issues by the 1950s, his presence on the Society for Crippled Children's Board of Directors is evidence of Chown's decades-long interest in the social and medical issues related to epidemic polio. See: MA, Social Planning Council of Winnipeg, P-700, (R-3) Society for Crippled Children of Manitoba, 1951-52, "Society for Crippled Children of Manitoba, Organizational Chart," in "Summary of the Meeting of the Presidents and Easter Seals Committee Chairmen of the Local Kinsmen Clubs of Manitoba, December 1952, np.

NFIP was promoted initially by Horace Brown, a writer who had contracted polio as a child. Rutty suggests that the fledgling CFP was stymied by “the political tensions of growing Canadian provincial and federal interest in health care, and polio specifically, amidst a Canadian tradition of state control and a desire for order.”<sup>107</sup> However, the provincial government was desirous that private agencies deal with the bulk of the rehabilitation programing. There was concern, too, that too many charitable organizations were competing for donations from the public, and physicians and officials in Manitoba were leery about joining forces with that group. Bruce Chown in particular thought Manitoba should “have nothing to do with this organization,” and recommended enlisting “the support of the media” to prevent the CFP “from carrying on an active [fundraising] campaign in Manitoba.”<sup>108</sup> Nevertheless, Ivan Schultz, the provincial Minister of Health and Public Welfare, struck a committee to consider the CFP’s proposal that a provincial chapter be established in Manitoba, and two delegates from that committee met with CFP delegates over a series of meeting in Toronto.

Despite their apparent willingness to consider the CFP’s proposal, the Manitoba committee was adamant in their refusal to support a provincial branch. The reasons for this refusal were laid out clearly in a seven page letter to the CFP, signed by Chown and another member of the committee, Milton George. The letter refuted carefully the three “needs” set out by the CFP that would ostensibly be covered by the monies raised: the treatment of patients; research; and the education of the medical community and the general public about polio. While rehabilitation programs needed funding, it did not make financial sense to Chown and George to

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<sup>107</sup> Rutty, “Poliomyelitis in Canada,” 188. See Rutty for a detailed discussion of the CFP controversy.

<sup>108</sup> MA, G157, B64, file H-4-9-2, Bruce Chown, Minutes, Executive Committee meeting, CFP, “To the Committee in Reference to the Canadian Foundation for Poliomyelitis,” 24 October, 1950, as quoted in Rutty, “Poliomyelitis in Canada,” 201, footnote 103.

raise money specifically for people with polio, since many Manitobans with “crippling conditions” had not ever had polio.<sup>109</sup> Chown and George further argued that the CFP delegates had not been able to identify any research projects concerning polio that were in need of funding; and finally, they preferred that education for health remained in the hands of “health authorities.”<sup>110</sup> Chown and the rest of the committee did not think it was feasible or desirable to work with the CFP; however, health authorities and social welfare experts in the province were interested in contributing in some way to the development of rehabilitation programs. Chown argued that rather than creating a foundation that focused solely on polio, Manitoba would be better served by a broader group focused on “all aspects of crippling, prevention, cure, care, rehabilitation and research”; thus, children with polio-related disabilities were included in the SCCA almost from its inception.<sup>111</sup> The SCCA benefitted financially from polio’s relatively high profile: in its first fundraising campaign in 1949, the Kinsmen’s Easter Seals campaign raised approximately \$20,000 and by 1953 it had raised “just under a quarter of a million dollars.”<sup>112</sup> Coupled with federal grant monies, the successful fundraising scheme allowed the SCCA to

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<sup>109</sup> Library and Archives Canada (hereafter LAC), R1463-19-7-E, Volume 187, file 9, Canadian Council of Churches – Manitoba Chapter – Canadian Foundation for Poliomyelitis and Rehabilitation, 1950, letter to Mr. Charles Clay, President, Canadian Foundation for Poliomyelitis from Milton George and Bruce Chown, at the direction of the Minister’s Committee, 6 December 1950, 4.

<sup>110</sup> LAC, R1463-19-7-E, Volume 187, file 9, Canadian Council of Churches – Manitoba Chapter – Canadian Foundation for Poliomyelitis and Rehabilitation, 1950, letter to Mr. Charles Clay, President, Canadian Foundation for Poliomyelitis from Milton George and Bruce Chown, at the direction of the Minister’s Committee, 6 December 1950, 4. For a further discussion of the Canadian Foundation for Poliomyelitis, see Ruty, “Poliomyelitis in Canada,” in particular, chapter five “Polio Volunteers and the State, 1945-1952,” 171-208.

<sup>111</sup> Chown in Ruty, “Poliomyelitis in Canada,” 201, footnote 103.

<sup>112</sup> Stanley Ade, “Report of the President of the Kinsmen Club of Winnipeg to the Annual General meeting of the Society of Crippled Children, Manitoba,” *Report, Third Annual Meeting of the Society for Crippled Children of Manitoba*, (Winnipeg: November 1952), 1.

develop a number of programs aimed at the rehabilitation of young Manitobans with polio-related disabilities.

Among the programs developed by the SCCA were camps for children with physical disabilities. In 1952, M. MacDonald, the Secretary of the Recreation Division of the Welfare Council of Greater Winnipeg, sent a memo to S. C. Sparling, the Director of the SCCA, about the possibility of a summer “camp for crippled children” which he believed would provide immeasurable value for children with disabilities, beyond “the regular values and purposes which one associates with camping.”<sup>113</sup> The values and purposes to which MacDonald referred were grounded in ideas about the deleterious effects of modernity and urban life. As Sharon Wall suggests, camp promoters positioned “the city [as] an especially dangerous place for children and youth” and camp as a useful antidote to the class-based dangers lurking in urban spaces.<sup>114</sup> The promise of the protective and regenerative nature of camping meant different things for different classes. According to Wall, camp promoters believed that the crowded dwellings of the urban poor were dangerous to the health of the children and that while “the physical well-being of middle-and upper-class children could generally be taken for granted,” camping would assist in the development of their “spiritual and emotional welfare.”<sup>115</sup> The threat of polio complicated this binary. Polio, as Rogers and Oshinsky have shown, was not a disease born of dirt and filth, and it did not respect class or other boundaries. It also had the potential to threaten the idyllic spaces camp promoters had created. In August 1952 a young boy from Winnipeg who had just returned from the YMCA-run Camp Stevens in northern Ontario was identified as one of the

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<sup>113</sup> SPCW, P-700, (R-3) Society for Crippled Children of Manitoba, 1951-52, M. MacDonald, “Memorandum,” 1.

<sup>114</sup> Sharon Wall, *The Nurture of Nature: Childhood, Antimodernism, and Ontario Summer Camps, 1920-50* (Vancouver: University of British Columbia Press, 2009), 29.

<sup>115</sup> Wall, *The Nurture of Nature*, 30.

city's polio cases. While camp officials took the precautionary step of informing the parents of all the other campers, they publicly downplayed the possibility of a polio outbreak in their wilderness sanctuary.<sup>116</sup>

Despite polio's tendency to complicate the discourse that situated camps as idyllic, healthful spaces for young people, the belief that camping was nurturing and regenerative made it an attractive component of the rehabilitation programs for children in Manitoba. The camp MacDonald proposed to the SCCA had a dual purpose, grounded in both the anti-urban bent of camp promoters and the goals of broader rehabilitation programs. MacDonald first hoped to get urban children with disabilities out of the city and into nature, a place that their disabilities ostensibly did not allow them to experience. He argued in favour of, for example, "the opportunity for limited hikes, over-night trips, and other distinctly camp-like activities that these youngsters would ordinarily not participate in."<sup>117</sup> MacDonald wanted to ensure that children with disabilities were able to experience nature, but that was not the only purpose underlying the desire to create camps for children with disabilities. Part of the rehabilitative nature of the camp centred on physical therapy:

A camp setting would present a new area in which therapy could be continued under interesting and challenging conditions. The exercise gained through play, the gains derived from an Arts and Crafts program, and the potentialities inherent in a good water-front set-up, would each provide both gross and small muscle activity in a play situation.<sup>118</sup>

The emphasis on improved muscle function at camp was similar to the therapy provided in rehabilitation centres such as the Princess Elizabeth Hospital. Participating in these activities in

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<sup>116</sup>"19 Polio Cases Rocket Total Past 100-Mark," *Winnipeg Free Press*, 6 August 1952, 1.

<sup>117</sup> SPCW, MacDonald, "Memorandum," 1.

<sup>118</sup> SPCW, MacDonald, "Memorandum," 1.



nature – a place that had been constructed as beneficial to the health of young people – was a way to enhance the positive aspects of physical therapy.

Increased physical function was one of the goals of the camp; however, it was also designed to grapple with the emotional problems that were assumed to come with disease and disability. According to MacDonald, the “crippled child often experiences difficulty in assuming a group role because of his infirmity. There is often a tendency, therefore, for such a child to withdraw from social competition.”<sup>119</sup> Psychologists, social workers, and other interested experts viewed shyness and isolation amongst children as indicative of “crippled personalities” that needed to be corrected.<sup>120</sup> That children with ‘crippled’ bodies were constructed as prone to develop these negative personality traits made the child with polio-related disabilities a prime candidate for camp-based rehabilitation.

The problem of overprotective mothers, the bane of psychologists in the postwar period, was another issue that camps were supposed to help ameliorate. MacDonald opined that a camp for children with disabilities would “assist in the emancipation of dependent children from overprotective parents.”<sup>121</sup> This point is not elaborated on in the memorandum, but much ink had been spilled by social agencies and psychologists about the familial and social problems caused by improper mothering and as Gleason indicates, “case histories of school children referred to child guidance clinics around the country consistently blamed the inadequacies of mothers for causing emotional problems in children.”<sup>122</sup> Camps for children with polio-related disabilities were held at Lakeside Camp, near Gimli, Manitoba beginning in July of 1954. While the camps

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<sup>119</sup> SPCW, MacDonald, “Memorandum,” 1.

<sup>120</sup> Mona Gleason, “Psychology and the Construction of the ‘Normal’ Family in Postwar Canada, 1945-60,” *The Canadian Historical Review*, 78, 3 (September 1997): 460.

<sup>121</sup> SPCW, MacDonald, “Memorandum,” 1.

<sup>122</sup> Gleason, “Psychology and the Construction of the ‘Normal’ Family,” 470.

were set up to assist in the rehabilitation of the children, they were also established for the benefit of the parents. The SCCA's April-May 1954 monthly review indicated that most of the children "will attend [camp] with their mothers," possibly so that the mothers, who were assumed to be both the main caregivers for the children, and potentially their biggest obstacle, could benefit from learning how to best integrate the social workers' prescriptions into their everyday lives.

Other social experts worried about the negative impact overbearing or emotionally distant parents – particularly mothers – could have on children assumed to be emotionally stunted by disease and disability. Polly Kay, the graduate social work student stationed at the Queen Elizabeth Hospital, worried about the effects overbearing and overwrought parents might have on the rehabilitation and recovery of their children. Kay points to number of case studies where the parents ostensibly hindered their child's rehabilitation. This, according to Kay, occurred for a number of reasons. Her discussion of "Ellen," a fifteen year old girl described as adventuresome and vivacious before contracting polio, is instructive. After coming through the acute stage, Ellen was "confined to a wheelchair with almost useless legs, sagging stomach muscles and a twisted arm" and had ostensibly become withdrawn and antagonistic. Kay suggested that Ellen's parents were partially to blame for the change. Even though they had received financial assistance for hospital and physiotherapy costs, Kay described the parents as "reluctant to have her come home from the hospital," because they were "fearful [of] what it meant for them now to have their daughter at home, helpless, dependent." According to Kay, fearfulness and resentment on the part of the parents only hindered Ellen's ability to accept her disabilities, and, although she

thought a social worker might have been able to assist the family, her final characterization of Ellen was that she was “bitter, antagonistic and unable to accept her disability.”<sup>123</sup>

Aloof parents were partially blamed for a child’s failure to accept the rehabilitative goals ascribed to them; however, parents who reacted in other ways could also, from the perspective of social workers, harm a child’s rehabilitation. Kay commented that “parents deprived of their child for many months [due to extended hospitalization], tended to be extremely overprotective.”

<sup>124</sup> This was problematic to social workers. Kay’s discussion of Richard and his parents, particularly his mother, is useful in this context. Richard was a fourteen year old boy who had developed temporary polio-related paralysis. Upon his discharge from the Princess Elizabeth Hospital, he had “regained most of his strength but still had some weakness of the shoulder and stomach muscles.” Despite his recovery, social workers found that although both his parents “were extremely fearful about his recovery,” his mother was the most problematic, mainly because she treated her son “as if he had suffered the most completely paralyzing effects of poliomyelitis,” and believed that she needed to “devote herself completely to Richard.” This was worrisome to Kay, because overprotective parents, according to experts, could hinder the recovery and development of children and youths. Richard’s mother was receptive to the advice offered to her, and she was eventually “helped to recognize that her need to protect her son now had arisen primarily out of her own feelings and anxiety and not the boy’s actual needs.”<sup>125</sup>

Mothers who were unable to allow their children to develop and recover on their own, then, were as much as a threat to the rehabilitation process as those who did not want to engage in the process at all.

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<sup>123</sup> Kay, “Social Work with Patients,” 21.

<sup>124</sup> Kay, “Social Work with Patients,” 49.

<sup>125</sup> Kay, “Social Work with Patients,” 50.

Beyond managing parents, another focus of the rehabilitation program for children was the attitudes and behaviours of the children themselves. Camp represented one part of the intervention process, but because camping usually only occurred for a week or two a year, other rehabilitation programs were also set up. Social workers and other interested parties believed that in order for rehabilitation to be of any value, it had to begin as early as possible after the individual passed out of the acute phase of the disease. This attitude was summed up in a letter from S. O. Goodman, the Chairman of the Melita Kinsmen Club, to Walter Boyd of the SCCA. In his discussion of one boy with polio-related disabilities, Goodman reiterated that “catching this case early may be the [best] means of creating a useful life for the child.”<sup>126</sup> Similarly, Bruce Chown, long interested in the treatment of individuals with polio, situated after-care not only as a medical issue, but as a social one. In a 1952 address, Chown argued that “children at the Children’s Hospital [in Winnipeg,] and in Manitoba at large got extremely good care for poliomyelitis from a medical point of view,” but the medical community “stopped treatment when the child left the hospital. There was no follow-up, there was no ultimate care, no attempts to see for one who was paralyzed what later could be done for them.” This problem, according to Chown, was addressed mainly by the SCCA, which he characterized as opening “the door for these children who have been in the dark, children who have been confined to their homes in a hopeless situation, and now are getting out into the light.”<sup>127</sup> While Chown was correct in stating that after-care was barely an afterthought in the early epidemic era, it is clear that by the later years, expert intervention was constructed as an essential component of the rehabilitation rubric aimed at children.

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<sup>126</sup> SPCW, P-700, (R-3) Society for Crippled Children of Manitoba, 1951-52, Letter from S.O. Goodman, Kinsmen Club of Melita, to Walter Boyd, The Society for Crippled Children of Manitoba, 23 January, 1952, np.

<sup>127</sup> SPCW, “Dr. Chown’s Address,” 3.

In order to continue the work to which Chown alluded, and to prevent young people with polio-related disabilities from ostensibly becoming too withdrawn and dependent, social workers believed strongly that they needed to set up programs for children with polio-related disabilities. The Young Men's Hebrew Association, established in Winnipeg's North End in 1899, was the first social welfare group to institute a program aimed at the emotional rehabilitation of young people with polio. The "Thursday Morning Club," so named for the day of the week the group met, was a ten-week program where twenty children of various ethnic and religious backgrounds from greater Winnipeg between the ages of six and twelve "who had been ill with polio during 1953 and were physically handicapped to some degree" met one morning a week at the YMHA community centre for physical and group therapy.<sup>128</sup> A portion of each Thursday morning focused on exercise, mainly through activities such as swimming and games; however, the emphasis was mainly on the minds of the children, rather than their bodies.

