

Perspective of Manitoba Pharmacists
on Entry-Level Practice Competencies

by

Rehana Durocher

A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

in partial fulfilment of the requirements of the degree of

MASTER OF EDUCATION

Department of Educational Administration, Foundations and Psychology

University of Manitoba

Copyright © 2006 Rehana Durocher

THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION

Perspective of Manitoba Pharmacists on Entry-Level Practice Competencies

by

Rehana Durocher

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of

Manitoba in partial fulfillment of the requirement of the degree

of

Master of Education

Rehana Durocher © 2006

Permission has been granted to the Library of the University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film, and to University Microfilms Inc. to publish an abstract of this thesis/practicum.

This reproduction or copy of this thesis has been made available by authority of the copyright owner solely for the purpose of private study and research, and may only be reproduced and copied as permitted by copyright laws or with express written authorization from the copyright owner.

Abstract

Qualitative focus group methods were used to explore the perceptions of community pharmacist preceptors on changes and challenges they expect to face in practice, and on the knowledge, skills, and attitudes needed in responding to the challenges. Participants expressed the opinion that practice was evolving towards clinical patient services, but that change was impeded by structural barriers associated with community pharmacy's product-focused model and difficulties in finding appropriate continuing professional development opportunities for maintaining competency and acquiring advanced credentials. They stated that while students entering the profession are well prepared for practice, in many cases they were not able to use many of their skills in community practice settings. Given that obstacles to implementing clinical services may be inherent to community pharmacy's retail structure, rather than the education standards of entry-level practitioners, it is suggested that more comprehensive studies be conducted before instituting major curricular changes in Canadian pharmacy programs.

Acknowledgements

I would firstly like to thank my thesis advisory committee for their guidance and advice during the course of this study. Thank you to my thesis advisor, Dr. Zana Lutfiyya, who agreed to take on a student from a different field of study and help introduce her to research using qualitative methods. My sincere thanks go to Dr. Dieter Schonwetter for his ready and invaluable advice, and his careful and insightful reading of my thesis. Thank you to Dr. David Collins for taking time out of his busy schedule, and later out of his research leave, to sit on the committee and read this thesis.

Thank you to the sixteen community pharmacist preceptors whose voluntary participation in the focus groups made this study possible. While they must remain anonymous, I want them to know my deep appreciation of their contributions. My sincere thanks go to Marian Kremers for her generous help with the focus group sessions. Marian's keen observation and organizational skills were of tremendous help in conducting the sessions and providing information to enhance the transcripts. Thank you to Sherry, Toula, and Jennifer, who transcribed the audio recordings of the sessions and to the Manitoba Society of Pharmacists, who helped cover some of the transcribing costs.

I would like to express my sincere appreciation to Dr. Colleen Metge for her constant encouragement and insightful discussions throughout the course of this study and her incredible ability to suggest a good reference paper on almost anything related to pharmacy.

Finally, I would like to thank my family, a.k.a. *les boys*, without whose support this journey would not have been possible.

Dedication

for Rémi

who showed amazing patience along this journey

Table of Contents

Abstract.....	ii
Acknowledgements.....	iii
Dedication.....	iv
Table of Contents.....	v
List of Tables.....	x
List of Figures.....	xi
CHAPTER ONE.....	1
The Profession of Pharmacy.....	1
Defining Professionals.....	4
Members of the Professions.....	7
Evolution of Pharmacy as a Profession.....	13
Stage 1: Manufacturing.....	14
Stage 2: Compounding.....	15
Stage 3: Distribution.....	16
Stage 4: Medication counselling and clinical pharmacy.....	16
Stage 5: Pharmaceutical care.....	17
Threats to Pharmacy's Professional Status.....	19
Educating Professionals.....	20
Research Questions.....	29
Summary.....	33
CHAPTER TWO.....	36

