MOVING TOWARDS THE TWENTY FIRST CENTURY: A CURRICULUM BLUEPRINT FOR MIDWIFERY EDUCATION IN BRITISH COLUMBIA

by

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Moving Towards the Twenty-first Century: A Curriculum Blueprint for Midwifery Education in British Columbia

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ABSTRACT

This thesis addresses the question: *"What constitutes a curriculum for midwifery education in British Columbia?* No Canadian midwifery curriculum is currently available to guide development, although a collaborative program is expected to commence in Ontario in the Fall of 1993. A review of past and present midwifery practice and education provides a rich insight into the challenges encountered along the way as midwives established themselves as credible and respected health care providers. Identification of trends, issues and curriculum problems of the past assisted the author avoid common pitfalls in the development of a contemporary midwifery curriculum. Throughout the development of midwifery, the need for excellence in midwifery education was classified as a priority by midwives, their clients, as well as by other health care providers. The necessity for flexibility of program design arose in the last decade as a result of anticipated changes in student characteristics; more students are expected to want part-time studies and some future students will be second career and second degree people.

The method used to develop a 'multi-route-of-entry' curriculum leading to a baccalaureate in midwifery is based on Torris and Stanton's approach to curriculum development. Their guidelines are sufficiently broad to allow for a wide range of individual ideas, and precise enough to project a complete and internally consistent curriculum. The curriculum blueprint has four stages: the first describes the foundations for the curriculum, including philosophy, characteristics of the graduate and a theoretical framework; the second depicts curriculum design, organization, and overall goals; the third represents teaching methods and learning experiences; and the last describes program evaluation. Midwifery practice and educational philosophies are illustrated in two different models.

The practice model is derived from the International Definition of the Midwife (1972) and the philosophy of the Midwives Association of B.C. (1992). The educational model uses behaviorist, humanist and androgogical principles as a theoretical base. An organizational framework provides direction for multiple-routes-of-entry into the program. The thesis concludes with implications for midwifery practice and education in British Columbia and suggestions for future research.

DEDICATION

This thesis is dedicated to my sister Yvonne, a born teacher, who could not be here to witness the completion.

with love,

Jetty

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To my husband Jurjen, and to my family and friends for their assistance, encouragement, and support.

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Jetty Soolsma,

Vancouver,

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CHAPTER I

Background and Statement of Problem

The procurement of obstetric health care in industrialized nations around the world has become a much debated issue in the last few years. Controversy revolves mainly around the following questions:

- In whose domain does the provision of care for childbearing families belong, the physician or the midwife[1]?
- Should the midwife be an autonomous health care practitioner, regulated by a self-governing College of Midwives, or a nurse-midwife regulated by a Registered Nurses Association?
- What is the preferred educational (academic) preparation for the future midwife? Is it essential that midwives obtain nursing credentials before commencing midwifery studies?

The first and last question apply specifically, but not uniquely, to the Canadian system. Canada is presently the only industrialized country in the world with no national agreement on, or provision for, legal midwifery practice. Ontario is the first province to legalize midwifery. After announcing the intent to legalize midwifery (January 1986), the Ontario government appointed several committees to address issues and provide recommendations and guidelines (Kilpatrick 1993, p. 1067). The 'Curriculum Design Committee on the Development of Midwifery Education in Ontario' conducted preliminary investigations on midwifery education. Upon completion of their report, an Interim Regulatory Council was created to develop standards of practice and regulations for the

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[1]Midwives referred to in this thesis are either nurse-midwives or midwives who completed a course of study without nursing as a prerequisite, unless otherwise stated

profession. In November 1991 midwifery was written into the Regulated Health Professions Act (RHPA) and received Royal Assent (Ministry of Health Ontario, 1992). A Transitional Council of a College of Midwives, replacing the Interim Regulatory Council, was appointed late in 1992, to commence self regulation of the new health care professional. Proclamation of the RHPA and Bill 56, the Midwifery Act, is anticipated towards the end of 1993.

The Health Disciplines Board in Alberta submitted its final report on midwifery to the Government in February of 1991, recommending that midwifery be designated as an autonomous health profession under the Health Disciplines Act. In addition, the Board identified issues requiring further research, so the Government appointed the 'Midwifery Services Review Committee' to examine these issues and present recommendations. A comprehensive and detailed report was presented in 1992. The document outlined a proposal for scope and standards of practice, settings of practice, education, legislation and implementation of midwifery. A Midwifery Regulations Advisory Committee appointed in early 1993 is presently developing policies and regulations for midwifery practice in Alberta. It is anticipated that Alberta will soon proclaim the Midwifery Act as law.

In British Columbia a newly formed Health Professions Act (1990) created an avenue for unregulated health professions to apply for legal status. Professions designated under the Act were to have self regulating and governing status. A Health Professions Council was appointed to investigate and recommend the feasibility of incorporating selected professions under the Health Professions Act. The Midwives Association of B.C. made application for legislation to the Council in July 1992. The Council's recommendation was favorable, and as a result the Minister of Health, Elizabeth Cull, announced that the Government had set proceedings in motion to legalize midwifery in

British Columbia in the near future (The International Conference of Midwives, Vancouver, 1993).

Before incorporating a new health care provider into the system, questions must be addressed regarding the role, regulation, legal liability, and education of the practitioner. The Report of the Curriculum Design Committee on the Development of Midwifery Education in Ontario examined many of the questions that must addressed by other provinces. The report (1990), the first such document in Canada, has since been used as a valuable reference guide throughout the country, and it is therefore reasonable to expect that the B.C. Ministry of Health will follow Ontario's precedent and appoint a committee with Terms of Reference modeled after Ontario. At the present time Alberta, Manitoba, Quebec and New Brunswick are all considering legislation for midwifery practice.

In British Columbia, as in Ontario and Alberta, the Ministry recommended that the scope of midwifery practice include prescribing and administering selected drugs, and delivery of the newborn in both hospital and community settings. This necessitates several amendments in the legislation before proclamation of the Midwifery Act can be achieved. The Hospital Act, the Pharmacy Act and the Medical Practitioner Act will all have to be amended, to allow respectively for hospital admitting and discharge privileges, the prescription and administration of selected drugs, and a registered midwife assisted delivery of the baby.

According to the Health Professions Act, future midwives in British Columbia will be regulated by a College of Midwives. The Health Ministry is expected to appoint an Interim College of Midwives soon. According to the Ontario (1990), Alberta (1991) and British Columbia (1992) Ministries, an Interim College's initial responsibility will be for policy-making. The College will have to:

- develop standards of practice and a code of ethics (the Midwifery Association of B.C. obtained recently approval of the ICM for their code of ethics, May 1993);

- outline licensing procedures: credentials and education;
- appoint a Registrar;
- describe requirements for liability insurance;
- recommend procedures for clinical evaluation and peer review;
- outline an Integration Education Program to prepare the first group of midwives for registration;
- outline eligibility criteria for admission to the Integration Program;
- outline future basic and continuing education programs.

The question if midwives should practice as autonomous health care providers regulated by a College of Midwives, or as a sub-specialty of nursing licensed through a nursing association, is a contemporary issue world wide. These queries provoke the question about the academic preparation for midwives. Until recently, Australia and the U.S. favored nurse-midwifery over autonomous midwifery practice, with the majority of women delivering their babies in a hospital setting. In the U.S. perinatal care is sometimes described as 'fragmented' (Silverton, 1988), because nurse-midwives do not provide follow-through care to women during the post-partum period and newborn baby care is frequently provided by the pediatrician. In the past Australia recognized and educated nurse-midwives only. A trend to promote midwives educated via a direct-route of entry program, however, is emerging in both countries as more midwives recognize problems related to fragmentation and/or medicalization of childbirth.

On the European Continent midwifery has become a well-established profession. The majority of healthy women and their families are cared for by midwives during all phases of pregnancy (Kitzinger, 1988). There are essential differences, however, in the delivery of care and educational standards for midwives between and within different countries.

In the Netherlands for example, midwives function autonomously, working as an independent team member *alongside* physicians rather than *under* their direction and supervision. Midwives work in either a hospital or community setting. A change in regulation for health care professionals ten years ago gave midwives the option to obtain hospital staff privileges. Before that time midwives practiced in the community only. Approximately 40% of all births in Holland are home confinements under supervision of a midwife (personal communication, Schoon 1992).

In the United Kingdom midwives are educated via a post-basic nursing program or via the direct-route of entry into a midwifery program. Midwives practice in both hospitals and community settings. In the early part of the century midwives practiced independently. In the 1970's, however, midwives in the United Kingdom shifted their primary practice setting from the community to hospital. As a result, many hospital-based midwives adopted the medical model of care (Field 1992). This meant an illness-focused and technological approach to pregnancy care. Pregnancy was not any longer a 'normal' physiologic event, but was only believed to be normal in retrospect.

Midwifery education began to focus on preparing nurse-midwives. In response to this change, 'radical' midwifery groups developed. These midwives promoted a non-interventionist approach, and a return of the control of the childbearing experience to the family unit. While emphasizing an excellent philosophy of care, a select group of the radical midwives were lay-midwives with no formal training. Their lack of recognized educational qualifications reduced the credibility of their ideas (unidentified radical midwives; ICM conference, 1993). In recent years, progressive universities and colleges, such as the Queen Charlotte's College of Health and Science in London in partnership with Thames Valley University (Burtch 1993), revived 'direct-entry' midwifery education. Direct-entry midwifery programs do not require certification as a nurse as a prerequisite to becoming a midwife.

In Ontario, Alberta and British Columbia, governments have recommended that midwives be educated via a direct-entry program and function as a self-regulating profession. The Mitchener Institute for Applied Health Sciences in Toronto presently offers a one time only Integration Program for 76 Ontario midwives. It is expected that the first *licensed* midwives will commence practice in the fall of 1993. Three post-secondary institutions McMaster University (Hamilton), Laurentian University (Sudbury), and Ryerson Polytechnical Institute (Toronto) will commence a four-year educational program leading to a baccalaureate degree in midwifery. Future midwives in Ontario are eventually expected to practice in all settings, including hospitals, small birthing centers and homes. The University of Alberta is planning to offer both a basic and an advanced educational program for midwives. The proposed basic program will be a baccalaureate degree in midwifery. The advanced program will lead to a masters' degree in nursing, with a certificate in midwifery. A four-year baccalaureate program to be offered by one of the degree granting institutions is also anticipated for the province of British Columbia.

Statement of Problem

Development of a curriculum for the preparation of midwives is one of *the* major challenges to be addressed as midwifery legalization is approaching reality. While midwifery curricula are taught all over the world and share a common denominator, such as the midwifery model of care, and the need for clinical expertise, each jurisdiction has its specific characteristics and needs. Ethno-cultural groups will benefit from adaptations in language, customs and specific needs created by the environment; to this extent curricula will require distinctive characteristics. The primary question, nevertheless, is *"What constitutes a curriculum for midwifery education in British Columbia?"* This broad question can be broken down in three specific questions, (1) "W*hat are the guiding philosophical principles for midwifery education in B.C.?"*, (2) *"How can curriculum*

content be directed?", and (3) *"How can a direct-entry program be organized to allow for flexibility in student placement?"* Influences on a curriculum are multi-factorial. Diversities of culture and educational philosophy require that curricula be uniquely tailored to the specific characteristics of the learner, the community and society . In addition, a midwifery program must ensure that graduates of the program have a body of knowledge and skills to guide families safely through their childbearing cycles. Midwifery education today must prepare the kind of midwife who can accept the ambiguities of the modern health care world, a complex world, in which there are no certainties or easy and clear solutions. Everyday judgments are fraught with ethical and moral dilemmas that require constant re-evaluation of our most basic ideas about human life (Bevis, 1989). The next generation of midwives must be practitioners with exceptionally high educational, moral, and ethical standards. They need more than knowledge and psychomotor skills. They need to be critical thinkers and decision makers, and be able to function as resourceful midwifery practitioners. Prospective health care consumers are better educated and more knowledgeable than ever before. Many childbearing families are highly motivated to participate in the creation of a fulfilling and memorable birth experience. Childbearing families in B.C., as in all of Canada, come from diverse ethnic backgrounds with their own unique ideas and customs. Thus, B.C. cannot adopt and implement a midwifery curriculum developed elsewhere, but a distinctively designed curriculum for B.C. midwives has to be created.

Midwives throughout the world claim that midwifery is both an art and science. It is the art specifically, that differentiates midwifery from medicine and outmoded nursing models. With the change in societal expectations regarding obstetric care and outcome, particularly in North America, it is essential that midwives are educated in the art as well as in the science of the profession. If midwives want to be recognized and treated as professionals, they will have to be respected as professionals, and therefore a

baccalaureate degree is considered the minimum basic academic preparation. A balance must be struck between practical training and academic preparation.

In almost every discipline across Canada, characteristics of future students are expected to be different from the traditional learner. Students applying for admission to a midwifery program in B.C. will likely fall in the same categories. Bevis and Watson (1989, pp. 15-16) identified and described it clearly for nursing:

Increasing numbers of future nursing students are not immediate post-high school; increasing numbers are 're-entry' persons with either a second career or second degrees, and more students than ever before work 20 or more hours per week. These realities force nurse educators to plan programs that allow associate of arts degree in nursing graduates to seek a baccalaureate degree with the least redundancy and the fewest possible problems and roadblocks. This situation will force educators to examine and reconstruct programs of study in such areas as the policies governing entry, part-time study, scheduling, articulation, and challenge examinations or transfer credits, to facilitate flexibility and accessibility.

Statement of Purpose

The purpose of this thesis is to propose a unique 'multi-route of entry' program plan for students in British Columbia, leading to a baccalaureate degree in midwifery. The program plan features:

- a curriculum based on contemporary philosophies of midwifery and education.
- a curriculum designed to appeal and facilitate access to a broad spectrum of future midwifery students in British Columbia (i.e., traditional learners, learners of the variety described above, as well as learners from diverse ethnic groups).
- a curriculum designed so that graduates of the program will be able to obtain reciprocity in other jurisdictions.

The word 'curriculum' means different things to different people (Taba 1962, Beauchamp 1981, and Oliva 1982). Most curriculum experts agree however, that a curriculum is a plan rather than a course of study. The Concise Oxford Dictionary of the

English Language (1990) describes curriculum as "subjects that are studied or prescribed for study in a school, or as any program of activities." For the purpose of this thesis, curriculum is defined as "a systematically organized program outline describing the program foundation, course requirements, and learning components of a specific discipline" (Torris and Stanton 1982, Houle 1982).

Method

Data for this project have been obtained through:

- a literature search and review of the history of midwifery practice and education, with a focus on trends and issues, and a basic review of the relevant educational theories used in the thesis.
- a comparative analysis of five selected midwifery curricula of industrialized nations throughout the world.
- selected documents received from the Midwives Association of B.C. and used with permission.

Development of a midwifery curriculum involves process. Torris and Stanton (1982) define process as a series of progressive stages in which interdependent activities have some purpose. A curriculum process is systematic in nature because it involves a methodical ordering of sections within the total curriculum. The process is logical because by making continuous interrelated steps, a curriculum is constructed. The spiral concept reflected in process promotes ongoing evaluation and change. The dynamic nature of the curriculum is created by the motivation and energy of the faculty involved in the development and teaching of the curriculum.

The midwifery curriculum described in this thesis is developed with the use of the curriculum process guidelines described by Torris and Stanton (1982), outlined and discussed in chapter two of this thesis. Their format offers broad, but clear directions,

while allowing for freedom of planning in any curriculum project. The curriculum outline includes program philosophy, purpose, function and structure. While the format suggests a behaviorist paradigm, in this proposal behaviorism, humanism, and andragogy have been amalgamated in an eclectic educational model. The idea is explained in chapter IV. The proposed curriculum contains four interconnecting sections.

- Section I identifies the foundation for the curriculum, including a practice philosophy, using the International Definition of the Midwife and the philosophy of the Midwives Association of BC. An eclectic model based on principles promoted by Tyler, and selected theorists of humanistic and adult education represents the educational philosophy. This section also includes a description of the characteristics of a graduate of the program.
- Section II describes how a curricular content outline is derived from the conceptual models described in the first section. In addition, this section presents a framework providing direction to allow for multiple-routes-of-entry into the midwifery program. Program goals complete this segment of the curriculum blueprint.
- Section III outlines the operational spectrum of the curriculum, and includes learning experiences, teaching methodology, and validation of learning. A sample course plan concludes this section.
- Section IV discusses the formative and summative aspects of program evaluation. Program evaluation serves as the feedback link through the curriculum development stages, and provides direction for future change. Program evaluation is often instrumental in assuring continued program funding.

Personal Perspective

Never before has midwifery practice and education been more controversial. There is a great diversity of academic standards around the world, and many countries are

examining their health care policies, costs, and practices. Societal values are changing, not only with regard to reproductive care issues, but in all aspects of life. Relationships between health care professionals and their clients are being challenged. Roles are changing, partnership models of care are emerging, struggling to maintain a delicate balance between the need for care giver control and consumer participation.

Originally 'trained' as a nurse and midwife during the 1960's in Holland, my experience centered around the provision of care for childbearing families in both hospital and community settings. I believe that midwives are equally-well educated via both direct-entry and nursing extension programs. The objections that nurse-midwives do not understand the philosophy of midwifery, and that they are 'handmaidens' of physicians are, in my opinion, generally untrue. I believe that many midwives, forced by law to function as obstetric nurses in British Columbia, attempt to provide a strong and persistent force against medicalization of childbirth. Many physicians rely on the nurse-midwife's judgment to assist childbearing women through the normal birthing process. Confusion surrounding the use of technology in the management of pregnancy, created primarily in response to the change in the legal climate in North America, is of serious concern and warrants careful investigation. There is presently no evidence that the use of technological equipment, such as an electronic fetal monitor, improves perinatal outcome in the healthy childbearing population.

My basic midwifery philosophy has remained unchanged throughout my perinatal nursing career in Canada. I believe that the strength of midwifery care is based on three main principles:

1. Childbearing is a normal physiologic process of the life cycle for the large majority of women.
2. The continuity of care during all phases of pregnancy creates the best possible outcome and satisfaction of birth for the childbearing family.

3. Control over the childbirth experience belongs in the hands of the family; responsibility is a shared endeavor between the client and caregiver/midwife.

Unfortunately, too much emphasis has been placed on the importance of the birth setting, to the extent that most controversy presently focuses on the issue of home birth. The issue interferes with people's judgment on other issues, and ultimately creates a wedge between health care members.

Limitations

This thesis has the following limitations:

- The curriculum blueprint is developed by one person only. The possibility of the inclusion of personal bias must be considered. Many authors (i.e., Taba 1962, Pratt 1980, Torris and Stanton 1982, Houle 1984, Bevis and Watson 1989) depict curriculum development as a collaborative group (faculty) process.
- Many questions concerning the scope of practice and the educational setting for a program in British Columbia remain. The setting influences the curriculum on many levels. The mission, purpose, and goals of the educational setting play a role. The institute's age and traditions are reflected in its financial status. If the program is taught at an university with a medical school and/or other health science programs, there are advantages and disadvantages. The use of sharing existing resources is a definite advantage. Established dominant health disciplines, however, may undermine autonomy of a new midwifery program. For the purpose of this thesis, I used published reports as well as selected information received by personal communication. Selected assumptions are made, based on the best rationale available.
- Provinces in Canada in the process of developing midwifery education programs are unable to share information at this time because the documents have not been completed.

Thesis Organization

The thesis is organized in the following manner:

1. Chapter I provides the background for the project, the problem statement, the purpose, the method, the limitations, and a personal perspective.
2. Chapter II reviews the midwifery literature with a focus on trends and issues affecting midwifery practice and education. Identification of trends and issues assisted in avoiding common pitfalls in the development of a midwifery curriculum. It is essential that we learn from the past when designing the future (Bevis and Watson, 1989). In addition, this chapter provides an introduction to the educational principles and curriculum development ideas used in chapters III and IV.
3. Chapter III provides a comparative analysis of five contemporary curricula of industrialized nations around the world, four in English and one in Dutch. This chapter contains a review of the *Report* of the Curriculum Design Committee on the Development of Midwifery Education in Ontario instead of a curriculum, because no Canadian curriculum is currently available for review.
4. Chapter IV presents the new curriculum proposal outlined in four interconnecting sections as described under method.
5. Chapter V concludes the thesis with a focus on implications of the new curriculum on future midwifery practice and education.
6. Appendix A includes a glossary of terms to assist the reader of the thesis.
7. Appendix B include selected sections of the curricula analysed in chapter III, to illustrate findings.

Chapter II

Midwifery Practice and Educational Principles

We face the future fortified only with the lessons we have learned from the past. It is today that we must create the world of the future ---- In a very real sense, tomorrow is now.

Eleanor Roosevelt.

This timeless statement reminds us that every present requires an appreciation of the past. We need to examine the history, of how we got from there to here, and then explore issues that influence the next step, a step forward (Bevis 1989). Many researchers explored midwifery practice and education. The anthropologist and sociologist specifically portray a rich and vivid description of the past, linking historical struggles for the survival of midwifery practice, and development of standards to today's challenges and beyond. The older references, J.H. Aveling (1872) and Forbes (1966) in particular, portray a clear picture of how midwifery practice has evolved. The stories are given a modern perspective by writers such as Donnison (1977) and Benoit (1986, 1991). The trends and issues presented enhance insights and understanding of where today's challenges in midwifery practice and education originate.

This chapter includes four sections. The first section presents a global perspective of the early history of midwifery practice, with an emphasis on Great Britain, the United States, and Canada. Great Britain has provided vision and leadership to midwifery practice and development around the world for many years (Field 1992). The United States is geographically our neighbor and has a midwifery history similar to that in Canada, with the exception of the recent resurrection of midwifery in form of nurse-midwifery. The second section focuses on contemporary practice and education in the industrialized[2] countries

[2] Industrialized, non-industrialized, and third world countries are terms used broadly and in a non-derogate manner. They convey complex notions of diverse cultures.

previously mentioned, and includes efforts to re-instate midwifery in Canada during the last decade. The third section focuses on trends and issues found in midwifery history, including the last decade, that will affect midwifery practice and education in British Columbia in the future. The fourth section provides an introduction to the educational principles and curriculum development ideas used in Chapters III and IV.

A Global Historical Perspective

Reproduction has fascinated and puzzled humankind since early times. The moment of birth, a climax and a beginning, has always stimulated the imagination; humans must always wonder where they came from and how they were produced (Forbes 1966). The experience of birth has been known to people as a 'celebration', and midwives have historically fulfilled the role of facilitator of the experience. Mid-wif, [mid-wyfe in later texts] or 'with-woman', or the Spanish and Latin analogous of respectively 'comadre' and 'cummater' (Aveling 1872 p. 1), is a profession as old as history. Every culture in the history of the world has had its midwives; wherever there have been women, there have been midwives (Katz-Rothman 1982). Midwives in very early history are described by many authors (Aveling 1872; Forbes 1966; Donnison 1977; Benoit 1986 1991) as women of inferior education, of lower class, dirty and often feared. They cared primarily for, and often at the expense of, the poor who had no other choice or access to health care. Forbes (1966, p. ix) summarizes the evolution of the midwife through history when she says:

> *....her not very clean hands guided countless millions of babies into this world; her eventual emancipation from ignorance, incompetence, and poverty, and her transformation into today's skillful expert is a chapter of medical history that has been much neglected.*

Although sociologists refer to the same issues all over the world, there appears to be less emphasis in earlier history on the poverty, societal and economic status, and lack

of hygiene of the midwives and their practices in places such as India, the Middle and Far East. It was not until Western influence and the introduction of foreign aid took place, including immigration of midwives from other countries, that the distinction was made between the midwife and the traditional birth attendant. Even today, many tribes in Africa (e.g. People's Republic of Benin) prefer to keep the birth ritual within the village, attended by the traditional birth attendant. Women's choices about medical and childbirth care in this country are still directly affected by their social status and goals. The original beliefs remain unchanged. Although improvement is reported, typically, midwives in small rural hospitals, trying to improve maternity statistics, have difficulty persuading traditional birth attendants to attend educational programs (Sargent 1989).

It is important to consider how these chapters in history have contributed to what is known today as the technological approach to childbearing. One cannot help but ask, "Who are we to assume that the scientific method of birthing is superior to the practical knowledge women gained over a millennia of birth experiences?" as presently believed by so many people in industrialized countries around the world. The answer may well be found in the fact that the 'celebration of birth' has become a haunting nightmare for countless women in the western world, who in their wisdom and need for perfection, choose medical science over midwifery skills.

Great Britain

People's beliefs before the nineteenth century in Great Britain and Europe centered around theology and superstition. In Western Europe, witchcraft and devil worship existed side by side without too many problems before it was acknowledged and addressed by the ecclesiastical authority (Forbes 1966). The devil began to lose its relatively friendly image during the thirteenth century. Midwives were blamed for collaborating with the devil which caused the problems in child birth and they were, therefore, labeled as witches. Many such fascinating tales are still told and believed in third world countries.