The Thursday Morning Club program was influenced heavily by the dominant discourse of normalcy. Gleason presents normalization as a "socially and historically contingent process whereby some behaviours and attitudes come to be labelled as normal and good while others come to be labelled as deviant and bad."<sup>129</sup> An analysis of the concerns of the organizers of the Club indicates that disability was viewed as something deviant in need of correction. They further postulated that polio, and its resulting disabilities, led to behavioural and personality issues in children that needed to be corrected. Indeed, the notion that polio-related disabilities somehow altered a child's personality undergirded the program:

Due to the large number of cases of polio reported during the

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<sup>128</sup> SPCW, P651/8, Post Polio Children Committee, Minutes, YMHA Community Centre, Thursday Morning Club Report, February 1954, 1.

<sup>129</sup> Mona Gleason, *Normalizing the Ideal*, 8.

summer of 1953 it was anticipated that some specialized group program might be provided to help return any victims of the disease back to normal group living. Since this specific illness is often accompanied by some degree of physical disability plus a long period of convalescence many resulting problems were foreseen by the agency. These included social awkwardness for the victims of disease (as evidenced by extreme forms of shy or aggressive behaviour), self-consciousness and inability or a feeling of inability to keep up with others. These sick people having been protected and catered to over a long period of time by hospitals, doctors, nurses, family and friends are suddenly thrust into their community, their schools, their playgroups<sup>130</sup>

In order to rectify the emotional issues that had ostensibly developed while the children were ‘being catered to,’ the social workers and experts involved in the development of the program concentrated on certain key issues. Shyness and aggressive behaviour, for example, were flagged as not only having been created by polio, but as problematic behaviours that needed to be remedied through the group therapy component of the program. Some of the activities the children took part in during group therapy included “games, sing-songs, story-telling, charades, club-meetings, crafts such as clay-modelling, painting, drawing, crest-making, costumes and decorations, planning and carrying out a party and a circus.”<sup>131</sup> The goal of these activities was the (re)creation of the child to fit into the discursive model of the ideal normalized child – children who did not depend on their mothers, who were not too shy or withdrawn, and who were able to interact with others.

Each perspective participant had to go through a multi-pronged intake process before they were admitted to the program, a process that appeared to confirm the experts’ suspicions about the detrimental effects of polio. Interviews with the children and their parents during the intake procedure seemed to bolster the notion that physical disabilities led to emotional ones.

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<sup>130</sup> SPCW, Thursday Morning Club Report, 1.

<sup>131</sup> SPCW, Thursday Morning Club Report, 3.

According to the leaders of the Thursday Morning Club, “all the parents noted that their child tired more easily, was more high strung and nervous, and cried more easily since their illness. Many of the children appeared shy and awkward and very self-conscious.”<sup>132</sup> Indeed, contracting a serious illness, the pain during the acute phase, and the isolation in hospital all made a polio diagnosis extremely traumatic; however, the idea that the children were shy or self-conscious because they were once again being paraded in front of more ‘experts,’ particularly after being in a hospital environ for a long period of time, did not seem to cross the minds of those involved in the Thursday Morning Club. Social work experts pathologized the child’s post-polio personality. These troubling personality traits had developed out of the child’s engagement with the poliovirus and needed to be corrected so that the child could successfully re-enter society. The final aspect of the group therapy portion – putting on a small circus show – was designed to showcase the progress the children had made towards normalcy. According to the organizers, it “gave each child status with his friends and family and helped him feel proud and secure in the knowledge that, although handicapped, he could do things that were fun and exciting and be accepted by his friends and family,” thus marking the beginning of their return to the ‘normal’ world.<sup>133</sup>

The organizers of the Thursday Morning Club indicated that correcting the mind of the child could have a positive effect on the body. Put another way, they believed that disabilities led to emotional issues, and that fixing the deviant behaviours would lead to a lessening of the physical disabilities associated with polio. According to the program report, “as the child improved in his physical development it helped his social development. The reverse was also true. The child who found himself socially accepted in the group even though he limped,” for

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<sup>132</sup> SPCW, Thursday Morning Club Report, 2-3.

<sup>133</sup> SPCW, Thursday Morning Club Report, 4.

example, “soon became less self-conscious of his limp or more desirous of overcoming the handicap and showed signs of physical improvement.”<sup>134</sup> The description of the children’s involvement in the penultimate activity of the group therapy program – putting on a circus for family members – particularly compared to the descriptions of their emotional and behavioural states before the program is indicative of this conviction.

The examples of two participants, Louis and Phyllis, indicate how much the organizers believed in the mind-body component of their program. Louis was a young boy with facial paralysis cause by polio. As a result he “was extremely self-conscious about his appearance and speech. He barely spoke above a whisper during the intake interview [and] showed reluctance to try anything for fear he would be ridiculed.”<sup>135</sup> At the end of the twelve-week program, not only could Louis close his mouth and go underwater in the swimming pool, he volunteered to be the “barker” at the group’s circus, an indication of how well he had responded to the group therapy, both from an emotional and physical standpoint. Phyllis was a “shy, pale” child whose “extremely over-anxious mother” did not allow her to play outside or walk to school alone. Once freed from her mother’s grasp, Phyllis blossomed in the program: not only did she “regain confidence in herself,” her “limp became less laboured and conscious, and many times [the] worker noticed her walking with almost no limp at all.”<sup>136</sup> The conflation of the pathologized personality issues associated with an over-protective mother made Phyllis’ rehabilitation difficult, but according to the program organizers, the removal of these problematics allowed for her emotional and physical regeneration.

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<sup>134</sup> SPCW, Thursday Morning Club Report, 4.

<sup>135</sup> SPCW, Thursday Morning Club Report, 7.

<sup>136</sup> SPCW, Thursday Morning Club Report, 8.



Other agencies viewed the Thursday Morning Club as a model to emulate, however, setting up similar programs proved problematic. In the wake of the 1953 epidemic, the Greater Winnipeg Welfare Council, a “planning and coordinating body composed of a number of public and private agencies and organizations” that worked to “study and fulfil unmet needs in the community” set up a post-polio children’s committee.<sup>137</sup> The committee, tasked “to investigate the need for a recreational and socialization program for post-polio children,” was composed of a number of people interested in the rehabilitation of children with polio-related disabilities, including Dr. Desmarais and social workers from the Princess Elizabeth, the University of Manitoba School of Social Work, and the SCCA. At the first meeting in April 1954, the committee identified the terms of reference which guided their impetus to study the need for special rehabilitation and therapy. In particular, it was believed that “young children, afflicted by polio, and as a result removed or protected from their normal environment, can develop problems or social awkwardness, which may also slow down physical recuperation, [and] that such problems can be overcome in a group therapy setting.”<sup>138</sup> The Post-Polio Children’s Committee decided that the group should focus on children with “varying degrees of emotional disturbances as a result of their handicap e.g., shyness, hostility, [and] crying,” but children who showed evidence of “deep seated neurotic traits” would need the type of services they could not provide.<sup>139</sup> The committee chairman, Lloyd Lenton, held the Thursday Morning Club up as an example that needed to be emulated and the committee endeavoured to study the feasibility of instituting a comparable program.

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<sup>137</sup> Frank E. Conlon, “Winnipeg Welfare Council Composed of 100 Agencies,” *Manitoba Ensign*, 5 May 1956.

<sup>138</sup> SPCW, P651/8, Post Polio Children Committee, Minutes, Correspondence and Reports, 1954, “Minutes of Post Polio Children Committee, 29 April 1954, 1.

<sup>139</sup> SPCW, “Minutes of Post Polio Children Committee, 1.

The committee took their task of creating a rehabilitation program that focused on the emotional normalization of young children with polio-related disabilities seriously. Between April and December 1954, the committee reviewed the Thursday Morning Club records and reports, and undertook a study to find two things: enough children for a similar program and sufficient funding to develop one. Lenton and Archie Carmichael from the SCCA contacted the Children's Hospital, the Municipal Hospitals, and the DHPW in an attempt to find enough suitable children to attend the rehabilitation program they hoped to facilitate. Although Dr. Desmarais indicated that the Municipals were unable to provide the committee with the requested information because "it would entail a considerable amount of work," the committee was able to procure a list of children between the ages of five and sixteen who were in either the KGH or the Princess Elizabeth hospitals.<sup>140</sup> The director of the maternal and child hygiene division of the DHPW also sent the committee information on 165 children in the greater Winnipeg area with residual paralysis who might benefit from a concentrated rehabilitation program.<sup>141</sup>

Despite this initial interest, the committee was unable to develop the type of program they wanted. Funding proved to be the biggest stumbling block. Initial interest in developing a program similar to the Thursday Morning Club had been expressed in April of 1954, but by the end of the year, the committee was still searching for financing. At the November 1954 meeting, Mrs. Shell, the social worker on the committee who hoped to lead the program, indicated that she had spoken to Dr. Hildes and Dr. Desmarais of the Municipal Hospitals and that while both

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<sup>140</sup> SPCW, P651/8, Post Polio Children Committee, Minutes, Correspondence and Reports, 1954, Letter from Dr. M. Desmarais to Lloyd Lenton, 9 June 1954, np; and, "Children 5 – 16 years – K.G.H. and P.E.H. Degree of Disability," np.

<sup>141</sup> SPCW, P651/8, Post Polio Children Committee, Minutes, Correspondence and Reports, 1954, Letter from Dr. E.L. Peters, Director of Maternal and Child Hygiene, to Lloyd Lenton, Welfare Council of Greater Winnipeg, 6 January 1955.

expressed that there was a need for such a program, “due to a lack of funds the idea did not materialize.”<sup>142</sup> The following month, the committee sent a letter to Mrs. Waight, the Vice-President of the Princess Elizabeth Hospital Guild, describing the program and asking for a financial commitment of seventy-five dollars a month for a three-month program. According to the letter, the idea had been broached with the president of the Guild who had expressed interest; however, neither excerpts from the Guild’s 1955 *Annual Report*, nor a late-1950s history of the Guild mention a rehabilitation program.<sup>143</sup>

Financial difficulties combined with questions about the scope voluntary social welfare agencies should assume in society impeded the development of rehabilitative programs for children. That the province contributed information but not financial assistance to the committee is instructive. The province was involved, to some degree, in the medical care and vocational training of people with polio, and the SCCA’s annual financial reports indicate that both the provincial and federal governments assisted the group financially; however, private agencies were increasingly expected to develop and fund their own rehabilitation programs. In 1954, S. C. Sparling, the Executive Director of the SCCA, hinted at the frustrations inherent in this development, writing that “there is a real question in my mind, and I am sure in the minds of

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<sup>142</sup> SPCW, P651/8, Post Polio Children Committee, Minutes, Correspondence and Reports, 1954, Minutes, Post Polio Children Committee, 18 November 1954, np.

<sup>143</sup> “Princess Elizabeth Hospital Guild, 8<sup>th</sup> Annual Report, 1955, *The Beacon*, 3,2 (February 1956), 6. The Princess Elizabeth Hospital Guild was created in 1948 on the recommendation of Nursing Superintendent Mary Shepherd and City of Winnipeg Alderperson Hilda Hesson, in anticipation of the opening of the new hospital. When the polio epidemics of 1952 and 53 led to the seconding of the Princess Elizabeth for convalescent cases, the Guild turned their attention to those patients, visiting a few times a week, collecting games and decks of cards from the public for use on the wards, and organizing a kindergarten for the youngest polio patients. This was a temporary focus for the Guild and investing a significant amount of money in a rehabilitation program may have been outside of their purview. RHA, Winnipeg Municipal Hospital, Princess Elizabeth Hospital Guild, Princess Elizabeth Hospital Guild Press Releases 1950s-1980s, “Century of Service: A History of Hospital Volunteer Work in Manitoba,” 36-38.

many others, as to how far a private voluntary agency's responsibility should go in the area of health and welfare. It is my opinion that the program which has been undertaken and is being carried out by this Society is at least rapidly nearing the boundary of the usual scope of a purely private and voluntary organization." The province's narrow response to polio led to gaps in the aftercare of children with polio, something the SCCA endeavoured to rectify. Sparling did not expect the provincial government to take over the SCCA's work; rather, he argued that there needed to be "a happy compromise possible between a completely socialized approach and a completely voluntary and private approach." It appears that, at least to Sparling, the way to bridge the divide was through increased financial assistance from the province, as he further suggested that "it is essential that adequate government funds should be made available to ensure at least a foundation of financial security to carry on the work."<sup>144</sup> Without that financial security, programs such as the one championed by the Welfare Council's committee fell by the wayside. Ruttly argued that the severity of polio in Manitoba meant that it developed one of the more comprehensive provincial polio policies in the country. The lack of assistance provided for the development of rehabilitation programs, combined with the ongoing debates over hospitalization charges indicates that not only did Manitoba not appear to have a specific polio policy, it was reluctant to provide the necessary financial assistance to help ameliorate the effects of the disease.

As the Queen Alexandra Solarium example indicates, education and vocational training were the cornerstones of the rehabilitation program for young people in British Columbia in the early epidemic era; however, neither were central in post-war rehabilitation programs designed for children with disabilities in Manitoba. In the late 1920s, the Board of Directors at the Queen

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<sup>144</sup> Sparling, "Report of the Executive Director, (1954)," 8.

Alexandra focused mainly on education, as well as the development of a training and apprentice program for older children.<sup>145</sup> By the immediate post-war period, when attention in Manitoba turned toward the problem of children with disabilities, the emphasis was considerably different. Vocational training was de-emphasized in favour of focussing on the emotional and behavioural problems that were assumed to accompany a disease that left children with various disabilities. This re-orientation, however, does not mean that education and vocational rehabilitation were disregarded completely during the later epidemic era in Manitoba.

Although not central to the rehabilitative rubric, educational opportunities for young children existed on a rudimentary level at the Princess Elizabeth Hospital. Children there were able to take classes from grades one to ten, and there was a kindergarten class for the youngest patients. The education of children with polio-related disabilities was made possible by a collaboration between the provincial Department of Education and the SCCA, both of whom contributed “textbooks and supplies” to the program.<sup>146</sup> Despite the challenges inherent in teaching children of varying ages and degrees of disability, the teacher, Mrs. A. B. Smith, suggested that the cooperation of the nursing and physiotherapy staff made it possible for her “to teach each child the essentials of his grade, so that upon his return to school he may be familiar with his classwork or if his stay in the hospital is prolonged, he may complete the year’s work and be promoted to the next grade.”<sup>147</sup> The Princess Elizabeth did not have dedicated indoor or outdoor classrooms, as did the Queen Alexandra Solarium; nevertheless, the education of children with polio-related disabilities was attended to in some degree in the later part of the epidemic era in Manitoba.

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<sup>145</sup> Wace, “The Queen Alexandra Solarium,” 702.

<sup>146</sup> “School Work at Princess Elizabeth Hospital,” *The Beacon* 1,2 (February 1954) 3.

<sup>147</sup> “School Work at Princess Elizabeth Hospital,” *The Beacon* 1,2 (February 1954) 3.

The decline in the importance of vocational training for children is also indicative of the shifting focus of the rehabilitation programs for children throughout the epidemic era. In the late 1920s, the technical training of young people with disabilities was central to rehabilitation programs. By the later epidemic era, this had given way to the focus on emotional and behavioural therapy, and, to a lesser degree, physical therapy and education. Vocational training for young people with polio-related disabilities did not completely fall by the wayside, but it was reserved for older teenagers, particularly young males who had already been in the workforce. Jim, a fifteen year old with “residual paralysis in his legs,” was referred by Polly Kay, the medical social work student at the Princess Elizabeth, for vocational therapy. Jim, however, had left school two years prior with a grade seven education, and “had been working ever since,” driving a tractor and “doing other heavy work.”<sup>148</sup> Kay suggested that he upgrade his education to at least a grade eight level so that he could receive vocational training at an accredited institution. Most children, however, were not given the opportunity to pursue vocational rehabilitation, indicating that its position as an integral part of the rehabilitation process had been altered.

In 1956, a film entitled *Three to Make Ready* was screened prior to the commencement of the SCCA’s annual general meeting. The film told the stories of three individuals – a child, a teenager, and a “man, the head of his family,” all of whom had disabilities. The SCCA’s description of the film encapsulates the broad goals of the impetus towards the rehabilitation of children and adults in the immediate post-war period. The film, according to the SCCA, shows “the combined efforts of doctors, therapists, teachers, social workers, psychologists and many other skills of modern rehabilitation” working “toward a common goal – the return of the

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<sup>148</sup> Kay, “Social Work with Patients,” 54.

handicapped to happy and productive life.”<sup>149</sup> What constituted a happy and productive life for people with polio-related disabilities was increasingly informed by the discourses and prescriptions of social workers and other experts. Indeed, the broad goal of the rehabilitation of people with polio was to create useful Canadian citizens. The post-war rehabilitation programs for adults with polio-related disabilities were premised on physical and vocational rehabilitation and gendered ideas about the family. Physical rehabilitation, in order to reduce or minimize any residual disabilities, was a part of the broader rehabilitative thrust. It was a popular aspect of the rehabilitation programs, as both the growth of the hydrotherapy program and the successful fundraising initiative for a hydrotherapy pool for the Princess Elizabeth Hospital indicate.

