

**NURSING RESOURCES IN MANITOBA
1995
A DESCRIPTION OF THE CURRENT SITUATION
AND CONSEQUENT POLICY IMPLICATIONS**

By ⁵⁴

LINDA HUGHES

**A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of**

MASTER OF PUBLIC ADMINISTRATION

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ABSTRACT

The purpose of this study is to describe the nursing resources available in Manitoba as of April, 1995 and to delineate possible policy initiatives based on the collected data. After years of inattention and neglect, the topic of nursing resource planning is now one of the priorities of most health departments across Canada including that of our province of Manitoba. This study represents one of the first attempts to gather and collate, in a consistent format, data on the various categories of nursing personnel within the province. This baseline information is required in order to formulate Human Resource strategies within a health care system which is facing the need for massive change and major reform.

Chapter One will provide an overview of the current literature on this topic and a review of recent initiatives within Manitoba and other provinces related to issues of Nursing resource planning. Chapter Two will present the data collected regarding the current Nursing resources within Manitoba. Chapter Three will outline and discuss related considerations and possible policy implications. Chapter Four will offer conclusions.

The data were collected from a variety of sources including Manitoba Health, the Manitoba Association of Registered Nurses (MARN), the Registered Psychiatric Nurses Association of Manitoba (RPNAM), the Manitoba Association of Licensed Practical Nurses (MALPN), and the Manitoba Nursing Professions Advisory

Council (MNPAC). The difficulties encountered in collecting this data highlight the need for a centralized, coordinated process by which this type of information is compiled and analyzed. This is the first step required in the process of developing a Nursing Resource plan for the Province.

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LIST OF ABBREVIATIONS

B.C.	BRITISH COLUMBIA
CNA	CANADIAN NURSES ASSOCIATION
EFT	EQUIVALENT FULL TIME
GRADS	GRADUATES
HCA	HEALTH CARE AIDE
HMA	HOME CARE ATTENDANT
LPN	LICENSED PRACTICAL NURSE
MALPN	MANITOBA ASSOCIATION OF LICENSED PRACTICAL NURSES
MARN	MANITOBA ASSOCIATION OF REGISTERED NURSES
MB	MANITOBA
MNPAC	MANITOBA NURSING PROFESSIONS ADVISORY COUNCIL
RN	REGISTERED NURSE
RPN	REGISTERED PSYCHIATRIC NURSE
RPNAM	REGISTERED PSYCHIATRIC NURSES ASSOCIATION OF MANITOBA
USA	UNITED STATES OF AMERICA

CHAPTER 1

INTRODUCTION AND LITERATURE REVIEW

1. INTRODUCTION

During the past five years, there has been considerable activity within Canadian provinces as governments and professional associations have begun to grapple with the challenge of developing a rational, systematic approach to human resource planning within the field of nursing. After years of inattention and neglect, the topic of nursing resource planning is now one of the priorities of most health departments across Canada including that of the province of Manitoba.

1.1 NATURE OF THE SUBJECT AND SCOPE AND OBJECTIVE OF THE STUDY

The purpose of this study is to describe the current nursing resources in Manitoba and the resource planning models and assumptions which pertain to such resources.

Nursing resources within Manitoba include Registered Nurses, Registered Psychiatric Nurses, Licensed Practical Nurses, and Health Care Aides/Attendants. It will be shown that, although rational models related to Health Resource planning have been developed, missing data and the lack of clear policy direction on a number of crucial factors, make the prediction of future demand for nursing resources in Manitoba a

difficult, if not impossible task. A purely rational model based on facts rather than values which ignores the aspirations of those affected by Human Resource decisions and the political decisions inherent in the process, is not applicable in Manitoba. There are many players whose positions must be accommodated through compromise and negotiated consensus and difficult decisions to be made within the nursing professions themselves and with other health care workers including the powerful physician group. This thesis will suggest some policy implications and options and highlight the reasons why Human Resource planning within the health care system in Manitoba will continue to evolve incrementally rather than rationally.

The policy shifts currently taking place in health care reflect a strong concern on the part of government for the system to be more cost-effective and efficient. The forces which are driving these policy shifts across Canada will quite likely culminate in the most profound changes to the health care system since the implementation of universal hospital insurance in 1957 and universal physician insurance in 1968.