Literature Review.....	36
The Professional Faculty.....	37
Pharmacy as a Profession.....	40
Pharmaceutical Care	42
Community pharmacy's role.....	43
Research Context	46
Entry-level Pharmacy Education	47
A Brief History of Pharmacy Education in Manitoba	48
Entry-level Degree Requirements.....	49
Entry-level Pharm.D.	52
Entry-level Practice Requirements	56
Summary	56
CHAPTER THREE	58
Research Design.....	60
Focus Group Interviews.....	63
Selecting Focus Group Participants.....	65
Entry into the field.	67
Participants.....	71
Data Collection	72
Focus Group Settings.....	72
Focus Group Process.....	73
Data Analysis.....	77

Procedures.....	80
Enhancing the Trustworthiness of the Study	81
Role of the Researcher.....	83
Ethical considerations.....	86
Summary	88
CHAPTER FOUR.....	89
Perspectives of Pharmacists.....	89
Focus Group Participants.....	89
Group 1	90
Group 2	91
Group 3	92
Group 4	93
Themes.....	94
Changes and Challenges	95
Evolution Towards Clinically Oriented Pharmacy Services	96
Educational Obstacles To Adopting Clinical Pharmacy Services.....	100
Corporate vs. Professional Vision of the Role of the Pharmacist.....	102
Lack of Clarity About the Role of the Pharmacist.....	104
Outdated Remuneration Model For Pharmacy Services.....	105
Inter-professional relationships.....	107
Business vs. Professional Models of Practice.....	109
Entry-Level Knowledge, Skills And Attitude.....	110

Admitting the Right Candidates to Professional Education	110
Disharmony Between Practice and Curriculum.....	113
Graduating Students Have Adequate Entry-Level Knowledge	114
Marketing Professional Services / Deficiency in the Curriculum	115
Summary	116
CHAPTER FIVE	117
Limitations and Strengths of the Research	118
Implications.....	120
Changes and Challenges	120
Entry-level Education	127
Implications for Future Research.....	130
Summary	131
REFERENCES	136
APPENDICIES	151
Appendix 1 Categories of Pharmacy Practice in Manitoba	152
Appendix 2 History of Pharmacy Education in Manitoba.....	156
Appendix 3 Comparison of Canadian Pharmacy Degrees.....	157
Appendix 4 Education and Nursing Research Ethics Board Submission.....	159
Ethics Protocol Submission Form (Basic Questions about the Project)	160
Required Information about the Research Protocol.....	162
ENREB Approval Letter.....	164
Appendix 5 Recruiting Letter	165

ENREB-Approved Recruiting Advertisement.....	166
Appendix 6 Project Information Sheet	167
Appendix 7 Focus Group Session Agenda	169
Appendix 8 Informed Consent Form	170
Appendix 9 Focus Group Interview Schedule	174
The interview guide	175

List of Tables

Table 1 Summary of general characteristics of CPPs sent letters.....	69
Table 2 Summary of characteristics of CPPs interested in participating.....	70
Table 3 Focus Group Attendance	74
Table 4 Summary of the general characteristics of the study participants	76
Table 5 Frequencies at which identified themes were identified in each focus group	97

List of Figures

Figure 1 Conceptual Framework of the Profession of Pharmacy.....	8
Figure 2 Five Stages Of Major Change In Pharmacy Practice.....	15
Figure 3 Categories of Pharmacy Practice.....	26

CHAPTER ONE

The Profession of Pharmacy

The question of how to best educate professionals is one that has been debated since the emergence of the Western university in medieval times. Although these institutions originally arose out of a desire to provide training for those entering the professions of theology, law, and medicine (Casper, 1996), over time universities came to increasingly focus on the pursuit of “pure knowledge” in natural sciences and the arts. This, in turn, has led some to question the role of professional schools in the academy (Gregor, 2000). While this was taking place, the nineteenth century saw the formal rise of new professions, such as pharmacy (American Conference of Pharmaceutical Faculties, 1999), who sought the legitimacy gained through the requirement of a university-based education. Moreover, while a university degree does satisfy one of the commonly accepted requirements of a professional education (Wilensky, 1964, as cited in Hepler, 1987), there are stakeholders within the professions who continue to question whether this is the best means of preparing an individual for professional practice (Casper, 1996).