Regardless of the perceived usefulness of physical rehabilitation, vocational training was the main focus for adults with polio-related disabilities in Manitoba. This was propelled by the overarching concern that disabled people would become an economic drain on their families and society and it meant different things for males and females with polio-related disabilities. Medical social workers and social welfare groups such as the SCCA premised their vocational rehabilitation advice and programming on the gendered assumption that males were breadwinners and women were wives and mothers. If a female was slotted for vocational employment training, she was usually directed towards the traditionally female professions. Evidence of vocational training for women was scarce in the records examined; more common, though, was the enabling of women to find their worth as mothers and wives in spite of a disability. Men were to be directed towards an occupation that they could perform even with a disability. The emphasis was on retraining adults who had contracted polio to fit into the dominant social roles ascribed to men and women.

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<sup>149</sup>*Annual Report of the Society for Crippled Children and Adults of Manitoba, January 1955 to March 31<sup>st</sup>, 1956*, (Winnipeg, 1956) 31.

Although the goal of creating independent, useful citizens also informed the rehabilitation of children as it did adults, the rehabilitation of children differed in important ways. The methods utilized during the earliest epidemics in the 1920s differed significantly from those which informed the post-war rehabilitation programs. While earlier programs focused on the education of young children and the vocational training of older youths, by the post-war period, the emphasis had shifted considerably. Summer camps for children with disabilities and programs such as the Thursday Morning Club, influenced by the post-war emphasis on discourses of normalcy and the construction of normal families, focused on the emotional and behavioural issues that were assumed to be part and parcel of an illness that led to a disability.

In the rehabilitation of adults and children, we see the discursive transformation of people with a disease into people with disabilities. From the perspective of social workers and other experts involved in the rehabilitation process, people with polio-related disabilities were in need of reforming on multiple levels: their bodies were to be reformed through physical therapy, particularly hydrotherapy, and their minds through vocational and emotional rehabilitation. The polio epidemics created a substantial population of adults, children – males and females – who in the eyes of medical and social welfare experts, needed to be recreated to fit into the idealized version of normal productive Canadians. This chapter has identified and analyzed the perspectives and actions of some of the social workers and other experts involved in rehabilitation in Manitoba, particularly those at the SCCA and the Princess Elizabeth Hospital. This perspective allows for a deeper understanding of the meanings ascribed to disabilities in the post-war period and the focus on the prescriptions, advice, practices, and programs illuminates the idealized notion of the transformation of people with polio-related disabilities into independent, economically useful citizens. Its focus on those who created and implemented the



programs aimed at people with disabilities does not interrogate the multiple ways individuals with polio experienced the epidemics, and negotiated their post-polio worlds, and all the prescriptions and presumptions inherent in being a person with a disability in a society which privileged non-disabled persons constantly. The following chapter seeks to do just that.

## **Chapter Seven: “I sort of got on with my life’: The Lived Experiences of People with Polio Related Disabilities in Manitoba”<sup>1</sup>**

The previous chapters analyse the way people with polio were constructed, viewed, and acted upon, first as patients with an illness and then as people with disabilities who, according to various experts, needed to be re-shaped emotionally, physically, and vocationally within dominant discourses about disability. This allows for a deeper understanding of the impact polio had on patients and the medical infrastructure. It also helps to insert polio into a number of historiographies but it does not necessarily indicate how polio affected the lived experiences of the patients. Using twenty-two interviews done with members of Manitoba’s Post-Polio Network (PPN), this chapter argues that while polio and its various side effects affected people’s lives in multiple and numerous ways, it did not pull families apart or prevent people who contracted polio from living relatively ordinary, yet meaningful, lives. The majority of the interviewees were children under the age of fifteen when they contracted polio, although five were adults in their twenties and early thirties. This age distribution, combined with the wide-ranging, life-history interview style indicates that polio-related disabilities and ideas about disability shaped, but did not necessarily determine, the outcome of many of the encounters people with polio had throughout their lives.

This chapter examines the experiences of people with polio-related disabilities in a number of contexts such as elementary, secondary, and post-secondary school, work, relationships, and parenting. While it briefly interrogates some aspects of the time spent in hospital, broadening the conceptual basis of polio to include not just the actual epidemics or the time people spent in hospitals allows for a fuller understanding of the impact of the disease. I

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<sup>1</sup> MA, Polio Oral History Project, Kevin Frank interview, disc one of one.

argue that the lives of people who contracted polio, rather than being defined solely by their encounter with the disease, were shaped and influenced by complex ideas about gender, education, work, and the ideal family as well as their polio-related disabilities and ideas about people with disabilities. Finally, this chapter suggests that the multiple long-term effects of polio and polio-related disabilities – from ideas about people’s ability to work and parent to the development of post-polio syndrome decades after the epidemics era ended – speaks to the need to examine not only the epidemic era, but the years which followed. While Manitoba’s epidemic era may have ended in 1953, the effects of polio continued to linger long into the late twentieth century and beyond.

Trying to understand the impact of polio on families and individuals is not a new endeavour. In *Passage Through Crisis: Polio Victims and their Families*, published in 1963, Fred Davis examined the families of a number of children who had contracted polio. Over the eighteen months that he observed these families, Davis suggests that most families acted as if polio did not alter their family at all, and most believed that their child could and should do anything other children were doing. Davis states that while carrying on with a “tenacious sameness” might “bespeak a fundamental stability in the family,” acting as if everything was just fine was actually a “major source of weakness” in the family.<sup>2</sup> Davis further suggested that the attempts of a child with a polio-related disability to “be accepted by normals as normal are doomed to failure and frustration: not only do most normals find it difficult to include the handicapped person fully in their own category of being, but he himself, in that he shares the normal standards of personal observation, will in a sense support their rejection of him.”<sup>3</sup> From this perspective, polio is extremely disruptive. It forces families to pretend that they are fine

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<sup>2</sup> Davis, *Passage through Crisis*, 133 and 4.

<sup>3</sup> Davis, *Passage through Crisis*, 138.

when they, according to Davis, are not, and it leads a child to be rejected not only by peers, but by themselves. The themes of denial, loss, and deviance are rife in this sociological analysis.

Historians have recently turned their attention to the impact polio had on the lives of individuals, concluding that while there were some personal triumphs over the effects of the disease, it largely had a negative impact. Daniel Wilson has done the most work on people with polio in the United States. He has written about the gendered impact polio had on males, suggesting that polio-related disabilities emasculated them, took away their social and cultural claims to manliness, and lead to, in a number of cases, mental breakdowns.<sup>4</sup> He also examines the lack of understanding the medical community had about the psychological impact of polio. In his monograph *Living with Polio: The Epidemic and its Survivors* Wilson uses multiple published and unpublished memoirs written by people who had polio to tell the stories of “children, adolescents, and adults whose bodies were paralysed by the virus and who slowly, painfully, and determinedly rebuilt lives shattered by polio.”<sup>5</sup> Richard Altenbaugh also suggests that a polio diagnosis, in particular one that led to residual paralysis, ruined families and individuals emotionally, psychologically, and personally.<sup>6</sup> While cognizant that for some, polio most likely had a negative impact on their lives, this chapter seeks to complicate this narrative by suggesting that while polio and its related disabilities certainly transformed people’s lives in multiple ways, it was not as devastating as the extant literature suggests.

This chapter is based largely on an analysis of twenty interviews conducted in 2006 with members of Manitoba’s Post-Polio Network (PPN), a group formed in 1984 with the goal of

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<sup>4</sup> Wilson, “Crippled Manhood.”

<sup>5</sup> Daniel J. Wilson, “Psychological Trauma and its Treatment in the Polio Epidemics” *Bulletin of The History of Medicine* 82 (2008): 848-877; and Wilson, *Living with Polio*, 10.

<sup>6</sup> Richard J. Altenbaugh, “Home Sweet Home: Poliomyelitis, the Family, and Disability,” unpublished paper presented at the Canadian Historical Association Meeting, 2008.

offering support and camaraderie to others with polio, and to lobby the provincial government to bring a neurological expert familiar with post-polio syndrome to Manitoba. In 2004, members of the PPN decided to “explore the possibilities of [their] own oral history project” and after a few exploratory meetings, the topic was broached to the larger membership, which expressed strong support for that type of project. Supported by funding from the Hannah Foundation, the Jewish Foundation of Manitoba, a private individual, and the PPN, two undergraduate students from the University of Winnipeg, Thea Hoogstraten and Alana Lajoie-O’Malley, interviewed twenty-nine individuals who contracted polio during the epidemic era. I utilize twenty-two of the interviews, which are available to researchers in the Manitoba Archives. Some of the participants chose to have their interviews restricted from the public for a number of years and two of the individuals did not contract polio in Manitoba. Those were not included in the study.

Oral histories are integral to this project as it seeks to widen the boundaries of the social history of disability. Recently, historians have turned to oral histories and interviews in an attempt to better understand the lived experiences of everyday people. In her study of women in Toronto during the Depression, Katrina Srigley suggests that oral histories go beyond providing “access to individual experiences and memories” by changing the focus of history and telling “the stories of those whose pasts have been ignored and to challenge dominant narratives that silence these histories.”<sup>7</sup> As Geoffrey Reaume suggests, those that write the history of disability “advocate disabled people telling their own stories.” However, his caveat that “if disability history is to be taken seriously, people classified as disabled need to be shown in historical work as having faults, virtues, and mixed blessings, just like everyone else” is important too.<sup>8</sup> And, as

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<sup>7</sup> Katrina Srigley, *Breadwinning Daughters: Young Working Women in a Depression-Era City, 1929 – 1939* (Toronto: University of Toronto Press, 2010), 6.

<sup>8</sup> Reaume, “Disability History in Canada,” 40 and 41.

Catherine Kudlick argues, “by approaching disability as a social category rather than as an individual characteristic, the field [of disability history] challenges long-held perceptions that relegate it to the unglamorous backwaters” on the margins of social history.<sup>9</sup> This chapter engages with the challenges presented by Reaume and Kudlick by bringing the experiences of people with polio-related disabilities into the conversations and constructs created by Canadian social historians. Some of the broad questions that inform this analysis include: What did it mean to have polio-related disabilities? How did people participate in everyday activities? How, if at all, did it affect people’s education and labour, and how did dominant ideologies about disability shape their abilities to develop meaningful careers and relationships? Did ideologies about gender intertwine with, or take precedence over, ideas about disability in the context of work or motherhood?

The PPN interviews were conducted as life histories, with the interviewers asking the subjects open-ended questions about their childhoods, educational experiences, work, and family before moving on to ask them if they remembered when they contracted polio and what their lives were like with polio-related disabilities. The choice to employ a life history model was based on two factors. In their summary of the oral history project, the interviewers found that while some of the interviewees wondered why they were interested in their life story, “rather than focusing on memories of polio and the disease’s direct consequences,” it was necessary to focus on “thick interpersonal detail” in order to develop and provide a fuller and informed narrative.<sup>10</sup> Second, Hoogstraten and Lajoie-O’Malley were consciously thinking of future

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<sup>9</sup> Kudlick, “Why we Need Another Other,” 765.

<sup>10</sup> Hoogstraten and Lajoie-O’Malley, “Polio and Post Polio: An Oral History,” 1. Hoogstraten and Lajoie-O’Malley borrowed the term ‘thick interpersonal detail’ from Patricia Kaufert, “Disability or End-of-Life: Competing Narrative in Bioethics,” *Theoretical Medicine* (2003): 463.

historical research. “By asking questions about family, marriage and the workplace,” they wrote in their presentation on the oral histories to the PPN, “our goal was to provide a resource with which future researchers can place polio in context of the very full and inspirational lives that these men and women have led, lives in which polio has not been the only focus.”<sup>11</sup> I am not interested in positioning these individuals as inspirational, nor do I contend that their lives were any more or less extraordinary than anyone else’s. Rather, in unravelling and interrogating their experiences, I suggest that while polio played a role in the lives of those who were interviewed, it was not the only factor, and often not even the main factor that shaped their lived experiences. In making that argument, I do not suggest that there was one ‘Manitoba polio experience,’ nor do I think researchers should look for one. I do, however, contend that while polio and its related disabilities may have reconfigured people’s lives and families, polio did not wreck or shatter them.

Table Four provides the basic contextual information for this chapter. It indicates the pseudonyms I have given to each interviewee, the year they contracted polio, their age at that time, their gender, and the type of polio-related disabilities they had or have. Polio related disabilities shifted considerably over the course of a person’s life time, thus the final section of Table 4 was difficult to fill. Often a person might have been paralysed significantly during the acute phase of the disease, but regained mobility quickly or sometimes more slowly over time. Operations and rehabilitation also changed the nature of the disabilities. Further, several of the interviewees spent time in a respirator during their hospitalization, but respiratory polio was not always permanent. Thus, that section of the table is necessarily vague, but it does give a good indication of the broad nature of each interviewee’s polio-related disability.

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<sup>11</sup> Hoogstraten and Lajoie-O’Malley, “Polio and Post Polio,”1.

Table 4: Participants in the Post-Polio Network Oral History Project<sup>12</sup>

Pseudonym	Gender	Year	Age	Polio-Related Disability
Anne Friesen	F	1952	11	legs
Franny Brown	F	1928	2	legs/hand
Jessica Smith	F	n/a	1	leg
June Henry	F	1947	7	leg
Liz Smith	F	1952	n/a	throat
Sarah Buckley	F	1953	5	legs (used a wheelchair)
Dianne Richards	F	1947	5	legs
Alice Jones	F	1952	6	shoulder
Carol Waters	F	1953	3	legs
Donna McGillivray	F	1941	2	limbs
Esther Kingsley	F	1937	13	legs
Emma Lawrence	F	1953	20s	arms and legs
Rose Stephens	F	1953	3	legs (used a wheelchair)
Barb Thomson	F	1953	30	legs
Peggy Johnson	F	1953	26	leg
John Straub	M	1953	23	arms
Arthur Epp	M	1953	30	arms
Marc Tremblay	M	1953	5	legs
Kevin Frank	M	1952	13	legs
William Haas	M	1953	13	left side of body
Jim Loewen	M	1952	9	right side of body
George Toews	M	1953	6	legs (used a wheelchair)

In the later part of the epidemic era, more adults than ever before contracted polio, but in Manitoba, children were still the main group affected by the disease. This pattern is represented in the PPN interviews, with thirteen of the interviewees having contracted polio as children. As such, school experiences and relationships with friends and family members figured prominently in the interviewees' memories. The young ages of all of the interviewees – whether young children or young adults – allows for an examination of the ways the remembered polio-related disabilities and ideas about disabled people shaping various aspects of their lives. While

<sup>12</sup> Although the names of the participants are not redacted in the Manitoba Archive, I chose to give each interviewee a pseudonym.



children's educational experiences were often disrupted, at least temporarily by polio, these disruptions did not preclude most of the interviewees from participating in school activities and getting an education, nor did it pull families apart.

Polio is often cited as a force that ruptures families apart emotionally and literally, because the patient, often a young child, was hospitalized for long periods of time. An analysis of the interviews suggest that while the interviewees who contracted polio as children did feel alone while in the hospital, family and community members tried very hard to make this time period less traumatic. For seven months, Sarah Buckley was hospitalized over seventy miles away from her rural Manitoba home. Only five, Buckley had two sisters at home, making the logistics even more difficult for her parents. Yet, the Buckleys made the trip every second night, even during the isolation period when her parents were not even allowed in the room and a nurse would have to hold Sarah up to the window so that she could see her visitors outside.<sup>13</sup> Rose Stephens' father seemed to want to make sure that neither his daughter nor any of the other children on the polio ward would be too lonely. Once she was out of isolation, Stephens' father would bring movies in on a regular basis and show them to all the children. Both her parents would visit every second day, although her father's career as an engineer for a railway company meant that they could travel back and forth from the hospital for free.<sup>14</sup>

It was not always possible for parents to visit their children as often as they would have liked. Strict visiting hours during the epidemic era combined with other responsibilities made this difficult, and while most parents visited as often as they could, extended family members often worked to fill the void. Sarah Buckley's grandparents visited her at the hospital on the evenings her parents were not there, for example. When Dianne Richards contracted polio, she

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<sup>13</sup> MA, Polio Oral History Project, Sarah Buckley interview, disc one of one.