The area of human resource planning in the health care field is gaining increasing attention during this period of intense review and analysis. As Lomas and Barer point out, the emergence of more attention to the collective public interest forces us to focus not only on ensuring that adequate quality of care is provided to each individual, but also that resources are used in an efficient manner. "Squandering resources in health care means either deficits from attainable community health status (technical

inefficiency) or fewer resources available for other competing non-health care uses of greater social value (allocative inefficiency)" (Lomas & Barer, 1986, p.246). These authors go on to explain that

the importance of the collective public interest only emerged as third parties came to have a stake in the resources consumed by the aggregation of these individual encounters, as closer scrutiny of the distribution, roles and incentive structures of the health care system revealed that traditional and accepted work allocations and delivery institutions were far from optimal. Nevertheless, a governance system based on the individual public interest (quality assurance without resource constraints) became a powerful determinant of manpower policies because government had, where self-regulation had been granted, no obvious or painless method of forcing consideration of this new collective public interest (p.247).

Within this context of ensuring the collective public interest rather than the self interest of various health care workers, human resource planning is an attempt to provide the most appropriate skill set required at the least cost to achieve the best patient outcome. Nursing personnel represent the largest category of health personnel within the Canadian health care system and consequently attempts at developing human resource plan for nursing must be an integral part of national and provincial health policy-making.

Human Resource research is a relatively new field of study and practice. Its subject matter is currently in the developmental stage and it is of a multidisciplinary nature, drawing on such disciplines as economics, statistics, behavioural sciences, management science, and personnel and industrial relations. Health human resource research is in its infancy in Canada with the first National Health Manpower Conference being held

in 1969. This conference was a response to the growing realization that there was more to health manpower planning than simply increasing the number of graduates in health care programs (Hacon, 1974, p.28).

The lack of attention to the collection and analysis of data about the various groups of health care workers by both Provincial and Federal governments is quite likely a result of overriding concerns by both levels of government about physician supply. Health human resource planning policies have been dominated by first, the need to increase the supply of physicians (1950s and 1960s), then, to control expenditures on services generated by this growing supply (1970s), and finally, to slow physician supply growth directly (1980s). This focus has been at the expense of appropriate planning and policies for other health human resources including nursing personnel (Lomas & Barer, 1986, p. 251).

It is not surprising, then, that comprehensive studies of nurse human resource supply and requirements for the specific purpose of long-term and province-wide nurse human resource planning have been lacking in Canada. In fact, reliable and comprehensive time series data on nursing personnel are not readily available. The primary sources for data are the licensing authorities of the various nursing associations but, these data are of course, not available for those categories which have no mandatory licensing requirements. For example, in Manitoba, the occupation of "Health Care Aide" or "Nursing Assistant" does not require licensing and the numbers in this category have

been increasing as the mix of nursing personnel has been manipulated in response to budget constraints.

This study will provide an up-to-date snapshot of the categories and numbers of Manitoba nursing personnel and delineate implications for policy direction. Chapter One will provide an overview of the current literature which will include information about current initiatives in other provinces and within Manitoba. Chapter Two will include data and corresponding discussion about the current Manitoba nursing personnel. Chapter Three will summarize the data and discuss possible policy implications and Chapter Four will conclude with a discussion about the possible approaches to, and difficulties inherent in, policy making related to Health Human Resources.

1.2 METHODOLOGY

The sources of information for this study will be the three licensing bodies of the nursing professions (Manitoba Association of Registered Nurses, Registered Psychiatric Nurses Association of Manitoba, Manitoba Association of Licensed Practical Nurses) and Manitoba Health. Each of the three licensing bodies requires that membership and the right to practice conveyed by such membership be renewed yearly. Information necessary to the determination of right-to-practice is collected from the renewing members each year, along with other items essential to registration renewal. In addition, data are gathered about employment status and conditions, and about

educational preparation.

Manitoba Health has initiated an extensive survey of all health care facilities to ascertain the numbers and types of personnel currently working within the Manitoba health care system. This survey also collected information about the employment status of working health care personnel in terms of fulltime, part-time, or casual status and about the number of vacant positions for which personnel were being recruited. Data from the 1994 survey will be used. Information from the Annual Reports of Manitoba Health will also be included as appropriate.