Superstitious beliefs about the umbilical cord, the placenta, and the unbaptized newborn, all associated with midwives, made them a prime target for the witch hunt. For example, the umbilical cord was thought to be used to make candles for black magic ceremonies.

It was during the course of the fourteenth century that action against real or alleged witches became common practice. It is believed that in Great Britain alone, 30,000 people accused of witchcraft were executed before the criminal law against witches was repealed in 1736 (Aveling 1872). France and Germany show the same horrible statistics. The threat of the devil and the superstition surrounding midwives became of such magnitude, that Pope Innocent VIII appointed Kramer and Sprenger, two Dominican Inquisitors, to investigate the problem of witchcraft. As a result of the investigation they wrote the *'Malleus Maleficarium' (the Hammer of Witches)*. According to Aveling (1872), the book provided guidance to the courts in discovery, conviction, and prosecution of witches. The Inquisitors described the witch's attributes, including responses and criminal procedures of how to deal with them. Despite the fact that midwives did not truly possess these characteristics, they were treated as if they did.

Midwives were seen to be collaborating with the devil because they were women, weak and easily seduced. Interestingly, men were never under suspicion, probably because God, Jesus, and the Disciples are all portrayed as men (Gielty & Kelly 1992). The question arises "Why would midwives, who were generally ignorant, unskilled, poverty stricken and avoided, engage in superstitious practices to submit themselves to the accusation of witchcraft?" Since the seventh century midwives had been accustomed to baptize babies in the absence of a clergy man. The importance of that role was re-emphasized during this time because of the belief that unbaptized infants would eternally burn in hell. Religious character, rather than experience or skill, became the most important criterion for eligibility and acceptance as a midwife.

In the early 1600's, male midwives (also referred to as man-midwives), most often physicians interested in midwifery, began to compete with woman-midwives, whom they labeled incompetent and dangerous. Although most women were reluctant to be delivered by a man for reasons of modesty, childbearing women of higher social class started to express concerns about midwifery care, and dissatisfaction with midwives in general (Aveling 1872). They promoted the idea of education for midwives to reduce their ignorance. The problem was that printing midwifery details involved 'vulgar' language in the mother tongue (Aveling 1872). In 1646 Peter Chamberlen, a London surgeon with extensive midwifery experience, also tried to promote education for midwives. Dr. Chamberlen was ahead of his time when he attempted, in direct opposition to the wishes of the College of Physicians, to obtain permission from Crown Authority to organize female midwifery practitioners into a company with himself at their head, as president and examiner (Dr. Munk's Roll of College of Physicians, vol. 1, p. 181. in English Midwives by Dr. Aveling 1872).

In eighteenth century England and Europe inter-professional rivalry continued with man-midwife practices flourishing. Nevertheless, efforts to establish education programs for midwives continued. Dr. Mawbray, identified as the first public teacher for midwives in England, outlined both standards of practice, and educational requirements for knowledge and skills. He was the first physician to propose development of birth centers, which he envisioned would be staffed by midwives. These centers would have the backup of two surgeon-midwives, whose responsibility it would be to assist with problem cases and provide educational seminars. It is absolutely unbelievable that no effective steps were taken to implement any of the proposals made during that period of time. Dr. Aveling (1872, p. 151) blames the practitioners of that time:

> *....no one seems able to possess himself with sufficient comprehensiveness and clearness, to enable him to present the thought in a practical form so as to convince the nation that Parliamentary interference is absolutely necessary.*

"What needs to be done to solve the problem?" people asked. The question is an easy and difficult one to answer at the same time. Although what is required is sufficiently evident, how best to carry out the requirements was one of the most difficult problems of the age (p. 170). As a result, Dr. Aveling(1872, p. 154) wrote a book to promote the need for midwifery education in England,

> *To arouse the interest in midwives of this country-----to show what misery may result from their ignorance-----and to gain sympathy, advice, and assistance in endevouring to raise them to a refined and intellectual position.*

While Dr. Aveling promoted organization and education for midwives in England, other countries in Europe had already completed the process. France, Germany and Russia had licensing procedures and mandatory education programs for midwives in place. Midwifery schools were state regulated and supervised. State midwives were compelled to keep a diary of birth for inspection by authorities. In Prussia, continuing education consisted in providing all midwives with a midwifery handbook for study.

Eighteenth century Europe was characterized by industrialization and population growth. While men focused on obtaining an education, attended universities to climb the ladders of economic and social status, women could only enroll in charity schools and learn how to cook and needlepoint (Aveling 1872; Forbes 1966). Physician-midwives, primarily male, threatened to take over the traditional female-midwife role. They promoted their case by questioning the woman-midwife's competence and blaming her for complications in childbirth. This was also the time when popularity in the use of tools, such as the obstetric forceps developed by Dr. Chamberlen, increased and obstetric morbidity skyrocketed. Dr. Aveling (1872, p. 33) noted:

> *He (Dr. Chamberlen) used the instrument unnecessarily to hasten the birth and save his own time, as well as to impress the family and justify charging a higher fee. Consequently more infants were lost than formerly, and if mothers did not die of the injuries she might sustain----she was frequently left with fearful and lasting disabilities----the male practitioner was so adept at concealing his errors with a 'cloud of hard words and scientific jargon', that the patient herself was convinced that she could not thank him enough for the mischief he had done.*

The struggle to establish education and licensing for midwives continued throughout the seventeenth and eighteenth centuries. In 1671, Jane Sharp wrote the *Midwives Book,* the first textbook for midwives (Donnison 1977). Control of midwives was assured by forcing them to take an oath before the Bishop to be allowed to practice. The oath was difficult and included many unrealistic expectations. The Society of Apothecaries in 1813 persuaded Parliament to pass enactments for control and examinations of midwives (Aveling 1872).

The nineteenth century, with its continued population growth, saw a dominance in care by male midwives for childbearing women of advanced social status and consequently a decline in the number of female midwives. Midwives survived, however, because poor women and those living in rural areas had no access to medical care. At the turn of the next century, the battle for registration became even more complex. Nurses began to apply and compete with midwives for licensing. Family practice physicians, finding themselves with additional competition for patients and income, objected strongly to legal sanction for both midwives and nurses.

Despite its controversial nature, Parliament passed the Midwives Act in 1902. Although the Act was supposed to provide midwives with 'respected and worthy status' (Donnison 1977), several rules remained and proved difficult to change. The Act subjected midwives to local authority supervision otherwise associated with licensing of tradesmen.

In addition to scrutiny of their private lives, the rival occupation of nursing began to have a dominant voice in governing midwifery practice (Donnison 1977).

Controversy over registration of midwives raged unabated in the British Medical Journal. The arguments were basically unchanged. Registration for midwives, argued the doctors, would create an inferior order of medical practitioners; there was no more need to legalize midwives than herbalists, bone setters, aurists, opticians or other 'irregular practitioners'. Midwives were quite unnecessary competitors, since the services of a doctor could be provided through provident clubs and dispensaries, lying-in charities and Poor Law Medical Services (Donnison 1977). If it had not been for a handful of courageous and persistent women and selected male physician supporters, midwives would have vanished from the scene, repressed by male opposition.

The next two important landmarks in the United Kingdom's history were the 1918 and the 1936 Midwifery Acts. Both Acts related to payment for services rendered. As of that time, midwives and physicians received a fee for service from the local health authority if the family was unable to pay. This provision assisted in reducing medical resistance to midwifery care significantly, because competition for clients who were able to pay for their care was decreased.

The second decade of the twentieth century saw an increase in midwifery popularity again. This was primarily due to a decrease of physician availability during the first world war. The Midwives Act of 1936 was seen to be both a response to a decline in birth rate and a pre-war Act. The Act improved services for childbearing families greatly because it made provision for full time midwifery coverage in local communities (Donnison 1977).

The first College of Midwives was finally established in 1941, almost sixty years after the first efforts of midwives to organize themselves. It was crowned with the inclusion of 'Royal' in the title in 1947. The National Health Service, created in response to

the need for social reform after the second world war, offered free, comprehensive health care to the entire population. It was the major breakthrough in health care in the United Kingdom. The desire of women to deliver their babies in hospital during the post-war era resulted in a gradual change in the role of the midwife. She started to lose her independent status. Her care became fragmented as a result of hospital policies and the take over of ante-natal care by general practitioners in community clinics. The midwife's role was no longer that of the primary care giver. Myles tried to play down the significance of the event when she called it "the inauguration of the team concept of shared responsibility" (Katz-Rothman 1982). This trend continued until well into the nineteen seventies. The role of the midwife had eroded to the extent that concerns were expressed that midwives were becoming maternity nurses because midwifery skills were ignored and abandoned (Barrington 1985; Kitzinger 1988). Field (1992) reports that a survey in 1983 by Robinson demonstrated that less than 5% of hospital midwives and less than one third of community midwives took responsibility for ante-natal surveillance during the course of pregnancy.

In conclusion, throughout the years, midwifery survived the rise of the male midwife and his competitive approach to birth in Europe and England. Some authors call the male-midwife approach to caring for childbearing women oppressive and pathologizing (Kitzinger 1988). Midwives, however, lost considerable autonomy over work and licensing requirements. Physicians were socially defined as superior care givers for childbearing women, with a special expertise to manage difficult or problem cases. Katz-Rothman (1982) notes that Myles attempted to phrase it in a positive way when saying that, "the modern role of the midwife is that of a team member functioning within an obstetric unit," but it is clear that the midwife was no longer the professional authority in that team (Field 1992). In most countries around the world today a power balance has

been struck between midwifery and medicine, with the exceptions of the United States and Canada.

The United States

The early history of midwifery in the United States is reminiscent of the early history in Europe and the United Kingdom. An influx of immigrants, including midwives, brought the practice of midwifery to the United States. These midwives had no formal training; they learned by trial and error. During the eighteenth century, the United States adopted the notion of male-midwives, and physicians gradually became managers of childbirth. Influential men in upper class society had already decided that care from a doctor for their wives during pregnancy was superior to that of a midwife. The middle class soon followed. It did not take long before the poor, including the immigrant population, had also been converted to believe in the expertise of the physician-midwife. The Declaration of Independence in the U.S.A. in 1776 released physicians from their regulatory dependency on the British College of Surgeons. No other medical standards were set for some time, and medical education could be obtained anywhere, abroad or in the myriad of private medical colleges (Arney 1982). Arney argues that it was the freedom of women in the U.S.A. to train as physicians, (unlike England, where wealthy women were barred from entering medical schools or joining the Royal College) that ultimately led to the demise of midwives.

There was no equivalent of the U.K. Midwifery Act (1902) in the U.S.A. Health professionals were licensed by individual states, which also delineated their practice. Management of childbirth had become a man's domain, with a focus to provide expert care for the rich. As a result, the overall standard of maternity care was very poor and widely spread geographical distribution of the population did not help to improve the situation. Midwives continued to practice in rural areas in an attempt to help reduce mortality rates. Mary Breckinridge's efforts to help improve obstetric care resulted in a 'paradigm shift' in

midwifery practice in the U.S.A. When she created the Frontier Nursing Service Program in Kentucky, a program aiming at delivering midwifery and family health care services to the poor in rural Kentucky, the staff existed of English trained nurse-midwives. From then on, American nurses were encouraged to obtain midwifery training in England. The original American midwife became a different health care provider, the nurse-midwife; and a new American health care controversy was born (Silverton 1988).

Time had come for State regulation of midwifery in the U.S.A. The American College of Nurse Midwifery was formed in 1955, to become the American College of Nurse-Midwives (ACNM) in 1969. Initially, the College was preoccupied with the fight for recognition of nurse-midwifery practice in the U.S. Presently, the aim and primary functions are to provide direction for educational standards and research. In 1966 a joint study was undertaken by the International Confederation of Midwives (ICM) and the International Federation of Gynecology and Obstetrics (FIGO) to compile a report on maternity care for the World Health Organization (WHO). The United States was treated as a 'special case' because it did not recognize midwifery as an independent profession.

A new interest for direct-entry training for midwives commenced during the late seventies. The Midwives Alliance of North America (MANA), was formed in response to that movement in 1982. MANA provides a voice for *all* midwives, whatever their educational qualifications or training ground. Both MANA and the ACNM are presently members of the International Confederation of Midwives.

The controversy between midwifery and nurse-midwifery is a divisive issue for most American midwives regardless on which side of the fence they stand. It interferes with progress and recognition of midwifery as a profession. Ruth Lubic (1975) denounced the claim that nurse-midwives are unduly physician-dominated, by pointing at their control over education and certification procedures. She defends the nurse-midwife by saying "There has been no need to surrender autonomy, we are not exploited." American

obstetricians believe that midwifery is, and should be controlled and supervised by their College. For example, the midwifery school in Downstate (New York) *is* still under control of the medical school and not with the nursing division. "It may be that 'nurse-midwife' is a contradiction in terms, with an inherent dilemma" says Katz-Rothman (1982), and "nurses, in the medical system, are defined by their relationship to doctors, while midwives are, in the meaning of the term derived from old English, with woman" (p. 80).

Canada

The Canadian Medical Act of 1795, placed the practice of midwifery in Canada effectively in the hands of physicians. From then on, it was illegal to practice midwifery without a license, and to obtain such license one needed a university degree in medicine. The Act was supposed to improve maternity care because childbearing women were to receive 'expert' care only from physicians. There were two problems, however, (1) there were not enough physicians to provide the care, and (2) poor women could not afford medical care. A significant population growth during the early twentieth century further reduced access to already sparse medical resources in rural communities (Benoit 1986, 1991). Physicians preferred to practice in urban rather than rural areas, catering primarily to the elite, thus leaving new, and socio-economic unstable immigrants in rural areas in the hands of lay-midwives (Benoit 1986 1991). Although a response to the outcry for more services was heard, and selected maternity clinics were started, they did not solve the problem because their locations were primarily in large urban areas. Cecilia Benoit (1986, 1991) reports that in Newfoundland and Labrador cottage hospitals were implemented in the early 1930's, representing the first major attempt to improve maternity care in these areas. Home birth was slowly exchanged for cottage hospital delivery care. This meant that women interested in providing maternity care had to be formally educated and certified, instead of trained through an apprenticeship. The original granny-midwife,

characterized by low socio-economic status and little schooling, was replaced by the educated midwife.

This new breed of midwives in Eastern Canada were quite unlike the former grannies. They were younger, had a shorter but formalized education, and although most often married did not have such large families. The new midwife was a full-time government employee. The consequent benefits of that position contributed to a gradual rise in economic standing and brought midwives to the level of teachers, nurses, and social workers. Cottage midwives functioned quite autonomously, and overall claimed to have been 'called' to the profession. Most granny-midwives said to have 'fallen' into their roles, primarily due to the necessity to provide a living, or because there was nobody to provide the service. Cottage hospitals survived until the late nineteen sixties. By this time, most midwives in the jurisdiction had obtained nurses training as well (Benoit 1986, 1991). However this particular scenario was only seen and allowed in Newfoundland, Labrador and selected areas in Northern Canada. Other provinces made no legal provision for midwifery practice; midwives could only provide care for childbearing families outside the regulated health care system.

Burtch (1992, p. 161) points out that the 'midwifery challenge' in Canada has over the years been met with a mixture of support and resistance. This situation, he says, has led to the current state of uncertainty surrounding midwifery. Repressive law (such as prosecution of midwives for criminal negligence) and other state measures (such as coroners inquests) have been ineffective in redressing this state of uncertainty (p. 161). Until midwifery practice is legalized, criminal prosecution, coroners' investigations, and prosecution for practicing medicine without a license will continue to intimidate midwives. The seriousness of these threats surfaced in Vancouver B.C. in the mid-1980s, when two midwives, following a newborn death after an attempted home delivery, were found guilty of criminal negligence causing death (Burtch 1992, pp. 174-175). The conviction was

appealed and the two midwives were found guilty on a new charge of criminal negligence causing bodily harm (to the mother), a charge which had been substituted for the original one (Burtch 1992, p. 175). The Supreme Court of Canada acquitted both midwives six years after the first conviction (Burtch 1992, p. 175), but that does not change the fact that few midwives will be interested in continuing to practice midwifery without legal protection against these threats (Burtch 1992).

Synopsis of Current Midwifery Practice and Patterns of Education

During the last decade a great number of variations and alterations occurred in midwifery practice and education in the United Kingdom. This has been largely due to a multitude of changes in the overall health care structure. The health care structure was forced to change, to reduce health care costs. Field (1992) provides in-depth analysis on current status, trends and changes in midwifery practice and education in her paper "A Report on Health Care in the United Kingdom with Particular Reference to Midwifery." Health care regulation for nurses, midwives, social workers and other health care providers is presently provided through the Nurses, Midwives and Health Visitors Act (1979). This Act was basically an amalgamation of the four existing Acts in the UK, The Midwives Act of 1951, including the Scottish Act (1951), the Nurses Act of 1964 and the Health Visiting and Social Work (training) Act of 1962. The United Kingdom Central Council for nursing, midwifery and health visiting (UKCC) replaced the General Nursing Council and the General Midwives Board. The UKCC, represented by four regional national boards, takes responsibility for policy development and regulation of practice and education.

The United Kingdom is currently divided into Regional Health areas which are themselves divided into Health Districts. The areas are respectively governed by Regional, and District Health Authorities (Field, 1992). This information is important because as a

result of the reorganization, nursing and midwifery supervision merged, and midwifery representation was lost in some instances. Field argues that the threat of midwifery absorption by nursing is behind the move away from post-registration midwifery education to three year pre-registration programs (p. 7). A three year midwifery program eliminates the prerequisite for nursing qualifications. The UK's Health Care Project 2000 (1986) promoted amalgamation of midwifery schools. Several schools responded to that recommendation and used the opportunity to upgrade their academic standings at the same time. The Oxford and Dorset Schools of midwifery developed three year direct entry programs leading to a baccalaureate in midwifery. The UKCC's recommendation for a eighteen months specialization program in midwifery upon completion of an eighteen months general nursing core program was met with fierce opposition from midwives, and resulted in an agreement of the UKCC to try a variety of innovative programs for midwifery. As a result, one can presently become a midwife via several educational routes. First, there is the post-registration program in midwifery, meaning a program taken after completion of a general nursing education. Post-registration programs lead to a either a certificate or a baccalaureate degree in midwifery. These types of post-registration programs take respectively eighteen months or two years to complete. Second, there are post-registration midwifery programs leading to an Advanced Diploma in Midwifery (ADM) and to midwifery tutoring qualifications, the latter needing an additional year of academic preparation in the Faculty of Education. Third, there are the pre-registration programs, whereby midwives are educated via a direct-route of entry program (requiring no prerequisite nursing qualifications) leading to a baccalaureate in midwifery. These types of programs take three or four years to complete.

Midwives in the UK practice in a hospital setting or the community. They function in teams or independently. The independent functioning midwives in the district are generally not paid by the National Health Service, but receive a fee directly from the

family (Field, 1992). Midwives practicing in hospitals function less autonomously than community midwives. The exception are hospital midwives working in 'two-tier' hospitals, where there are no obstetric residents and midwives refer directly to the obstetric consultant. These midwives take full responsibility for their practice (Green, Kitzinger and Coupland, 1986).

The medical model of midwifery practice is prevalent in the United Kingdom, and there is limited reaction to the medicalization of childbirth from consumers. Opposition comes primarily from the Association of Radical Midwives says Field (1992, p. 55), and she concludes the paper saying:

> *The next five to ten years would appear to be critical to the future of British midwifery. It is to be hoped that the country that provided vision and leadership to midwifery development around the world for many years, may find the vision and leadership to survive the current crisis.*

Midwifery practice in the United States does not easily compare to practice in the United Kingdom. This is primarily due to the substantial difference in the health and education systems. In the United States many people are covered by private health insurance, or receive coverage via Medicaid when on welfare. The department of Health and Human Services reported that in 1986 an estimated 15.3% of American people were without *any* medical coverage. People in that group are the working poor, earning too much to receive assistance but not enough to pay for private insurance (Silverton, 1988).

Most midwives in the U.S.A. are currently trained as nurse-midwives. There is, however, a move away from that practice, and the number of direct-entry programs are increasing. The Seattle Midwifery School is an example of a program that has been in place since 1978. Midwifery practice models in the U.S.A. appear in many forms. A common practice model is the independent nurse-midwife running her own business, referring her clients to selected obstetricians or family physicians if needed. As a variation

of that model the midwife provides service within the physician practice. This is seen to be advantageous for the physician, because offering an alternate service in a medical clinic increases popularity, bringing more clients to the business. In this model, however, the midwife is most often employed by the physician(s) and practices less independently. The advantage to the midwife is that she is guaranteed an income, because insurance companies will reimburse physicians but are sometimes reluctant to pay midwives directly (Wingeier in Silverton, 1988). Public or private hospitals and health maintenance organizations also employ midwives. Another available option is to work with provincial or federal sponsored projects such as the Community of Caring facility for pregnant teenagers in Washington D.C. A disadvantage is that hospital midwives in the U.S.A. have a tendency to provide selected facets of perinatal care only, they work in ante-natal units and labor/delivery rooms, while post-partum care is provided by obstetric nurses, and pediatricians take over the newborn care. Although the demand for midwifery has been on the rise in the U.S.A., it is estimated that midwife managed births have not increased beyond 4% since 1983 (National Center of Health Statistics 1992).

Midwives are prepared for their role as defined by the International Definition of the Midwife, but find a heavy emphasis in their education on the nursing aspects of the role. Consequently, midwifery education is readily available in the U.S.A. in Schools of Nursing, particularly at the graduate level. Selected direct-entry programs leading to a certificate in midwifery are available too, such as the program taught at the Seattle Midwifery School. However, programs offering a baccalaureate degree in midwifery via a direct-entry route are not readily available, and are strongly discouraged by the medical profession. Regardless of the approach, all programs in the U.S.A. need to be approved by the American College of Midwives. All graduating midwives need to write the ACM certification examinations to be able to practice within the regulated health care system.

Efforts to legalize midwifery in Canada escalated in the last decade. Midwifery task forces and associations lobbied for, and promoted legalization of midwifery. The Quebec government finally allowed eight midwifery pilot-projects to be started in rural settings, after three different readings in the legislature. The mandate was to research the feasibility of incorporating midwives into the health care system and to examine selected models of midwifery practice. The biggest stumbling block in Quebec was and still is, the opposition of the medical profession. The resistance went as far as trying to slow and obstruct progress in passing the law. The main issues are 'economic territorialism' (Barrington 1985), and the perceived difference between nurse midwife and midwives trained via a direct-route-of-entry. The last issue is primarily related to loss of control (physicians supervise nurses in hospital) and home birth. The resistance is so strong that it is doubtful that Quebec will be the next province to legalize midwifery, despite positive results of its midwifery pilot-projects.

The entire Canadian midwifery scene is in a state of flux. Three provinces, Ontario (1991), Alberta (1992) and British Columbia (1993) are well on their way to legalize and implement midwifery practice. Government announcements (Ontario news release 1991; Alberta's Midwifery Review Committee 1992; Cull 1993) in all three provinces endorsed that the scope of midwifery practice be defined in the following manner:

> *The practice of midwifery is the assessment and monitoring of women during pregnancy, labor and the post-partum period, and of their newborn babies, the provision of care during normal pregnancy, labor and post-partum period and the conducting of spontaneous vaginal deliveries.*

The statement is consistent with the International Definition of the Midwife.

Ontario will begin licensing midwives soon, and it is anticipated that the first midwives will practice within the regulated health care system by the end of 1993. At that time the Regulated Health Professions Act (RHPA) will be proclaimed law. Ontario did not triumph without a struggle. After calling Bill 48 (1984) "pre-mature until additional

research was performed," midwifery was out of the limelight until the media focused its attention on a coroner's inquest into the death of a baby delivered with midwives' assistance in Ontario. Although the midwives were not held legally responsible, the case reopened the midwifery practice issue, and became a political forum to debate public policy issues (1984). As a result, the newly formed (1983) Health Disciplines Legislative Review Committee recommended in 1986 that midwifery should be a legally recognized profession. A Health Ministry appointed Task Force made the final recommendations on practice and education, before midwifery was given Royal Assent in Ontario in 1991.

As stated on page 5, the Mitchener Institute for Applied Health Sciences in Toronto is in the progress of preparing 76 midwives through an 'one time only' pre-registration-integration program to become licensed in Ontario. The Institute's faculty prepared a comprehensive document "The midwifery model of practice" (1992), summarizing how midwives will practice in Ontario. The paper addresses the scope of practice, the Ontario model of practice, the meaning of continuity of care and informed choice of the consumer, and practice site, and birth place. The document also outlines standards of practice, the expectation that two midwives attend each birth, midwifery practice in hospital, the need for community input and liability coverage, and midwifery education, and continuing education. Special emphasis is placed on the importance of continuity of care and the need for midwives to be able to function in all settings. The document will be used as a guide by the Interim College of Midwives of B.C. when developing such an outline for midwifery practice in British Columbia.