If, as some might argue, professional education legitimates itself primarily through practice (Hansen, 2004; Holland & Nimmo, 1999; Knowlton, 1991; Schwinghammer, 2004), it follows that the primary role of professional faculties such as pharmacy, medicine, nursing, dentistry, engineering, and law is to graduate new pharmacists, physicians, nurses, dentists, engineers and lawyers. While it is true that professional schools are increasingly involved in traditional scholarly activities and research (Holland & Nimmo, 1999; Knowlton, 1991), their *raison d'être* would remain

the “production” of new professionals needed to fulfill the mandate the profession avowed with the public in exchange for practice exclusivity in dealing with a specialized body of knowledge (Beck, Thomas, & Janer, 1996; Commission to Implement Change in Pharmaceutical Education, 1993a). That being the case, the question arises as to who is ultimately responsible for deciding what future professionals are learning through curricular programs and what influence various stakeholders have in making these decisions. The success of inevitable change in a profession, like any organizational change, occurs only through the dedicated efforts of individual members of the profession (Davies, Spence Laschinger, & Andrusyszyn, 2006; Wilkinson, 1998). Hence, what role(s) should individual practitioners play in determining curricular change and how do they affect acceptance of new practice models and standards?

In light of ongoing discussions taking place involving pharmacy educators and various external stakeholders looking at the future of pharmacy education and practice, I set out to explore the perspectives of some of the individuals who might be affected by changes in pharmacy education curricular standards. These changes centre around the pharmacist providing medication management and self-care services along with health promotion information, carrying out clinical interventions, and participating in therapeutic decisions, in addition to drug distribution or dispensing services. My goal was to explore the views, opinions, ideas, and perceptions on changes and challenges which a sub-group of Manitoba community (retail) pharmacists (staff and managers) face now, and expect to face in the foreseeable future. I also sought their opinions on the

necessary knowledge, skills and attitudes needed by entry-level practitioners to respond to the identified changes and challenges.

Community pharmacists as a group currently make up the majority of practitioners in Manitoba (864 out of 1155, 74.8%) and nationally (over 71%) (NAPRA, 2006) and I would not expect these figures to be reduced in the near future given the expansion of pharmacy practice in the retail sector (Jennings, 2005). They also define pharmacy to the average individual (Lemieux-Charles, 2003; K. Taylor & Harding, 2003) and the services they provide and the knowledge they display set the *de facto* standard for what the public expects of a pharmacist. That was one of the reasons I chose community pharmacists for this study. Given the study's limited scope and resources, reducing the participant population to a manageable size was an essential element. It was therefore decided to look at the perspectives of a specific subgroup of community pharmacists, namely those who had been preceptors of undergraduate pharmacy students and/or pharmacy interns in the two years preceding the study.

There were other, more specific reasons for selecting this subgroup. It is made up of individuals who, as preceptors, assist in the socialization of pharmacy students, where in this context socialization is defined as "the process by which an individual selectively acquires not only the knowledge and skills of the profession, but just as important, the appropriate behaviors, attitudes, and values" (Beck *et al.*, 1996, p. 122). In pharmacy this involves the development of practical skills and the integration of theoretical knowledge into actual patient care. By passing on behaviours, attitudes, and values, preceptors are in a position to influence the standards by which future practitioners will practice. I also

selected this subgroup since I am assuming that since these individuals have volunteered to serve as preceptors in the recent past, they may have a greater interest in pharmacy education than the general practice population, and might therefore be more likely to volunteer to participate in a study dealing with entry-to-practice education. A more complete discussion of the selection process is presented in Chapter Three.

Defining Professionals

A discussion of changes in professional standards and practice needs to begin by defining what is meant by the term “professional”. As Smith and Knapp have indicated, the terms “profession” and “professional” are commonly used in such wide ranging context that “that it is difficult to produce definitions that are relevant and widely accepted” (1992, p. 108). They then go on to suggest that one way to clarify the meaning would be to choose an occupation that is widely accepted as a profession, such as medicine, and compare its characteristics to the occupation under discussion; in this case, pharmacy.