1.3. LIMITATIONS

Much of the information presented in this study will be drawn from the self-reported data collected in annual membership renewal procedures. Each Nursing regulatory body (MARN, RPNAM, MALPN) collects information according to its own specific format. There is a lack of consistency amongst the bodies in relation to what information is collected. As well, the length of time over which data has been collected varies. This creates difficulties in performing comparisons and analysis over time. In addition, information that is self-reported is not completely consistent from nurse to nurse within an association and between associations. For example, nursing personnel must report their type of employment according to preselected options provided by each association. The options provided have changed over time and are somewhat narrow in scope compared to the types of employment currently available.

Another limitation is caused by the paucity of information available on the Health Care Aide/Attendant group. This group is currently the fastest growing group of nursing personnel but there is no central body which collects and retains information about the group. Total numbers are unknown as is information about individual members such as age categories, gender, and educational background.

2. LITERATURE REVIEW

2.1. OVERVIEW

Clearly within the health care system, a most important topic for policy makers is that of nursing personnel and the need to fully understand all the issues related to supply, distribution, deployment, and utilization. Although research in this area is hampered by the lack of available, reliable data, efforts are currently in progress to develop models sufficiently complex to examine the multi-faceted nature of human resource planning for nursing personnel. Linda O'Brien - Pallas (1992) presents a concise summary of the work of Prescott, an American, and Kazanjian, a Canadian, both of whom have been examining the need for models which could be used to forecast resource needs for nursing personnel. She states that both would concur that such models need to be further developed and that they need to include the following characteristics:

1. While parsimony, costs and simplicity are important considerations, models of sufficient complexity are needed to capture the intricacy of factors which have an impact on the demand for health care providers.
2. Models need to include all sectors of the health care system. Shifts in hospital demand may influence shifts in the demand of the community. Single-segment models are not adequate to detect these shifts.
3. Models of single-occupation groups cannot capture substitution within and across occupational groups and determine the impact of supply changes on one group on the demand for other groups. For example, the current replacement of RNs by RNAs and HCAs will affect forecasting in the future.
4. Finally, nursing and health person power planning does not exist in isolation from the world in which these services are delivered. Future planning models need to explicitly place the health care industry in the general context of the economy and expected growth in the labour force as a whole. These contextual factors place important constraints on the supply of the health care workers and demand for health services. In Canada, work by the Centre for Health Services and Policy Research at the University of British Columbia and by the Ontario Resource Data Centre at Waterloo are teasing out the elements of future models and identifying the data elements required as well as the limitations in our current reporting practices. Many of these concerns have been brought to the National Task Force on Health Information for consideration. Such items as a unique identifier and the need to link national and provincial data sets are beginning solutions to the problems of reliable data elements. (p.21)

Provincial governments only recently have begun to take a more active role in the collection and analysis of human resource data and this task must be addressed in order to initiate any long term nursing human resource plan. The province of British Columbia has begun to address this need through the Health Manpower Research Unit at the University of B.C. This unit now collects and publishes on a yearly basis a status report on health personnel in the province called "Rollcall Update" (University of B.C., 1991) In Manitoba, an initiative to begin collecting data on health care personnel has recently (1993 and 1994) been undertaken by the Provincial Health Care

Labour Adjustment Committee and Manitoba Health. (Manitoba Health, 1994, Nursing Research Study). All health care facilities in Manitoba are being surveyed regarding the types and numbers of personnel currently employed. This endeavour will provide information about those workers currently employed and about any vacant positions but will tend to underestimate the current numbers and types of health care workers available in the province.