<sup>14</sup> MA, Polio Oral History Project, Rose Stephens interview, disc one of one.

was sent to the Children's Hospital in Winnipeg from her home town of Neepawa. Her mother could not stay with her in Winnipeg, as she had other young children to look after, but Richards' grandparents and aunt, who lived in Winnipeg, visited on a regular basis.<sup>15</sup>

Despite these attempts and overtures, many of the interviewees remembered the hospital as a lonely place. This was particularly true in the early epidemic era, when the convalescent period was quite long. Esther Kingsley spent over a year in the hospital, and strict visitation rules meant she only saw her sister once, at Christmas.<sup>16</sup> When George Toews entered the hospital with polio at the age of six, he could not speak English, only the Low German his family spoke at home. Toews learned to speak English during his time in the KGH, which included four months in a respirator, and while he thinks that being there "probably broadened my mind and my social horizons a bit," he was very lonely and suggests that he only started to feel better and stronger when he returned home, where he could breathe the fresh air and play with his siblings.<sup>17</sup> June Henry was in grade two when both she and her younger brother contracted polio and she recalls being extremely upset when their parents had to leave them at the hospital. The hospital was certainly a lonely and forbidding place, but families did what they could to keep the patients' spirits up.

Richard Altenbaugh's article "Where are the Disabled in the History of Education? The Impact of Polio on Sites of Learning" provides some context for an examination of the educational experiences of the PPN interviewees. Altenbaugh argues that despite the increasing numbers of school age children with polio in the first half of the twentieth century, "disabled

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<sup>15</sup> MA, Polio Oral History Project, Dianne Richards interview, disc one of one.

<sup>16</sup> Esther Kingsley interview.

<sup>17</sup> MA, Polio Oral History Project, George Toews interview, disc one of two.

people have become virtually invisible in the larger context of the history of education.”<sup>18</sup> As a corrective, he uses many of the same published memoirs as does Daniel Wilson to detail the educational experiences of some individuals with polio-related disabilities. Altenbaugh agrees with Davis’ assertion that school officials were not interested in accommodating people with disabilities, shunting them instead to “special classes for cripples” which had “low social and academic expectations.”<sup>19</sup> He further suggests that for these children, the lines between school, home, and hospital became blurred, as education could take place in any, or all, of those places. An examination of the interviewees’ discussions about their education, and what they remembered about returning back to school, complicates this argument. While the line was often blurred between the home, school, and hospital with parents sometimes homeschooling and teachers bringing assignments to convalescing children, the interviewees all eventually returned to public school. This echoes Daniel Wilson’s findings that most American children with polio-related disabilities “were mainstreamed into public schools.”<sup>20</sup> Returning to school was difficult, emotionally, and physically, and it often was not a fluid transition. It is also evident that school officials and administrators did not place a priority on accessibility; however, an analysis of the PPN oral histories suggests that families, friends, and teachers worked with the children to ensure that their educational needs were met.

The long convalescent period associated with polio meant that the disease often disrupted people’s education. This was more pronounced in the early epidemic era, when long-term rest and immobilization were prescribed. Esther Kingsley was thirteen when she contracted polio in 1937. She spent several weeks in isolation at the KGH and was transferred later to the Children’s

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<sup>18</sup> Richard Altenbaugh, “Where are the Disabled in the History of Education? The Impact of Polio on Sites of Learning,” *History of Education* 35, 6 (November 2006): 705.

<sup>19</sup> Altenbaugh, “Where are the Disabled,” 714.

<sup>20</sup> Wilson, *Living with Polio*, 179.

Hospital to convalesce. Kingsley contracted polio prior to the introduction of the Kenny method and her thirteen-month stay in the Children's Hospital reflected the importance placed on rest and immobilization. She recalled that even though only her legs were affected, she "wasn't even allowed to sit up" while she was hospitalized.<sup>21</sup> Despite the insistence on rest, Kingsley was able to continue her education as teachers from her school, whom she described as "fabulous," visited her at the hospital and later at home to see if she was having "any problems with her studies." She also took correspondence courses for two years before returning to public school. It is possible to view her experience as one in which she was separated from her peers, and Kingsley stated that returning to school was "extremely difficult" for a variety of reasons. However, her teachers' willingness to participate in Kingsley's education indicates that people with polio were not viewed as uneducable and it allowed her to graduate from high school and consider a number of post-secondary options.

Teachers taking the time to invest in the education of children with polio-related disabilities is a recurring theme in the PPN interviews. Jim Loewen contracted polio as a nine year old during the 1952 outbreak in Winkler and while he does not recall missing any school, he did have to repeat fifth grade. Rather than write him off, his teacher took an interest in him making sure that he "was okay" when he came to school. This particular teacher was so helpful that Loewen described her as "almost like a second mother."<sup>22</sup> Kevin Frank also recalled teachers and students being supportive and helpful when he returned to high school after four months in the hospital when he was fifteen.

Even though the introduction of the Kenny method shortened the convalescent period considerably, polio continued to interrupt the education of the children who contracted polio

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<sup>21</sup> Esther Kingsley interview.

<sup>22</sup> MA, Polio Oral History Project, Jim Loewen interview, disc one of one.

during the later part of the epidemic era. Sarah Buckley had only attended first grade for two days before she contracted polio in 1953. Hers was a particularly serious case and she spent seven months in the hospital before being sent home to convalesce. Buckley did not return to school until she was in the third grade.<sup>23</sup> Despite this lengthy absence, she does not recall having difficulty catching up academically. While she convalesced at home, her mother, who had worked as a school teacher prior to marriage, homeschooled Buckley so that she would not fall behind academically. June Henry contracted polio in 1947, when she was in the second grade. Hospitalized at Winnipeg's Children's Hospital, she does not recall the institution providing a teacher or academic work.<sup>24</sup> Her mother also tutored her and, like Buckley, she did not recall being behind academically. While polio disrupted children's education in very real ways, community and family members worked to normalize this aspect of their lives as much as possible.

Although most interviewees did not feel as if they were behind academically after returning to school, social re-adjustment was more complicated. George Toews contracted polio in the fall of 1953, just as he was about to begin first grade. Toews spent a considerable period of time in a respirator and could neither stand nor walk when he returned home. As a result Toews, the oldest of nine siblings, two of whom also contracted polio in 1953, was homeschooled until the fifth grade.<sup>25</sup> Upon entering public school for the first time, he felt "a bit self-conscious about the disability because it sort of marked you as different, and even the kids would reflect some of the stereotypes." This shyness lasted until the beginning of tenth grade when Toews became "very outgoing," made a number of friends, and became a part of "a real active social

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<sup>23</sup> Sarah Buckley interview.

<sup>24</sup> MA, Polio Oral History Project, June Henry interview, disc one of two.

<sup>25</sup> George Toews interview.

network.”<sup>26</sup> Like most of the interviewees, Donna McGillivray’s educational experiences fell somewhere on a continuum between positive and negative. She does not recall being close with her classmates, and was “bedridden” in grade nine due to surgery to correct her polio-related scoliosis, yet she participated in her school’s choir and was voted class president in grade eleven.<sup>27</sup>

Many interviewees recalled their school years in a positive or neutral manner. Anne Friesen recalled enjoying the academic side of school, but found the social aspects more difficult. While she did not point to any specific incidents, she intimated that she “didn’t always feel that [she] was part of the group.” Nevertheless, Friesen “blossomed” in high school, where she had a boyfriend and joined a number of groups.<sup>28</sup> Carol Waters remembered having “a lot of fun” at school, even though she was not “an A student.” When reflecting on her childhood, she noted that she “had a good group of friends that included me in everything and I never felt different. I never felt out of place.”<sup>29</sup> Rose Stephens had a group of friends with whom she socialized in high school. One girl, she recalled, had a large basement where they always hung out. Stephens was always invited to these activities: her wheelchair was not an obstacle or deterrent.<sup>30</sup> Cynthia Comacchio’s examination of the construction of the modern Canadian teenager suggests that high school experiences, both educational and social, were predicated on a number of conditions including ethnicity, class, and gender.<sup>31</sup> Those who did not appear to conform to the normative ideal often felt rejected or isolated. While visible disabilities placed people with polio outside the

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<sup>26</sup> George Toews interview.

<sup>27</sup> Donna McGillivray interview.

<sup>28</sup> MA, Polio Oral History Project, Anne Friesen interview, disc one of one.

<sup>29</sup> MA, Polio Oral History Project, Carol Waters interview, disc one of one.

<sup>30</sup> Rose Stephens interview.

<sup>31</sup> Cynthia Comacchio, “Inventing the Extracurriculum: High School Culture in Interwar Ontario,” *Ontario History* 113, 1 (Spring 2001): 33-56.

normative ideal, it is clear that not everyone with a polio-related disability felt ostracized during their formative school years.

Non-accessible schools presented further challenges for young students with polio related disabilities, although most found ways to attend class with assistance from friends and family members. Like most schools built in the early twentieth century, the elementary school in Sarah Buckley's southwestern Manitoba town was not accessible. The large staircase leading up to the only entrance made it impossible for Buckley, who used a wheelchair, to enter the school. Her father, who worked as a pharmacist and was able to leave work briefly at multiple points during the day, was the one who made sure Sarah entered the school. Every day he would carry her wheelchair up and down the staircase in the morning, at lunch, and at dismissal. When she transitioned to high school, there were only three stairs leading to the front entrance, and her friends or her sisters would pull her wheelchair up them.<sup>32</sup>

Rose Stephens contracted polio when she was three years old and, like Sarah Buckley, used a wheelchair. In her interview, she did not mention having any issues with the elementary school she attended in Brandon, but high school was more problematic as the one in her neighbourhood was two stories high and not accessible. The entrance was level with the ground, and because all of her ninth grade classes were on the first floor, she did not have any issues. Starting in tenth grade, some of her classes were on the second floor and Stephens recalled a meeting between her parents and the principal, who suggested she attend a high school across the city because it was all one story. Stephens' parents thought that was a reasonable alternative; however, she refused to consider it as she did not want to leave her friends. Somehow – Stephens is not clear on the particulars, as she did not attend any of the meetings with the principal and her

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<sup>32</sup> Sarah Buckley interview.

parents – it was agreed that she could stay at her original high school, but she had to find classmates who would carry her and her wheelchair up and down the stairs. If anyone had been worried about that particular arrangement, they need not have been. It “worked beautifully” for the remaining three years she was in high school; in fact, Stephens recalls the boys in her classes fighting with each other for the right to carry her to her classes.<sup>33</sup>

Incidences of banding together to assist a friend or family member seem to have been common among the interviewees, both at school and in their broader lives. Maurice Tremblay’s brothers would pull him to school on a wagon, although he remembers one incident when he fell off the wagon while they were crossing a busy street and was almost run over by a car.<sup>34</sup> When George Toews was ready to return to school, his father hired two boys who had a jeep to take him to and from school and Sarah Buckley’s neighbours set up a system of rotating babysitters so her parents could make the long trip to visit her in the hospital without having to bring her siblings every time.<sup>35</sup> Esther Kingsley’s neighbours were also eager to be of assistance. One of her neighbours successfully lobbied the municipality to have her hospital bill written off and the “fellow who owned the local hardware store” also extended a helping hand to the Kingsley family. Kingsley’s mother used to call a cab to take her to bi-weekly physiotherapy appointments; however, this neighbour offered the services of his teenage son, telling the Kingsleys “why should you take a cab when my son is in the shop doing nothing. He’ll drive you.”<sup>36</sup> And he did drive them to and from her appointments for several months.

Childhood is often a difficult time socially and the visible disabilities engendered by polio made this period particularly difficult for some. Sarah Buckley did not recall feeling

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<sup>33</sup> Rose Stephens interview, disc one of one.

<sup>34</sup> MA, Polio Oral History Project, Maurice Tremblay interview, disc one of two.

<sup>35</sup> George Toews interview, disc two of two; Sarah Buckley interview.

<sup>36</sup> Esther Kingsley interview.



nervous or excluded as her parents had prepared her for her first day back at school, and her classmates all knew that she would be there with her wheelchair.<sup>37</sup> Others, however, did not feel so included and welcomed. Jessica Smith, who contracted polio at fifteen months old, recalled that when she did go to school she was “teased a lot because of my leg.” While she did not let that teasing stop her from pursuing an education and participating in activities at school, she admits that “the teasing hurt because some kids were really cruel.”<sup>38</sup> Smith was not the only interviewee who remembered being teased by her classmates for a polio-related disability. Dianne Richards, who contracted polio when she was five and afterwards wore a brace on one leg, went to school in both Neepawa and Winnipeg. Sometimes boys would steal her crutches and tease her. “Kids are mean,” she stated when discussing her classmates’ reaction to her leg brace, “that’s the way it is.”<sup>39</sup> Maurice Tremblay also remembered poor treatment by his peers. His left side was paralysed and he had to wear a body cast after a surgical intervention. At recess, the other children would throw balls at his body cast and try to punch it, often leaving Tremblay in tears.<sup>40</sup>

School was not necessarily a negative place for the majority of the PPN interviewees, but sporting activities were an area where children could have been reminded of their physical differences. Maurice Tremblay recalls that he was always the last to be picked for school teams but others did not have the same experience. Alice Jones, whose shoulder and arm were weakened, recalled that while “she was never any good at sports because of polio,” she always tried every activity and Jones was involved with many of her school’s teams, either as a

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<sup>37</sup> Sarah Buckley interview.

<sup>38</sup> MA, Polio Oral History Project, Jessica Smith interview.

<sup>39</sup> MA, Polio Oral History Project, Dianne Richards interview.

<sup>40</sup> Maurice Tremblay interview.

scorekeeper or team manager.<sup>41</sup> While she may not have participated directly, she was always welcomed by the coaches and players. Carol Waters recalled playing baseball as a child, even though her legs were affected by polio, and she states that she was never the last one chosen when classmates were choosing teams in gym class. Jim Loewen's right side was paralysed, but he regained enough mobility in his arm to join his high school's fastball team. William Haas participated in wheelchair basketball as a young adult, as did Sarah Buckley's husband.<sup>42</sup>

Other interviewees recalled attempting to participate in physical activities, often with humorous results. Dianne Richards' brothers really wanted her to go waterskiing with them in the summer and she recalls fondly that they would compete to see who could get her in the water first. One of her brothers turned an old wooden toboggan into a sort of water-sled and the contraption worked fine – at first – until the boat started going too fast and water started spraying into her face. Richards remembered falling off and laughing while making her way back to shore.<sup>43</sup> At her request, Franny Brown's parents enrolled her in a dance class, but that only lasted for one day because she inadvertently kicked herself so hard that her father had to take her home. This led, she recalled, to a long-running family joke, as various family members would ask her to tap dance for them.<sup>44</sup> Polio may have circumscribed some people's ability to participate in organized sports, but many were able to keep physically active.

One activity that was viewed as extremely therapeutic was swimming. Rose Stephens recalled taking swimming lessons as a child, even after she contracted polio, and lamented that the “physically disabled were sort of streamlined out” of such activities.<sup>45</sup> A number of

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<sup>41</sup> Rose Stephens interview; Alice Jones interview.

<sup>42</sup> MA, Polio Oral History Project, William Haas interview; Sarah Buckley interview.

<sup>43</sup> Dianne Richards interview.

<sup>44</sup> MA, Polio Oral History Project, Franny Brown interview.

<sup>45</sup> Rose Stephens interview.

interviewees recalled swimming at YMCA pools and the hydrotherapy pools at the Princess Elizabeth Hospital and later the Misericordia Hospital in Winnipeg.<sup>46</sup> Kevin Frank was unequivocal in his support of swimming for people with polio-related disabilities. Swimming, he stated, “has kept me going physically for the last thirty, forty years.”<sup>47</sup> The hydrotherapy pools are central to the lives of many people with polio-related disabilities. Dianne Richards admitted that she could easily find an excuse not to go to the classes, but she makes herself go because she knows how beneficial it is, and how much she loves being in the pool. This was clearly one of the positive aspects of the rehabilitation projects that were implemented in the later part of the epidemic era.