In a News Release (March 29, 1993), the Ontario Health Minister Ruth Grier announced that requests were being issued for proposals for three out-of-hospital birthing centers. "Birthing centers will be a home away from home for women who don't want to have their babies in hospitals, or at home," said Mrs. Grier, she continued "Birthing centers offer a safe, less clinical alternative to hospitals. By funding birthing centers,

staffed by midwives, my Ministry is acknowledging that most births are uncomplicated, normal deliveries." The same news release outlines that community health centers, hospitals, and independent health facilities in Ontario will be able to contract with or employ midwives. Another possible agency will be community-based and non-profit midwifery care organizations, yet to be developed (News Release 1993, p. 2).

A four year baccalaureate degree program will be taught collaboratively by three post-secondary institutions in Ontario, McMaster and Laurentian Universities, and Ryerson Polytechnic Institute. The program has been scheduled to begin in the fall of this year (1993).

Alberta is probably not far behind Ontario. The Report of the Midwifery Services Review Committee in Alberta was able to take advantage of the extensive research and work done by the different Ontario committees. Their report offers a complete profile of midwifery care for the province of Alberta. The paper includes recommendations for the use of drugs by midwives, access to ante-natal screening and criteria for medical consultation and transfer of care. The recommendations with regard to the scope of practice, the setting of practice, the educational qualifications for registration, and others, are comparable to those accepted in Ontario. The report does not specify a choice of post-secondary setting.

British Columbia received the green light, with the announcement of Health Minister Elisabeth Cull during the International Conference of Midwives in Vancouver (May 1993). The Health Minister disclosed that the B.C. Government had consented to start proceedings to legalize midwifery in British Columbia. Many 'pieces' have been already developed in the anticipation that legalization will be a reality soon. The Midwifery Association of B.C. made application for legislation to the Health Professions Council in the summer of 1992 and completed the hearings in early 1993. The next step will be to

appoint an advisory committee like the ones in Ontario and Alberta to make final recommendations.

Up to now, midwifery practice in British Columbia has been only possible outside the regulated health care system. It is estimated that midwife attended home births total approximately 300 babies per year (unidentified midwife, 1992). In response to the need to educate midwives in Vancouver, the Fraser Valley Childbirth Education Association started a midwifery education program during the 1980's (The Vancouver Midwifery School) for people interested in practicing midwifery. The graduates of the program were certified via the Seattle Midwifery School in the State of Washington. The program was cancelled due to lack of enrollment (Burtch 1992).

A pilot project initiated in Grace Hospital's Low Risk Clinic during the 1980s, provided an alternative approach to meet the health care needs of women in the perinatal period. The midwifery approach provided safety as well as a recognition of the broader significance of the event in the womens' lives and those of their families (Weatherstone et al. 1985). The project was a success in the eyes of all parties (clients, midwives, and supportive physicians) involved. The set up of the project had to be modified at times, due to midwife 'burn out' caused by the volume of *voluntary* time commitment, and the amount of patient demand for the service. The project, although demonstrably successful, never progressed beyond pilot-project status. The statistics, however, did contribute to prove the need for and public interest in midwifery services. The Seaton Report of the Commission on Health Care and Cost (1991) strongly recommended legalizing a self regulating midwifery profession in B.C. The Interdisciplinary Midwifery Task Force of B.C. and The Midwives Association of B.C. have also played a significant role in the accomplishment of getting the B.C. Government to agree to legalize midwifery. A midwifery practice model for B.C. will be a close image of those models promoted in Ontario and Alberta.

Most people agree that in order to establish academic and clinical credibility in the eyes of the public and other health professionals, future midwives will need to obtain a baccalaureate degree in midwifery. In British Columbia, as in Quebec and Ontario, midwives will meet obstacles and resistance with regard to issues arising from home birth, hospital privileges, and competition for clients with family practice physicians. However, problems are there to be solved. Jonas Salks (1993, p. 12) provides an answer:

> *Solutions seem to be found through strategic thinking, through perceiving not just obstacles we face, but the challenges and opportunities presented.*

Trends and Issues Affecting the Future

The review of history and present midwifery practice and education has identified several trends and issues which will affect or have the potential to affect midwifery education and practice in British Columbia. The following key words stand out in the literature:

witchcraft -- poverty -- (low) socio-economics -- dirty -- (un)educated

non-nurse midwife -- nurse- midwife -- man-midwife -- birth-place

physician resistance -- credibility -- art and science -- technology

The following questions place the key words in perspective and show how trends and issues relate.

- Does witchcraft mean the lack of scientific evidence, or is it the "art" of midwifery that appears to provide mystery to midwifery practice?
- Did midwifery survive due to the need for and commitment of midwives to look after the poor?
- Why do people associate 'midwife' with uneducated and home birth?
- Is there a relationship between the reemergence of midwifery practice and economic decline?

- Does 'credibility' relate to every word outlined above?
- Is there a difference between the practice of a nurse midwives versus midwives who are not trained as nurses?
- Do we expect men to be midwives in the future?
- Is physician resistance primarily associated with home birth, direct-entry midwifery or competition for clients?
- Does 'technology' belong in midwifery practice?

Answering these questions is not an easy task, as each question raises additional questions and more than one answer may be correct. Kaiser (May 1993) suggested Walt Whitman's solution to such dilemma, "Reexamine all you have been told --- dismiss what insults your soul."

Witchcraft appears to be a thing of the past. Although most midwives will tell you that there is nothing magical about their practice, midwives always had and still appear to have a 'mystique' surrounding their practice. This mystique may be the result of the poorly understood components of 'art' and 'intuition' used by experienced midwives in their practice. In order to achieve future credibility for midwifery practice, midwives will have to be taught a delicate balance between the art and the science of midwifery.

According to the literature, midwifery practice survived because midwives were committed to care for the urban poor and people living in rural areas with decreased accessibility to health care services. Midwifery also filled a gap, however, in caring for people suspicious of and opposed to medical intervention in normal stages of the life cycle. These people can be found on all levels of society. Understanding the need for hygiene and prevention of infection in case of birth trauma helped midwives and the public to promote cleanliness during childbirth. Midwives today are educated and cognizant of the concept of 'asepsis'.

Midwives, not trained as nurses, are often confused with labor support people because they practice in the community and are referred to as community midwives. The title midwife belongs to duly educated and qualified midwives. There are however, people calling themselves midwives, who have *no* formal education but are interested in supporting women through the childbearing process. They are most often women responding to the need of childbearing families who prefer to give birth at home.

Midwives are either educated in the form of a post-basic nursing specialty or following a program of midwifery study via a 'direct-route-of-entry'. The direct-route-of-entry option is gaining popularity around the world. The length of both didactic and clinical components of such educational programs often exceed those of nursing programs. These midwifery programs draw on selected knowledge from other disciplines without adopting all knowledge (Muzio, 1992). Nurse-midwives specialize in midwifery as an extension of nursing. Some people belief that nurse-midwives use the medical model of care for midwifery practice rather that a wellness focused approach, because they were trained as nurses to use the medical model of care only. This is believed to be true specially for nurse-midwives working with physicians in hospitals. A recent move in nursing to adopt different philosophies to direct both nursing practice and education away from the medical model of care, may assist in reducing the differences between nurse-midwives and direct-entry midwives over time. A wellness-promotion and self-care practice model, and the use of humanistic educational principles, including adaptability and autonomy for *both* students and faculty, are just a few example of recent changes in nursing education and practice.

In the past, midwifery practice seemed to resurface in periods of economic decline. During the last decade interest in midwifery practice surfaced because more Canadian women expressed the need for a humanitarian and safe alternative to the medical

interventionist care during the childbearing cycle. Legalization of midwifery practice however, has also been recommended because it is perceived that midwifery care will contribute to reducing health care cost in the long run. In an address at the ICM conference in Vancouver, Van Wagner (1993) cautioned against the misuse of that idea when incorporating midwives into the health care system. Midwives should be adequately remunerated like other professionals. Savings in midwifery care would be achieved by reducing the use of unnecessary expensive high technological tests. An interesting fact is that fee schedules have not been worked out yet. The Ontario committee recommended that all deliveries should be attended by two midwives. Although this recommendation promotes safety, it does not appear to reduce cost.

It is beyond the scope of this paper to deal with the issue of the equality between men and women. Men are expected to continue to become midwives in the future. In addition, male-physicians will continue and are allowed to practice 'midwifery' according to the Medical Act in B.C.

Physician resistance against midwifery practice, particularly home birth, and the controversy about the nurse versus non-nurse midwife have essentially remained the same throughout history. The midwife's struggle for credibility is very much alive, and directly related to the understanding of the arts and science components of the discipline. Midwives today are often still viewed by both the public and other health care providers as uneducated, unless they are registered nurses.

The controversy over home birth, despite convincing statistics on its safety by the World Health Organization, will remain just that. Burtch (1992, p. 163) points out that in Canada, despite the lack of scientifically rigorous evaluations of midwifery practice or home birth, a variety of exploratory studies have challenged the assumptions that home birth or midwife attendance are inherently more hazardous than other arrangements (Burtch 1988a; Tyson 1990; Walker, Pullen, and Shinyei 1986). He affirms that the home

birth issue is especially pertinent in Canada, since midwives tend to be the only practitioners who attend birth at home, raising questions about safety (Burtch 1988a, pp. 361-62). The issue of absolute safety is neither related to midwifery care or the birth setting itself says Barrington (1985), "Birth is a major life transformation, and like any change of such magnitude, it involves elements of uncertainty and risk." Many nurse-midwives do not advocate home birth either. Selected midwives and physicians may have to agree to disagree on the issue. Birthing centers provide an excellent and viable alternative but are expensive to build. Competition for clients, seen as a problem by some, appears to be less of an issue.

The use of technology during pregnancy is becoming a legal issue rather than a philosophical one. Although some argue that if pregnancy is normal, no technology should be needed or used, others argue that we use technology in every day 'normal' life. The use of needless intervention, such as the use of forceps or vacuum extractor to shorten the second stage of labor, is an entirely different kind of dispute. Midwives of the future must be educated to understand and know how to use technology, for example electronic fetal heart rate monitoring, so they will be able to educate their clients and exercise judgment in the use of these techniques.

In conclusion, the historical review of midwifery practice and education shows that future midwives need to be well educated professionals. In addition, the review raises a number of issues to be considered when developing a curriculum for midwives in B.C. The issues include questions about legal protection for midwives, the practice and educational setting, home birth, physician resistance to midwifery practice, hospital priviliges for midwives, and the difference between nurse-midwives and direct-entry midwives. These issues will be reviewed in chapter V.

Educational Principles and Curriculum Development Ideas.

This section of the chapter provides a general introduction to the educational principles (derived from behaviorism, humanism and andragogy), the curriculum evaluation criteria (Campbell 1985), and curriculum development guidelines (Torris and Stanton 1982) used in this thesis. This overview is not meant to be a literature review of educational philosophies but has been included to provide clarity to chapters III and IV.

The educational principles and curriculum development ideas used in this thesis come from diverse backgrounds. The use of diverse principles evolved because the curricula analyzed in chapter III and the curriculum blueprint proposed in chapter IV of this thesis are of such nature that they contain both 'education' and 'training' components.

Behaviorism

"Probably no other system of psychology has had as much impact on general and adult education, or had its principles be the cause of as much debate as behaviorism" say Elias and Merriam (1984). The fundamental philosophical questions raised in behaviorism are about the differences between humans and animals, people and complex machines, and the relationship between education and the formation of culture. If education is synonymous with training, one should be able to solicit predetermined responses through selected stimuli (Tyler 1969).

One of the well known theorists on modern behaviorism, B.F. Skinner, has significantly influenced education. His philosophy, based on the presumption that survival is the fundamental value for individuals and societies, became the foundation for the rationale of promoters of behaviorist education that each person has to obtain the skills to survive in society. The emphasis is on teamwork, personal competition and achievement are of a lower priority (Elias and Merriam). Behaviorism promotes the importance of providing education under favorable conditions, which include the provision of positive rather than negative reinforcement, and allows for individual differences. The role of the

teacher in this philosophy is very important and active. Elias and Merriam (1984) portray the teacher as a contingency manager. The teacher manipulates the environment to elicit behaviors to assist students meet the goal of learning to survive in society.

Behavioral objectives, also referred to as instructional objectives, specify the expected behaviors upon completion of an educational program. The primary advantage of using instructional objectives is the accuracy and objectivity by which learning can be measured. In addition, objectives help teachers to know precisely what to teach and expect from the students. Although there is no actual proof, and not everybody agrees that the use of objectives enhances effective teaching and learning, most educators agree that objectives increase clarity in communication (Houle, 1982). Another positive aspect related to the use of behavioral objectives is that they are seen as a mechanism to assess effectiveness of a curriculum, the educational institution, and/or administrators and individual teachers (Elias and Merriam, 1984). The notion of accountability, stressed as an essential asset in contemporary job performance, ties in with the concept of competency-based education. Competency-based education programs are basically an adult education offspring of general behaviorist educational programs (Elias and Merriam 1984). The programs have specified goals, learning experiences and evaluation based on outcomes. The emphasis is on criterion-referenced evaluation, assuming that all students are able to meet the objectives. Criterion-referenced evaluation is less threatening than norm-referenced evaluation and promotes self-directed learning and continuation of learning. Competency-based evaluation is frequently used for performance evaluation of professionals. The competencies are derived from the job description, stated in behavioral terms, and known to the evaluatee before hand.

Ralph Tyler's model for designing educational programs, has had a strong influence on program development models proposed in recent years. Tyler's model is based on the

assumption that "education is a process of changing the behavior pattern of people." In his approach to program development the following questions are asked:

- What is the educational purpose of the program?
- What educational experiences can be provided that are likely to attain the purpose?
- How can these educational experiences be effectively organized?
- How can we determine whether these purpose(s) are being attained?

Most significant is the fact that contemporary authors and theorists of curriculum development theory continue to acknowledge that "the fundamental way of thought which Tyler suggested still remains intact, underlying the discussion and practice of most education today" (Houle 1982, Elias and Merriam 1984, Bevis and Watson 1989).

Torris and Stanton (1982) proposed guidelines for curriculum development for nursing education in the U.S.A. Their book "Curriculum Process in Nursing: A Guide to Curriculum Development" was written during a time when the use of behavioral objectives was popular and *the* accepted approach to nursing education on the North American Continent. Their format follows the four basic questions raised by Tyler. Bevis and Watson (1989), promoting a humanistic existentialist approach to adult education, claim that a curriculum development process using the format of philosophy, framework and objectives, is characteristic of behaviorism. They also claim that process to be linear and therefore restrictive. I see Torris and Stanton's process as cylindrical or spiral, and ongoing. The approach stresses the importance of a foundation to direct the curriculum, but does not focus on the development of specific content or objectives. The authors (Torris and Stanton) describe a process for curriculum development suitable for the development of any curriculum, whether it has to be started from scratch, or be evaluated and revised.

Torris and Stanton (1982) emphasize process in curriculum design, and they define process as "a series of progressive stages in which inter-dependent activities have some

purpose" (p. 16). They characterize four developmental stages in the curriculum process. The directive stage provides the foundation for the entire curriculum, the formative stage outlines broad and general concepts used in the curriculum, the functional stage focuses on the specifics and the operational aspect of the curriculum, and the evaluative stage involves program evaluation (chapter III, p. 56). Torris and Stanton point out that the key to development of a curriculum is an organizational structure conducive to the task (1982, p. 5). The organizational structure of a curriculum must be able to accommodate future modification and change. Torris and Stanton stress the need to plan and implement curriculum in the context of financial and resource realities of a select educational institution. They focus on the importance of the curriculum foundation describing philosophies of practice and education, including conceptual visualization of the principles, because the foundation developed in the directive stage provides the base on which the entire curriculum rests.

A Glossary of Terms is an essential component of the directive stage because it gives clarity to the jargon, beliefs and concepts used in the curriculum. Torris and Stanton's process is precise, comprehensive and adaptable, with the added advantage that the broad outline can be used in conjunction with Cambell's specific evaluation criteria (chapter III, pp. 53-55). The two documents complement each other. Torris and Stanton state, for example, that each progressive stage in the developmental process must be built upon the previous one, while Campbell takes an interrogative approach to each of these stages. Their compatibility is self evident when analyzing the two documents closer. Torris and Stanton's first stage directs the development of a philosophy, a glossary of terms, the characteristics of the program graduate, and a theoretical framework. Campbell, in turn, focuses specifically on the philosophy and framework for example, and asks questions, "Does the philosophy identify who holds the beliefs?" (see criterion B, p. 54), and "Is the framework drawn from the philosophy, curriculum objectives and the conceptual model?"

(see criterion F, p. 54). When analyzing or designing a curriculum, the evaluation criteria assist in maintaining a continuum in the curriculum design (Campbell, 1985).

Humanism

An interesting observation is that humanists struggle with the same fundamental questions as behaviorism but arrive at a different conclusion because they have alternative views of the world (Elias and Merriam 1984). The humanist values the notions of freedom and autonomy. Behavior is a consequence of human choice which individuals can freely exercise (Elias and Merriam 1984, p. 118). Individuality and potentiality represent the unique individual and the unlimited potential for growth and development in the humanistic philosophy. The self, self concept, self actualization, and responsibility and humanity to self and others is very much the center of the belief. The goal of humanistic education, according to Elias and Merriam (1984), is the development of persons --- persons who are open to change and continued learning, persons who strive for self-actualization, and persons who can live together as fully functioning individuals (p. 122). These authors describe humanistic educational principles to be student centered and teacher facilitated. The egalitarian relationship between teacher and student is an important notion in the humanistic educational approach. The act of learning is seen as a personal endeavor, in which curriculum becomes secondary to the personal experience. While the emphasis is on self it is nevertheless recognized that growth does not occur in isolation and needs to be fostered by a cooperative and supportive environment (Elias and Merriam, 1984).

Bevis and Watson (1989) advocate humanistic principles in education, based on the humanistic existentialist philosophy. In their book "Towards a caring curriculum: A new pedagogy for nursing", they propose an educational paradigm shift for nursing education, by moving from a pragmatic empirical to a humanistic existentialist approach. They argue that such a move increases congruency between the philosophy of care and practice,

including research, and education. Incorporation of the humanistic philosophy helps "in seeing people as unique, perfect wholes rather than reducing them to behavioristic reductionistic persons" (pp. 16).

The approach would be equally applicable to *midwifery* philosophy and education. Moving away from using a Tylerian behaviorist approach in the 'educative' component of midwifery education could assist in moving midwifery research away from the strict scientific empirical quantitative investigation methods and make room to incorporate the ethnographic and other qualitative based inquiry methods. Using a non-traditional educational framework for the didactic component of a midwifery curriculum design could solve more than one problem. Bevis and Watson promote a return to the caring component of nursing, including a reduction of the use of technology, very much in line with midwifery philosophy. Incorporation of the humanistic principles in a midwifery curriculum could ultimately assist in reducing the gap between nurse-midwives and direct-entry midwives. Despite the fact that Bevis and Watson present a very powerful and well-supported argument for the acceptance of their theory, what they envision is 'Utopia'.

Bevis and Watson define curriculum as "the transactions and interactions that occur between student and teacher, and among students with the intent that learning takes place." They emphasize the importance of student-teacher interaction and the type of learning activities planned by the teacher. 'Liberating' the teacher- student interaction is a necessary and essential component supporting educative learning. Students participating in an educational program based on the humanistic philosophy are expected to be, or become independent, self-directed, self motivating and life-long learners. They are urged to develop questioning minds and become familiar with inquiry approaches (Bevis and Watson 1989).

The teacher on an equal basis with the student will move the learner forward on a maturity continuum. The five basic positions on that continuum are from low to high (1)

charming, the student tries to please the teacher, (2) *anticipatory compliant*, the student tries to pre-guess the teacher, (3) *resonating*, the student is motivated due to teacher performance, (4) *reciprocating*, the student takes responsibility for learning and participates in a teacher-student relationship based on mutual respect and exiting exchanges (p. 86), and (5) *generating*, student initiative is optimal in participation.

Bevis and Watson differentiate between 'item' learning such as recall of straight knowledge and skills, 'directive' learning which includes learning the rules and the exceptions, and 'rationale' learning where research is applied to practice. These first three kinds of learning are a lower level of education according to Bevis and Watson and only achieve training. The next three levels are 'contextual', 'syntactical' and 'inquiry' learning. These levels move the student up into the higher levels of the maturity continuum. Contextual learning means understanding the essence of midwifery practice, learning of the 'language', symbolic values and philosophy. Syntactical learning refers to the ability to logically structure arrangements of data in meaningful wholes (p. 94), to plan individualized care for an unique human being, while deviating from the norm based on judgment, feelings or intuition. Inquiry learning applies to the creative aspects of midwifery such as the art of the investigation, the search for truth, the generation of theory and other. Bevis and Watson's ideas clearly favor an academic focus of learning over training. This notion creates tension in a program such as midwifery, where mastery of selected knowledge and skills is essential to ensure safe practice to protect society. Bevis and Watson (1989, p. 79) claim that persons in an educational program primarily need to learn to:

- think as well as act;
- know, to continually seek a better knowing;
- discourse about knowing;
- seek and doubt truth, while developing a splendid sensitivity and devotion to it;
- appreciate the enduring values that make the profession [midwifery] a moral activity.

The intent is for the teacher and/or student to decide on selected content. While Bevis and Watson say that it is meant to be that way, it leads to unrealistic expectations of the teachers and the student. Few faculty today could rise to the demands of Bevis and Watson's proposal. The issue and need for extensive faculty development before such approach can be implemented is addressed in-depth by the authors in their book.

I believe that studies on the graduate level would be more suited and geared to meet the expectations of the learner and the teacher. Wearing my 'theoretical hat' I agree with, and like Bevis and Watson's ideas, but my 'practical hat' struggles with the reality of such dramatic shift for midwifery education at the present time. In order to establish education and educational credibility for midwives in B.C., a more structured approach will be needed. The tension between the behavioristic and humanistic curriculum approach must be discussed and released so the diverse educational principles can be used side by side.

Future midwifery students in B.C. are anticipated to include a large group of mature students and people returning to professional life after child rearing. For many midwifery may mean a second degree, career or life experience (Bevis and Watson 1989, Ontario Curriculum Design Committee 1991). These types of program participants create a need for what could be called 'a multi-route-of-entry' curriculum. For example, when an anthropologist or sociologist decides to reenter the work force or change careers to become a midwife, it would be neither economically and motivational feasible to have them repeat courses on culture and/or sociology, likewise, a physiotherapist changing career or study path would most likely be able to bypass the anatomy and physiology courses. Registered nurses with a variety of perinatal nursing backgrounds should be credited for their education and experience, and/or be able to challenge selected sections of the program. Thus, students with varied educational backgrounds must be able to enter a midwifery program at different points along the educational path. Furthermore, many of

these students will be self motivating and self directed, and as adult learners they will not appreciate authoritarian methods of teaching.

Andragogy

The third philosophy used in this thesis is 'andragogy', commonly referred to as adult education. The term 'andragogy' is used interchangeably in the literature, meaning education for adults as well as adult educational philosophy. Andragogy is often found to be mixed with other educational philosophies (Elias and Merriam 1984). Malcolm Knowles (1968) was the first one to attempt to establish andragogy as a term in English. It is currently still under debate if andragogy exists as an independent philosophy, and if andragogic principles are essentially different from pedagogic principles. For the purpose of this thesis it will be assumed that there is a difference. The assumption is grounded in the argument that adulthood is a normative concept based on chronological age and status in society (Elias and Merriam 1984, p.190). The authors note also that adults have certain rights and responsibilities in society not afforded to children. Adults are older than children, it is the time factor which counts for the difference in emotional and moral maturity levels. Another factor in differentiating between education for children and adults lays in the role of institutions. The place of institutions in adult education is the issue of social change (Elias and Merriam, 1984).

According to Houle (1982) and Elias and Merriam (1984), Paterson (1979) analyzed the concept of teaching and learning in adult education as well. He considered learning 'a coming to know'. Even in learning skills, the coming-to-know aspect is fundamental to the concept of learning, argue Elias and Merriam (1984, p. 195). Paterson (1979) did not agree with the behaviorist belief that learning is a change in behavior. He saw teaching as "a collaborative process, involving exchanges, outgoings, and interaction between two separate and independent centres of consciousness, and converging on to some objective and accessible reality" say Elias and Merriam (1984, p. 195).