In Alberta, the Provincial Nursing Action Plan (PNAP) Steering committee is supporting a proposal for the establishment and funding of a committee on nursing manpower planning. The objectives of the project are:

1. To collect standardized data that are reliable and timely to allow appropriate parties to ensure that there are adequately prepared nursing personnel to meet the future needs for nursing,
2. Develop a manpower model, and
3. Develop an implementation plan for the model. (Province of Alberta, 1991, p.1)

The forward of this proposal notes that

In Alberta, there is an manpower planning deficiency when it comes to defining whether or not a nursing shortage exists, defining whether there is a problem on the supply and/or demand side, determining the magnitude of the problem, and monitoring how the problem is changing over time. Although some of the necessary data to track and monitor RN, RPN, and LPN employees in Alberta, is collected by the Health and Social Services Workforce Survey on an annual basis, much of the big picture on overall workplace employment patterns can only be pieced together from several existing databases and one shot surveys. The extent to which the data gathered on nursing attachment patterns in Alberta are standardized, analysed, and utilized for human resource management and manpower planning in nursing services is currently unknown. Without such baseline data on RN, RPN, and LPN employment patterns, very few rational or targeted manpower and retention policies are likely to be instituted and properly evaluated in the

various institutions. (p.1)

It is also noted in the introduction to the Alberta proposal that this problem is not unique to Alberta and that at least one nurse researcher, Dr. Shirley Stinson, has been trying during the period from 1981 to 1991 to encourage interest at the national level with the Canadian Nurses Association, Statistics Canada, and the National Health Research Development Program to develop a valid nurse manpower model and to keep comprehensive statistics on patterns of nursing personnel. Dr. Stinson also noted that there is no valid nursing manpower model. (p.2)

Nova Scotia and New Brunswick have recently developed and published plans to address Nursing supply and requirement issues (Province of Nova Scotia, 1993; Province of New Brunswick, 1993). A substantial amount of research on this topic has been undertaken in the province of British Columbia through the auspices of the Centre for Health Services and Policy Research (University of British Columbia, 1993; Kazanjian and Wood, 1993). Here in Manitoba, a very recent initiative has begun under the direction of the Provincial Nursing Advisor and in collaboration with the Manitoba Association of Registered Nurses (MARN), Registered Psychiatric Nurses Association of Manitoba (RPNAM), Manitoba Association of Licensed Practical Nurses (MALPN), and Health Care Aide representatives. These groups have agreed to collaborate on the development of a nursing resource plan for Manitoba and the advisory committee is in the midst of establishing working committees to begin data collection and analysis. The RPNAM has also recently completed a planning

document, "Psychiatric Nursing Education Feasibility Study", which addresses future projected needs for Psychiatric nurses in the province (Registered Psychiatric Nurses Association of Manitoba, 1994).

At the national level, the CNA has been collaborating with three other health professional groups to explore the possibility of developing an Integrated Health Human Resource Plan. The CNA has also recently completed extensive work with Statistics Canada to "clean up" the data collection process on nursing personnel across Canada. The International Council of Nurses has also begun to develop documentation and proposals in the area of human resource planning (International Council of Nurses, 1993).

These recent efforts have brought to the forefront the need for reliable, consistent data on nursing personnel and highlighted the lack of a relevant model which can be used to reliably forecast supply/demand projections of nursing personnel. As Kazanjian and Stark (1985) note,

Health economists argue, and the evidence suggests, that the health manpower market is markedly different from other labour markets, the traditional push/pull factors that affect supply/demand in the general labour market do not apply as readily to health manpower. In addition, there is considerable evidence to indicate that the market for nurse manpower is appreciably different from that for the other health occupations. To be useful then, a study of nurse supply and requirements must have well-defined objectives: it must be clear whether it addresses specific or comprehensive planning issues; short or long-term forecasts; and ideal or practical scenarios. Data, or lack of data from

unfocused studies yield an unreliable collection of statistics and opinions which are confusing and may even be misleading for planners and policy-makers.
(p.36)