Ideas about disabilities had an impact on the post-secondary aspirations of some of the PPN interviewees, but disability was not the only category that shaped their experiences. In *The Gender of Breadwinners*, Joy Parr posits that “through time and space, the processes by which class and gender identities are formed, and the elements from which these processes are constituted change.” There are, she writes, “conjectures when gender identities are lodged firmly in the foreground [and] give meaning to their experience”; however, there are other “times when the relative positions of class and gender relationships are reversed, times when racial, ethnic, or national identities assume greater prominence” than other discursive categories.<sup>48</sup> Following Parr, I argue that disability is another part of this process. For some women, social beliefs about disability mediated their experiences, while at times discourses and assumptions about gender

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<sup>46</sup> June Henry interview; Arthur Epp interview; Barb Thompson interview; Peggy Johnson interview; Dianne Richards interview. See the previous chapter for a discussion of the hydrotherapy pools in Winnipeg.

<sup>47</sup> Kevin Frank interview.

<sup>48</sup> Parr, *The Gender of Breadwinners*, 10.

intertwined with, or took precedence over, their experiences in the workplace and interactions with educators, employers, and colleagues.

While not all of the interviewees had positive experiences in public school, many decided to continue their education. In the post-war period, post-secondary education became accessible to more Canadians than ever before. Canadian universities, however, were not built to accommodate those with disabilities. Nevertheless, many of the interviewees did attend university. Kevin Frank moved to Winnipeg to attend university and recalls “dating a lot” during his undergraduate years. He also admits that, like myriad other young people experiencing life away from the watchful eye of their parents, he “partied too much,” so much so that he had to repeat his second year of studies. Nevertheless, he completed his degree and became a chartered accountant, a career which his mother had suggested to him, as it meant he would not have to be on his feet for too long.<sup>49</sup> June Henry also attended university, obtaining both a Bachelor of Science and a Bachelor of Education degree.

Broader ideas about respectable work for women constrained employment options for women, as did ideas about disabled people. During the early epidemic era, two viable employment options available to women were nursing and teaching. Dominant ideologies concerning respectable work for women combined with Franny Brown’s disability to limit her choice of career. Brown contracted polio in 1928 when she was two years old. Immediately following the acute stage of the disease, Brown’s legs and arms were paralysed, and physicians told her parents that it was unlikely that she would ever walk. Eventually, the paralysis dissipated in her legs and arms, although she was left with paralysis in her left hand and one weaker leg. Brown stated that she originally wanted to join a religious order, but her father forbade it, leaving

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<sup>49</sup> Kevin Frank interview.

her with two options: nursing or teaching. At eighteen, she applied to nursing school and started the course without telling anyone that her hand was paralysed. The nursing instructors only found out when she was unable to lift a patient and Brown was told that she could not continue. Disappointed, she returned to high school to finish grade twelve and resigned herself to becoming a teacher, even though she found normal school to be “boring.”<sup>50</sup> Like many other women in the 1930s, Brown worked as a teacher in a rural schoolhouse, her choice of career doubly constrained by ideas about disabilities and acceptable work for women.

Gendered notions about women’s work were often interwoven with, or took precedence over, ideas about disability. Carol Waters, who had residual paralysis in her legs, suggested that while polio “definitely affected the type of job she could do,” most of the work-related challenges she experienced occurred after she separated from her husband and became a single mother. She recalled one boss who made her position “stressful” because he was not tolerant of single mothers in the workforce and she had to find a position in another town where her employer was “sympathetic” to both her needs as a single mother and a person with a disability.<sup>51</sup> The impact of gendered workplaces was also made clear to Rose Stephens. In 1970, after completing her Bachelor of Science degree, Stephens and the only other female graduate interviewed with a large corporation that had sent recruiters to the campus. When the two women entered the interview room, they were told that they would not be hired because the place of employment did not have women’s washrooms.<sup>52</sup> While these employers may have been able to overlook Stephens’ polio-related disabilities, they were not able or willing to accommodate women workers.

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<sup>50</sup> Franny Brown interview.

<sup>51</sup> Carol Waters interview.

<sup>52</sup> Rose Stephens interview.

Dominant discourses about the employability of people with polio-related disabilities affected the educational and career aspirations of women during and after the epidemic era. Sarah Buckley, who used a wheelchair, aspired to be an educator. After completing successfully a Bachelor of Arts degree, Buckley decided to pursue an education degree; however, the visible marker of her disability – a wheelchair – influenced the way university administrators viewed her and her suitability for the program. Buckley recalled a meeting with a university official who denied her the opportunity to begin the education program. Citing the encounter as a “strong memory in her mind,” Buckley remembered the official telling her that she could not enter the program because she would never be able to find a job as a teacher. “How on earth,” the administrator asked, “would you ever write on the blackboard.”<sup>53</sup> Instead, Buckley reluctantly took a business course and found employment as a secretary for a group that assisted people with disabilities.

Rose Stephens faced similar obstacles at two different points in her educational career. After completing high school, Stephens, who had long wanted to be a physician, tried to enrol in a laboratory technician program at a university. Her application was turned down because program administrators feared that she would be a “danger in the lab” on account of her wheelchair. Undaunted, Stephens enrolled in a Bachelor of Science program at a different campus.<sup>54</sup> After working for several years as a research scientist, Stephens was still desirous of becoming a physician and applied to medical school. Despite having all the pre-requisites, the Associate Dean of the program denied Stephens the chance to enroll in the program because he did not believe she would be able to complete either the obstetrics or the surgical rotations because she used a wheelchair. She completed an MBA instead – a significant accomplishment –

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<sup>53</sup> Sarah Buckley interview.

<sup>54</sup> Rose Stephens interview.

but not the one she had originally hoped to pursue. In the mid-1960s, and again in the 1980s, Stephens was denied educational opportunities because of her polio-related disabilities.

While all of the women who contracted polio as children worked for some portion of their adult lives, and some did not feel their polio-related disabilities played a role in their educational or work experiences, many remembered feeling anxious while looking for work. This anxiety centred on how they believed they would be perceived by potential employers. Esther Kingsley, who used crutches and wore a leg brace, recalled that looking for work following the successful completion of a business course was “probably the most traumatic experience in my whole business involvement.” Kingsley’s anxiety was due to uncertainty about “how people would react to someone on crutches coming in looking for a job” and she purposely searched for a career in public service as she believed that would offer the most “even playing field.”<sup>55</sup> After a few temporary positions, she found a position with Canada Post where she worked for forty years and was promoted several times. Dianne Richards, who worked at a few jobs before beginning a long career at a financial institution, addressed this problem directly in her interview, stating “I didn’t know I was a handicapped person until I started working.” Her parents had made sure to treat Richards in the same manner as her siblings, and her disability was not an issue until she began interacting with people who did not have experience with people with disabilities. For Richards, these issues were most apparent when she started a new position and the other employees were unsure of how to treat her or what to expect from her until they realized “it is not my head. It is just the leg.”<sup>56</sup> Alice Jones, who worked as an administrative assistant until the birth of her first child, was certain that her employer hired her because she had

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<sup>55</sup> Esther Kingsley interview.

<sup>56</sup> Dianne Richards interview.

attended school with his nephew.<sup>57</sup> Anxiety that accompanies the interview process is certainly a regular feeling, but it is clear that ideas about how people with disabilities were perceived increased the anxieties of many of the PPN interviewees.

Polio-related disabilities did not always cause anxiety for the female interviewees in the course of their working life. After high school, Donna McGillivray attended a business college to learn typing and shorthand. She did not recall any problems when she was looking for a job and worked for a variety of employers until she married and had children. Anne Friesen, who contracted polio in 1952 when she was eleven years old, worked as a nurse for many years, a career choice that she attributed directly to her polio experience. Her decision to enter a nursing program, Friesen suggested, “had partly to do with the polio. I wanted to help those who were sick and couldn’t care for themselves. That [impulse] came from when I had polio.”<sup>58</sup> While nursing has long been considered appropriate women’s work, some women’s experiences with polio and hospitalization meant that this career path resonated with them particularly.

In his studies of polio ‘survivors,’ Wilson suggests that it was imperative for men with polio-related disabilities to prove they were masculine, particularly through the way they approached the disease and their ability to find a job and support their families. He contends that while all American men felt pressure to live up to the masculine breadwinner ideal, men with polio felt it more profoundly, because they had contracted a disease that was thought largely to be a children’s disease and because polio “infantilized” them: they had to re-learn how to walk, and, in some cases, had to rely on other adults to take care of their most basic needs and bodily functions. Wilson argues that in order to counteract this emasculating disease, men with polio used military metaphors to aid in their rehabilitation. They could, if nothing else, “fight polio like

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<sup>57</sup> Alice Jones interview.

<sup>58</sup> Anne Friesen interview.



a man.”<sup>59</sup> Elsewhere, Wilson suggests that “male survivors, in particular, saw work for wages as crucial to their sense of masculinity.”<sup>60</sup> Only five of the PPN interviewees were male, making it difficult to make comparisons or establish patterns. Nevertheless, while polio-related disabilities and broader ideas about people with disabilities informed their careers, they did not tie their ability to work to ideas about masculinity, at least in explicit ways. Rather, the PPN interviewees took stock of their physical characteristics and found paid employment that worked for them, in the particular contexts of their lives.

Polio-related disabilities did have an impact on the career aspirations of the males who participated in the interviews. All but one of the male PPN interviewees were involved in paid employment throughout their adult lives. Arthur Epp and Kevin Frank took their polio-related disabilities into consideration when planning their careers. Arthur Epp had been a minister prior to contracting polio in 1953 when he was thirty years old. Epp’s arms were paralyzed and he did not believe that he could continue on that path. He explained that prior to contracting the disease he had embarked on a building project with his church, but that he felt unable to contribute afterwards. “With polio,” Epp stated, “it changed.”<sup>61</sup> While it was not an easy decision, he decided to take the opportunity to further his education, and he began studying for his doctorate. It was not an easy journey: while in school he worked as a janitor to strengthen his arms and his studies took him to the United States and Germany. Yet, when taking his polio-related disabilities into account, Epp knew that working as a professor would be a better fit for him in the long run. Kevin Frank, whose legs and stomach muscles were affected by polio as a fifteen

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<sup>59</sup> Daniel Wilson, “Fighting Polio like a Man: Intersections of Masculinity, Disability, and Aging,” *Gendering Disability*, eds., Bonnie G. Smith and Beth Hutchinson (New Brunswick: Rutgers University Press, 2004): 122.

<sup>60</sup> Wilson, *Living with Polio*, 196.

<sup>61</sup> MA, Polio Oral History Project, Arthur Epp interview, disc one of one.

year old in 1952, suggested that while he always focused on working “around” his disabilities, he consciously chose a career that “did not involve being on his feet.”<sup>62</sup> Frank toyed with studying medicine or dentistry, but knew that those professions would mean standing for long periods of time. By the time he enrolled in university, his muscles had recovered enough so that he could walk, golf, and swim, but he still decided to study finance, as a career in that field would not require long periods of standing.

The post-war vocational rehabilitation programs did not factor into the lives of the PPN interviewees. Only two of the interviewees mentioned retraining programs, and neither characterized them as particularly helpful. William Haas contracted polio in 1953 just as he was beginning grade nine and he missed an entire year of school while hospitalized at the KGH and Princess Elizabeth Hospital. After his release, he found it difficult to return to high school and registered instead for a vocational course in upholstery offered by the SCCA. Haas did not finish the course because the instructor was “harsh” on him because of his disability.<sup>63</sup> John Straub was twenty-three years old in 1953 when he contracted a particularly severe case of polio. He spent a five years in a respirator at the KGH and was paralysed permanently from the waist up. Prior to contracting polio Straub had worked on his family’s farm, a career he expected to have for the rest of his life. Upon his release from the hospital, he moved back to the family farm but was unable to resume his regular work. His polio-related disabilities precluded him from finding paid employment in the nearest town and his sibling took over the family farm. The discourse about the importance of vocational rehabilitation, detailed in the previous chapter, would have been useful for Straub as the goal was to retrain people with disabilities to find employment that ostensibly worked for them but he was never given the option. When he moved back to

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<sup>62</sup> Kevin Frank interview.

<sup>63</sup> William Haas interview, disc one of one.

Winnipeg thirty years later, he lived in a care centre which focused on teaching “life skills.” Straub did not think this was a good fit, classifying it as a “waste of time.”<sup>64</sup> While he sat on a few boards and committees he did not work for wages after contracting polio, partly because he was not given the tools to do so.

While several of the male interviewees suggested that economic factors affected their career choices and changes, it is clear that their disabilities and broader ideas about disability also had a significant impact. As a young man Haas worked in a variety of jobs such as a farm hand, hospital orderly, and security guard and he suggested that his inability to “hang onto a job for any great length of time” was due in part to views about people with disabilities. It is impossible to know the motivations or thoughts of the employers Haas referenced, but is interesting to note that he ultimately found a long-term career, like Esther Kingsley, with the post office.<sup>65</sup> Haas was not the only male interviewee who changed careers more than once. Maurice Tremblay left school at the age of sixteen to work in his family’s business, which he did for several years until that particular industry collapsed. Tremblay returned to a technical school to find a trade and worked his way up through the management levels in a variety of media related areas until he lost his job due to downsizing. Despite being in his mid-forties, he re-trained as a massage therapist, but was unable to complete this program due to increasing fatigue related to polio.

Social ideas about people with disabilities propelled George Toews career choices. While in university, Toews met a visually challenged classmate who was having difficulty finding audio textbooks for his courses. Toews decided to apply for funding to start an audio book reading company and while the company went bankrupt a few years later, he believes that his

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<sup>64</sup> MA, Polio Oral History Project, John Straub interview, disc one of one.

<sup>65</sup> William Haas interview.

initiative “set in motion a lot of reforms,” and had a positive impact.<sup>66</sup> Toews later worked for a number of organizations for people with disabilities with a focus on training people with disabilities to run their own organizations. Early organizations, according to Toews, were run by “non-disabled professionals” and people involved with charities and he resented that those people were speaking for people with disabilities. He wanted to ensure the active participation and leadership involvement of people with disabilities. Toews carved out a proactive and important role for himself, based on his experiences with polio-related disabilities.

The majority of the PPN interviewees were young when they contracted polio, and as they grew into adults they had to consider not only school and work, but relationships as well. The majority of the interviewees married at least once in their lives and while the intimacies of relationships were not a part of the interviews, it is an important topic that needs to be considered. Daniel Wilson suggests that “many polio narratives mention marriage and family as a matter of course and without elaboration,” but an analysis of the PPN interviews indicates that the relationship between disability and dating or marriage is complex and gendered.<sup>67</sup> The male interviewees who married indeed addressed their girlfriends and wives very matter-of-factly and few of the men discussed relationships as a necessary step in proving their masculinity or virility. The women, however, were slightly more open about the challenges they faced as women with disabilities who also wanted to enter into romantic relationships.

George Toews was the only interviewee who addressed directly issues of sexuality and disability. He commented that while many of his high school friends married and settled down in their early twenties, he did not, which he attributes to his disability. He recalled that when he did begin to date, he was “a little more assertive in my sexuality than I would have liked to have

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<sup>66</sup> George Toews interview.

<sup>67</sup> Wilson, *Living with Polio*, 207.

been [and] I might have taken a more balanced approach, a more gentle approach to things if I hadn't felt the need to demonstrate something that the world couldn't see."<sup>68</sup> Other male interviewees introduced their wives or girlfriends to their narrative with less introspection. Kevin Frank, who met his wife on a blind date, positions her as a "very understanding woman," but there is no outward questioning of whether or not he would find a partner.<sup>69</sup> Haas also met his wife on a blind date. Haas had been married for almost forty years at the time of the interview, and while he remembers that his in-laws were not originally impressed with him, he believed it was because he already had a child, not because he had a disability.