One might also consider the basic definitions used in the English language. The Oxford English Dictionary (OED) *Online* (Simpson, 1989) defines a professional as one who is “Engaged in one of the learned or skilled professions, or in a calling considered socially superior to a trade or handicraft”. It in turn defines a profession as

A vocation in which a professed knowledge of some department of learning or science is used in its application to the affairs of others or in the practice of an art founded upon it. Applied *spec.* to the three learned professions of divinity, law, and medicine.

Perhaps more in keeping with my thesis, however, is the description of a profession provided by Cogan (as cited by Maudsley & Strivens, 2005, p. 535-536) who states

A profession is a vocation... founded upon an understanding of the theoretical structure of some department of learning or science, and upon the abilities accompanying such understanding ...applied to the vital practical affairs of man. The practices ...are modified by knowledge of a generalized nature and by the accumulated wisdom and experience of mankind... The profession... considers its first ethical imperative to be altruistic to the client.

Larson (1977, p. x) identifies two sociologically core characteristics of professions which she states as having "...special competence in esoteric bodies of knowledge linked to central needs and values of social system" and being "...devoted to the service of public, above and beyond material incentives". She then goes on to list attributes which help define a profession, namely having: a body of knowledge and techniques which professionals apply in their work; a service orientation; distinctive ethics; the privilege of self-regulation granted by society (social sanction); and autonomy and prestige.

In addition to the privilege of self-regulation, society grants a number of professions the privilege of exclusivity. For example, one cannot legally practice law, medicine, dentistry, engineering, or pharmacy in Canada without the sanction of the respective self-regulatory bodies. Self-regulation also grants another very important privilege to many professions. That is, the ability to set and enforce standards of practice by defining the general attributes required by practitioners to fulfil professional

competencies. Defining standards of practice in turn sets standards of professional education, including the entry-to-practice education standards for students graduating from professional faculties at universities (National Competency-Based Standards of Practice Working Group, 2003).

In general, the three core characteristics needed if a group is to rightly be called a profession include:

1. an established autonomous system of self-regulation;
2. governance by a code of ethics, including aspects of social responsibility and devotion to the public good; and
3. practice guided by a specific and substantial body of knowledge.

These are consistent with professional attributes expected of Canadian pharmacists, that is, they must consistently (National Competency-Based Standards of Practice Working Group, 2003):

1. accept responsibility for actions and decisions;
2. demonstrate respect for others;
3. provide professional pharmacy care to individual patients that complies with ethical guidelines governing the profession [each provincial regulatory body developed its own code ethics];
4. maintain appropriate inter-professional relationships;
5. provide care and services that place the best interest of patients before their own self-interest;

6. strive to improve professional competence through the use of appropriate learning;
7. demonstrate personal and professional integrity;
8. undertake non-pharmacy practice-related activities that are consistent with their status as a health professional; and
9. avoid bias or conflict of interest.

Members of the Professions

Members of a profession generally form a community which shares a relatively permanent affiliation, identity, personal commitment, specific interests, and general loyalties. These communities are built around professional associations, professional schools and self-administered codes of ethics (Larson, 1977). While professional bodies are made up of many stakeholders, a closer look would show that they may be primarily divided into three large sub-groups.

Figure 1 presents a conceptual illustration of the pharmacy profession, showing the major sub-groups of a self-regulating profession, namely: regulators, educators, and practitioners. It should be noted that students have been deliberately left out of this figure. While they play a vital role in the continuity and renewal of any profession, their roles and their relationships with other members of the profession is complex and including a full discussion here would dilute the focus of the thesis.