It must be noted that Paterson's ideas were developed with liberal education in mind, focusing on academic education not emphasizing skill training. Elias and Merriam (1984) amalgamate adult education with the different educational philosophies. They contrast liberal adult education, progressive adult education, behaviorist adult education, humanistic adult education and radical adult education. Liberal adult education principles have been primarily applied in the Western world, the main traditions include liberal learning, organized knowledge, and development of an intellectual mind (p. 9). Progressive education explores the concepts of education and society. The focus is on experience centered, and vocational education. Behavioristic adult education centers around the notions of control, and behavior modification. Humanistic adult education promotes student centered, self-directed learning, active participation, and freedom and autonomy. The radical adult education movement believes in education as a force to achieve radical social change. Included in Elias and Merriam's (1984) discussion about educational philosophies is the analytical philosophy of adult education. The philosophy emphasizes the need to clarify concepts, arguments, and policy statements used in adult education (p. 11).

Other recognized differences between pedagogy and andragogy based programs are that adults participate voluntarily, the program is most likely freely chosen, and they are able to remove themselves from the scene if they find the educational endeavor not beneficial. Adult education focuses heavily on active student participation, while there is some disagreement on the role of the teacher in adult education between theorists, the teacher role is much more egalitarian than in the behaviorist approach.

Review of selected perspectives on educational philosophy emphasized that the development of the philosophical theories evolved as a result of a logical progression of changes occurring in the world. Elias and Merriam (1984, p. 204) give meaning to the idea when describing the move from liberal to progressive adult education.

> *This educational philosophy (liberal adult education) corresponded to a static society in which truth, values, and structures were considered authoritative and immutable. The great challenge to this system came with the rise of modern science and modern philosophy. Change, relativity and pluralism were introduced into human consciousness. A new educational theory developed to cope with this view of the world.*

It makes sense that different philosophies may share essential principles. The humanistic and progressive adult education both focus on the person him/her self as a learner, progressive and behaviorist adult education share the emphasis on the importance of scientific inquiry. An eclectic educational model merging andragogical principles with humanistic and behavioristic ones for a program designed to both educate and train a health professional, is therefore a feasible option.

Chapter III

A Comparative Analysis of Midwifery Curricula in Selected Jurisdictions

The purpose of the comparative analysis of five different midwifery curricula in selected jurisdictions of the industrialized world is to provide direction for the development of a midwifery curriculum for British Columbia. The analysis was assisted by Campbell (1985), and Torris and Stanton's (1982) criteria as discussed in chapter II. Specific focus was on:

- similarities and differences in the selected curricula;
- missing concepts and components in each curriculum;
- identification of concepts and components suitable to a curriculum for midwifery students in British Columbia.

The data for this analysis project were obtained in 1992, before a process to provide legal sanction for midwifery practice was initiated by the B.C. Government. At that time, I had not considered incorporating humanistic principles into the educational philosophy for a midwifery curriculum. The criteria selected for analysis, Campbell's (1985) criteria, were developed when the use of behavioral objectives in curriculum development were the norm. The criteria are specific and suitable for the analysis project. Guidelines for curriculum development process published by Torris and Stanton (1982) are less specific and are more useful for curriculum development.

Method

In selecting curricula for the analysis, I decided:

- to choose curricula from a variety of countries with an established and respected history of midwifery practice and education, with the exception of Canada;

- to select curricula from countries with primarily English as a first language (with the exception of the Dutch curriculum);
- to ensure inclusion of one curriculum of the North West United States;
- not to differentiate between curricula educating a nurse or direct-entry midwife.
- to request the following midwifery curricula by fax or phone, two from the United Kingdom, two from Australia, two from the USA, and two from the Netherlands. The Report of the Curriculum Design Committee in Ontario, Canada was obtained via the RNABC library.

The following five curricula were decided on:

1. ***Australia,*** *Sydney (New South Wales):* "The Midwifery Curriculum of the School of Nursing Studies. Royal Prince Alfred Hospital" (1989).
2. ***Canada,*** *(Ontario):* The Report of the Curriculum Design Committee on the Development of Midwifery Education in Ontario (1991).
3. ***The Netherlands,*** *Amsterdam (Noord- Holland):* "Studie Gids: Kweek School voor Vroedvrouwen" (1991).
4. ***United Kingdom,*** *Poole (Dorset):* "Dorset School of Midwifery, Approval of Three Year Midwifery Training" (1988).
5. ***United States of America,*** *Seattle (Washington):* "Catalog Midwifery and Nurse Midwifery Education" (Vol. XI, October 1991).

All curricula meet the specifications outlined above. All are in the English language, except for the Dutch curriculum outline, and represent a variety of countries where midwifery has been recognized and taught for many years. The United Kingdom and Holland have been leaders in midwifery care for many centuries. The curriculum of the Seattle Midwifery School in the United States is not representative of midwifery education in America, because it is one of the few available direct-route-of-entry programs in the U.S.A. The Australian program is characteristic of midwifery education in that country, and meets the specified criteria. Except for the Australian program (requiring nursing certification) all programs offer a direct-route-of-entry into the program.

The Canadian curriculum document is distinct in that it consists of a report in the form of a proposal outlining recommendations for midwifery practice and education. It is important, however, to include the proposal in order to make recommendations that facilitate reciprocity of educational credentials in the future. It was anticipated that additional Canadian curriculum information would be available by the summer (July 1993). Unfortunately, faculty at the Ontario Universities were unable to share curriculum details for reporting. Therefore, the Canadian curriculum ideas are discussed with the assistance of the Report of the Curriculum Design Committee, in addition to information obtained through personal communication at the ICM conference in Vancouver B.C.

Criteria for the Comparative Analysis

The criteria used for the comparative analysis are derived from two primary resources: (1) Campbell's (1985) evaluation criteria, and (2) Torris and Stanton's (1982) guidelines for curriculum development. Campbell's criteria are specific, while Torris and Stanton's criteria are broad, encompassing Campbell's detailed outline as illustrated in the previous chapter. Campbell's standards will be used for discussion of the specific criteria, while Torris and Stanton's guidelines assist in the recommendations for development of a curriculum blueprint for B.C. midwives.

Campbell's criteria are clear and concise. They assist in dealing with the many variables encountered when undertaking a comparative analysis of data derived from such diverse sources. For the purpose of this thesis, the sections focusing on objectives will be identified with an asterix, and will be de-emphasized throughout the discussion.

I The following outline represents Campbell's (1985) evaluation criteria:

A. The information is sufficient to assess:
- ♦ validity of curriculum objectives;
- ♦ appropriateness of curriculum design;
- ♦ feasibility of curriculum design.

B. The statement of philosophy:
- ♦ identifies who hold the beliefs;
- ♦ serves to guide development, implementation, and evaluation;
- ♦ is internally consistent; and
- ♦ presents relationships between its elements clearly.

C. The statement of purpose:
- ♦ is broad yet precise; and
- ♦ indicates the nature of the education program.

D. The purposes stated are:
- ♦ compatible with the philosophy;
- ♦ realistic for the program; and
- ♦ appropriate for the type of program selected.

E.* The curriculum objectives are:
- ♦ attainable;
- ♦ consistent with behaviors expected of a new graduate of the program;
- ♦ congruent with program philosophy;
- ♦ defined in terms of learner's behavior and/or product, not process or experience;
- ♦ defined in terms of behavior that can be evaluated in the work setting;
- ♦ stated in an appropriate level of generality; and
- ♦ representative of all logical learning outcomes.

F. The conceptual framework for the curriculum is:
- ♦ drawn from philosophy, curriculum objectives, conceptual model;
- ♦ identifies major concepts and sub-concepts, including their relationships;
- ♦ provides sufficient elaboration of the concepts to guide the development of the design; and
- ♦ identifies theories and areas of knowledge to be used to explain each major concept and its sub-concepts.

G. Both the horizontal and vertical curriculum content threads:
- ♦ are logically derived from the curriculum framework,
- ♦ have the potential to promote sequence, continuity and integration.

H.* The level of objectives:
- ♦ is related to the curriculum objectives,
- ♦ reflects progression towards achievement of the curriculum objectives,
- ♦ is stated at appropriate levels,
- ♦ reflects appropriate levels of learning,
- ♦ is correctly stated.

I. The curriculum design:
- ♦ is derived from the curriculum framework,
- ♦ should permit achievement of curriculum objectives,
- ♦ reflects use of curriculum threads,
- ♦ provides appropriate grouping and sequencing of courses (prerequisite, core requisites, etc.),
- ♦ congruent with program philosophy,
- ♦ internally consistent,
- ♦ adequately justified.

J. The plan for the evaluation of the curriculum:
- ♦ identifies variables to be assessed,
- ♦ includes a time plan for data collection and evaluation,
- ♦ identifies appropriate data collection techniques and tools,
- ♦ indicates appropriate use of the findings.

II Torris and Stanton's guide to curriculum development, although written with nursing in mind, provides broad directions for curriculum development of educational programs. The guidelines accommodate any philosophical concept or theoretical framework providing the terminology is defined in the directive (early) stage of the curriculum process. This thesis provides a global glossary of terms found in Appendix A. While development of objectives is suggested as a component of the 'formative' stage in Torris and Stanton's process, in the newly proposed midwifery curriculum, program objectives are replaced with broad aims for the program. These broad goals allow for personal growth of the individual learner, set no limits, and are in tune with the 'caring curriculum' philosophy. Provision has been made, however, to provide specific direction for what Bevis and Watson (1989) call the 'training' phase of the new program. The training phase is that part of the midwifery curriculum that teaches essential knowledge and skills to ensure safe guidance of the family through childbirth. The stages of the curriculum process as described by Torris and Stanton (1982) are as follows:

Directive Stage — Gives guidance and authority to the entire curriculum.

Components:

- Philosophy
- Glossary of terms
- Characteristics of the graduate
- Theoretical framework.

Formative stage — Utilizes the broad, generalized concepts to identify curriculum details.

Components:

- Curriculum design and requirements
- Level and course objectives
- Content map.

Functional Stage — Represents the activities affecting the operational component of the curriculum.

Components:

- Approaches to content
- Teaching methodology
- Validation of learning

Evaluative Stage — Involves comprehensive, formative, and summative curriculum evaluation.

Components:

- Input
- Throughput
- Output.

Findings

Criterion: A. Is there sufficient information to assess the validity of the curriculum objectives, the appropriateness and feasibility of the curriculum design?

The information provided by the Australian and the English schools is more than sufficient and appropriate for a comparative analysis. The Seattle Midwifery School provides sufficient data, but specific data need to be clarified. For example, the clinical component of the program is not clearly delineated in time and setting. The Dutch Study Guide (precise translation) is short on essential information, specifically with regard to curricular foundation. There is neither a philosophy nor a theoretical framework to direct

curriculum design. A phone call to the school (Schoon 1992) provided insight into the rationale for the absence of the information. Schools of Higher Education in the Netherlands have emphasized the need to incorporate practice and educational philosophies in curricular documentation. Unfortunately progress has been slow, and existing well-established schools seem to run well without the curriculum foundation documents. Midwifery schools continue therefore, to function in a theoretic 'curriculum vacuum'. In addition, Dutch midwifery programs are controlled by State law and employ the medical model of perinatal care. Little room is left for individual initiative in designing an educational conceptual model. The Canadian information is incomplete, although, the Report of the Ontario Curriculum Design Committee (1991) provides a comprehensive proposal. Unfortunately the Ontario curriculum was not available at the time of completion of this thesis.

Criterion: B. Does the statement of philosophy identify who holds the beliefs, and serve to guide development, implementation, and evaluation of the curriculum? Is the statement internally consistent and does it present relationships between its elements clearly?

The philosophy for a midwifery program is a way of viewing the world of midwifery and midwifery education, the nature of the discipline, and the nature of teaching and learning (Torris and Stanton, 1982). Such philosophy integrates and synthesizes fundamental beliefs, concepts, and theories about the discipline, which in turn need to be defined by the curriculum developers. Only then can curriculum philosophy provide clear direction for an educational program.

Four of the five curricula in the study have a statement of philosophy incorporated in the curriculum outline. No mention is made of a philosophy in the Dutch curriculum guide as stated before. The program director (personal communication, Schoon 1992) outlined that the school's faculty endorses the International Definition of the Midwife as their practice philosophy. The practice philosophy is supplemented and integrated with the

philosophy of the clinical practice setting. The Amsterdam midwifery school uses 'Slotervaart' ziekenhuis (hospital) for clinical practice. The director confirmed that information of that nature (curriculum foundation) is shared with the student midwives during their orientation to the program. The director validated that the care model in the Dutch midwifery program is the medical model. She also reminded me that the Dutch midwife is no longer referred to as 'vroedvrouw' (precise translation of midwife), but is called 'verloskundige' (obstetrician). The obstetric medical consultant in Holland is generally referred to as the gynecologist.

The statements of philosophy of the Australian and American programs are the most comprehensive. They declare specific beliefs of the schools on health care, the health care provider, the consumer, and educational principles. They incorporate the International Definition of the Midwife in their philosophy and emphasize the rights, as well as the responsibilities, of the health care consumer. The Australian faculty's beliefs regarding the learning environment stress a continuous process of interaction between the individual and the environment, resulting in changes in knowledge, attitude, skill, and behavior. They also believe in principles of adult education as expressed in the andragogy model. The Seattle school accentuates its dedication to the improvement of maternal-child health, development and advancement of midwifery practice, and provision of quality education. Faculty members stress the need to respect women and their families. The midwife's responsibilities are considered inherent in the International Definition of the Midwife (1972).

The English school in Dorset presents their philosophy in two components, (1) 'Philosophy of Care', and (2) 'Philosophy of Common Care programs'. The philosophy of care uses the concepts of individualized, holistic care, a family centered approach and includes client participatory decision making. The philosophy stresses the physiologic aspects of childbearing with a provision for adaptation and care in the event of illness. The

English school's philosophy underlines the need for research-based care, including the need for ongoing evaluation and change. It is interesting though, that a curriculum, preparing a midwife who has no nursing certification, makes use of concepts suggesting nursing models. This finding is substantiated by the use of terminology such as 'illness participation' and 'partially or wholly compensatory care' in meeting the client's needs. The philosophy of common care programs is said to reflect the future advancement of professional education, yet the statement provides a rationale for the use of the common care curriculum presented in a spiral framework, which by itself promotes a more progressive approach. The philosophy of common care programs is therefore not clearly an educational philosophy. Appendix B include the philosophies of the English and Australian schools to illustrate the point.

The Ontario Report incorporates the International Definition of the Midwife as their primary philosophy as well. They combine the practice beliefs with 'guiding principles' of midwifery education. These guiding principles contain seventeen statements. The first seven pertain to midwifery practice, the next seven represent educational beliefs about learning, the student, the educator and the educational setting. The last three statements stress the need for diversity in student population and flexibility in admission standards, while warning against student discrimination on the basis of race, religion, sex, handicap, or national origin. People belonging to ethnic minorities are encouraged to participate. Belief statements are also found in the executive summary. In all, a comprehensive philosophy of both practice and education could be developed by a faculty by combining and aligning the existing statements. The guiding principles are included in Appendix B.

The lack of controversial statements in the philosophies of any of the curricula, and appropriate use of related subjects, concepts and sub-concepts with a focus on midwifery practice and education, provide all documents with a form of internal consistency.

Relationships drawn between elements are generally clear, but particularly well expressed in the Australian curriculum philosophy. The Australian midwifery curriculum, taught as a post-basic nursing course, views the nursing role as inherent in the role of the midwife, but with a different emphasis. Whereas the nursing role focuses on the process of the disease, treatment and management, (i.e., the medical model), the midwife's role differs in that s/he deals primarily with the process of birthing, a normal physiologic part of the life cycle. Confusion of roles is thereby avoided.

In summary, all existing or proposed midwifery curricula are *based* on a philosophy of care, but only four out of the five syllabi describe philosophy statements. Philosophies of practice are primarily derived from the International Definition of the Midwife. Less consistency exists in the educational belief statements. Consequently, they differ in the amount of direction provided for development, implementation, and evaluation of the different curricula.

Criteria: C. and **D.** Is the statement of purpose broad yet precise, compatible with the philosophy, reflective of the nature of the program, and realistic and appropriate for that program?

If one views purpose and aim as synonymous, all curricula meet this criteria. Nevertheless, the Dutch and the American midwifery schools are superior in presenting their purpose. Both statements, although different, provide a broad but precise spectrum. The nature of the programs is straight forward and realistic. The Dutch program aims to prepare an independently functioning midwife without nursing qualifications, although the profession is classified and regulated under medical jurisdiction. This statement provides the reason for the use of a curriculum framework consistent with the medical model. The Seattle Midwifery School educates a midwife via a direct route of entry into the program. Upon completion of the program the midwife obtains a certificate in midwifery. In addition, the Seattle school submitted a proposal (1992), aiming at education of a nurse-

midwife on graduate level. The project was designed in collaboration with Pacific Lutheran University School of Nursing, but has been postponed due to lack of funding.

The newly proposed health care professionals, nurse-midwives, would obtain a Masters Degree in Nursing with a Certificate in Nurse-Midwifery. They would be unique in that they belong to the nursing profession, but function in an autonomous manner. Both the Dutch and USA purpose statements are compatible with the International Definition of the Midwife endorsed by the schools in their philosophies.

Neither the English nor the Australian schools present a *broad* purpose statement. They provide a list of specific aims. The aims of the Australian profile are fairly precise. The aims represent the school's commitment to high quality learning experiences for the students, and enhancement of personal and professional growth of staff, including the provision of continuing education programs. The aims provide direction for maintenance of educational standards through ongoing evaluation and effective liaisons with the clinical settings. These are all very important facets of a program, but not characteristic of an overall purpose statement. The Dorset School of Midwifery provides 'aims of the course', which relate specifically to the education program. The purpose describes what the *course* hopes to achieve, not the characteristics of the graduate of the program. The eight statements are precisely formulated (Appendix B).

The Report of the Ontario Curriculum Design Committee (1991, p. 29) provides an introductory statement:

> *The central challenge for Ontario's midwifery program is to develop an educational process which promotes the acquisition of essential midwifery knowledge while creating a broadly prepared health care provider. The midwife must have sound knowledge and skills, based and reinforced through clinical experience. She/he will develop and use clinical judgment, and must be capable of critical thinking, and of developing sensitivity to larger issues surrounding pregnancy, childbirth, and parenting.*

This statement provides a basis for a program purpose.

Criteria: E, F and **G.** The specific criteria are outlined on page 54, and relate to curriculum objectives, conceptual framework for the curriculum and curriculum content threads.

The criteria E, F and G have been grouped together to avoid unnecessary repetition and improve clarity.

The Royal Prince Alfred Hospital in Australia educates nurse-midwives. Their curriculum outline presents a comprehensive package including objectives, a theoretical framework and curriculum content strands. The objectives are formulated in behavioral terms and show congruency with the school's educational and midwifery philosophy. The curriculum objectives clearly define the product, however the statements are broad and present a wide spectrum of learning outcomes, thus not stifling individual progress. In order to evaluate these objectives in the clinical setting, selected terms may have to be defined more specifically. The Australian conceptual curriculum development model (Appendix B) divides in two components: (1) a model for the curriculum development process, a modified Tylerian model, and (2) a descriptive theoretical framework to direct the organization of the nurse-midwifery curriculum.

The theoretical framework claims to be derived from three sources, the philosophies of midwifery practice, including the educational setting and two theories of nursing. The theories of nursing are the nursing process, assessment, planning, implementation and evaluation, and Virginia Henderson's principles of nursing, based on a client 'needs' approach to planning and care. The theoretical framework acknowledges the need to amalgamate the scientific components of the discipline with the art of midwifery. The 'interpretation of the midwifery syllabus' is a schematic representation of content overview, content organization, and its relationships. The diagram is clearly outlined, but a glossary of terms is needed to comprehend its meaning. For example, the content map refers to major concepts and theories as 'domains', and divides each domain in units

consistent of the course subjects and specific topics. Each course (unit) within the domain (chapter) describes:

- a rationale for the knowledge and skills in the unit and the midwifery curriculum;
- orientation to the unit, such as the number of hours of the course and the topics included;
- specific course objectives;
- a very detailed subject outline;
- learning resources available and recommended;
- assessment tests for clinical skills.

The explanation of the schematic outline clarifies how the objectives and learning experiences relate and integrate with the rest of the midwifery curriculum. The statement about the need for curriculum evaluation appears to stand on its own, as neither the Tylerian model nor the descriptive framework include 'evaluation.'

Curriculum content threads or strands in this framework are primarily vertical with the exception of the nursing process. According to Torris and Stanton (1982) vertical strands are used to identify content areas such as concepts, theories and knowledge that are broadly conceived and give meaning to the building of content (p. 43). Horizontal strands are process oriented and focus on how the content is used. The organizational approach of both content and learning experiences in the Australian curriculum is built on study blocks (content and practice), providing a gradual increase in levels of difficulty of knowledge and skills. Using Torris and Stanton's (1982) schematic directive, a diagram would look like fig 1 (p. 64). The diagram depicts vertically the study blocks 1-4 (and up), building knowledge and skills in a linear way. The arrow signifies the vertical strand specifying content. The arrow could represent other vertical strands (e.g., if each study block taught progressively the knowledge and skills of the different periods of pregnancy). In most midwifery programs, however, periods of pregnancy provide a horizontal process strand because of the importance of continuity of care. The horizontal 'double' arrow represents the use of

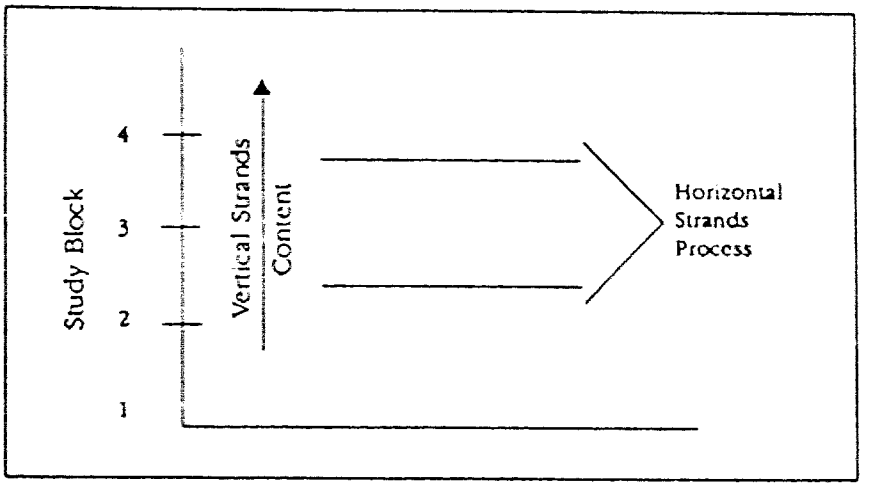

fig 1

the nursing process of assessment, planning, implementation and evaluation of care, throughout all study blocks in the Australian curriculum.

The Seattle Midwifery School has two curricula. The original curriculum (1978) educates a midwife via a direct route of entry. The second curriculum proposed education of a nurse-midwife on graduate level. The nurse-midwifery pathway was derived from the existing curriculum. By outlining how this health care professional differs in practice and education, including the educational setting, a clear picture is formed. The curriculum objectives are in-depth but not formulated in specific behavioral terms. An broad objective is stated in the catalog (1991) as follows. (there are seven guiding principles, the example gives three).

> ***Program Objective 1**: The graduate midwife implements midwifery care with an understanding of the following principles:*
> *A. Midwives recognize the opportunity for women's empowerment inherent in the childbearing experience, and strive to promote and protect this opportunity.*
> *B. Midwives view pregnancy, childbirth and the postpartum period as normal physiologic processes.*
> *C. Midwifery is an autonomous profession working interdependently with other health and social professions (p. 7).*

The curriculum objectives promote integration of the conceptual framework and the content map. The objectives do reflect the philosophy and appear attainable. I believe that selected objectives, however, are achieved only after several years of experience.

Courses at the Seattle midwifery school have been realigned to fit a semester system to facilitate referencing within a university setting. The Seattle school assigned each course a reference number, semester credits, and faculty involved in teaching the courses. In addition, each course outline describes objectives, a topic's outline, learning resources and experiences, teaching strategies, and an evaluation approach. The Seattle school's approach to program and content delivery integrates both vertical and horizontal threads. Core concepts appear to be taught with use of a vertical strand. The three practica promote a progressive increase in the level of difficulty and independent involvement with care, characteristic of a vertical strand. Horizontal strands surface when teaching specialized midwifery content and the clinical skills with use of the periods of pregnancy. This is most evident in the clinical practice courses in the Seattle curriculum. Each practicum promotes involvement with all phases of pregnancy, from the antepartum period through to the postpartum and the newborn periods. Another horizontal thread evolves when adding the process of assessment, planning, implementing and evaluating as addressed above. Fig. 2 on the next page provides the same type of schematic representation as in fig. 1, but uses the clinical practica as vertical building blocks. The clinical practice arrow represents the progressive levels of student involvement in clinical practice. In summary, the curriculum outline of the Seattle Midwifery School meets the criteria outlined under E, F and G.