The female PPN interviewees were more ambivalent about their dating and relationship experiences. Many recalled feeling awkward as teenagers and young adults when it came to dating and did not form romantic relationships. Carol Waters recalled one incident – having a boy turn down her invitation to a school dance – which made her dislike dances. She saw him again many years later at her high school reunion and he apologized to her, explaining that he was so shy in those days that he did not know how to react to her overture. While her polio-related disability did not enter into his narrative, she believed that it did.<sup>70</sup> Alice Jones did not have any high school romances, which she does not necessarily attribute to polio. Jones recalled that she and her best friend were both a bit "heavier" and were not part of the "in-crowd."<sup>71</sup> In this context, high school popularity hierarchies may have come into play more than other factors such as disability. Donna McGillivray was more direct, stating that she did not have a high school boyfriend because she had gone through a number of surgeries due to her polio-related

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<sup>68</sup> George Toews interview.

<sup>69</sup> Kevin Frank interview.

<sup>70</sup> MA, Polio Oral History Project, Carol Waters interview.

<sup>71</sup> MA, Polio Oral History Project, Alice Jones interview.

disabilities and “was pretty deformed by then.”<sup>72</sup> Several of the interviewees had different experiences, and did participate in youthful romances. Dianne Richards dated others before she met her future husband and while Anne Friesen remembered sometimes feeling left out in elementary school, she “blossomed” in high school and had a boyfriend. Franny Brown, who contracted polio as a two year old in 1928, attended an all-girls high school. She recalled that because the school was close to a military base there were “always boys around” but she would not say whether or not “there were romances” at that time.<sup>73</sup>

Dating and relationships were complex and personal subjects for the female PPN interviewees, and while none of the interviewees referred to sex or sexuality, some spoke to the interwoven aspects of disability, gender, and relationships. Sociologist Claudia Malacrida points to this idea in her study of mothers with disabilities. “Women with disabilities,” Malacrida posits, “are often perceived as falling short of cultural ideas of attractiveness and suitability for heterosexual love and motherhood.”<sup>74</sup> When Dianne Richards got engaged, she felt a sense of pride at being able to show off her “handsome six foot tall fiancé” to those in her neighbourhood. While this may be a regular reaction for someone planning a wedding, for Richards, it had another meaning. She recalled that some people in her neighbourhood were surprised with her news, because there was an overwhelming belief that people with disabilities had to stay “in the closet” or at home with their parents without participating in heteronormative rituals such as dating and marriage. In doing so, Richards was able to confirm to others that she was able to perform successfully the gendered roles attributed to women despite polio-related disabilities. When asked by the interviewer if she dated in high school or university, Sarah Buckley stated

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<sup>72</sup> Donna McGillivray interview.

<sup>73</sup> Dianne Richards interview, Anne Friesen interview, and Franny Brown interview.

<sup>74</sup> Claudia Malacrida, “Negotiating the Dependency/Nurturing Tightrope: Dilemmas of Motherhood and Disability,” *Canadian Review of Sociology* 44, 4 (2007): 471.

that while she did date a bit in university, overall “circumstances did not allow it.” She added that it was less common for women with disabilities to date than men, because women can overlook disabilities easier than men can.<sup>75</sup> Because women biologically bear children, they have historically been trained to be nurturers and this extends to male partners. As Malacrida suggests, “women are expected to provide both to the men in their lives” and to their children.<sup>76</sup> Thus it would be, as Buckley articulated, more acceptable for a woman to date a man with a disability as it did not place her outside her historically constructed role as nurturer.

Despite the myriad issues which rendered dating and forming relationships problematic, many of the PPN women did marry and have children. While motherhood is never easy, broad social ideas about motherhood and women with disabilities influenced their desires to parent, particularly if their polio-related disability was apparent. This section of the chapter interrogates some of the women’s experiences with motherhood in two ways. First, it examines the ways women with polio-related disabilities who had biological children negotiated the demands of motherhood. Some of the women had children many years after having contracted polio, however, three of them were pregnant when they contracted the disease, which complicates the motherhood narrative considerably. Nevertheless, I suggest that they did parent and did consider themselves to be effective mothers, even if they did so in ways outside what is considered traditional motherhood. Second, it interrogates the experiences of the women who adopted children, a process that brought them into contact with social workers. In this context, women whose polio-related disabilities were less visible and less obvious had an easier time adopting; that is, they were more likely to be seen as fit for motherhood than those with visible disabilities.

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<sup>75</sup> Sarah Buckley interview.

<sup>76</sup> Claudia Malacrida, “Performing Motherhood in a Disablist World: Dilemmas of Motherhood, Femininity, and Disability,” *International Journal of Qualitative Studies in Education* 22, 1 (2009): 99.

Experts viewed potential adoptive parents and their disabilities in particularly gendered ways: men with visible disabilities were more likely to be considered as acceptable potential parents than women with visible markers of disability.

The poliovirus did not prevent women from bearing children, but polio-related disabilities and ideas about women with disabilities complicated women's motherhood experiences. Many of the female PPN interviewees who contracted polio as children bore children as young adults. Alice Jones, who married a man with whom she had been friends with since childhood, recalled always wanting children. As did many young mothers in the 1970s, Jones quit her job before the birth of her first son; however, she did not believe her polio-related disability impacted her parenting in any way. Indeed, the loss of her mother a few months prior to the birth impacted her more strongly, as she did not have anyone to turn to for assistance.<sup>77</sup> Donna McGillivray also believed that other factors affected her parenting decisions and experiences far more than did her polio-related disabilities. McGillivray's polio-related disabilities did not play into her decision to construct herself as a "traditional" mother who did not work outside the home for wages.<sup>78</sup> For McGillivray and her husband, financial stability was the most important factor and they waited to have children until they had bought their own home and were in a position whereby she could stay home with the children.

Some of the female interviewees did find that their polio-related disabilities necessitated some ingenuity, particularly when their children were infants. Carol Waters, whose legs were affected by polio, had two daughters. Unlike Jones, she felt that her polio-related disabilities did affect her parenting, at least when her children were young. Waters' disability meant that she tripped a lot and as a result she had to find ways to carry her infant daughter so that if she did

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<sup>77</sup> Alice Jones interview.

<sup>78</sup> Donna McGillivray interview.



trip, the baby would not be injured.<sup>79</sup> While she had to be mindful of that, Waters suggests that her separation from her husband and subsequent years as a single mother were more difficult than negotiating around her disability. Dianne Richards' experience was similar. She recalled that while her pregnancies were routine, in that she did not have any complications, she did have to remind her doctor that her leg was paralysed and that he had to be careful not to drop it when he was examining her progress during labour. When her sons were babies, she often carried them in a blanket as that was easier for her. Both her sons were very early walkers, and she wondered if this was because they did not want to be carried that way.<sup>80</sup>

Three of the PPN interviewees were pregnant when they contracted polio, and two gave birth while at the KGH. Barb Thompson was eight and a half months pregnant when she contracted polio in 1953. She first started feeling unwell on the last day of September and four days later was transported to the KGH, with her arms and legs completely paralysed. Thompson gave birth to her second child there. Although a potentially tense situation, Thompson was able to find humour in the situation. Because it was the height of the 1953 epidemic, the nurses were all too busy to attend the birth. A number of doctors, however, were interested in the situation and Thompson laughed while recalling that she gave birth with no nurses, but seven or eight doctors in attendance. Immediately after the birth, her daughter was transferred to the Children's Hospital; however, because the ambulance driver was nervous about taking a newborn baby, he drove with his siren on, but very slowly, a story Thompson remembered fondly. Despite this, Thompson knew her situation was potentially grave: another woman on the polio ward had also

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<sup>79</sup> Carol Waters interview.

<sup>80</sup> Dianne Richards interview.

had a baby there, but that baby passed away.<sup>81</sup> While Thompson was unsure of what the future held, she was comforted by the fact that her newborn daughter was in good health.

Women who contracted polio as adults found that the disease changed the contours of motherhood, often in multiple ways. Peggy Johnson recalled being a “terribly inexperienced mother” when her first child was born; however, that may have paled in comparison to her second pregnancy, as Johnson contracted polio in 1953 when she was twenty-six years old and four and a half months pregnant. Johnson remembered that polio was definitely around that summer and she and her husband were cognizant of it, so much so that her husband purchased polio insurance. While Johnson remembered that some people avoided crowds that summer, she was “of the mind that you carried on” in the face of epidemic disease. Johnson was playing bridge the night she began feeling ill; in fact, members of three of the four families at the bridge game that weekend contracted polio. Johnson’s husband was first diagnosed with a mild case of polio, and ten days later Johnson and her two and a half year old daughter contracted the disease. Within a few days, Johnson was sick enough that she “could not move” and she was sent to the KGH. Her left leg and her torso were weakened. Johnson suggests that with polio, “your life was profoundly changed. One day you were well and one day you weren’t.”<sup>82</sup> Despite a short time in the hospital, polio continued to affect Johnson’s life and her motherhood experiences.

The jarring effects of polio reconfigured Johnson’s life in intimate ways. After spending a month in the KGH, Johnson was released and sent home. She wondered often how polio had affected her pregnancy and how she would care for a toddler and a newborn. Her son was born

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<sup>81</sup> MA, Polio Oral History Project, Barb Thompson interview, disc one of one.

<sup>82</sup> MA, Polio Oral History Project, Peggy Johnson interview, disc one of one. Although Johnson was in considerable pain when she was taken to the KGH, she remembers two things: first, that it was raining that day, and second, that the KGH entranceway had a lot of stairs, which she said, considering it was a hospital “for disabled people, that is pretty stupid.”

underweight and with severe health problems, which she seemed to connect to her polio.<sup>83</sup> To complicate matters further, Johnson became pregnant again almost immediately after her second child's birth, leaving her with three children under the age of four, one of whom had severe health issues. While Johnson hired people to help with the housework, her husband travelled a lot and she was left with the bulk of the parenting duties. Johnson believes that her third child was affected negatively by both her polio-related disabilities and her second child's health issues. According to Johnson, he had trouble accepting that she "looked different" from other mothers, and resented that she had to spend so much time on her other child's health issues. In this context, while polio did not take a serious toll on Johnson physically, it continued to leave its imprint on her life as she raised her children.

The long hospital stays associated with polio and the severity of some of the women's disabilities meant that they were not necessarily their children's primary physical caregivers, either in the short or long term; however, none of them believed that that made them any less of a mother. While post-war ideologies dictated that mothers ought to be the primary caregivers for their children, mothers with polio-related disabilities found that often they had to rely on family members and friends for assistance. Emma Lawrence delivered a child while at the KGH and her severe polio-related disabilities affected her family in many complicated and permanent ways. Lawrence had a two-year old daughter and was several months pregnant when she contracted polio in the late summer of 1953. She had been feeling unwell for a few days, and was troubled particularly by a "violent headache." Her doctor suggested she go to the KGH, but she did not consider it until the next day when she attempted to brush her teeth, but could neither raise her arm nor swallow. Lawrence remembered that every time she woke up in the KGH, another part

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<sup>83</sup> Peggy Johnson interview.

of her body had “stopped working,” and one day she woke up in a respirator. She did not remember being placed in it, but when she woke up, her husband was there, and Lawrence knew then that her situation was serious, because the only people who could have visitors in an isolation hospital were the people who were “dangerously ill.”<sup>84</sup>

Despite the precariousness of her health, Lawrence had another concern: she could feel that she was in labour. She was, however, unable to speak and could not alert anyone to the impending birth. Her husband had asked a family friend who was a nurse to check on her and when that friend entered the room, she sensed something – something other than polio – was wrong. Her friend reached through one of the portals in the respirator, felt Lawrence’s abdomen, and immediately alerted the medical staff that Lawrence was in labour. Although she did not go into the details of her son’s birth, Lawrence noted that he was delivered by forceps and was taken immediately to the Children’s Hospital. This occurred in October 1953 and she did not see her son until May of the following year, on Mother’s Day.<sup>85</sup>

Lawrence’s long separation from her newborn son was only the beginning of the reconfiguration of her motherhood. Although she regained the ability to breathe and swallow shortly after giving birth, her polio-related disabilities were particularly acute. Lawrence was paralysed from the neck down, and while she eventually regained some movement in her right leg and her left foot, she remained paralysed from the waist up. As a result, Lawrence remained in the hospital for a year, at which point her husband took her to Warm Springs in the United States for rehabilitation, where she remained from October 1954 until April 1955, receiving

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<sup>84</sup> MA, Polio Oral History Project, Emma Lawrence interview.

<sup>85</sup> Emma Lawrence interview. Lawrence was conscious for the birth of her son and recalled that there were three other polio patients in respirators in her room – two women and a man. Despite all the activity, the medical staff whisked the male patient – still in his respirator – out into the hallway during the birth. Even during emergencies and epidemics, gendered notions regarding birth and propriety had to be observed.

physical and occupational therapy as well as hydrotherapy. Lawrence appreciated the care she received at Warm Springs, but at the same time, she was candid in discussing the frustrations engendered by polio. At first, Lawrence explained, she could not fully comprehend what was happening, and then she became angry. After that, she said, there is “sadness and the realization that this is the way this is going to be.”<sup>86</sup> During her hospitalization and subsequent rehabilitation, Lawrence rarely saw her children. Even when she returned from Warm Springs, she did not go directly home, but to the Princess Elizabeth Hospital where she lived for two months while her house was remodelled to accommodate her wheelchair. It was at the Princess Elizabeth where she began the long process of getting to (re)know her children, who had lived with her parents in the interim.

Women with polio-related disabilities relied on friends, family, and paid help to perform the physical duties related to motherhood. The multiple long-term disabilities Lawrence experienced meant that she needed someone to physically care for her and her children. Her mother filled that role and when her mother passed away, Lawrence hired an assistant, Susan, who lived with them and did “everything” related to the physical care of her children.<sup>87</sup> Other mothers with polio-related disabilities used similar coping strategies. Peggy Johnson’s husband travelled a lot and she relied on paid babysitters to care for her children when she went to physiotherapy. At times her father also helped with her children. Barb Thomson’s brother and sister-in-law took in her daughter for the five months that she was hospitalized at the KGH. Thompson, who first used a wheelchair and then a leg brace and crutches, relied on hired help for the first few years after she contracted polio. The first summer she was at home, she hired a girl from the neighbourhood. After that, she hired one of her nieces, however, Thompson

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<sup>86</sup> Emma Lawrence interview.

<sup>87</sup> Emma Lawrence interview.

eventually regained enough mobility and strength that she was able to resume her “household duties” related to being a wife and mother.<sup>88</sup>

While severe polio-related disabilities changed the contours of women’s motherhood, it did not sever them. Betty Banister’s memoir *Trapped: A Polio Victim’s Fight for Life* speaks to the complicated emotions and relationships severe polio-related disabilities engendered.

Banister, who also contracted polio in 1953, was fully paralysed and lived for close to thirty years at the KGH and Princess Elizabeth Hospital. Because she did not return home, Banister’s mothering was disrupted severely by polio. Her sister, who lived in Saskatchewan, took on the task of raising Banister’s daughter and her son lived with his father, whom Banister divorced. Banister had more of a day-to-day relationship with her son, as he lived in Winnipeg. While Banister sometimes spent weekends at their apartment, she did not live with her son on a full-time basis after she contracted polio.

Banister’s conception of motherhood was complex. She was grateful to have been able to “stay at home and look after [her] children” before polio, and while she stated that she had, at one point, “relinquished the mother role, feeling the relatives who cared for my children had taken on this right,” her sister and other family members did not allow her to do that, by “subtly bringing [her] back into the family fold.”<sup>89</sup> Banister’s close relationship with her son and the picture in her memoir of Banister with her infant grandchild on her lap indicate that despite the unorthodox nature of her family, Banister was certainly a mother, always.<sup>90</sup> Emma Lawrence moved back into her family’s home after several years of hospitalization and rehabilitation, and

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<sup>88</sup> Barb Thompson interview.

<sup>89</sup> Betty Banister, *Trapped: A Polio Victims Fight for Life* (Saskatoon: Western producer Prairie Books, 1975), 92.