In addition to the obstacles of lack of reliable, consistent data and the absence of an appropriate model, the lack of clear definitions of the functions and scope of practice for the numerous categories of personnel within nursing further clouds the issue. The roles of Registered Nurses, Registered Psychiatric Nurses, and Licensed Practical Nurses all overlap. Recent decisions by the National and Provincial Registered Nurses' Associations to make a Bachelor of Nursing degree a requirement to practice as a registered nurse by the year 2000 have added another dimension to the question of competencies. Some provinces do not have Registered Psychiatric Nurses, others do not have Licensed Practical Nurses or they are called something different and have slightly different roles. The proliferation of health care workers who assist or support nursing care delivery presents another complication. The growth of these unlicensed workers originated in Canada during times of nursing shortage and the numbers have grown substantially in response to the current fiscal pressures being placed on health care institutions. There are currently no guidelines in place to assist in developing the most effective and efficient mix of nursing personnel to meet the health needs of specific populations. The CNA is attempting to initiate a collaborative venture between the provincial associations of the various categories in order to develop a mutually agreed upon statement of competencies. This, however, is an enormous undertaking, fraught with political challenges and territorial issues. Clear definition of competencies and of who is "assistive" and who is "in charge" in relation to the provision of nursing

care will be difficult because disagreements between RNs and LPNs over these issues have been longstanding.

If the nursing associations can reach agreement on competencies and scope of practice, it remains to be seen if these decisions achieve the extent of task delegation that is deemed by government to be the most efficient and effective. The province of Quebec has been experimenting with medical and nursing task regulations since 1980 and in a recent article on the topic the point is made that

for the government as for physicians in private practice, the use of nursing assistants has certain economic advantages as long as the latter enjoy a measure of autonomy - that is, as long as their practice does not require that they be too narrowly supervised by nurses. Moreover, the entire medical profession stand to gain from supporting nursing assistants; such support reduces the control nurses have over the particular field of treating the sick and maintains their subordinate position (Contandriopoulos, Laurier, & Trottier, 1986, p.311).

Contrast this notion to the 1991 position statement of the CNA which states, in part,

Registered Nurses are responsible for the quality of nursing services provided to the client. The worker should be under direct professional nursing supervision in situations where nursing services are provided.

It is evident that the issues of staff mix, competencies, and scope of practice within the nursing categories will be difficult to address and are an integral part of the equation when predicting future requirements of nursing personnel. The bottom-line realities of governments and health care administrators and the struggles for territory amongst health care workers are key factors which are influencing decisions about "how many" and "what kind" of nursing personnel are required to provide adequate care.

2.2. ESTIMATION OF SUPPLY

The estimation of the supply of nursing personnel includes considerably more than simply counting the numbers of personnel currently available - although that is a good place to start and easier said than done. For example, data on the numbers of Health Care Aides available for work in Manitoba are not currently accessible.

As well as information about the current numbers of each category of nursing personnel available, specific data about each person in each category are required in order to be able to predict the professional life expectancy of those currently available. The data required include: age and a retroactive history of the membership status of each person. Kazanjian and her co-workers have done extensive work in the area of modelling the life-cycle activity patterns of Registered Nurses in B.C. using these data (Kazanjian, Brothers, & Wong, 1986; Kazanjian, 1989).

Within the area of supply, data on employment status (full/part-time/casual, active/inactive/retired) and those working part-time and casual who are looking for more hours of work are also required. Geographic location, type of work, job titles, work setting, and educational qualifications are all data required to ascertain if the right personnel with the right qualifications are available to meet regional and specialty needs.

Attrition data are another important part of the equation. Out-migration, retirement, leave of absence, career change, turnover statistics, and non-registered nursing personnel are all required supply data. As well as data on the current nursing personnel available, information is required about the annual additions to the workforce. Data are required about in-migration from other provinces and other countries as well as the projected annual production of personnel from educational facilities and reentry programs.

A dimension of the supply question which is more qualitative in nature but which affects the whole question is that of the image of nursing and the ability of the profession to attract new personnel into the field and retain those who are already qualified to practice. Demographic information about those entering the nursing professions is important in this context and these data need to be compared to the working population of the province to ascertain if the supply of potential recruits is stable, falling, or increasing.

Two examples of the data elements required when examining the supply of nursing personnel are depicted in Figures 1.1 and 1.2. Figure 1.1 was developed by the Centre for Health Services and Policy Research at the University of British Columbia (UBC, 1993, p.17). Figure 1.2 was used by the task force which studied Nursing in Nova Scotia (Province of Nova Scotia, 1992, p.95). Figure 1.1 identifies those factors which have a relationship with the supply of nursing personnel and divides the factors according to whether they have a proportional, causal, or balance relationship. Factors