The sub-groups shown in Figure 1 play their respective roles in order to fulfil the mandate of the three core characteristics of a professional group, that is, devotion to public good, social sanction, and a specialized body of knowledge. The sub-groups are all

made up of members of the profession with different primary roles and responsibilities for which they are accountable. These roles and responsibilities are not mutually exclusive and some members may serve important functions in two or more categories. The double-ended arrows used in this figure are meant to indicate that each of the sub-groups is affected by the others and that changes initiated by one sub-group may impact on the entire organization. While Figure 1 specifically illustrates the structure for the profession of pharmacy in Canada, it is applicable to most of the healthcare professions, as well as engineering and law, since they have similar basic professional governance and regulatory structures.

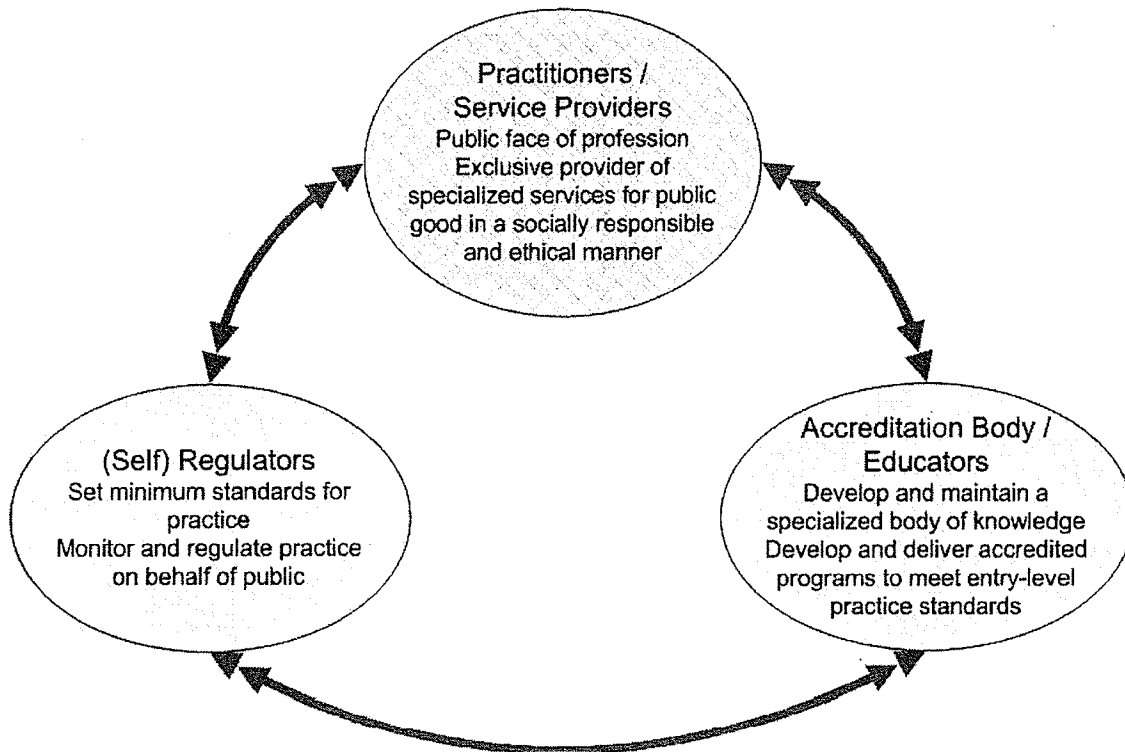


Figure 1 Conceptual Framework of the Profession of Pharmacy

Pharmacy regulators are charged with the responsibility of establishing and maintaining an autonomous system of self-regulation. They derive their authority from the public through provincial legislation (for example MPhA, 2006). While governments, both federal and provincial, are involved in the approval and regulation of drug products handled by pharmacists, they retain an “arm’s-length” relationship with the profession regarding matters concerning practice. On behalf of the public, from which they derive their authority, the regulators have a legal obligation to establish, monitor, and regulate practice standards for individuals and practice sites and are responsible for disciplining those who violate accepted standards. They also establish the minimum standards for entry-to-practice by stipulating the academic and practical training requirements, and/or registration examination(s) that an applicant must complete to meet the standards of qualification for entry into practice, and for higher levels of practice if they exist (for example, cardiology or psychiatry in medicine). In the case of pharmacy, this group does not prescribe specifics within pre-licensure educational programs, but requires the pharmacy education programs to be accredited by another, recognized body.