The Dorset School of Midwifery educates midwives via a direct-route-of-entry. Curriculum objectives (as defined by Tyler and others) is the only segment not found in the comprehensive document prepared by faculty of the Dorset Institute. The conceptual framework portrays a spiral around a common core center and focuses on general content

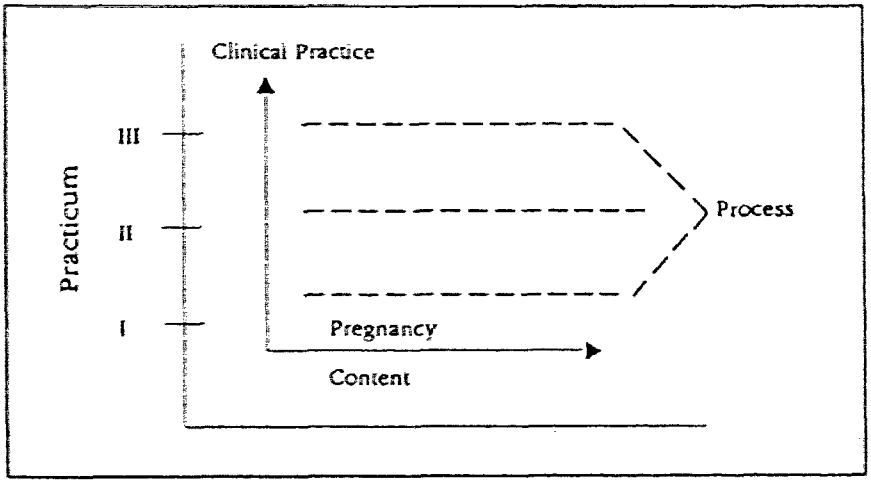

Figure 2.

fig. 2

organization and program delivery. The content map is integrated in the spiral framework depicting a progressive building of subject matter, referred to as 'themes'. There are eight themes A through H. In the spiral theme A2 and A3 build upon A1 and A2 respectively (fig. 3, page 67). The strength of this framework is that it allows for forward and backward movement of subject matter in the program. This means that students can repeat or make up courses without program and/or progress interruption.

The 'Philosophy of Common Core Program' provides a rationale for the common core concepts and the subject matter taught in these core courses. They are called sequences. Unfortunately, sequence titles do not clearly reflect what is taught in a common core course. The specific content profile needs to be reviewed in order to understand the linkage with the common core philosophy. A list with definitions of terms would have been helpful. Each sequence describes the title, objectives or learning outcomes in behavioral terms, broad subjects including the specific topics within the subject. A reading list is provided. The curriculum emphasizes that delivery of care is

The spiral curriculum framework of the Dorset School of Midwifery, England

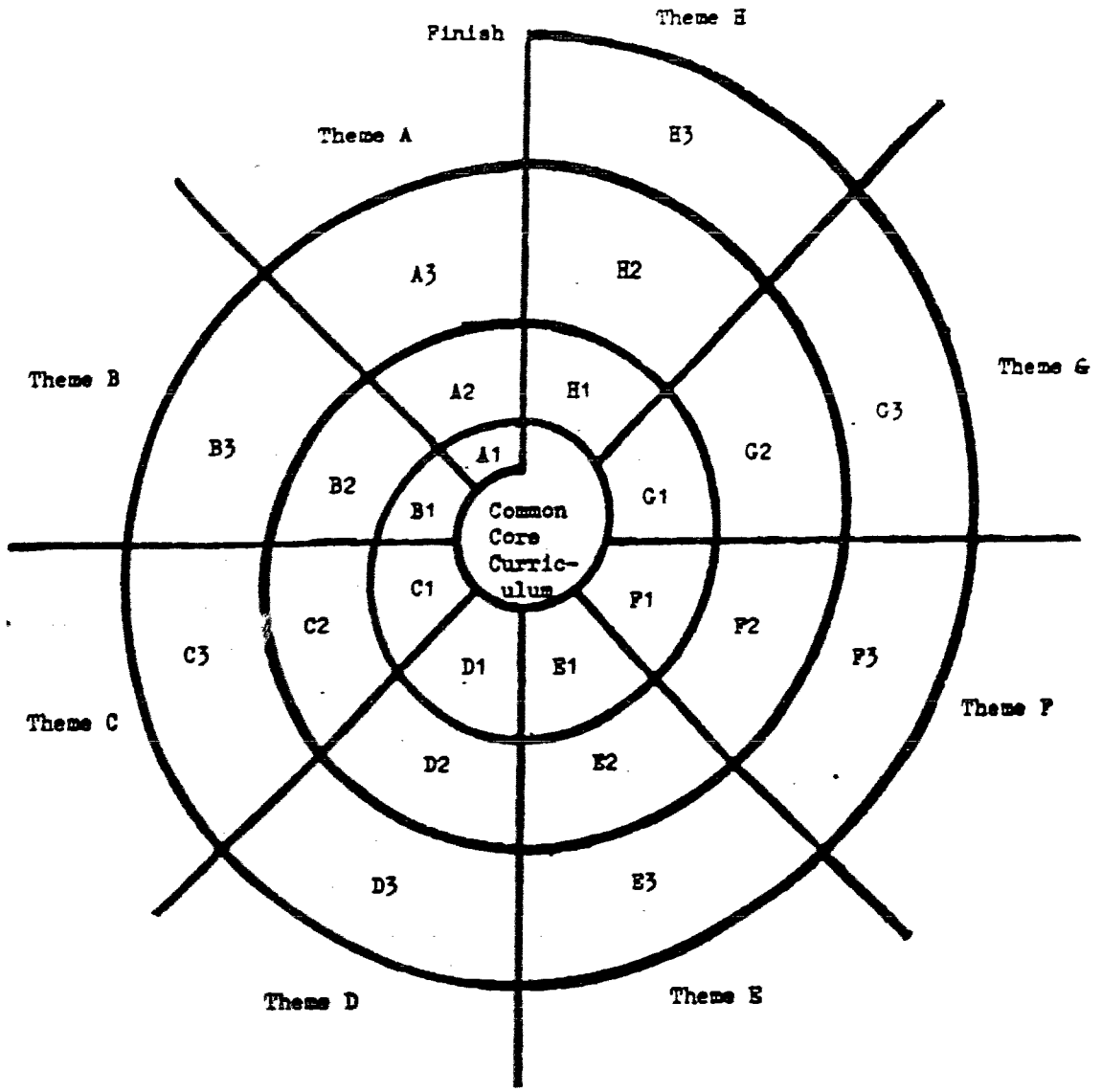

fig. 3

discussed in the light of current research, and that all curriculum core content is applied to midwifery studies. It is unclear however, how the concepts of holistic and family centered care are integrated throughout the curriculum. Throughout the document the importance of research and change is stressed, but no such courses are included in the curriculum content outline.

Curriculum strands present vertical in this curriculum. The holistic care concept, however, provides a horizontal strand. The educational philosophy developed by the school's faculty represents an eclectic coalition model using concepts and theories from a variety of educational specialists. The andragogy model emphasizes the relationships between theory and clinical practice, while the humanistic approach is derived from Maslow's theory, to assist individuals "to become the best they can be", and the cognitive, psychomotor, and affective domains are representative of Bloom's Taxonomy. These three theories are combined in a model showing three touching, not overlapping circles held in place by a triangle representing input, process, and evaluation. This model directs course delivery and evaluation.

The section on teaching and learning states that 'producing an independent learner' is a high priority program goal and incorporates ways and means to achieve this goal. Each conceptual framework in the English curriculum is unique and applicable to midwifery practice and education, yet the overall value is diminished due to the lack of relationship of the models to each other, and the program philosophy.

The Dutch Midwifery School in Amsterdam teaches the same curriculum as the school in Rotterdam. Both schools educate midwives via a direct-route-of-entry program (Schoon 1992). The curriculum is structured by the state law on 'verloskunde' (obstetrics) and is regulated and certified under medical law. Curriculum outcome, characteristics of the graduate of the program, and examinations are determined and controlled by state law, as is the length of the clinical practice component or 'stage'.

As stated before there are no conceptual framework or curriculum objectives, but there are specific guidelines for the organization of the content and program delivery. The content map is derived from the medical model, as is the approach to care. That leaves the program delivery in hands of the school's faculty. The curriculum guide's section on structure of the educational program summarizes the State regulations and informs the reader that the course content packages have been adapted to include the latest educational principles directed by the Institutes of Higher Education. They omit to say what these educational principles are, or how they are applied in the curriculum.

Sequencing of content is directed by the medical model, and reflects progressive levels of difficulty. First year didactic knowledge is applied in first year clinical practice, in the second year, new and advanced concepts are taught and applied in clinical practice on that level. Only during the last year, does the subject matter involve the highest degree of synthesis as required for a program graduate. In the Dutch curriculum, a course is called a 'study plan.' Each study plan has a title reflecting content taught in the course such as chemistry, pediatrics and others. Each study plan is subdivided into study periods. Specific subjects and topics are taught in each study period.

The school year runs continuously from August to August of the next year, and alternates study plans with clinical practice blocks. The first, second, and third year have respectively 23, 24 and 32 weeks of clinical practice. The curriculum outline of the Amsterdam school emphasizes the need to apply theory in clinical practice, facilitating that recommendation by continuously alternating theory with clinical practice.

Curriculum threads (strands) of content and program delivery are both vertical and horizontal. Levels of difficulty in both didactic and practicum components of the program provide vertical threads. The process of assessment , planning, implementation and evaluation of each phase in pregnancy provide horizontal strands.

The Ontario curriculum to be taught at McMaster University, Laurentian University and the Ryerson Institute, is a four year direct-entry midwifery program leading to a baccalaureate degree in midwifery. The program foundation is based on the International Definition of the Midwife and incorporates the educational philosophies of the educational institutes. The Report of the Curriculum Design Committee includes an educational vision outlined in the guiding principles. The educational vision provided guidance in selecting suitable post-secondary institutes to teach a midwifery program.

The third chapter of the Ontario document (Appendix B) called "Essential Components of a Midwifery Curriculum," outlines recommendations for program length and composition, didactic and clinical content, and clinical requirements. The recommendations are general, but provide the reader with the idea that all program facets have been deliberated. The Committee's recommendation to organize content under headings such as basic sciences, health sciences, social sciences and others is unclear particularly because the organization does not reflect the guiding principles.

The emphasis on the need for both continuity of care and a holistic approach to care provides direction for incorporation of two horizontal curriculum threads in the Ontario curriculum. It is my impression that the Ontario midwifery curriculum is going to be a 'sister model' of the direct-entry curriculum taught at the Seattle Midwifery School, with selected adaptations to meet Canadian (Ontario) regulations. I base the observation on personal communication (ICM conference 1993) with Ontario midwives involved with development and teaching of the future program, and the fact that many of the recommendations correspond with the Seattle Midwifery School's curriculum. In addition, the Curriculum Design Committee included the Seattle curriculum in their reference material. Assuming that the observation is correct, the Ontario curriculum will meet most criteria used in the analysis. It will be interesting to see what theoretical framework is used to direct midwifery content in the Ontario curriculum.

Criteria: H*, I and **J** The levels of objectives, curriculum design and evaluation plan for the curriculum.

Every curriculum, with the exception of the Dutch one and the Canadian Report of the Curriculum Design Committee, includes at least one set of course objectives written in behavioral terms. The majority of course objectives mix levels of generality and specificity. Objectives in all curricula are characterized by a general lack of conciseness and very few objectives aim at a higher domain of learning (Bloom's taxonomy), than the application level.

Curriculum design in all programs reflects the discipline, including practice and/or process. The Dutch curriculum appears to be more practice than process oriented compared to the others. Their curricular design is complete and well sequenced. The problem with the Dutch curriculum lies in the diversity created by the lack of congruency between the medical model and the midwifery philosophy, inherent in the International Definition of the Midwife. The Australian curriculum design specially provides a complete, clear and concise picture. The design is derived from the curriculum framework and meets all specified criteria.

Although evaluation plans vary greatly, both summative and formative evaluation components are present and extensively discussed in all curricula, with the need for *ongoing* program evaluation accentuated. Evaluation procedures are clearly outlined, including specific time plans, criteria and methods. Self-evaluation is encouraged and incorporated in the American and Dutch programs. The majority of evaluation procedures include expectations of both the student and the instructor. The Australian and Dutch schools have special evaluation committees. The Dorset school of midwifery has certainly the most explicit and comprehensive plan for curriculum evaluation. Specific responsibilities for evaluation are assigned to individual faculty members or a faculty group in this school. In the Seattle midwifery school, the faculty evaluate their curriculum

quarterly and student participation is encouraged. Policies on student progress, conduct, and protocols for student grievances are found in every complete curriculum document.

A Synoptic Content Analysis

An in-depth topic content analysis will be a research project for another time. This section provides a broad overview of general content taught in the analyzed curricula. Substantially more specific information is needed to accomplish a full analysis of all subject matter taught in a midwifery program. Such a project would be interesting and feasible, because it would assist with future integration and licensing of midwives trained in other countries.

This section of the analysis is limited to:

- identifying and comparing general subject matter taught in the programs;
- comparing length (in weeks) of the total clinical practice components of the curricula.

General subject matter taught in the programs compares favorably. The following content is taught in all schools:

- basic sciences theory, sociology, anthropology, psychology, anatomy, physiology and others;
- midwifery studies, including state regulation for midwifery practice;
- medical sciences in obstetrics, gynecology and pediatrics, where they affect midwifery care;
- teaching and learning theory;
- research with more or less emphasis in selected curricula;
- law, generally integrated with other content;
- a care process, such as the nursing process; and
- a general knowledge component about the health care system in the specific country.

Total clinical practice (weeks) in each program accumulates to:

Australia:	38 weeks midwifery + 52 weeks RN clinical education
England:	79 weeks
Holland:	79 weeks
Canada:	78 weeks
USA:	36 weeks (Stalling, 1993).

The practice components of the English, the Dutch and the Canadian schools are clearly compatible. The Australian program has a shorter practical component because the midwifery students are already RNs. While the pre-requisite to enter the Australian program includes twelve month of clinical practice as a registered nurse, it does not state that the practice has to be in a maternal-child health setting. It would be too much of an assumption to say that the Australian clinical component compares with the others, without closer analysis. The length of the practica in Seattle midwifery school is also difficult to assess. The first impression is that the practice component is considerably shorter than in the other programs. Closer scrutiny shows that some clinical experiences have not been counted in time. Clarification was obtained from the school's director (Stalling, June 1993), who pointed out that their clinical time is calculated by incorporating 100% productive time only. Stalling suggested that the practice component outlined in other programs counted the clinical shifts assigned. She feels that their clinical requirements exceed requirements of other schools.

Common content is also found in chapters describing the educational faculty, cost and finances, policies for vacation, statutory holidays and absence due to illness and emergency. Most curricula devote a chapter to the clinical facilities, including their policies, procedures and teaching resources. Every document outlines and/or summarizes specific theory content, including the number of hours. Clinical practice sessions specify practice in hours or weeks, and include minimum expectations with regard to clinical experiences and skills.

Summary and Recommendations

Using Torris and Stanton's stages of curriculum development, it is interesting to find that all curricula, with the exception of the Dutch document, include the elements of the development "stages." Philosophies, characteristics of the graduate and theoretical

frameworks have been incorporated. The importance of a glossary of terms has been illustrated and was responsible for lack of clarity in the most comprehensive outline. The Formative Stage was represented in a variety of ways. Objectives were generally presented as overall goals, and while fairly well represented in selected curricula, they were not a strong force in any of the documents. Perhaps curriculum objectives do not play such a key role in a program as formerly believed. They certainly provide a structure, however the question arises, "How much structure do we need in an adult education program?" Bevis and Watson (1989) point out that specific objectives promote achievement of a minimum standard only, and do not allow for individual growth. Components of the Functional Stage were addressed in varying degrees of specificity. The Evaluation Stage was not missed, although not always outlined in a systematic manner as suggested by Torris and Stanton.

Taking social, cultural, and political influences into consideration, in addition to the small sample analyzed, the comparative analysis of five curricula of five different industrialized nations throughout the world shows remarkable similarities on more than one level. There is universal agreement in the endorsement of the International Definition of the Midwife, including the sphere of practice, as *the* major component of a practice philosophy. Other similarities are found in broad content outline and length of clinical practice components.

Significant differences are primarily expressed in educational philosophy and program design, specifically content organization. The Australian, American and English schools have obviously been more cognizant of a specific curriculum development process than the Dutch school, whose curriculum evolved over time and through experience, yet the curriculum guide is organized, clear, concise and comprehensive. Even *without* objectives, and *with* use of the medical model, they manage to successfully educate an autonomously functioning, worldwide respected midwife. A qualitative research project

pursuing and explaining this phenomena would be very interesting. Dutch midwives (ICM conference, May 1993) claim that *they*, not the physicians set the standard of obstetric care in the state regulation of 'verloskunde' [obstetrics].

Of the remaining curriculum documents the Australian curriculum stands out in organization and clarity. This curriculum is consistent with Campbell's (1985) evaluation criteria. The Dorset school in the United Kingdom presents the most detailed outline. Their strength lays in the development of conceptual frameworks. Unfortunately, the lack of consistency in terminology and identification of relationships between elements of the framework and philosophy, decreases the value and understanding of the practical application of the conceptual models. The 'Catalog' of the Seattle Midwifery school, including the information about the nurse-midwifery pathway, shows clear evidence of a comprehensive approach to curriculum development in the Institute. The 'catalog' is limited in providing details, so questions remain with regard to the educational level of the practitioner. The school has no linkage with an academic setting, except for the University of Washington library, reducing student exposure to a broad variety of resources. The problem is reflected in clinical practice experiences, which are all obtained in the district. Thus, midwife graduates of the program will have no exposure to both positive and negative aspects of obstetric practices in institutional settings.

The reasons for the variances in the curricula are generally clear. The ideal aims of midwifery programs today are challenged due to the tension created by the need to prepare both a scholar and a clinical expert in midwifery. Educational philosophies are also changing around the world, the use of humanistic adult education principles is gaining popularity. Some countries are more progressive than others in changing their educational philosophy and approach. A world wide paradigm shift is presently occurring in midwifery practice. Midwives want to move away from the nurse-midwifery practice model because of the dominant role of the medical profession in caring for childbearing families. Medical

dominance created an increasingly medicalized climate to birth, and decreased autonomy for midwives. A strong current runs towards the redevelopment of a midwifery practitioner who functions indepently. Furthermore, there is an increased consensus that this practitioner need to be academically prepared and obtain a baccalaureate degree in midwifery, rather than a certificate or diploma.

The following conclusions are derived from the findings of the comparative analysis. A future midwifery curriculum for B.C. midwives needs to incorporate:

1. all components of the curriculum development stages promoted by Torris and Stanton (1982), to ensure a complete and well grounded curriculum.;
2. a direct-route of entry design, leading to a baccalaureate degree in midwifery;
3. a conceptual framework that allows for multiple routes of entry and for backward and forward movement in the program;
4. a glossary of terms, defining concepts, sub-concepts, and specific terminology;
5. midwifery practice and educational conceptual models which reflect the philosophy;
6. the educational institute's semester and course credit system;
7. 50% clinical practice.

In conclusion, this comparative analysis addressed the complexities and multiple variables involved in developing an imaginative, comprehensive curriculum that will benefit midwifery students and their future clients. Ideas for curriculum development have been outlined as a result of the comparative analysis of a variety of midwifery curricula taught in different jurisdictions in the industrialized world. The ideas have been incorporated in the midwifery curriculum plan described in chapter IV of this thesis

CHAPTER IV

A Curriculum Blueprint for Midwifery Education in British Columbia

There are nine and sixty ways
of constructing tribal lays[3],
and every single one of them is right.

Rudyard Kipling, in the Neolithic Age

(quoted in The Design of Education by Cyril Houle, 1982)

The curriculum blueprint for midwifery education outlined in this chapter follows the curriculum development guidelines of Torris and Stanton (1982) as outlined in chapter III (p. 56). Their process guidelines are sufficiently broad to allow for individual ideas, but precise enough to ensure a complete and internally-consistent curriculum outline. The models presented in this chapter are my conceptual ideas. The curriculum blueprint is presented in the four stages of the curriculum development process.

- Section I starts with a description of the characteristics of a graduate of the program, followed by the foundation for the curriculum, including both practice and educational philosophies. The practice philosophy consists of a merger of selected statements of the International Definition of the Midwife (WHO, 1972 and FIGO, 1973) and the Philosophy of Midwifery Care of the Midwives Association of British Columbia (June, 1992). The two conceptual models in this section represent midwifery practice and educational philosophy. The midwifery practice model has been designed to provide a framework to direct the curriculum content outline. The idea is illustrated in the second section of this curriculum blueprint (fig.4, p. 90). The eclectic educational

[3] lays are defined in a variety of ways, as songs, poems, laws, and as 'lay-out' of some kind.

principles used to build the educational philosophy are derived from the humanist, behaviorist and andragogic philosophies.

- Section II describes curriculum design and requirements, and outlines how curriculum content can be derived from the midwifery practice model. A discussion on how the educational principles interact with the practice model to direct educational activities, is also included in this section. A third conceptual model has been designed to provide for multiple-routes-of-entry into the midwifery program. This section concludes with overall program goals.
- Section III outlines the operational spectrum of the curriculum, and includes learning experiences, teaching methodology, and a brief discussion on validation of learning. A sample course plan completes this section.
- Section IV gives direction for future change through program evaluation, providing the spiral effect in the curriculum development process.

Characteristics of Graduates of the Program

The direct-entry graduates of the midwifery program will be beginning scholar-clinicians[4] with a baccalaureate degree in midwifery. They will have the general and specific knowledge, skills, and attitudes to provide autonomous supervision, care, and advice to childbearing women and their families, as defined in the scope of practice by the College of Midwives in British Columbia (Appendix B). They will be able to function in a variety of settings (such as hospitals, birth centers and the community), and be eligible for registration and/or licensing to practice midwifery in British Columbia.

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[4]A scholar-clinician in midwifery is a person who is both academically educated and clinically trained in the art and science of midwifery. The academic preparation provides the midwife with the concepts, theories, and scientific evidence needed to exercise judgment, to make clinical decisions, to provide comfort and pain relief, and to teach and council families throughout the childbearing cycle. The clinical experiences provide 'hands on' practice and include a wide variety of psychomotor skills (Page 1993).

Selected graduates with previous post-secondary education, who entered the program at an advanced practicum level, may be able to graduate at a more advanced 'scholarly' level, while starting as a beginning midwifery clinician.

Philosophies: Midwifery Practice and Education

The practice of midwifery is characterized by a specific scope of practice as well as a specific model of practice. Therefore, a philosophy of midwifery practice must reflect the scope of practice, the expected care approach, and the educational expectations and qualifications of the practitioner (Houle, 1982). The International Definition of the Midwife, included in the philosophy of every one of the five curricula analyzed in chapter III, and the philosophy of the Midwives Association of British Columbia provides these three components. A combination of their ideas forms a comprehensive set of philosophical propositions. In addition, statements outlining faculty member's beliefs about 'health' and 'the individual' are included to provide general clarity to the practice philosophy. The World Health Organization (1947) describes 'health' as:

> *A state of complete physical, mental and social-well being, not merely the absence of infirmity. Health is a continual dynamic process involving positive adaptations to life stresses in order to attain or maintain the optimal state of well being that is realistic for that individual.*

Virginia Henderson (1966) provides a perspective on 'the individual':

- *All people should have the opportunity to develop as fully functioning individuals.*
- *Each individual is unique, has inherent value, and possesses a potential for personal and emotional growth.*
- *Individuals are sufficiently similar for there always to be a basis for developing mutual understanding and communication.*
- *The behavior of individuals has meaning. It is learned primarily as a result of interaction with significant persons in the environment.*

The following statements provide the philosophy of midwifery practice for the proposed midwifery curriculum by merging the International Definition of the Midwife (1972) and the philosophy of the Midwives Association of B.C. (1992).

A Philosophy of Midwifery Practice

A midwife is a person who has successfully completed a prescribed course of study in midwifery provided by a recognized educational institution, and who has acquired the qualifications to be registered and/or legally licensed to practice midwifery in British Columbia.

Midwifery practice involves the provision of supervision, care and advice to women and their families during all phases of pregnancy including delivery of, and care for the newborn.

Midwifery care incorporates education and counseling, enabling women and their families to make informed choices.

Midwifery care is based on the respect for pregnancy as a state of health, and childbirth as a normal physiologic process.

The promotion of, and participation in midwifery research and continuing education are essential ingredient of midwifery practice.

The maintenance and promotion of health throughout the childbearing cycle are central to midwifery care. Midwives focus on preventive care and the appropriate use of technology.

Women need to be encouraged to actively participate in their care throughout pregnancy, birth and the postpartum period, and make choices about the manner in which their care is provided.