<sup>90</sup> Banister, *Trapped*, np. The picture of Banister with her granddaughter can be found facing page 65.

she relied heavily on her assistant Susan. Despite these changes to her family's composition, Lawrence stated unequivocally that she was a "housewife and a mother before I got polio" and "continued to be a housewife and a mother" afterwards. Although Lawrence knew that polio had reordered her family considerably and permanently, and that the prolonged absences necessitated by her hospitalization and rehabilitation meant it took a while for her to "get her family back together again," she was adamant that she was still doing what she had originally chosen to do with her life and was lucky to have been able to do so.<sup>91</sup>

Women who had biological children before, during, or after their encounter with the poliovirus continued to parent, often with the assistance of others, but those who chose to adopt children often faced the scrutiny of social workers. Three of the PPN interviewees adopted children, and their experiences indicate that shifting ideas pertaining to the suitability of women with disabilities informed and shaped their adoption experiences. Franny Brown contracted polio as a two year old in 1928 and one of her hands was permanently paralysed. Brown and her first husband, who was in the Air Force but was killed in a plane crash in Ontario, adopted four children – three boys and one girl. In her interview, Brown did not go into the details of the adoptions, although she did mention briefly that she has very little respect for social workers, hinting at some possible problems. All of her children were adopted as infants, and one with clubbed feet was one of the first children who was not "physically perfect" to be put up for adoption in Manitoba. Veronica Strong-Boag posits that "children with handicaps [...] were always harder to place" although she suggests elsewhere that some social workers were open to placing children with disabilities with adults who had similar disabilities.<sup>92</sup> Brown does not

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<sup>91</sup> Emma Lawrence interview.

<sup>92</sup> Strong Boag, *Finding Families, Finding Ourselves*, 69; Strong-Boag, "Forgotten People of all the Forgotten," 42.

suggest that her disabilities factored into the decision; however, in making that claim, Strong-Boag referred directly to Manitoba in the mid-1950s, which is when Brown adopted her children.

Anne Friesen, whose legs were affected by polio, was also an adoptive mother, and her adoption experience was largely positive. Friesen's decisions to adopt had little to do with polio. She had a son, and then a number of miscarriages and felt that because there were so many children being put up for adoption, that applying to be adoptive parents was "their way of helping."<sup>93</sup> The Friesen's adoption was quick: they applied in August and had their daughter by December of the same year. Unfortunately, Friesen did not discuss the particulars of the adoption process, but she described the whole experience as "wonderful." It is possible that her polio-related disabilities were not taken into account, or that the social workers Friesen dealt with were not aware of them. Friesen's legs were paralysed for six weeks after she contracted polio when she was eleven years old in 1952, but they recovered substantially, and for most of her adulthood only had problems when sitting on the floor. Social workers may not have seen any obvious signs of disability.

Sarah Buckley's adoption experience was less straightforward, but it is important because it indicates how ideas about disability, motherhood, and gender are deeply intertwined. Buckley contracted polio as a five year old and used a wheelchair, as did her husband. After trying for several years to conceive, they decided to look into adoption. As a first step, they attended a "general information meeting" run by the Children's Aid Society (CAS) and almost immediately they were contacted by a social worker who requested a meeting. A CAS social worker came to their house to ask them to "withdraw their application" because "in no way would [they] ever receive a child." Buckley, who had been told years before that she would never be able to

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<sup>93</sup> Anne Friesen interview.



become a teacher, was “devastated” but she was “not prepared to accept” being told that she could not be a parent. At that initial meeting, the social worker asked them some very difficult questions, perhaps hoping that they would concede to withdrawing their application, but by the end of the meeting Buckley recalls having convinced the social worker to “agree” to let them “go through the same process that any other couple wanting to adopt would go through, and if [the CAS] could come up with some justifiable reasons at the end of that process why they felt they could not parent a child then [they] would be prepared to accept that.”<sup>94</sup> The Buckleys were assigned a social worker who met with them several times. At first, Buckley saw the social worker as a potential adversary, but over time, the social worker advocated for the Buckleys and they eventually were successful in adopting two daughters.

The Buckley’s adoption narrative, while it has a happy ending, brings up many questions related to broad social ideas concerning gender, disability, and parenting. The burgeoning literature on adoption in Canada focuses on the children who were put up for adoption, but it also discusses the construction of ideal adoptive parents. Strong-Boag argues that social workers and other experts involved in discussions about potential adoptive parents paid little attention “to prospective fathers. Mothers always stood front and centre in discussions of who could appropriately parent.”<sup>95</sup> This was Sarah Buckley’s experience, and her visible disability complicated the picture immensely. Most of the social worker’s questions focused on whether or not she could take care of children properly. Her husband, who was gainfully employed, was already fulfilling the normative role assigned to fathers: that of breadwinner. Although the literature suggests that by the mid-twentieth century, fathers were supposed to become more involved in their children’s lives, “bringing in the dollars,” as Sarah Buckley put it, remained

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<sup>94</sup> Sarah Buckley interview.

<sup>95</sup> Strong-Boag, *Finding Families, Finding Ourselves*, 77.

their most important role, even if they happened to be disabled.<sup>96</sup> Indeed, whether or not prospective fathers were wheelchair users does not seem to have bothered social workers and the Buckleys knew of several other families where the father used a wheelchair and whose adoption processes had been less involved than theirs. Buckley suggests that the social worker began to advocate for them once she saw Buckley “as a person” rather than as someone in a wheelchair. Disability was another way in which experts could prescribe who could and who could not parent.

The development of post-polio syndrome is a contentious topic for people who contracted polio in the epidemic era. As Daniel J. Wilson indicates, “twenty to thirty years after the initial onset of the disease,” people who had contracted the disease during the epidemic era began to experience a constellation of symptoms including “increased muscle weakness and pain, debilitating fatigue, more frequent falls, and an inability to do things they had once done.”<sup>97</sup> In the 1980s, the medical community was slow to accept this as anything more than the vicissitudes of old age and there is still debate over whether or not these symptoms are due to the “age-related attrition of motor neurons” or “new muscle weakness [due] to the metabolic failure of poliovirus-damaged neurons.”<sup>98</sup> Despite the medical world’s debates, the interviewees were unanimous in suggesting that post-polio syndrome has complicated and constrained their lives in multiple ways.

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<sup>96</sup> Sarah Buckley interview. For discussions on the shifting role of the father in Canada, see for example, Cynthia Comacchio, “Bringing up Father: Defining a Modern Canadian Fatherhood, 1900 – 1940,” in *Family Matters: Papers in Post-Confederation Canadian Family History*, Lori Chambers and Edgar-Andre Montigny eds. (Toronto: Canadian Scholars’ Press, 1998): 289 – 308.

<sup>97</sup> Wilson, *Living with Polio*, 228.

<sup>98</sup> Richard L. Bruno, “Post-Polio Syndrome,” *Neurology* 47, 5 (November 1996): 1359.

The lack of a post-polio expert in Manitoba is another example of the limits of the province's ability to care for the health of the citizenry. People with polio-related disabilities who are experiencing post-polio syndrome are angry that doctors who already know so little about polio are unable to assist them with post-polio syndrome. Even though polio was so prevalent in Manitoba, people have to travel to either Edmonton or Toronto to confer with neurologists who are cognizant of what post-polio syndrome is and who are able to diagnosis it. Anne Friesen suggested that it would be desirable if Winnipeg "could get a doctor who knew about post-polio syndrome [because] in the next fifteen to twenty years it is going to [become] very important."<sup>99</sup> The increasing prevalence of post-polio symptoms is unnerving to many of the people who were interviewed. As Jessica Smith stated, "there needs to be a post-polio clinic here in Winnipeg so that we don't have to fight to go to other places."<sup>100</sup> A number of the people who were interviewed for the PPN project in 2006 have since passed away. For the others, post-polio syndrome continues to circumscribe their quality of life.

The PPN interviews indicate how important it is to look beyond the traditional boundaries of epidemics in order to understand their impact. Polio did not end when people were released from the hospital, or when children lined up for the Salk or Sabin vaccinations. People's encounters were, and are, continuously shaped and mediated by the effects of epidemic polio, which were often quite visible. Polio's continued engagement with individuals' bodies shaped their interactions with the world around them, long after the epidemic era ended. Children's education experiences, both positive and negative, were shaped by their polio experiences and polio-related disabilities and ideas about people with disabilities impacted continuously every aspect of people's lives. This chapter indicates that disability often intertwined with other

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<sup>99</sup> Anne Friesen interview.

<sup>100</sup> Jessica Smith interview.

concepts and categories that have historically affected people's experiences in terms of education and work. In particular, this chapter has examined the multiple, complex ways polio and ideas about its effects impacted families. Despite the illness, pain, and separation it often engendered, polio did not shatter families. It reconfigured familial relationships physically, geographically, and emotionally but as my examination of the PPN interviews suggests, and as the way the interviewees recalled their lives, it did not sever familial ties and bonds. People with polio-related disabilities found ways to negotiate the effects of the disease and to keep intact the bonds of family.

**Conclusion: “It is important that people know what we went through during those times’: Polio, Health Records, and Integrating the Marginalized into Canadian Social History”<sup>1</sup>**

In this dissertation, I argued that the multiple polio epidemics that occurred in Manitoba during the epidemic era of 1928-1953 allow for an examination of the impact of the disease and its attendant disabilities on the social fabric of the province. I did so by first examining the limits of the province in controlling polio, despite the reliance on the tools of the laboratory. I then examined the ways nurses’ work changed over the course of the epidemic era. Using the tools of social history, I have demonstrated how ideologies about gender impacted nurses, the rehabilitation process, and lived experiences with the disease. In arguing that the growth of rehabilitation programs in the later part of the epidemic era worked to discursively turn people with an illness into persons with a disability, I have shown that particular ideas about childhood, gender, and citizenship were used in an attempt to reinsert people with polio-related disabilities back into the social and economic fabric of the nation. Finally, I argued that after the epidemics era ended, individuals with polio-related disabilities continued to be affected by ideas about disability. These broader social ideas often intersected with gendered ideologies to constrain individuals, but my analysis of the twenty-two PPN interviews indicates that they were able to negotiate these constraints and although polio certainly strained familial ties, most endured during the epidemic era and beyond. This concluding chapter reviews the main points of the dissertation and offers some thoughts on the nature of working with health records, the social history of disability, and the importance of remembering, particularly in the context of those often marginalized from history.

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<sup>1</sup> Paraphrased from MA, Polio Oral History Project, Donna McGillivray interview.

This dissertation is multi-thematic in that it examines a number of issues and borrows from a number of historical sub-disciplines. Even though at its centre is a disease, it is a social history. Using the tools and methodologies of social history, it examines a number of inter-related issues: the limits of public health in controlling disease and providing for the health of the citizenry; the changing roles of nurses in hospitals that cared for polio patients; the establishment of rehabilitation programs, which were influenced by the changing conceptions of the ideal Canadian citizen and gendered ideologies, and how children were viewed within this rehabilitation rubric; and finally, the lived experiences of people with polio-related disabilities as children and as adults.

Between 1928 and 1953, six polio epidemics occurred in Manitoba. This dissertation demonstrated that during this twenty-five year period, referred to as the epidemic era, polio was indeed transformative in multiple ways. Here I have used the era of epidemic polio as a window through which to view the broad social impacts of a disease that led often to physical disabilities and the limited capacity of the state to ameliorate or contain these effects. The recurring epidemics indicate that while the state, particularly the provincial and civic public health infrastructures, had important reasons for wanting to control and contain polio as it had other epidemic diseases, the reactive ways it dealt with polio constrained its ability to deal with the epidemics in a consistent, proactive manner. The emphasis on convalescent serum, the nasal spray, and gamma globulin suggests that throughout the epidemic era, public health officials relied heavily on the promise of the laboratory in the march to prevent ill-health, disease, and disability. As Judith Walzer Leavitt has shown, however, the medico-scientific advances promised in the laboratory were not as clear-cut as medicine wanted them to be. She uses the example of Mary Mallon to argue that the competing discourses of bacteriology, the public's

health, and individual rights are just as important now as they were in the early twentieth century.<sup>2</sup> This dissertation shows that the emphasis on the primacy of bacteriology and the laboratory was not guaranteed in the context of polio either. Into the 1950s, the Manitoba medical community was not united in its belief that polio was a communicable disease, indicating that while they wished to make a substantial contribution to medical knowledge by proving the efficacy of one of the preventatives, they were not having important conversations with the broader medico-social world, at least in the context of scientific advances in polio. Even today, the medical community is divided over the existence of post-polio syndrome. This debate has had detrimental effects on Manitobans with polio-related disabilities, particularly because it means they have to travel out of province to get a diagnosis and proper medical advice.

During roughly the same time period as the era of epidemic polio, the male-dominated public health bureaucracy in Winnipeg was professionalizing. In doing so, as Marion McKay has shown, they took control of the broad public health programs conceptualized and first implemented by “female philanthropists and health workers” such as those involved in the Margaret Scott Nursing Mission.<sup>3</sup> This urge to professionalize and centralize did not always translate into success, as the province’s track record with polio suggests. While the polio historiography indicates that few public health infrastructures in North America were able to contain successfully the disease, the debate held in the early 1940s over whether or not polio should be included on the list of communicable diseases at the KGH and the haphazard application of other public health tools such as school closures are indicative of the ways polio confounded public health officials in Manitoba throughout the epidemic era.

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<sup>2</sup> Walzer Leavitt, *Typhoid Mary*.

<sup>3</sup> McKay, “Saints and Sanitarians,” 4.

The long struggle to contain and control polio engendered a number of important transformations in the care provided to patients, which had important repercussions for nurses. The Kenny method was revolutionary in that it led to the discarding of the medical orthodoxy which privileged rest and immobilization. These changes had a profound impact on patients. While this dissertation does not examine in detail Manitobans' experiences with hospitalization, several of the interviewees recalled, for example, the smells associated with the hot packs that were central to the Kenny method, and the relief it provided for their aching muscles. Bruce Chown, a medical innovator in many ways, must be credited for having the foresight necessary to introduce a contested method to Manitoba. That he did so in the midst of the 1941 epidemic speaks to his ability to look at the big picture and challenge standard medical orthodoxies.

Yet, the impact of the Kenny method was felt mainly by the nurses who worked on the polio wards. The Kenny method led to a substantial increase in the labour of nurses, and as the reluctance of the Children's Hospital nursing supervisor to allow nurses to manipulate patients' limbs indicates, it also led to anxieties amongst nurses, who for twenty years had been trained that rest and immobilization were the only acceptable modes of treatment. Respirators also shifted significantly the contours of nurses' work. Because the respirators literally kept patients alive, the implications of running them were enormous. While nursing respirator patients was constructed by nursing leaders and manufacturers as simple, they were complex machines that necessitated nurses' engagement with state of the art technology and science. While the technological changes on the polio ward mirrored the broader intersections of nursing, gender, and technology in the post-war period, as evidenced by Kathryn McPherson and Margarete Sandelowski, respirators also required teamwork, strength, and ingenuity on the part of nurses, who were expected to keep respirator patients, fed, clean, and dry without removing them from



the machines.<sup>4</sup> The 1953 power outage at the KGH speaks to the complexities and anxieties that accompanied the respirators. That Mary Shepherd, her nursing staff, and all the volunteers they could muster were able to keep over ninety respirator patients alive during a four hour long power outage by operating the respirators manually indicates how deeply nurses were relied upon in times of emergency during the epidemic era.

Despite the reliance on nurses, gendered assumptions informed nurses' work during the epidemic era. This was made particularly clear during the protracted nursing shortage during the 1953 epidemic and the subsequent debates over civic public health nurses' remuneration for working on the polio wards at the Winnipeg Municipal Hospitals. Linda Quiney and Elyllt Jones have both shown how the 1919 influenza epidemic cemented the ideology that women were expected to volunteer to help the sick, the injured, and the diseased. During the 1919 epidemic in Winnipeg, the "leisured, respectable, Anglo-Canadian" women volunteers were elevated to the status of heroine because they volunteered their time.<sup>5</sup> The anxieties over the shortage of nurses during the 1953 polio epidemic revealed that, decades later, beliefs about female volunteerism still existed, at least in the minds of the male public health bureaucracy, who may have taken away the power of female health providers, but nevertheless expected them to give freely of their time and energies during moments of crisis. That the nurses who worked on the wards of the KGH and Princess Elizabeth assumed they would be remunerated was anathema to civic authorities. Thus the 1953 nursing shortage was not just about the increased number of patients, nor was it due to a reluctance on behalf of nurses and women to volunteer their time, but to the specific configuration of the new technologies of care and the existence of these gendered ideologies.