Members of the regulatory sub-group are largely drawn from the professional practice community and many are unpaid volunteers. The public is represented on the board of the regulatory group through the government appointment of lay members. The appointment of persons from outside of the profession is a reflection of a professional governance body’s mandate of serving the public interest. The current Act (MPhA, 2006) stipulates two lay members on the eight person MPhA council, but does not lay out the

criteria by which the government chooses these individuals or how they will function to bring a public perspective to the issues that they face.

Healthcare professionals in Canada are normally educated in the professional faculties of the country's universities. These faculties are accredited by bodies which serve to maintain consistent national standards, ensure the quality of professional education, and support of the growth and development of educational programs and professions (Lemieux-Charles, 2003). These bodies are made up of academics and other representatives of the profession. The academic accreditation process is meant to ensure that the outcomes and standards required by regulatory bodies and the public are met. The design of curricula, program set-up, and teaching methods is generally determined by individual schools or faculties, hence the curriculum and how it is delivered may vary from education program to education program across Canada. Educators are the faculty members at accredited institutions who teach prospective professionals from a specialized body of knowledge that they have developed and maintain, some by virtue of their practitioner standards. The curricula they design and deliver are primarily meant to prepare students for entry-level practice (Accreditation Council for Pharmacy Education, 1997; Beck *et al.*, 1996; Commission to Implement Change in Pharmaceutical Education, 1993a; Schwinghammer, 2004). Some faculty members also maintain a professional practice, in addition to their teaching, research, and other university duties.

The final group illustrated in Figure 1 is made up professional practitioners. These are the individual members of the profession with the primary mandate of providing services for the public good in an ethical and socially responsible manner. They are the

public face of the profession, the interface between the profession and the public (K. Taylor & Harding, 2003; Zellmer, 2005). As such, one might expect practitioners to be in a unique position to gauge what the public expects from the profession. Likewise, the practice standards of practitioners can influence public expectations by defining a *de facto* norm which the public may come to expect as the best service available (Zellmer, 2005). Just as some members of the regulatory and academic sub-groups may maintain a pharmacy practice, some members of the practice group actively participate in the education of pharmacy students. By acting as preceptors, practitioners serve as mentors and role models and assist with the socialization of students in practice settings. Some are also directly involved in teaching at universities. The curriculum committees of most faculties of pharmacy will also often have one or two practitioners as members in order to bring another viewpoint to the table. Others may be asked to sit on committees related to specific programs or initiatives where their input may be required (Perrier, Winslade, Pugsley, Lavack, & Strand, 1995).

Practitioners can also influence the success or failure of practice and/or educational innovations and changes simply by the degree to which they incorporate the changes into their personal practice model. Implementation of new learning is further complicated by the fact that in some professions, such as pharmacy, practitioners may find employment in a variety of settings (K. Taylor & Harding, 2003). For example, pharmacists are employed in retail outlets, hospitals, long term care facilities, government departments, and pharmaceutical companies (Jennings, 2005). In such cases these individuals may have allegiance not only to their profession but to employers, who may

or not share the ideals of the profession (Smith & Knapp, 1992; K. Taylor & Harding, 2003; Zellmer, 2005).

In the context of the profession of pharmacy in Manitoba, which is the focus of my thesis, the regulator is the Manitoba Pharmaceutical Association (MPhA). As mentioned previously, they are granted their authority by the public through provincial legislation, specifically the Manitoba Pharmaceutical Act (MPhA, 2006), and enabling regulations. The educator of prospective pharmacists in the province is the Faculty of Pharmacy at the University of Manitoba and the Faculty's program is accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP).