Midwifery care incorporates the respect for the woman's choice of care giver and place of birth, in accordance with the standard of practice of the College of Midwives.

Midwifery care is continuous, individualized and non authoritarian. It is comprehensive because the midwife responds to a woman's physical, emotional, as well as social needs.

Decision making in midwifery care is a shared responsibility between the woman, her family (as defined by the woman) and her care givers. The woman is recognized as the primary decision maker.

Fundamental to midwifery care is the understanding that the woman's care givers respect and support her, so she may give birth safely, with power and dignity.

The model on page 83 (fig 1), represents the midwifery practice philosophy in conceptual form. The conceptual model of midwifery practice focuses on a holistic approach to care. Midwives respond to the physical, emotional and social needs of childbearing women. The midwifery practice model projects the childbearing woman as an individual human being. She is the focal point of midwifery care. The childbearing woman is an integrated part of, and/or surrounded by family (as defined by her). The members of the childbearing family live, work, and operate within the same community, but they may belong to different social, religious, and cultural groups.

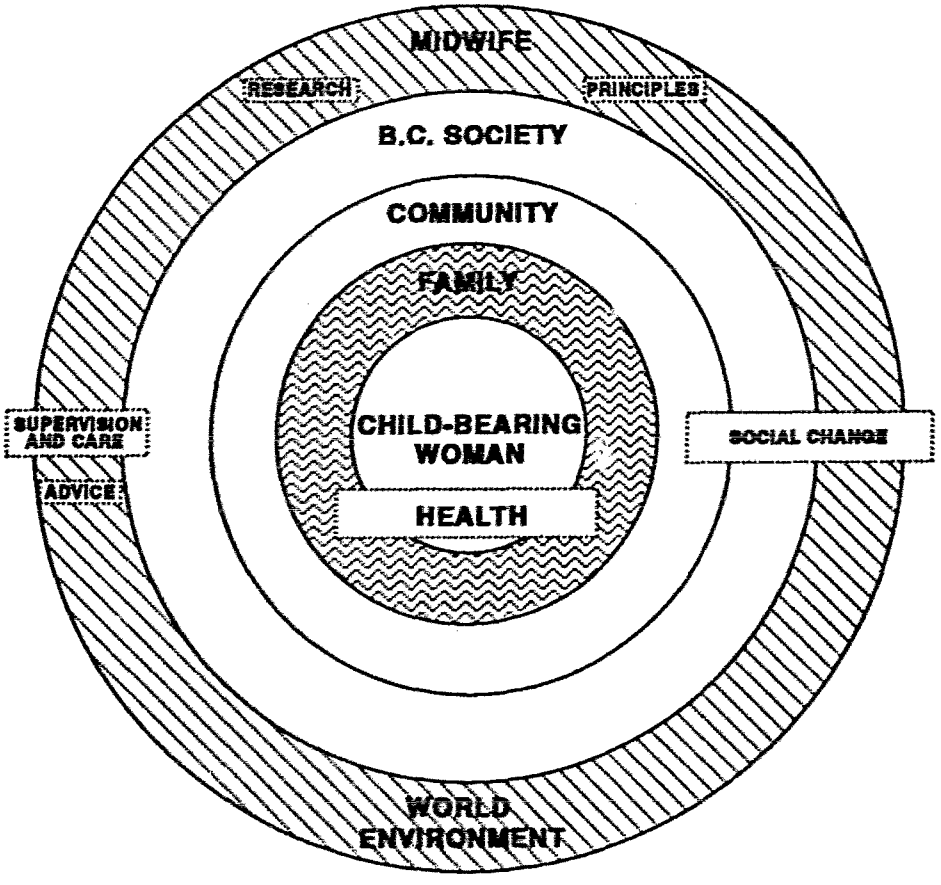
All members of the childbearing family are the clients of the midwife. The midwife practices within the 'world' environment surrounding the society and community, to which the childbearing woman belongs. Midwives use a midwifery model of care which includes continuity of care. Midwives, as individuals, are also surrounded and influenced by family, community, and society. Their families may belong to the same or a different community and society than the families they care for.

The concentric circles in the midwifery practice model represent the continuous interaction between the childbearing woman, her surroundings, and the midwife. The concentric circles are related and interdependent, but different. While the subjects may be studied as separate entities, they cannot function in mutual isolation. The essential components of midwifery practice, advice (including education and counseling), and supervision and care are based on principles outlined in the midwifery philosophy (pp. 80-81). The midwifery practice model (p. 83) integrates four major concepts: (1) midwifery

practice, (2) health, (3) social change, and (4) research, all derived from the midwifery practice philosophy.

1. Midwifery practice has a distinct model of care to assist women through the childbearing cycle. The distinction is inherent in the midwifery philosophy, i.e., midwives encourage women to participate in their care, midwives provide continuity of care, and midwives recognize the woman as the primary decision maker.
2. Health has been adopted as defined by the WHO (p. 79), and the importance is emphasized in several ways. For example, the midwifery philosophy states that midwives respect pregnancy as a state of *health* and that midwives promote *health* throughout the childbearing cycle. In addition, the scope of midwifery practice deliniates midwifery care to healthy childbearing families.
3. Social change involves examination of society's values and purpose. Fundamental changes require reassessment of the purpose and values of a specific society, and may influence the way health care providers, including midwives, practice. In addition, social change affects the interaction of the pregnant woman with her family, community and the environment. Lifestyle, socio-economic status and cultural influences (e.g., language barrier) play a vital role in pregnancy progress and outcome. Page (1993) reports a significant difference in the perinatal mortality rate (5.8 per 1000 versus 10.2 per 1000) between two socio-economic classes in England and Wales in 1989. Midwives respond to social needs of the childbearing women as well as their emotional and physical needs. The concept of social change provides also a focus on 'change' within the smaller entities representing society. Pregnancy often motivates families to make changes in their lifestyle (i.e., improve nutrition, stop or reduce smoking and alcohol intake), and childbearing creates both short and longterm changes in physical, emotional and social characteristics of the woman and her family.

model 1



A conceptual model of midwifery practice *fig. 1*

4. Research is essential in the provision of midwifery care and relates closely to the concepts outlined above. Midwifery care needs to be research based and midwives must promote and participate in ongoing research.

The concept squares in the model on this page are placed in the concentric circles where they play the most significant role, the size of the square is not representative of its importance. Thus, outlined in this form, the model also functions as a framework to direct and organize a broad content outline for a midwifery curriculum (p. 90).

A philosophy of midwifery education

Educational principles guiding a curriculum are often based on an eclectic mixture of educational philosophies (i.e., Dorset curriculum, 1989). As noted in chapter II, even distinct philosophies share concepts (Elias and Merriam, 1984). Adopting an educational philosophy is a challenge for a midwifery faculty, because many factors influence educational decisions. The learner and faculty profile, the characteristics of the graduate, and the academic and clinical institutional limitations and requirements are a few examples. One reliable factor is that all future students will be adults, and although these adults may vary in age, they will all appreciate an adult learning approach.

As early as the 1920s, attention has been drawn to the difference between educating the child and the adult (Elias and Merriam 1984). Although there are many ways to differentiate between the two, authors distinguish most frequently between the characteristics of children and adult learners (Houle 1982). Other differentiations made are by demarcation of the goals of adults and children, the methods of instruction, the kinds of motivation and the differences created by part time and full time studies.

model 2

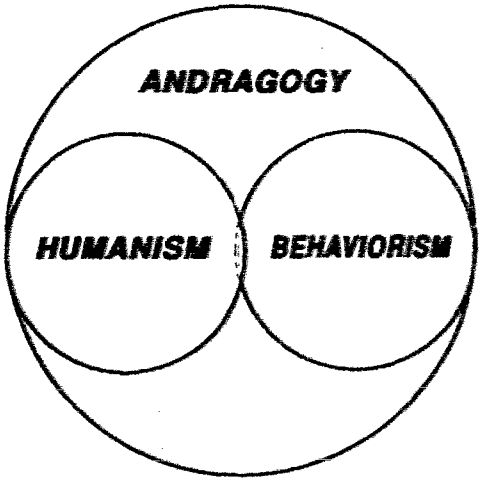


fig. 2

The term 'andragogy' is used interchangeably, meaning education for adults as well as adult educational philosophy, in the literature. Humanism and behaviorism are incorporated with andragogy in this thesis. To ensure clarity of the model the humanist and behaviorist philosophies are drawn within the andragogy circle. Therefore, the educational model presented in figure 2, below is sketched in the configuration of two slightly overlapping circles, representing the humanist and behaviorist philosophies, within a touching circle, the andragogical philosophy. The overlap of the inner circles draws on the commonalty between humanism and behaviorism.

In both philosophies, students play an active role in the educational process, and individual differences are acknowledged. In addition, both philosophies focus on the importance of the survival of society, including survival of the individual within society. The question remains, "Why a humanist and behaviorist merger for an educational philosophy?" Elias and Merriam (1984, p. 5) claim that,

> *When considering the interrelationship of philosophy and activity, it is clear that philosophy inspires one's activities, and gives direction to practice.*

Humanistic adult education is concerned with the development of the whole person, with an emphasis upon the emotional and affective dimensions of the personality say Elias and Merriam (1984). Thus, the activities inspired by the *humanistic* principles could be the ones seen by Bevis and Watson to promote an academic standing in professional education. The learning activities involved are the development of insight, the recognition of patterns, the exploration of creative modes of inquiry, the examinations of assumptions, and the formation of values and ethics in keeping with the moral ideals of the scholar-clinician (Bevis and Watson 1989, p. 277). The overall educational aim of the humanistic perspective is for individuals to understand themselves, including their interrelationship and interdependence with others, and with their society. This aim is based

on the belief that adults with a developed self-concept take responsibility for their own decisions and their own lives, both individually and collectively (Bevis and Watson, 1989).

The activities derived from the *behaviorist* philosophy are the specific knowledge and skills required of midwives, and defined by professional standards. An example is the knowledge and skills needed to conduct the delivery of the newborn, including stabilization and resuscitation measures in case of an emergency. Behaviorists believe that homeostasis and balance are signs of a well functioning society. Their primary aim is to obtain social order by maintaining a status quo. Emphasis is placed upon education and skills training to ensure there are qualified individuals to fill the positions deemed important by society (Bevis and Watson, 1989). The behaviorist beliefs have their roots in, and are closely allied with, a combination of philosophical traditions including materialism, scientific realism and empiricism, and positivism (Elias and Merriam, 1984). Humanism and behaviorism stand in complete opposition regarding this point.

Other tensions are created by the differences perceived in the student/teacher relationship and the student evaluation component of the curriculum. The teacher/student relationship in the humanistic educational approach is egalitarian. Learning finds place in a climate where the expert learner (the teacher) guides the novice learner (the student), and evaluation thrives on criticism not grades. Evaluation is process and progress focused and participant driven, in the humanistic approach. Section III describes in more detail the notions involved in the evaluation process promoted in the humanistic philosophy. The egalitarian teacher/student relationship is seen to be the *only* approach to foster learning in adult education programs (Eisner 1975, Benner 1984, Bevis 1989).

Most contemporary adult education programs developed with the Tylerian model in mind, have currently adjusted the old hierarchical type of teacher/student relationship to an egalitarian model. If the majority of the future midwifery students are going to be the kind of adult learners the educational researchers project, the humanistic evaluation

process will be an appropriate way to evaluate the 'educative' components of the midwifery program. The specific knowledge and skills essential to ensure a safe standard of practice, will be evaluated with the behavioral objectives method. Despite the differences, both philosophies offer unique direction for teaching of specific domains in a curriculum leading to a baccalaureate degree in midwifery. Therefore, I am not proposing to blend both philosophies, as stated before, but to use them in harmony, side by side. I recommend the following educational principles for midwifery education:

Midwifery education teaches the knowledge, skills and attitudes characteristic of a midwife as described by the College of Midwives and expressed in the midwifery practice philosophy.

Midwifery education is grounded in the theoretical and clinical preparation of the 'art' and 'sciences'. Both art and sciences are found in the humanities, and biological, behavioral, social and health sciences.

Midwifery education has two learning components, 'educative learning' and 'training'. Therefore, midwifery education benefits from two approaches to education, the humanistic and the behaviorist approach.

Midwifery education is based on an egalitarian relationship between the teacher and the student in both the class and clinical settings; this means that the teacher and the student share the responsibility to promote a climate conducive to learning.

In the humanistic approach to learning, the student is expected to be(come) a self-directed learner. The student is expected to exhibit initiative, creativity and willingness to participate in self evaluation.

The teacher takes responsibility to move the student up on the maturity continuum and designs a variety of learning activities to promote the development of critical thinking, the use of inquiry methods, judgment, and decision making.

Evaluation is an ongoing process based on a continuous progress record held by the student and the teacher. Clinical skills will be evaluated via the clinical objectives, but will not be limited by them. The emphasis is on personal growth and a continuing learning process.

A midwifery educator has to have a high level of current knowledge and clinical competencies in order to move the student on a maturity continuum.

Curriculum Content and Design; A Course Outline

As outlined above, the midwifery practice model provides direction for a broad content outline. Figure 4, p. 90 presents the idea. Content organization is directed by the four main concepts of midwifery practice, health, social change, and research, as discussed before. Figure 3, page 89, illustrates how the midwifery practice model interacts with the educational philosophy model. The educational philosophy continuously influences the way in which curriculum content is presented and taught. The educational philosophy is therefore 'circling' around the midwifery practice model. The model emphasizes the need to teach the program with the use of both adult humanistic and adult behavioristic principles. The educational model itself provides direction for the 'educative' components of the curriculum as well. Development of insight, recognition of patterns, exploration of creative modes of inquiry, examination of assumptions, and the formation of values and ethics, as stressed by Bevis and Watson, (1989) flow logically from the model.

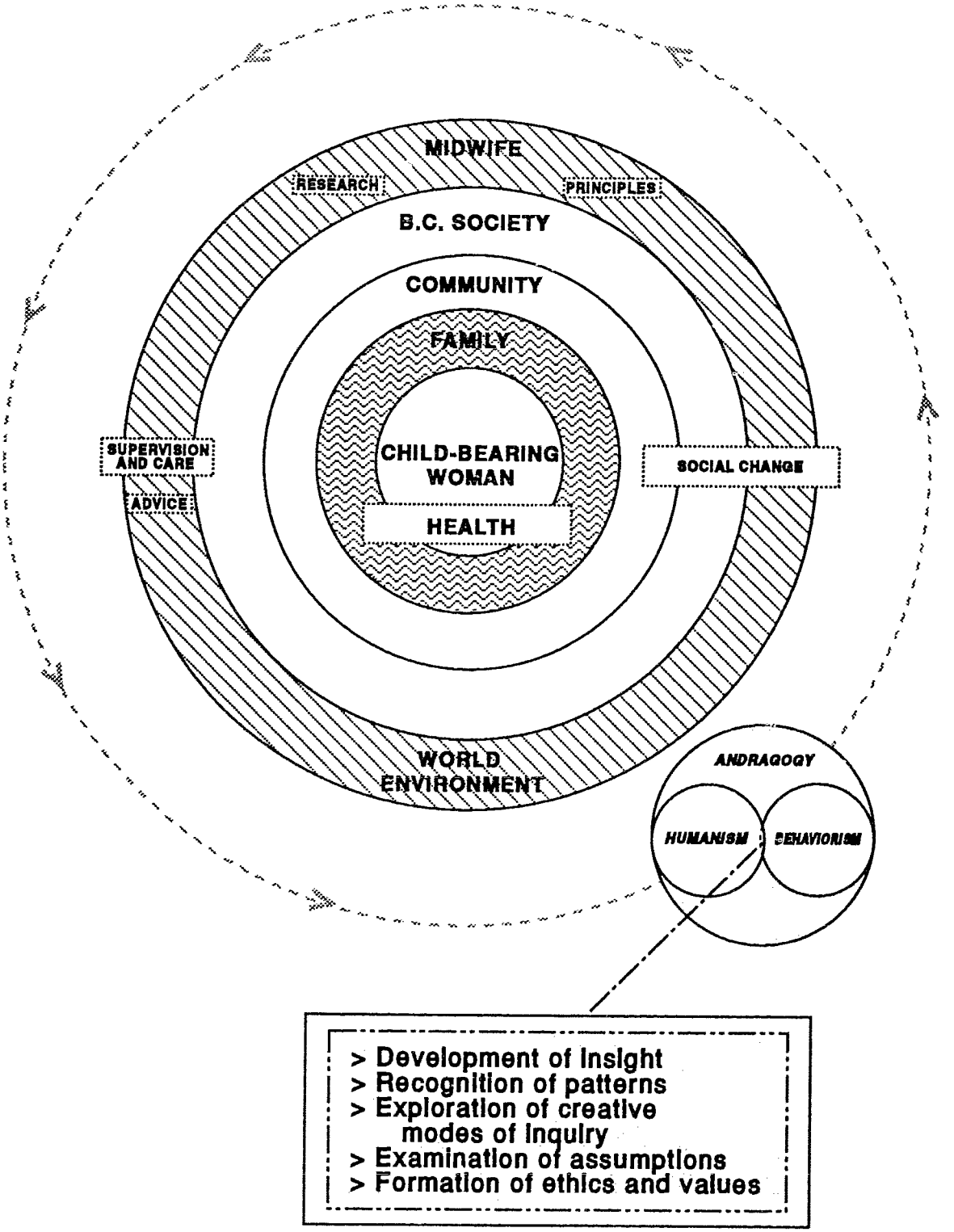
The following outline provides an overview of how curriculum content has been coordinated with the use of the major concepts.

Health, according to the WHO, is influenced by human beings' inherent capabilities as well as their potential for growth and development (Torris and Stanton, 1982). Thus, most biological sciences are grouped under this major concept.

Social change (see p. 82) involves the interaction of political and social forces, affecting an individual's cultural values (Torris and Stanton, 1982). Therefore, the majority of content derived from family, community and society is organized under this concept.

Research has become an essential component of midwifery practice and care. Midwifery is a discipline with a distinct and unique body of knowledge and skills. Midwifery education differs significantly from both nursing and medical education, while sharing selected segments of the knowledge and skills.

model 3



The eclectic educational model interacting with the midwifery practice philosophy

fig. 3

Broad Content Outline

Derived From The Practice Philosophy Model

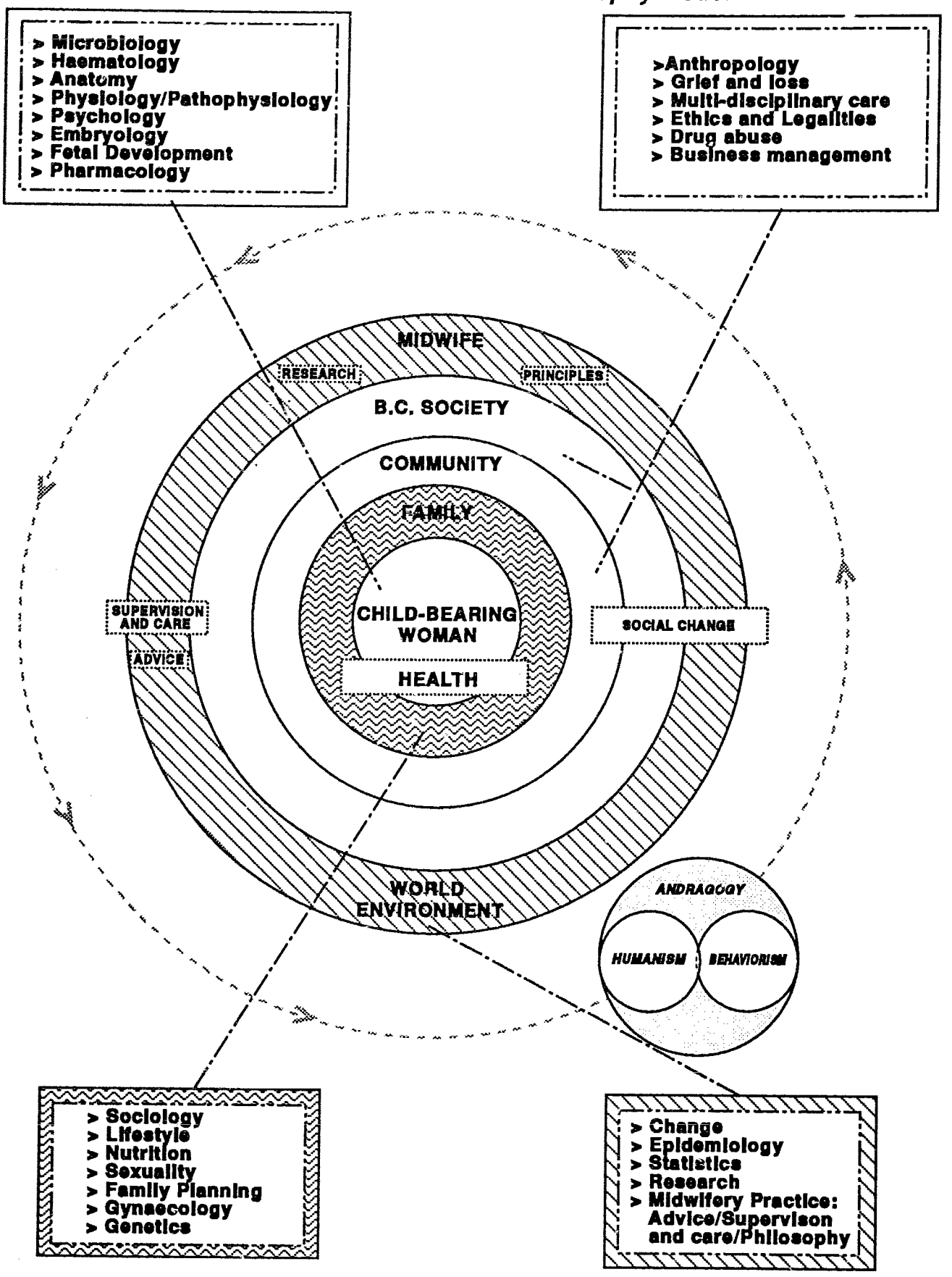


fig. 4

Qualitative research is particularly suitable for contemporary midwifery research because it promotes exploration of the art and science of midwifery practice. The science component of midwifery practice responds best to the traditional quantitative methods. Therefore, scientific knowledge related to pathology and pharmacology, is grouped under Research A (quantitative research), while other topics are grouped under Research B (qualitative research).

Midwifery practice has three interrelated components advice, principles, and supervision and care. The supervision and care courses I, II, III, and IV, will be taught in preparation for the next corresponding Practicum I, II, III and IV.

Dividing midwifery practice in three *interrelated* components (advice, principles, supervision and care), provides additional direction for a general content outline. The following course outline does not provide specific content details, entailing duplication of endless pages of available resources. In addition, the educational philosophy of Bevis and Watson does not promote a curriculum overburdened with specific content. A manual outlining content and skill details, however, would be a valuable resource for teaching faculty in a new midwifery program. Incorporation of a different educational philosophy necessitates development of additional resources for the faculty.

Course Outline

YEAR I includes: Semester I: Courses 1.1 to 1.5, and Semester II: Courses 1.6 to 1.10 = Practicum I.

Health I (1.1)

- Microbiology familiarizes students with normal and selected pathological micro-organisms relevant to the childbearing cycle. Bacteriology, virology and immune responses and their implications for pregnancy will be addressed, as well as laboratory tests and treatment.

- Hematology deals with the physiologic changes in the haemapoietic system during pregnancy and acquaints the student with blood and blood products, and laboratory test commonly performed during pregnancy.
- Anatomy and physiology is a core course and provides in-depth knowledge and understanding of the female and male reproductive system and its relationship to pregnancy. Students are expected to have a basic knowledge of human anatomy and physiology when enrolling in this course.

Health II (1.2)

- Genetics introduces the student to the basic principles of genetics, including genetic screening and counseling. Implications of family history and teratogenic influences are discussed. Common genetic aberrations and their implications for the family are examined.
- Embryology and fetal development provides an in-depth study of conception, pre-conception, and the embryological stages. Fetal development includes the anatomy and physiology of the placenta and fetal membranes.

Health III (1.3)

- Psychology in pregnancy addresses growth and development, and includes the implications of pregnancy during the teenage and adolescent years. This course also deals with the emotional changes during all stages of the childbearing cycle and their effects on family relationships. Special problems and problem solving, including resources will be explored. An introduction to the grief and loss theory will be provided.

Social Change I (1.4)

- Getting acquainted with the change process prepares the midwifery student to deal with, and initiate change in future practice. The change process will be explored and implemented in the form of a class project.

- Sociology and family theory are the focus of this course. Lifestyle, both positive and negative influences are discussed. Lifestyle includes exercise, smoking, use of alcohol, environmental influences, drug use and abuse.