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<sup>4</sup> McPherson, *Bedside Matters*.

<sup>5</sup> Jones, *Influenza 1919*, 88.

Gendered ideologies intersected with discourses about disability in the creation of rehabilitation programs in Manitoba during the last few years of the epidemic era. Early rehabilitation programs were available, but they were few and far between. In Manitoba, the early focus was on rehabilitation through surgical techniques, such as tendon shortening and bone fusions. The goal was to ensure patients did not appear disabled, at least obviously so, in order that they might contribute economically to the nation. The shift to vocational and psychological rehabilitation in Manitoba occurred in the mid-to-late 1940s, roughly the same time period established by Geoffrey Reaume in his study of the Lyndhurst rehabilitation centre in Ontario, indicating that broader social changes, such as the increased number of returning injured veterans and the post-war emphasis on active, useful citizens impacted rehabilitation programs across Canada.<sup>6</sup> The examination of medical social workers' ideologies in the context of this rehabilitation rubric reveals how gendered ideas informed the experts who were involved in the rehabilitation of children and adults with polio-related disabilities. Mothers of children with disabilities were not supposed to coddle them, lest the child become spoiled, lazy, or morose. Women with disabilities were supposed to accept their limitations, but still perform their expected gendered family roles and men with disabilities were expected to find paid labour to support their families.

While an analysis of the PPN oral histories indicates that the rehabilitation process was not as useful as experts may have wanted it to be, gendered discourses constrained and informed the lives of people with polio-related disabilities long after the epidemic era ended. While polio-related disabilities certainly complicated people's lives, so too did gendered ideologies, particularly in the contexts of work and motherhood. The visibility of an individual's disability

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<sup>6</sup> Reaume, *Lyndhurst*.

often affected their ability to find work and to position themselves as acceptable parents. Social workers, for example, had difficulty understanding how a woman who used a wheelchair could be a mother. I argue, however, that while these various ideas affected the lives of the interviewees, in terms of schooling, work, and parenting most were able to express their personal agency throughout the course of their lives. Nevertheless, it is clear that it is important to widen the lens through which the social effects of polio are viewed in order to understand its impact on people's lives.

The development of post-polio syndrome is further proof of the importance of examining the long-term implications of polio. Post-polio syndrome is a contentious topic within the medico-scientific community, but it has shaped the lives of the PPN interviewees in multiple ways. People that for years found ways to negotiate their disabilities and ideologies about disabilities in order to go to school, work, and raise families found that thirty or more years after they contracted polio, it once again began to figure centrally in their lives. That post-polio syndrome is so prevalent among the interviewees, and people with polio-related disabilities elsewhere, speaks to the fundamental long-term impact of the disease.<sup>7</sup> It is imperative, therefore, that in studying the social effects of polio, researchers look beyond the epidemics.

While this dissertation analysed a number of interrelated topics in order to understand the broad social impact of polio, it does not cover everything. The impact of post-polio syndrome deserves in-depth study, and the psychological impact of the disease has only been alluded to here. While Daniel J. Wilson has done important preliminary work on this topic, it is certainly worthy of further analysis in the Canadian context.<sup>8</sup> As Reaume suggests, studies of the “disability rights movement” and “activism among disability organizations” are an emerging part

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<sup>7</sup> See for example chapter nine in Wilson, *Living with Polio*, 228-251.

<sup>8</sup> Wilson, “Psychological Trauma and its Treatment in the Polio Epidemics.”

of the field of the social history of disability.<sup>9</sup> The Canadian Paraplegic Association and the Society for Manitobans with Disabilities, which grew out of the CCCA, are two groups in which people with polio-related disabilities have played central roles. These are two examples of the types of organizations that demand further study.

The impact of polio on distinct communities in Canada is also a fruitful topic. This dissertation suggests, for example, that there were outbreaks of polio Mennonite communities in southern Manitoba and Saskatchewan in the later part of the epidemic era. The provincial *Annual Reports* indicate that these may have been tied to the transnational movement of Mennonites, a topic that ought to be more fully explored within the context of that literature.<sup>10</sup> Additionally, a number of polio epidemics occurred in northern Canada throughout the epidemic era. That polio became epidemic in the north flew in the face of everything that was known about polio; namely, that it was a disease that proliferated in the summer, and in places with advanced sanitary infrastructures. The epidemic in the northeastern Arctic in 1949 was neither of these things. Interrogating the federal response to the Arctic outbreak, when physicians working for the Indian Services branch of the Federal Department of Health and Welfare attempted to quarantine the whole eastern Arctic, would be an important, original incursion into Indigenous health history and further the understanding of the ways ideas about race and ethnicity shaped the way the polio was viewed and managed.<sup>11</sup>

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<sup>9</sup> Reaume, "Disability History in Canada," 46 and 54.

<sup>10</sup> See for example Royden Loewen, "Trains, Text, and Time: The Emigration of Canadian Mennonites to Latin America, 1922 – 1948," in Adele Perry, Esyllt Jones and Leah Morton eds., *Place and Replace: Essays on Western Canada* (Winnipeg: University of Manitoba Press, 2013): 123- 138.

<sup>11</sup> See for example, Adamson et al., "Poliomyelitis in the Arctic," *CMAJ* 61,4 (October 1949): 339 – 348; J. D. Adamson, Malcolm Bow, and E. H. Lossing, "Poliomyelitis in the Yukon," *CJPH* 45, 8 (August 1954): 337-344; H.V. Johnson and W.J. Wood, "An Outbreak of Poliomyelitis at Maguse River, N.W.T.," *CJPH* 45,1 (January 1954): 16-17; E. S. Orford Smith

Ideas about race and ethnicity informed the construction of blacks and polio in the United States, where it was assumed, even though evidence suggested otherwise, that African-Americans were immune to the disease.<sup>12</sup> Similar ideas affected the time it took for state physicians to even realize that what the Inuit were experiencing was actually polio. Despite indications of paralysis and other symptoms in the Inuit population, it was not until a Euro-Canadian government employee stationed in the North contracted the disease that physicians even entertained the notion that it was polio, offering tantalizing and important clues into the intersections of ideas about race and disease. Twenty-two Inuit with polio-related paralysis were taken to the KGH in Winnipeg for rehabilitation and their experiences, too, need to be interrogated further.<sup>13</sup>

Internationally, there is a growing body of literature on polio. Historians elsewhere have focused on topics similar to those examined here, including medico-scientific conceptions of the disease, public health preparations for the epidemics, patient treatment during and after the outbreaks, the Kenny method, and the personal experiences of those who contracted polio.<sup>14</sup> There are many continuities and differences in the transnational understanding and experiences of polio and examining them together would be a fruitful endeavour. Orthopedic surgeries were

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and Beatrice Cole, "A Winter Outbreak of Poliomyelitis in Northern Alberta, *CJPH* 45, 12 (December 1954): 495-501.

<sup>12</sup> Oshinsky, *Polio: An American Story*, 66.

<sup>13</sup> Joseph Moody and W. de Groot van Embden, *Arctic Doctor* (Longacre: Odhams Press, 1965). That patients were sent to the KGH is mentioned in Adamson et al., "Poliomyelitis in the Arctic," and in the *Beacon*, the newsletter about the Municipal Hospitals edited by Mary Shepherd.

<sup>14</sup> Although this list is by no means exhaustive, see Axelsson, "Polio Epidemics and Preventative Measures, Sweden 1880s-1940s"; A.B. Cross, "The Solomon Islands Tragedy – A Tale of Epidemic Poliomyelitis," *Medical History* 21 (1977): 137-155; Laurence Geary "The 1956 Polio Epidemic in Cork" *History Ireland* (May/June 2006); Anne Hardy "Poliomyelitis and the Neurologists: The View from England, 1896-1966" *Bulletin of the History of Medicine* 71,2 (1997): 249-272; Anne Killalea *The Great Scourge: The Tasmanian Infantile Paralysis Epidemic, 1937-38* (Sandy Bay, Tasmania: Tasmanian Historical Research Association, 1995).

commonplace in Ireland, for example, but never in England. The advanced ages of most people who contracted polio has meant that the collection of their narratives has become imperative. Post-Polio groups similar to the PPN in England and Ireland have collected these personal memories. Geoffrey Reaume suggests that “making available the perspectives of disabled people whose experiences form the core of why disability historical scholarship exists” is important and I have attempted to do this here; however, analyzing these geographically disparate collections together will better expose the commonalities and changes inherent in the transnational experience.<sup>15</sup> A cursory comparison indicates, for example, that lengthy hospital stays were central to the Irish polio experience more so than in Canada, but much work remains to be done.<sup>16</sup>

The 1997 introduction of the Personal Health Information Act (PHIA) in Manitoba has ushered in a new era of historical research in Manitoba. Designed “specifically to provide access to information rights and protection of privacy rights concerning personal health information,” PHIA has had profound repercussions on the historical analysis of health-related topics, broadly defined.<sup>17</sup> Originally I had planned to consult the records of the province’s Department of Health and Public Welfare in order to write this dissertation. I was interested in how the province developed its polio policies during the epidemic era, how much these programs cost, and I was interested in the correspondence between physicians and health bureaucrats concerning these topics and others related to the care of people with polio-related disabilities.

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<sup>15</sup> Reaume, “Disability History in Canada,” 44.

<sup>16</sup> Nuala Hartnett, ed., *Polio and Us: Personal Stories of Polio Survivors in Ireland*, (Dublin: Post Polio Support Group, 2007). See also the Lincolnshire Post-Polio website, which has compiled a number of personal memories and stories related to polio: [lincolnshirepostpolio.org.uk](http://lincolnshirepostpolio.org.uk) (last accessed 31 May 2013).

<sup>17</sup> Manitoba Ombudsman, “PHIA,” <http://www.ombudsman.mb.ca/info/phia.html> (last accessed 26 May 2013)

I first applied to access these restricted records through the province's Freedom of Information and Protection of Privacy Act (FIPPA) and was then directed to the PHIA application form. My application was originally denied because of the alleged cost of redacting personal health information from the records. Claudia Malacrida speaks to a similar roadblock in her quest to access information about the Michener Centre, "a total institution for the incarceration of developmentally disabled children and adults in Alberta."<sup>18</sup> Malacrida was told that it would cost her \$13,000.00 to have personal information redacted; I was simply told it would be outside of a graduate student's budget.<sup>19</sup> Unwilling to concede defeat, and certain that the majority of the records I wanted to use did not contain personal health information, my dissertation supervisor and I decided to take a different route, and applied for access through the province's Health Information and Privacy Committee (HIPC) which was created in accordance with PHIA and is "responsible for approving health research projects that use personal health information held by a government department or agency."<sup>20</sup> After two years of trying to negotiate the HIPC forms, which are designed for large-scale medical research projects rather than those informed by social history, and numerous meetings with the members of the HIPC, and after consulting with the Legal Counsel of my institution, I chose to stop pursuing the records. Others have been successful in negotiating research agreements with the HIPC; however, the limitations they attach to these, at least my interpretation of them, made me uneasy.

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<sup>18</sup> Claudia Malacrida, "Contested Memories: Efforts of the Powerful to Silence Former Inmates' Histories of Life in an Institution for 'Mental Defectives,'" *Disability and Society* 21, 5 (August 2006): 397.

<sup>19</sup> A conversation I had with an archivist at the Manitoba Archives who examined the records I requested, however, suggested that the majority of the records were correspondence and very few contained personal health information. While she relayed this information to the HIPC, they continued to deny my requests to view and utilize the records of Manitoba's Department of Health and Public Welfare.

<sup>20</sup> Government of Manitoba, "Health Information Privacy Committee," <http://www.gov.mb.ca/health/hipc/> (last accessed 26 May 2013)

I did not want to have to destroy my research records immediately after the completion of my dissertation, and I did not want to send any and all conference papers or articles that used the records in question to the HIPC for vetting before presenting or publication.

While I appreciate the need to protect personal health information, this trend towards sweeping restrictions of large swaths of government records is troubling for anyone interested in the history of health care in Manitoba. Because health is so intertwined with other aspects of history, this trend should indeed be troubling to all those interested in Canadian history. In retrospect, this decision forced me to find alternative records and, indeed I found many, but many related topics of interest had to be, regrettably, bypassed. For example, in her interview, Emma Lawrence spoke highly of a home care program, ostensibly developed by the province so that many of the people with polio-related disabilities living in the Princess Elizabeth Hospital would be able to return home. Lawrence believes that the establishment of the home care program was a “far-sighted” move by the province, and one which allowed her to return home to her family, despite her multiple disabilities and extensive paralysis.<sup>21</sup>

Rutty alludes to this home care program briefly in his dissertation. He suggests that this program “was designed to allow polio patients, even respirator cases, to be cared of at home,” allowing the province to save substantial amounts of money. Rutty’s brief overview of the program concluded that “the economic and social benefits were obvious,” even though the province knew it had placed “financial and social stresses on the family.”<sup>22</sup> That the province was focused mainly on saving money is clear, but I would be interested also in what the province’s Home Care committee set up specifically, and what those social and familial stresses were. Unfortunately I could not research this particular topic further, as I was unable to access

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<sup>21</sup> Emma Lawrence interview.

<sup>22</sup> Rutty, “Poliomyelitis in Canada,” 252.



the records of the Home Care Committee, or any other records created by the provincial Department of Health other than their publicly available *Annual Reports*.

Those writing the social history of disability in Canada have particular reasons for advocating for broader access to these sorts of records. For Malacrida, her inability to access the records she sought “provides another example of how the powerful are able to constrain or erase undesirable memories.”<sup>23</sup> This is particularly important in the case of total institutions for young people with developmental disabilities who were often subject to abuse, but it is important to the history of disability more broadly because people with disabilities have long been marginalized from society and from history. Reaume argues that “disability oral history can serve to empower people whose views have so long been prevented from being heard by the wider public.”<sup>24</sup> While records relating to polio and people with polio are certainly less fraught than those of a total institution, the larger goal – to bring people with disabilities out from the margins and into the fabric of Canadian social history – is the same, and it is still being stymied.

Moreover, Manitobans who contracted polio, those with polio-related disabilities, and those who cared for them want their stories to be told. The first question each PPN interviewee was asked was ‘why did you want to participate in this project?’ Every answer was a variation on ‘I want our story to be told,’ or ‘I don’t want people to forget about polio.’<sup>25</sup> As Hoogstraten and Lajoie-O’Malley wrote in their follow-up to the oral history project, “when we asked what motivated participants to be interviewed, the response was unanimous. Participants are worried that their experiences will be forgotten, and that valuable knowledge and powerful memories will

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<sup>23</sup> Malacrida, “Contested Memories,” 404.

<sup>24</sup> Reaume, “Disability History in Canada,” 49.

<sup>25</sup> MA, Polio Oral History Project, various interviews.

be eradicated along with the disease.”<sup>26</sup> The records of the KGH and the Princess Elizabeth Hospital have been meticulously archived in a room at the Riverview Health Centre, the picturesque site of the former Winnipeg Municipal Hospitals in the southeastern Fort Rouge neighbourhood of Winnipeg. They are rarely consulted. While conducting research there, I came across a carefully hand-drawn floor plan of the ward where the long-term respirator patients lived. Created originally as a teaching tool to help orient new staff, it noted each patient’s room and the equipment they needed, such as respirators. On the back was a typed note which encapsulates perfectly the feelings of many of the people who contracted polio during the epidemic era, and those who write the social history of disability in Canada. The note states that the map was “placed in the archives so that long into the future the names of the post-polio patients will be known, where they were situated on the unit and how the unit was organized to care for them.”<sup>27</sup> The trend towards restricting any records remotely related to health prevents this from happening. This project, which has examined public health responses, nurses, the intersections of gender and disability, the discursive transformation of people with a disease into people with disabilities, and the gendered lived experiences of people with polio, represents one attempt to bring the effects of an epidemic disease which caused disabilities, and the lived experiences of those with polio-related disabilities, out of the margins and into the mainstream of social history.

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<sup>26</sup> Hoogstraten and Lajoie-O’Malley, “Polio and Post Polio: An Oral History,” 1.

<sup>27</sup> RHA, Winnipeg Municipal Hospital, The Polio Epidemic, The King George Hospital, Polio Epidemic 1952-1953. In this context, post-polio does not refer to post-polio syndrome; rather, it is used to demarcate simply people who had contracted polio.

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