Finally, for the purpose of my thesis, I am focussing on individuals in the profession who provide direct service(s) to the public on a regular basis. In Manitoba, these individuals hold a patient-care license issued by MPhA and, to maintain a practice, they must maintain minimum requirements for practice hours and continuing education (MPhA, 2006). Although other licensed pharmacists and other members of the profession provide valuable services to society, they fall outside the scope of this thesis. As indicated earlier, in order to have a group of the size consistent with the scope of a qualitative study of this type, I have narrowed the focus further and worked with a sub-group of pharmacists practicing in community retail settings who have served as preceptors of undergraduate students and/or pharmacy interns in the two years preceding the study. Reasons for choosing to study this group of pharmacy practitioners are presented in depth in Chapter Three of this thesis.

Evolution of Pharmacy as a Profession

Wilensky (1964, as cited in Hepler, 1987, p. 374) has listed the steps that an occupation passes through as it professionalizes. Once the members consider that their occupation has attained social value (Larson, 1977) they strive to have their status legally recognized by society (Smith & Knapp, 1992). In order to establish a profession, members must:

1. engage in the occupation full-time;
2. establish university-based standard curricula;
3. form a professional association;
 - a. redefine core tasks “upward” [increasingly cognitive], delegate technical tasks to others,
 - b. experience conflict within profession with the “old guard”, and
 - c. experience conflict with neighbouring occupations,
4. agitate politically to win legal support (legal protection of occupational name, exclusion of outsiders, licensure); and
5. establish formal code of ethics to eliminate the unqualified and unscrupulous, to reduce internal competition, and to emphasize the service ideal.

This is an ongoing, rather than a one-time process. As Taylor and Harding (2003, p. 143) have stated “Professionalism is a social state in a continual process of change.” As a profession changes in order to meet its obligations to a changing society, it must “re-professionalize” with each major change it goes through (Hepler, 1987; Holland &

Nimmo, 1999). Pharmacy in North America has gone through this process a number of times since it developed as a profession in the 1800s. An overview of this evolution is presented here to provide a context for the discussion currently underway concerning changes to pharmacy education and practice. The overview looks at pharmacy in the US since a search of the literature, discussed in Chapter Two, did not discover historical documentation on the Canadian experience. I would argue that using US information is relevant, however, since the Canadian profession shares many elements with its US counterpart and tends to follow the US model when introducing changes (Hill, 1999), as was the case for pharmaceutical care. Canadian pharmacy curricula are also heavily influenced by the US and until fairly recently there was mutual recognition of each other's entry-level degree programs (Vlasses, 2004).

In the period between the mid-1800s and the late 1990s, the (US) pharmacy profession's primary orientation moved from manufacturing, to compounding, to distribution, then to a more clinical role, and finally to the current pharmaceutical care model (Holland & Nimmo, 1999). Pharmacy in Canada has followed much the same path, albeit often lagging behind changes in the US by a few years at each step. Figure 2 shows a timeline for the major changes which Holland and Nimmo (1999) delineated for the professionalization of US pharmacy.

Stage 1: Manufacturing In the mid-1860s, pharmacists, who were more commonly referred to as chemists or druggists, created medicines according to their own recipes. They then prescribed and sold them from their own dispensaries. At that time pharmacy had a clearly defined social value and both product and process were valued

(Hepler, 1987; Holland & Nimmo, 1999). Patients sought pharmacists' guidance on selection and use of medicines.