Midwifery Practice: Supervision and Care I (1.5)

- Sexuality, family planning and basic gynecological care are essential topics, including both knowledge and practical skills, to be mastered by the midwifery student.
- This section provides an *introduction* to supervision and care during all phases of the childbearing cycle. An emphasis will be placed on the pre-pregnancy, and antepartum periods. The course teaches basic knowledge and skills in preparation for the first practicum. Basic knowledge and skills include:
  - Surveillance, support and care during pre-pregnancy, the antepartum, intrapartum and postpartum periods
  - Laboratory Testing
  - Diagnostic screening and Obstetric Ultrasound
  - Psychomotor skills for both assessment and therapeutic care and supervision during all phases of the childbearing cycle
  - Drug therapy

Midwifery Practice: Practicum I (1.6 - 1.10)

This first practicum will be an introduction to the clinical practice setting and will be comprised of a variety of experiences. The student will observe and participate in clinical learning experiences during all periods of pregnancy, the antepartum period, the intrapartum period and the postpartum (including the newborn) period. The focus of this practicum will be pre-pregnancy counseling and antepartum surveillance and care. The student will start to apply basic skills learned in the skill laboratory sessions. The intrapartum experience will be observation of labor and delivery. The postpartum practice will be follow up of mothers observed in labor. Basic postpartum assessments will

be included. The student will be able to observe newborn adaptations to extra-uterine life and assess interactions between the family and the newborn.

Students will keep an ongoing and accurate log of clinical contacts and experiences.

YEAR II includes: Semester I: Courses 2.1 to 2.6, and Semester II: Courses 2.7 to 2.11 = Practicum II

Social Change II (2.1)

- Nutrition during Pregnancy and Lactation provides in-depth knowledge and understanding of maternal and fetal nutritional needs during pregnancy and lactation. This course also introduces newborn and infant nutritional needs, and explores selected problems related to inadequate nutrition during pregnancy and lactation.

Social Change III (2.2)

- Cultural aspects related to childbearing is the focus of this course. Specific cultural groups, their environment and child birth practices will be discussed. Another aspect will relate to birth rate in specific societies, and the influence of societal status. In addition the concept of grief and loss will be further explored in this course in the context of society and culture.
- Multi-Disciplinary Care addresses the issue of care concepts and how other disciplines may be involved in providing care for selected childbearing families. This course will also deal with delivery setting, and alternative ideas and approaches to childbirth. The medical model of care, social services, physiotherapy, hypno-therapy, drug and alcohol rehabilitation agencies, crisis centers and roles of other support groups will be examined. Criteria for consultation and transfer of care will be outlined and discussed.

Social Change IV (2.3)

- Ethical and legal issues have become a significant aspect related to midwifery care. The scope of practice, including standards of practice and how they relate to personal

ethics and values will be explored, while the legal segment will deal with responsibility and accountability in midwifery, including the importance of documentation. A legal perspective is provided by examining legal cases and issues in the history of midwifery such as coroners' inquests and inquiries in Ontario and British Columbia (Burtch 1992, pp. 166-172).

- Business management provides the midwife with information about the business aspects of the profession. It includes office management, book keeping, ordering of laboratory and other diagnostic tests, billing, investment and other administrative components required of an independent practitioner (prerequisite: basic computer skills). Resource sharing is an important aspect of this session. This course is particularly suitable for teacher-student collaboration in deciding on specific content as promoted in the humanist educational approach.

Research I (2.4)

- Research A-I familiarizes the student with terminology and principles used in the scientific literature, and introduces the student to selected quantitative methods such as experimental and non-experimental research. Midwives need to be able to critically evaluate relevant studies in order to incorporate research based care into their practice.
- Research B-I introduces the midwifery students to the basics of qualitative research, including selected methods such as a case study approach or ethnography. This course focuses on exploration of the 'art' of midwifery.
- Epidemiology and statistics provide the student with a basic knowledge of the terminology and an understanding of the importance of the principles. Limitations and the importance of variables are addressed. Mortality, morbidity and other statistics will be reviewed, analyzed and evaluated to provide a realistic perspective.

Midwifery Practice: Supervision and Care II (2.5)

- This course addresses a variety of aspects related to supervision and care during all phases of the childbearing cycle with an emphasis on support and care during the labor/delivery period. For example:
  - recognizing normal behaviors during labor indicating progress;
  - aspects of relaxation, including management of pain and anxiety;
  - specific intrapartum psychomotor skills;
  - attention will be given to recognizing deviations from normal such as:
    - anomalies in fetal position and presentation;
    - failure to progress in labor;
    - abnormal uterine contraction patterns;
    - abnormal fetal heart rate responses;
    - lack of pain tolerance
    - other.

Elective I (2.6)

Midwifery Practice: Practicum II (2.7 - 2.11)

The second practicum, like the first one, will include clinical learning experiences during all phases of pregnancy, but focus on the labor delivery period. During this practicum the student will be intensively involved with implementation of the midwifery model of practice as outlined in the midwifery care model. Hands on care will increase progressively. At the end of this practicum, the student and clinical instructor need to assess progress and make a plan for the next practicum.

YEAR III includes: Semester I: Courses 3.1 to 3.6, and Semester II: Courses 3.7 to 3.11 = Practicum III

Research II (3.1)

In Research I students are introduced to research terminology and methods. The obtained knowledge is used throughout the program as research must become an

integrated part of the students future practice. Pharmacology and pathophysiology, related to childbearing, are grouped under a Research II heading because midwives need to understand the scientific evidence attached to these subjects if they are to recognize problems and make judgments about the need for client referral and interventions. Particularly when providing information and advice, the midwife will be called upon to understand the probability of selected forms of treatment (Page 1993, p. 1485). These courses also examine the role midwives play in supporting families with pregnancies complicated by pre-existing or pregnancy-induced problems.

Past, present and future research will become the focus of these course presentations.

- Pharmacology introduces the effects of pharmacological agent on the childbearing woman. This course is a core subject, and deals with drugs commonly administered during pregnancy. Drug absorption, actions, therapeutic and adverse effects will be explored as well as issues related to benefit versus risks.
- Pathophysiology is related to selected adverse physiologic reactions as a result of pregnancy, including a discussion on selected pre-existing conditions such as:
  - pre-eclampsia/eclampsia;
  - diabetes mellitus;
  - bleeding during pregnancy
  - other.

Midwifery Practice: Advice I (3.2)

Midwifery 'advice' courses are related to the aspects of communication. Course I includes:

- Communication

This session addresses the ways in which people communicate in both a positive and negative manner. Midwifery students will learn to identify and adapt their own communication styles and learn how to deal with adverse communication of clients and colleagues.

- Documentation

  Midwifery students will learn how and what to document in the specific areas of practice as well as in the different practice settings.

- Counseling

  Midwives need to obtain basic counseling skills to assist childbearing women and their families to make informed decisions. These include decisions with regard to family planning, unwanted pregnancy, genetic investigations and others requiring more knowledge and skills than good communication. Midwives also need basic counseling skills to guide families through periods of grief and loss.

Midwifery Practice: Advice II (3.3)

This course addresses the concepts of teaching and learning and childbirth education.

- Education

Midwifery Practice: Principles I (3.4)

Midwifery Principles focus on the aspects of midwifery philosophy such as continuity of care, the holistic approach to care, respect for the decision making power of the family, and others.

- Health care systems in North America
- Midwifery philosophy and model of care
- History of midwifery in Canada
- Midwifery legislation, registration/licensing
- Continuing education

Midwifery Practice: Supervision and Care III (3.5)

This course deals with supervision and care during all phases of the childbearing cycle, emphasizing surveillance, support and care during the postpartum period, including integration of the newborn into the family. Specifics are as outlined under Supervision and Care I.

Elective II (3.6)

Midwifery Practice: Practicum III (3.7 to 3.11)

During this practicum the student should be able to progress more rapidly because additional theory courses have been completed. This practicum focuses on the postpartum period which includes the newborn. During this practicum the student should be able to provide continuity of care to clients seen in the antenatal clinic, including guidance of labor and delivery.

YEAR IV includes: Semester I: Courses 4.1 to 4.6, and Semester II: Courses 4.7 to 4.11 = Practicum IV

Midwifery Practice: Supervision and Care IV (4.1)

An advanced supervision and care course focusing on all phases of the childbearing cycle with an emphasis on deviations of normal.

Midwifery Practice: Elective III (4.2)

In this course the student is able to focus on a topic of choice related to midwifery practice.

Midwifery Practice: Elective IV (4.3 + 4.4). Lactation Consultant

This course would be for students specially interested in breast feeding.

Elective V (4.5) and Elective VI (4.6)

Both these courses are topics of choice in the human or social sciences.

Midwifery Practice: Practicum IV (4.7 - 4.11)

During this practicum the student focuses on deviations of normal and perfects midwifery supervision and care, as well as education and counseling skills during all periods of pregnancy. At the end of this session the student will need to be able to independently care for childbearing women and their families in order to graduate.

A Framework for a 'Multi-Route-of-Entry' Program

This segment of the curriculum blueprint deals with program organization and distribution of courses over a four year program. The four year midwifery baccalaureate program is designed as a direct-route-of-entry program. The program takes eight university semesters (two per year) to complete. As in most universities students will have the option to meet the requirements over a six year period, or to complete program requirements in three continuous years of study. This means that all courses, including practica, will have to be offered year around. Students in the program will obtain a minimum of 120 credits to graduate with a baccalaureate in midwifery.

The program is divided in two components, a didactic and a practical component. The components are equally divided, matching clinical requirements of recognized midwifery curricula around the world. The majority of theoretical courses are three credit courses. Thus, a full time midwifery student must complete approximate twenty theory and twenty practical courses to finish the program in four years. A maximum course load, five courses per semester, accumulates 15 theoretical credits per semester.

The clinical component of the program is divided in four practica I, II, III, and IV. Each practicum consists of a full time semester of clinical practice. Fourteen weeks of full time clinical practice is the equivalent of five theory courses and accumulates 15 practicum credits. Each midwifery practicum must be taken as a full time semester. In addition, the program is organized in such fashion that practica must be interchanged with theory sessions, e.g., Midwifery Practice: Supervision and Care I need to be completed before the student is able to enroll in Practicum I, and so on. Integration of theory and practice is an essential part of the midwifery curriculum. Student midwives will learn to apply theory in clinical practice, but they will also use clinical practice to validate and question theoretical assumptions, and discuss practice issues. Each clinical practicum is comprised of a combination of clinical experiences and learning activities, focusing on the importance of

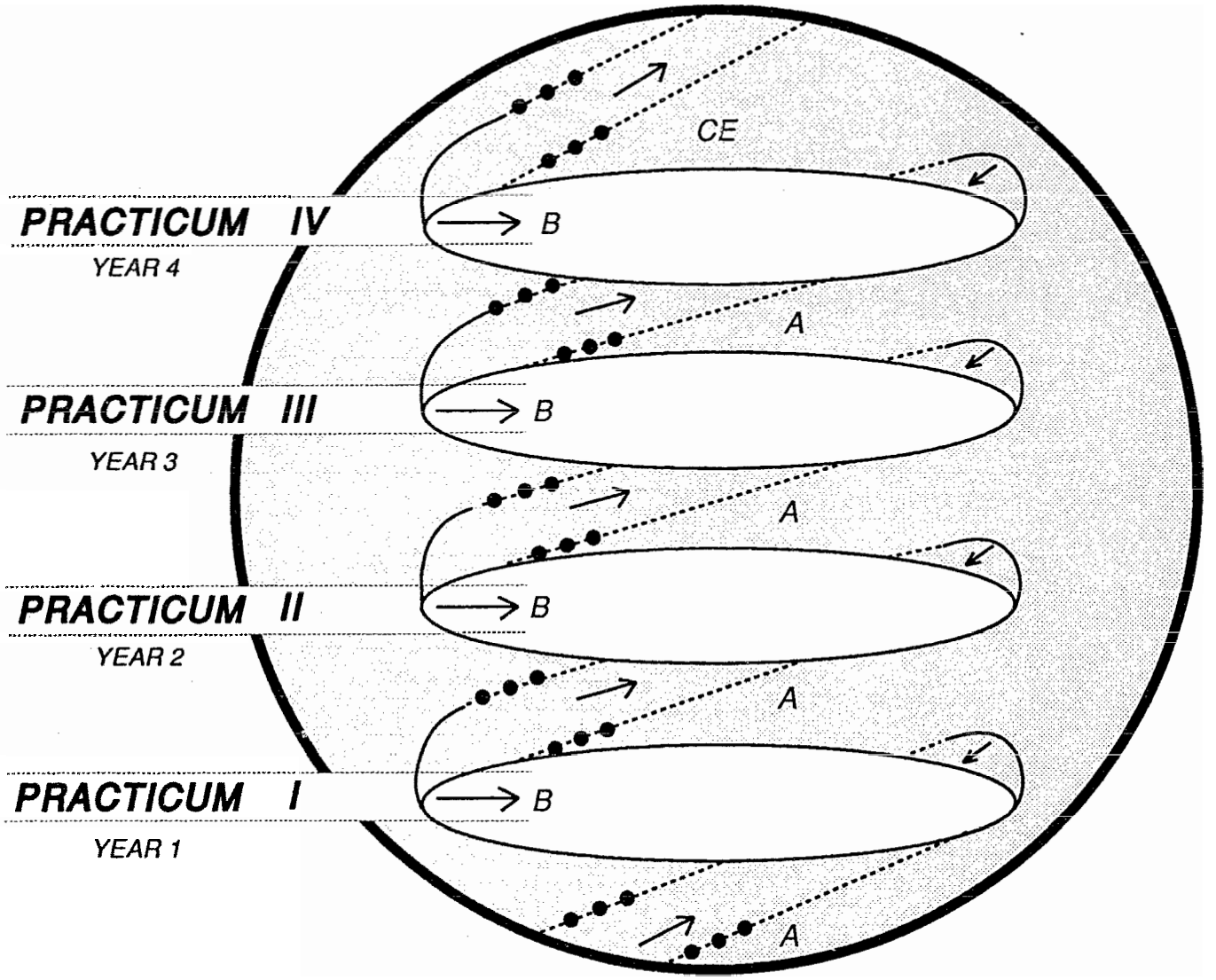
the concepts of continuity of care and a holistic approach to care. Thus, each practicum must include a variety of clinical experiences during all stages of the childbearing cycle. For example, during the first practicum students obtain ante-natal histories in a community practice, and observe selected labor delivery experiences of clients seen in that practice, including an early postpartum visit. In addition, they attend selected childbirth education classes. The practica focuses on moving students on a 'learning continuum', in other words students progress at an individual rate.

Teachers and/or preceptors in the clinical settings promote student reflection, critical thinking, and decision making in clinical practice, and allow for progressive involvement with the experiences. Students move from observation to participation to select independent practice to complete independent practice. This continuum will have many stages in between. The approach accommodates individual learning speed, and allows for development of special interest and expertise. Supervision decreases progressively when the student and the clinical mentor collaboratively decide that it is safe to do so. As students accumulate theoretical knowledge and clinical expertise, incorporate insight, recognize patterns, and begin to explore creative modes of inquiry, they will gain the confidence to examine theoretical and clinical assumptions. Consequently, they will be able to suggest alternative solutions for special care needed for selected childbearing families. Then, they will be on their way to achieve the goal of becoming a scholar-clinician in midwifery. Page (1993, p. 1483) in her address at the International Conference of Midwives in Vancouver describes the expert midwife as:

> *an experienced clinician who works in and through relationship with the woman, and who cares effectively, that is she knows what benefit her actions and advice is likely to have for the woman and her baby, and offers care appropriate to the individuals concerned.*

The model (fig 5) on page 102 provides a framework for organization of the theoretical and clinical components of the program. This framework provides also

Model 4



A framework for a multi-route-of-entry midwifery curriculum

fig. 5

direction for multiple-routes-of-entry into the program. The circle depicts midwifery education leading to a baccalaureate in midwifery. The pathway through the circle illustrates the learning path to be followed in order to become a midwife. The highlighted dots on both sides of the path signify theoretical courses preparing the student for clinical practice.

The 'plateaus' represent the clinical courses (practica). Each practicum represents five clinical courses because the practicum is equivalent to a full theoretical course load of 15 credits. The baccalaureate degree in midwifery is achieved upon successful completion of the fourth practicum. The continued pathway is a reminder that midwifery education does not finish with the achievement of a baccalaureate degree. Continuing education takes on many forms. It may be a refresher course for a returning practitioner, or an upgrade for an experienced midwife from an other country, needing to complete select course work in order to obtain a license to practice midwifery in British Columbia.

The clinical 'plateaus' are a constant factor in the midwifery curriculum, because in clinical practice students implement both their theoretical and clinical knowledge and skills. Therefore, a practicum level is a realistic and practical route of entry for an advanced-placement student.

Entrance at a clinical practicum allows both the student and the teacher to confirm the student's level of knowledge and clinical expertise. If adjustments up or down have to be made, it can be accomplished without failing the student or interrupting studies. Entering at a specific practicum level does not mean that the student is unable to take courses attached to the pathway below the practicum level, or even include a basic core course such as anatomy. The pathway in the model allows for back and forward movement of students. The three following examples are hypothetical cases to provide additional clarification of the idea.

Example 1: A registered nurse with a recent post-basic certificate in obstetric nursing from the British Columbia Institute of Technology (B.C.I.T.), would like to enroll into a midwifery program. She has a nursing diploma from the Vancouver General Hospital School of Nursing, acquired ten years ago. She works in a small community hospital with one hundred deliveries annually. She feels confident to support and care for childbearing families during the intrapartum and postpartum periods of pregnancy under supervision of a physician. What is the best route for this student to enter the program, and how can her education be facilitated to assist her in achieving both her academic and professional goals? In this case it appears that the student's strength is in the theoretical knowledge component. Her practical experience appears to be limited overall, especially on antepartum surveillance and care. In addition, this nurse is aiming at a baccalaureate degree, so she will likely have to complete at least 50% of the total curriculum. This student could enter the program at practicum II, and obtain 45 practicum credits. Her theoretical component, with a minimum of 15 theory credits, would focus on specific midwifery courses, including midwifery philosophy, legal and ethical issues in midwifery and others tailored to the student's personal interest. This person, as all advanced-placement students would be assigned a personal advisor to review previous education, including clinical experiences, and to develop a collaborative plan.

Example 2: A female family physician with a science baccalaureate and a medical doctor's degree wants to change her practice to care for childbearing families only. She applies to be admitted as an advanced placement student to the program, because she feels that she has a lot to learn despite five years of practice with twenty deliveries per year. Two options appear open for this person. She can either obtain a second baccalaureate degree, or be a candidate for a certificate in midwifery. Taking the first option, she would enter at the third practicum and obtain 30 practicum credits and 30 theory credits. The theory credits include specialty and elective courses, with an emphasis on midwifery

principles, offered below and above the practicum III plateau. This student must be encouraged to pursue a personal interest and graduate as an experienced scholar-clinician. The practicum must be focused on the implementation of the midwifery model of care. A certificate in midwifery may be looked at as an option for people with this educational and practice background. Students would achieve a certificate by completing a minimum of two course semesters, one practicum and one didactic semester. This option need to be further explored.

Example 3: A physiotherapist wishing to add midwifery to his practice. This professional will have much of the core knowledge required to enter the first practicum, with the exception of the psychology of pregnancy, and embryology and fetal development. In addition, he will likely have obtained previous credits for several courses such as statistics, research, sociology or others taught at a later stage in the midwifery program. Thus, a physiotherapist would be able to enter the program at practicum I, and in the second year take selected courses on the pathway below and above the first and second practica. He would likely need to obtain 60 practicum credits in addition to 30 theory credits in order to achieve a baccalaureate in midwifery.

Program Goals

The overall aim of the midwifery program is to prepare a scholar-clinician with the knowledge, skills and attitude to provide safe, individualized and comprehensive support and care to childbearing families. The scholar-clinician obtains a baccalaureate degree in midwifery, and will be eligible for registration and/or licensing to practice midwifery in British Columbia.

Upon completion of the midwifery program graduates:

- understand the need to develop insight, recognize patterns, find meaning in ideas and experiences, explore creative modes of inquiry, examine assumptions, and formulate values and ethics in keeping with the moral ideals of a scholar-clinician in midwifery.
- use research-based knowledge and skills to provide health counseling, education, supervision and care for families during the childbearing cycle. Supervision and care include delivery of, and care for the baby, as well as implementation of preventive measures, the detection of abnormal conditions in mother or baby, the procurement of medical assistance, and the execution of emergency measures in the absence of medical help.
- incorporate the philosophical principles of midwifery practice in her approach to caring for childbearing families.
- consult and collaborate with other disciplines in planning and providing supportive care to families during the childbearing cycle.
- promote and participate in research and continuing education to advance the practice of midwifery.

Teaching Methodology

Bevis and Watson's approach to teaching puts the responsibility for learning experiences and teaching methodology in the hands of *both* the student and the teacher. According to the ideas, teachers move away from the course content and align themselves with the students. In other words, the teacher is not any longer the content expert but becomes the expert learner. Both the teacher and the student play an active participatory role in the educative process. This means a trend away from teacher lecturing and assignments during class. Bevis and Watson (1989) and others promote that students benefit more from the learning experiences, if they are involved in the choice of specific class content and if they actively participate in the learning activities. Learning

experiences, including activities are facilitated by the teacher with student participation. In order to facilitate learning, recognition must be given to the students' life experiences (Torris and Stanton, 1982; Houle, 1982; Bevis and Watson, 1989). The teacher in the role of the expert learner assists the novice learner not to recall and recite knowledge details, but to work with the information, question it, identify problems, compare ideas or examples with similar personal experiences, and suggest solutions. Bevis and Watson (1989) suggest the use of the following list of scholarly modes in both training and education. They include:

- analysis and critiquing;
- recognizing insights;
- identifying and evaluating assumptions;
- inquiring in the nature of things;
- projecting, futuring, anticipating, predicting, or hypothesizing;
- searching for structural or organizational motifs or building them;
- engaging in praxis (enabling theory and practice each to inform and shape the other);
- evaluating: assessing merit using criteria and expert judgment;
- viewing wholes, not just parts in relation to each other;
- acknowledging paradigm experiences and cases in ways that enable them to be useful in practice and theorizing;
- Finding meaning in ideas and experiences (Bevis and Watson 1989, pp. 235-236).

These modes assist both the student and the teacher to engage in learning. In order to use these modes however, the student needs to develop specific learning tools to approach concepts and ideas in this manner. Bevis and Watson (1989) provide a variety of examples of what they refer to as educational heuristics (learning tools). The suggested learning tools include reflection, incubation, discussion, engaging in dialogue, debate, imagination, envisioning, trials (simulated or real), tracing of logical pathways, expressing notions in writing, and reading analytically (p. 237). The course sample at the end of this section applies the ideas.

Differences between learning activities and teaching methodology start to disappear if learning, and engaging in learning activities are a collaborative effort of the

teacher and the student. Style in facilitating classroom and clinical activities, including the ability to modify planned activities as the need arises, becomes an important teacher characteristic. The use of games, role-playing, and debate facilitate active student and teacher participation. Small group work particularly facilitates active participation of students, however some structure need to be outlined. The session needs a plan, including a start and finish, the learning activity needs a focus and time limit, and there need to be opportunities for plenary discussions, to share and consolidate learning. Teachers must know essential course content and understand group dynamics, to facilitate this process. Bevis and Watson (1989) agree that faculty development is an essential component of their proposed paradigm shift.

Validation of Learning

There is probably no greater controversy in education than on the subject of evaluation. Evaluation of learning should be a separate thesis topic, and therefore, a relatively brief discussion only appears in order to complete this section of the curriculum blueprint. The humanist view on how to evaluate learning is in direct opposition of the behaviorists' ideas about evaluation. This is due to their essential difference in philosophical beliefs on what constitutes learning. The humanist for example, believes that worthwhile learning is often personal, hidden from observation, and private. Only some learning appears as behavioral change according to Bevis and Watson (1989), many thing that exist are not empirically verifiable. Educative learning cannot be rated on a scale, and most learning cannot be compared to some criteria or to the progress of peer learners. Humanists say that every learner learns something different from the same or similar learning experiences. Student and teacher selected goals are equally important, and so is goal free learning (Bevis and Watson, 1989).

In the behaviorist philosophy the only learning worth evaluating can be observed as behavioral changes. Everything that exists, exists in some quantity and is therefore measurable. Learning can be evaluated by comparing student behaviors to objectively set criteria, or other students' progress. Every learner learns the same things from similar learning experiences says the behaviorist, and program goals are society driven and teacher controlled in their approach to evaluation.

Societal goals and expectations play an essential role in a midwifery curriculum for British Columbia, because the program prepares a new health care professional, needing to establish both scholarly and clinical credentials. Future midwives will be evaluated by clients, employers, and colleagues. Graduates of a new midwifery program will also evaluate themselves to provide feedback to the educational institute. In addition, midwives will provide ongoing evaluation of students participating in their clinical practice.