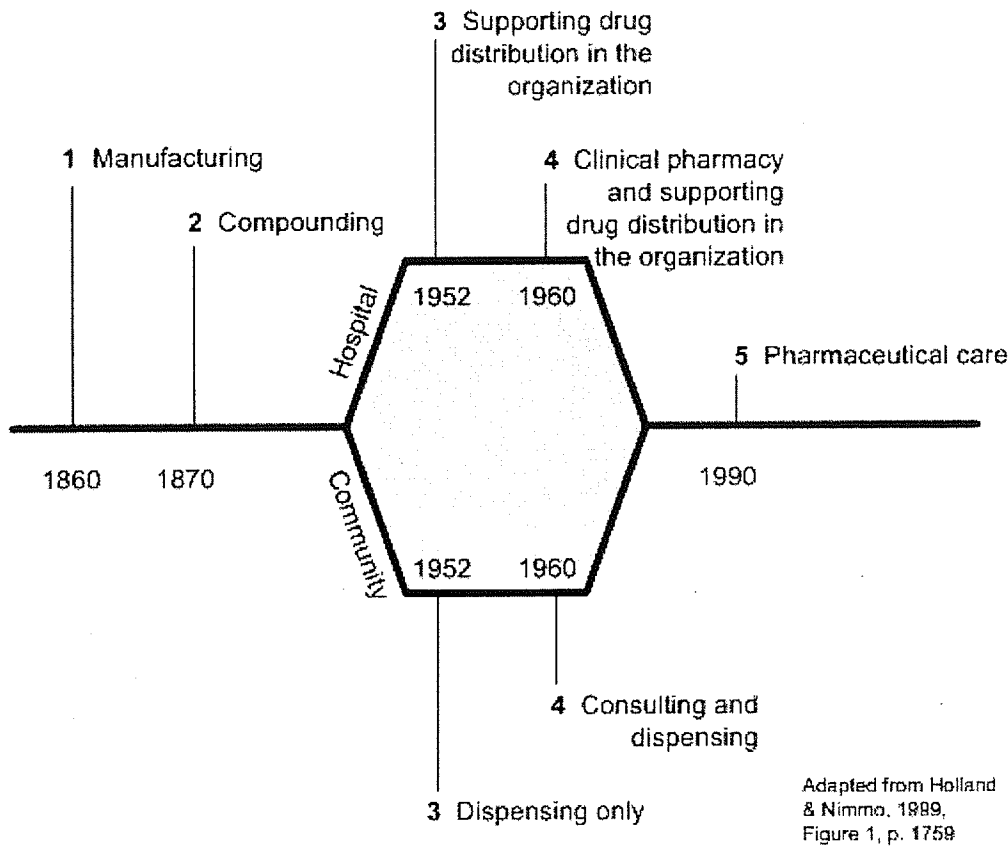


Figure 2 Five Stages Of Major Change In Pharmacy Practice

Stage 2: Compounding By the 1870s, the emergence of the pharmaceutical industry resulted in an increasing number of pharmacists relinquishing their manufacturing role. Pharmacists were now mixing pre-manufactured drugs according to a prescribed recipe, that is a prescription. Pharmacy continued to have a clearly defined social value and patients still came to pharmacists for medications and guidance on the use of medicines in self-care (Holland & Nimmo, 1999). That being said, while the pharmacist enjoyed public respect, the profession of pharmacy was at times under fire for

lacking the fundamental characteristics of a profession (American Conference of Pharmaceutical Faculties, 1999; Hepler, 1987).

Stage 3: Distribution The early 1950s witnessed fundamental changes in the way pharmacy was practiced and the beginning of diverging paths for community and hospital pharmacy. The community pharmacy was effectively reduced to a point of distribution for the pharmaceutical industry. During this phase the focus on the product remained but a role for the pharmacist in the healthcare process was lost, and as a result the community pharmacist lost social purpose (Holland & Nimmo, 1999).

At the same time the activities of hospital pharmacists were becoming more varied as their primary role moved to providing support for the management of drug products. Their duties came to include drug distribution, management, large-volume compounding, and participation on pharmacy and therapeutics committees. The emphasis, however, remained on the product (Holland & Nimmo, 1999).

Stage 4: Medication counselling and clinical pharmacy During this stage, hospital pharmacy added clinical pharmacy to its role of supporting drug distribution. Hepler (1987, p. 373) has characterized the development of clinical pharmacy as “an attempt to restore past losses of function from industrialization...” In the clinical pharmacy model hospital pharmacists helped physicians make the best decisions about medications. Physicians maintained responsibility for medication therapy outcomes while pharmacists, with their specialized knowledge, provided a supportive role (Holland & Nimmo, 1999). Clinical pharmacy may be viewed as a start of restoring social value to hospital pharmacy.