Newly developed and initiated midwifery programs will have to incorporate traditional methods of evaluation to ensure safety and credibility for future practitioners. The recommendation refers specifically to evaluation of clinical practice. I believe that evaluation ideas promoted by Bevis and Watson (1989) are suitable for use in selected didactic components of the midwifery program, such as evaluation of courses in communication and education. As faculty and students become confident in the use of the approach, the ideas can be expanded. A student/teacher trust and egalitarian relationship must be established to ensure successful outcome of the change in evaluation approach.

In concusion, the midwifery curriculum includes two types of student validation of learning. Theory knowledge is evaluated via writing of examinations and scholarly papers, oral presentations of projects, and via student and teacher held progress logs. Practical knowledge and skills are assessed with the guidance of clinical objectives. The focus is on progress and on maximum performance achievement of the student.

A Sample Course Plan

The following course plan provides a sample of a course organized under the heading of 'Midwifery Practice".

Course number: MP 1.5 (or as directed by educational institute)

Course Title: Midwifery Practice I: Introduction to Supervision and Care during Pregnancy.

Course Description:

This course is designed to *introduce* the student to supervision and care during pregnancy in preparation for the first clinical practice component (Practicum I) in the next semester of the midwifery program. The course deals with the aspects of surveillance and care during the antepartum, intrapartum and postpartum periods of pregnancy. The focus of this course is on 'health' maintenance and promotion, but assists the student to be aware of deviations from the normal physiologic response to pregnancy. The importance of continuity of care is emphasized and demonstrated. Research and change as they relate to the periods of pregnancy are incorporated. Students use the midwifery philosophy oriented approach (model 1) to gather client information, and a process format of choice (i.e., assessment, planning, implementation and evaluation) when analyzing data and constructing plans.

Course Prerequisite: Health I, II and III

Topics outline: (student and teacher directed)

The course is divided in three sessions: I, the antepartum (AP), II, the intrapartum (IP), and III, the postpartum (PP) period of pregnancy. Each session addresses the following topics as an introduction to supervision and care

Session I: The antepartum period

- obtaining and/or updating of a health history;
- pregnancy diagnosing and dating;
- principles of risk scoring;

- laboratory testing;
- diagnostic screening, including early ultrasound;
- influences of lifestyle
- pelvic examinations to assess bony pelvis, soft structures of the pelvis, fetal structures.
- abdominal palpation for lie, presentation, position, and engagement of the presenting part;
- anatomic and physiologic changes during pregnancy are reviewed and their meaning applied.
- common complaints are related to changes of pregnancy and adaptations to be taught to clients and their families discussed;
- guidelines for routine surveillance throughout pregnancy;
- common deviations of normal development during pregnancy. An introduction to the significance of the problem, including the short and long-term effects.
  - o bleeding in early pregnancy
  - o fetal growth deviations from normal, including amniotic fluid changes;
  - o abnormal fetal lie and presentation;
  - o selected endocrine responses (i.e., gestational diabetes mellitus);
  - o other.

Session II: The intrapartum period

- false, early and true labor patterns
- stages of labor and delivery
- support and care during labor, positioning, comfort measures
- partner and family role
- basic assessment psychomotor skills, i.e., vital signs of mother and baby
- maternal emotional responses normal for labor and delivery
- the newborn baby

Session III: The postpartum period

- early recovery
- the twelve F's of the postpartum period, representing the postpartum experiences of the new family. They include: physical changes, food and fluids, fatique, figure, falling in love with the baby, feeding the baby, 'fussy' baby, fustrations, freedom, fatherhood, family and friends, and fertility.
- basic physical assessment
- emotional responses
- mother, family and baby interaction
- hospitalization

Learning Experiences and Activities for a 'Sample' Class

The following outline is how I see a class developed using principles advocated by Bevis and Watson (1989). The content of this midwifery course MP 1.5 lends itself well for student participation in a variety of ways. Students are able to brainstorm topics of special interest for inclusion in course content during the first class of each session. The example refers to one class of session I, the antepartum period.

1. Antepartum supervision and care involves an extensive number of psychomotor and communication skills. The theory surrounding the skill is learned in class, the dexterity and coordination of the psychomotor skills are practiced in a skills laboratory and clinical practice. Students are encouraged to help each other as well as to obtain assistance of a skilled laboratory teacher.
2. Communication is incorporated in the learning activities. The specific activities are decided by both the teacher and the student. For example, gathering client information to obtain a health history, focuses on two skills at the same time. Knowing what and how to obtain the data, and practicing of communication techniques
3. Basic processing of knowledge is done in small group work or individual projects as part of, or in class preparation.

Class preparation:

- The students receive a short case study scenario. Example:

  Mrs. Green is a 25 year old woman expecting her first baby. Her pregnancy has been uneventful. Today, she is about 34 weeks pregnant and at the midwives' office for a routine ante-natal follow up visit. When the midwife measures uterine growth she notices that the expected fundal height is two centimeters below the expected measurement.

- Study focus and questions:

  o Create additional personal information about Mrs. Green and her family.

- What are ways to assess fetal growth?
- What additional information do you need, before you want to draw conclusions about the appropriateness or lack of growth of the baby?
- What would you communicate to Mrs. Green and her family at this time?
- Do you have suggestions for follow up care or other?

♦ Read a minimum of two journal articles, or book chapters from the references outlined, and/or any other related article published after 1991.
Focus on the questions proposed above when studying the materials.

♦ Use the references to reflect back on your own, or use experiences of a family members or friends. Perhaps interview one of them to complete the information in your case study.

♦ Find one research article on growth deviations during pregnancy suitable for class discussion. Highlight one point in the article relevant to your findings above.

In class: small group work (three to four students).

♦ present and discuss each case. Select one case and brainstorm consequences for the future with regard to the issue of decreased fetal growth. Aim at the last four weeks of pregnancy and the labor delivery experience for mother, baby and the family.

♦ suggest two solutions to manage the 'problem'.

♦ role play the scenario of choice in your small group. Focus on how and what to communicate to Mrs. Green and her family.

♦ present the small group findings and ideas during the plenary session.

Evaluation of student learning

1. Students are given an antepartum, intrapartum and postpartum case study for 'work up' as a home assignment to be completed at the end of the course. Students receive a grade in keeping with university guidelines.

2. Attainment and progress of psychomotor skills are individually assessed for each student in a collaborative effort between the teacher and the student. Selected psychomotor skills may be difficult to master in the first practicum. Therefore, a pass or fail grade could be deferred until after the second practicum.
3. Communication skills, as in client education, counseling and interviewing are assessed in the same manner as the psychomotor skills.

Program Evaluation

Program evaluation is an essential component of curriculum development. It provides the link between all stages of the development process, and ensures for continuous updating and improvement of the curriculum. If the midwifery practice or the educational philosophy of the program changes, so do the characteristics of the graduate of the program, the content and the educational approach.

In the behaviorist model, program evaluation is a reflection of student behavioral changes. Evaluation of student characteristics upon completion of the program is believed to represent the appropriateness of the curriculum. The behaviorist includes both formative and summative evaluation. In the humanistic paradigm this belief does not fit, because the humanistic evaluation approach is not judged by student behavioral changes. Program evaluation is provided by amalgamation of feedback of as large a variety of resources as possible. Program feedback is subjective information regardless of the objective criteria provided. Program evaluation in the humanistic approach requires a great deal of discussion between groups, and individuals within the groups. The information obtained could be entered into a computer program and be tested for validity, as done for example in qualitative research projects. Program evaluations are to be done by students, faculty, including clinical instructors and mentors, and clinical agencies. Using a variety of sources identify where the problems originate.

Frequency and timing of program evaluation seem to vary in the programs analyzed in chapter III. A newly developed and established curriculum will benefit from in-depth and frequent evaluation. At the onset every course should be evaluated and modified as needed. Established programs are evaluated at yearly intervals unless specific problems occur.

The following components of the program must be evaluated during the first two years of the new curriculum, including gathering of the data, analysis of the data, and identification and implementation of changes needed.

- Evaluation of theory courses:
  - o prerequisites for course attendance
  - o content
  - o learning activities and resources
  - o evaluation of learning methods and student achievement
  - o instructors
  - o other
- Evaluation of clinical courses including the different components of the Practica I-IV:
  - o settings
  - o clinical instructors, preceptors and mentors
  - o organization of clinical experiences
  - o evaluation of clinical learning
  - o logbooks held by instructors and students.

In conclusion, this chapter answers the broad question, *"What constitutes a curriculum for midwifery education in British Columbia?*, by answering the specific questions, *"What are the guiding principles for midwifery education in B.C.?*, *"How can curriculum content be directed?"*, and *"How can a direct-entry program be organized to allow for flexibility in student placement?"*

The guiding principles for the proposed curriculum are outlined in the midwifery practice and eclectic educational philosophies. The content is directed by conceptual models derived from the philosophies (fig. 1-4). The multi-route-of-entry-model (fig. 5) provides a flexible approach for student placement into the program (fig. 5).

The issues raised in chapter II have been taken in consideration during the development of the curriculum blueprint. The implications will be reviewed in chapter V. Curriculum development pitfalls are avoided by incorporating the ideas outlined in the conclusion of chapter III.

The curriculum blueprint for midwifery education in B.C. is comprehensive and innovative. The curriculum blueprint is comprehensive because the use of curriculum development guidelines (Torris and Stanton 1982) ensured that all components of the curriculum are included and that these components are built with the use of interrelated concepts and sub-concepts. The conceptual midwifery practice model provides a holistic approach to midwifery care and contributes to development of a comprehensive curriculum outline. A resource manual, with a detailed outline of content and skills, must be developed by midwifery faculty members in collaboration with the College of Midwives. The manual is for use by teachers in the midwifery program and helps to ensure consistency within the midwifery program. The curriculum blueprint is especially innovative because it incorporates a multi-route-of-entry design.

CHAPTER V

Implications of the Curriculum Proposal for Midwifery Practice and Education

There is an appointed time for everything,
a time for every event under heaven:
a time to give birth, a time to die,
a time to weep, a time to laugh
a time to be silent, a time to speak.

Ecclesiastes III (2,4,7).

This chapter focuses on the implications of the proposed curriculum for midwifery practice and education in British Columbia, and integrates suggestions and questions for future research. The implementation of both the didactic and clinical components of the curriculum proposes several questions with regard to the educational setting, the need for financial resources, midwifery faculty and students, and the need for public relations. The issues and questions raised in chapter III with regard to legal protection for midwives, the birth setting, the practice setting, and others, resurface in this chapter and are discussed within the context of the questions raised from the implementation of the proposed curriculum.

The need for excellence in midwifery education, implied in the consensus that midwives need to be well educated professionals, has its roots in the need for credibility of future midwives. The academic preparation on baccalaureate level is implicitly linked to the status of midwifery as an autonomous self-regulating profession.

The role of future midwives is unquestionably challenging. Midwives will not only have to be 'skilled companions', who act as a guide, counselor and friend (Page 1993, p. 1483), they will also have to make life saving decisions for mother and baby during the

childbirth experience. In order to use clinical judgements and make these clinical decisions, midwives need foundations of clear concepts, theories, scientific evidence, and clinical experience (Page 1993, p. 1484).

The outline in chapter IV describes the essential components of a distinct and comprehensive curriculum for midwives in British Columbia. The curriculum is designed to equip future midwives to meet the challenge. Course details are best completed by future midwifery faculty. Success of the implementation of the curriculum, and how well the program will be received, is related to a number of factors, (1) the choice of educational setting, (2) availability of financial resources, (3) accessibility to clinical sites, (4) public and professional knowledge about the midwifery model of care, and (5) faculty and student characteristics.

The educational setting

The choice of educational setting is essential to the success of the program. Availability and access to educational resources for both the clinical and theoretical components of the program play a major role. Library resources, international computer hookup and access, knowledge network affiliations, and other resources in the form of support services will contribute significantly to the excellence of a baccalaureate curriculum in midwifery. These considerations are more important than generally acknowledged. Audio-visual backup to create new learning resources is also helpful in offering a contemporary midwifery program for B.C. students. Ontario's Curriculum Design Committee did an in-depth review of potential educational settings in their province. The approach may serve as a model for a British Columbia Review Committee.

Financial resources

An additional factor is availability of money. Considerable funds are needed to establish and implement a midwifery program. Monetary considerations influence many aspects of program implementation. Availability of financial resources assists in improving

student instructor ratios in both class and clinical settings. Silverton (1988) reports, however, that in the United Kingdom the trend has been to amalgamate programs in order to cut costs and that the increased number of students in class is not seen to be a problem. According to British opinion, larger student groups are needed to provide the necessary peer support, and to facilitate exchange of ideas (Silverton 1988).

Access to clinical settings

The clinical learning setting is equally important as the didactic teaching site, because 50% of the total midwifery curriculum consists of clinical practice. Providing students with access to clinical facilities will present a major challenge to the program. If future midwives are to practice in hospitals, birthing centres, health units and homes, they need clinical learning experiences in these settings. There appears to be a shortage of placements for obstetric students across Canada. Hospitals report that they are overburdened with learners. Basic and post-basic nursing students compete with basic and post-graduate medical students for learning experiences in obstetrics. The problem of overload becomes an ethical dilemma in that decisions have to be made about who should have priority access to clinical sites. In addition, childbearing clients and their families are faced with the pressure to let students participate in their birthing experiences. Clients should maintain the prerogative to say "no" or "no more."

Unless hospital privileges for midwives are negotiated, clinical placements will present a challenge as limited spaces can be found in community practices at the present time. Difficulties in arranging access to clinical sites is also reflected in the way in which midwifery is viewed by some health care providers (Silverton 1988; Seattle Midwifery School Catalog 1991). This leads to the question if the general public and other health care professions understand the midwifery model of care. Communication is the key to overcome much of the resistance to midwifery practice in hospitals. If hospital administrators and other health care professionals are well informed about the educational

preparation of direct-entry midwives, hospital privileges can be obtained and physician resistance to working *with* direct-entry midwives can be reduced. The issue of legal liability insurance is not just a hospital issue, and policy direction has to come from the College of Midwives of B.C.

Investigating knowledge, understanding and feelings about the issue of legal protection should be considered as a priority for future research.

Public and professional knowledge about midwifery

I know from talking with colleagues, physicians and consumers throughout B.C., that both the public and other health care providers are often misinformed on what midwifery care entails, and how it differs from other approaches to obstetric care provided by physicians and nurses. This statement is substantiated by the way in which selected physicians equate their obstetric care with midwifery care. Stern and Bertolli (1992), both physicians, claim that midwifery care is just like medical care during pregnancy. It constitutes the provision of comprehensive prenatal care, childbirth psychoprophylaxis, and information concerning parenthood. Even within the last decade, the Society of Obstetricians and Gynecologists of Canada (1986) expressed concern about proper standards of training and practice for midwives in Canada, while at the same time acknowledging that certified midwives play a major role in the provision of services to pregnant women in most western countries (Burtch 1992, p.172).

The general lack of understanding of the midwifery philosophy and model of care is not only an issue for education, but affects practice as well. Even today, midwives are sometimes portrayed in a derogatory light. This negative image is hard to dispel and affects midwifery practice in several ways. A favorable public opinion is vital to the success of social, political, and professional groups in attaining their goals claim Kalish and Philip (Chaska 1983, p.36). Future midwifery clients need to know that midwives are well educated and licensed practitioners, who provide individualized and comprehensive

health care for healthy women during the childbearing cycle. Clients need also know that midwifery care focuses on continuity, as well as on partnership in care, while empowering women by encouraging them to stage their own childbirth experience. The 'partnership' exists between the childbearing family and the midwife, and means respect for individual costumes, ideas, and the right to have choices about the childbearing experience.

Childbearing women need to be aware that in the midwifery model of care the woman and the midwife share the responsibility for outcome. A research project exploring the knowledge of clients and professionals would be an interesting and helpful project in establishing midwifery practices. The results may assist in overcoming obstacles hindering implementation of midwifery practice and education.

Faculty

Another critical factor contributing to excellence and success of the midwifery program will be the composition, commitment and dedication of a midwifery faculty. Faculty knowledge, clinical expertise, and support for both practice and educational philosophies will make or break the new midwifery program in British Columbia. Teaching faculty must be both scholars and clinicians, in addition to role models, and colleagues of future midwifery students. It is essential that midwifery faculty retains a clinical role, to avoid being 'lecturers' removed from clinical realities (Silverton 1988). Communication and public relation skills will be of primary importance to establish political and professional acceptance of the program without compromising midwifery principles.

Students

Future students will also play an important role, particularly students in the first programs. The idea of student screening procedures as performed in Britain, may contribute to ensure groups of highly motivated students. In the United Kingdom, students interested in midwifery attend public information meetings. After the session, they submit a preliminary application, including an essay outlining why they are interested in becoming

a midwife. The applications are screened, and eligible candidates are interviewed (Dorset 1989).

Multi-route-of-entry program

The proposed multi-route-of-entry model combines a direct-route-of-entry program design with a flexible approach for students to enter at a variety of locations along the educational pathway. This type of approach allows for health care professionals and people with other academic achievements (e.g., a degree in sociology) to enter the midwifery program at an advanced level. The courses, with the exception of the basic core courses and the midwifery practica, are able to move up and down the educational pathway providing flexibility in student placement and program delivery. The approach reflects the humanistic philosophy component of the proposed program, promoting 'structure free' teaching of a curriculum. Validity of the proposed model will have to be established through implementation of the program.

Professions and Academic preparation

This thesis is not complete without a brief discussion on what constitutes a 'profession'. Throughout history, midwifery strives to become a self-regulating profession (chapter II). It is commonly believed, that professions have autonomy, meaning either the right to self-government or freedom of will. The issue of defining a profession is not new. Medicine and nursing have looked most extensively at the issue for a long period of time, as early as the beginning of the twentieth century (Smith 1981). The Canadian Nurses Association (1980), promoted "a baccalaureate for all" by the year 2000 over a decade ago. Nursing is not always called a profession because it does not have a self-regulating body. Medicine and law are the most frequently cited professions in the literature, as they are exemplary models of mature professions. Professionals have tended to be self employed, while blue-collar workers are more often found in organizations (Smith 1981). Engel (1970) reports that lawyers and physicians however, are increasingly employed in

organizations in today's changing society, and that despite that change, they have been able to maintain their autonomy. He also found that physicians employed in moderate sized bureaucratic organizations perceived themselves as having more autonomy than do physicians in solo practice.

Early and contemporary literature agree that a cameo of the ideal profession includes the following characteristics:

- Members are unified in a community of shared values and goals (Goode 1957);
- Professionals have a code of ethics which guides individual practice (McGothlin 1964);
- Members deal with matters of human urgency and significance (McGothlin 1964);
- Members exert control over the service area in which they practice (Freidson 1970);
- Professionals have status, prestige, social influence, and autonomy (McGlew and Robertson 1981);
- The acquisition of a body of knowledge in the discipline is an intellectual pursuit, and the body of theory should be guiding the practice of the members (Conway 1983);
- A professional is expected to manifest certain attitudes and behaviors including a sense of autonomy, a sense of calling, and a belief in self-regulation (Storch 1989).

If the characteristics described above are representative of a profession, midwives would certainly fall within that category, and if the minimum academic preparation for the majority of professionals is a baccalaureate degree, then midwives too should be educated to that level. This issue raises research questions such as, "What do current and future midwives in Canada have to say about the issue?", and "How do their responses compare with those of midwives in other countries?"

The comparative analysis of selected midwifery curricula (chapter III) provided an insight into the different types of curricula midwives are taught throughout the industrialized world. It appears that development of criteria for reciprocity creates a need

for specific content outlines, which is in direct conflict with the proposed educational philosophy. Reciprocity of credentials across Canada and other countries may become a concern because of the incorporation of a non-conventional educational philosophy into the curriculum. The philosophy promotes moving away from teaching specific content and focuses on the development of critical thinking and reflection. The evaluation process may raise questions because graduates of the program will have different levels of knowledge and expertise. This issue (reciprocity) warrants a research project after a midwifery program has been established in British Columbia.

In conclusion, the last chapter of this thesis discussed selected implications of the proposed curriculum on midwifery practice and education and incorporated suggestions for future research.

Not all issues were addressed because some of the problems, such as the resistance to home birth, need to be resolved by providing scientific evidence that home birth is safe in B.C., rather than endless discussion. Another issue needing to be explored is the meaning of empowering women through participation and decision making during the childbirth experience.

The climate in British Columbia is favorable to acknowledge and incorporate the midwife as a health care professional into the health care system. Diversity on specific issues (i.e., home birth, and nursing as a prerequisite qualification for midwives) will remain. Kitzinger (1988) claims that history has demonstrated that the position of the midwife will always be under challenge, and that current problems have been compounded by the age of technology. Midwives will have to fight to protect the integrity of an event as natural as pregnancy and birth from the alienating effects of a technocratic society. Their best weapon will continue to be education, alertness, creativity, and sensitivity (Kitzinger 1988, p. 249).

Implementation of a midwifery program in British Columbia will be met with challenges and obstacles, all of which can be overcome. Kitzinger (1988, p. 250) quotes Sarason (1990, p. 6.1), when she confirms and reminds us of the need to focus on understanding and working with the culture of local systems:

Ideas whose time have come are no guarantee that we know how to capitalize on the opportunities, because the process of implementation requires that you understand well the setting in which these ideas have to take root. And that understanding is frequently faulty and incomplete. Good intentions married to good are ideas are necessary but not sufficient for action consistent with them.

APPENDIX A

GLOSSARY OF TERMS

Definitions used in this thesis come primarily from four texts:

1. The Webster's Encyclopedic Unabridged;
2. the Concise Oxford Dictionaries of the English Language;
3. Curriculum Process in Nursing. A Guide to Curriculum Development by Torris and Stanton;
4. The Design of Education by Cyril O. Houle.

Activity

A specific educational action or succession of actions occurring in a situation.

Adult

A person (man or woman) who has achieved full physical development and who expects to have the right to participate as a responsible homemaker, worker, and member of society.

Adult Education

The process by which men and women (alone, in groups, or in institutional settings) seek to improve themselves or their society by increasing their skill, their knowledge, or their sensitiveness. Any process by which individuals, groups, or institutions try to help men and women improve in these ways.

Aim

see goal and objective

Beliefs

Accepting opinions or convictions of truth not necessarily supported by scientific knowledge.

Components

An essential constituent part of the educational framework; may include objectives, elements of the format, adjustments, and measurements and appraisal of results.

Concept

An idea, notion or abstract mental image derived from an individual's perceptual experience.

Consistency

The extent to which all components of each stage in the curriculum process show relationships between and among each other and support one another in a logical, reasonable way.

Content

Anything taught or learned in an educational activity, including knowledge, skills, or sensitiveness.

Course Outline

The contract between faculty and students specifying faculty and student responsibilities for a particular course. It includes a course description, content elements, and teaching and evaluation methods.

Curriculum (1)

A systematically organized program outline, describing the program foundation, course requirements, and learning components of a specific discipline.

Curriculum (2)

Subjects that are studied or prescribed for study in a school, or as any program of activities.

Curriculum (3)

Those transactions and interactions that take place between students and teachers and among students with the intent that learning take place.

Curriculum Philosophy

Speculative and analytical belief statements about the discipline, including theoretical propositions, serving as a foundation for the curriculum.

Design

The plan developed to guide educational activity in a specific situation, or the plan which can be inferred by an analyst of that activity.

Direct entry midwife

A midwife who entered or completed a midwifery education program not requiring registered nursing qualifications as a pre-requisite.

Evaluation of learning

Continuous assessment of the students' achievement that enhances the concept of progressive learning and provides immediate feedback relating to short-term learning experiences.

Existentialism

The belief that people form their essence in the course of the life they choose to lead; the doctrine emphasizes peoples responsibility for making their own nature as well as the importance of personal freedom, personal decision, and personal commitment.

Framework

The fundamental theoretical construction used to plan an educational design.

Health

A state of complete physical, mental and social well-being, not merely the absence of infirmity. Health is a continual dynamic process involving positive adaptations to life stresses in order to attain or maintain the optimal state of well-being that is realistic for that individual.

Horizontal Strands

Process oriented threads identified in the theoretical framework that are constantly used and reinforced throughout each course in the curriculum.

Key Concepts of a Discipline

Concepts that provide meaning to and define the nature of the discipline. These concepts have to be agreed upon by a faculty.

Lay-Midwife or Granny-Midwife

A person without any *formal* midwifery education calling him/herself midwife. (there are exceptions to this definition).

Life style

The general pattern of behavior of an individual or a group of people.

Medical-Model of Care

An approach to care that emphasizes pregnancy as a state of potential illness/ disease requiring intervention. The approach reflects the belief that medical sciences are an integral part of midwifery as a discipline.

Model

see framework

Nurse Midwife

A registered nurse who completed a post-basic program in midwifery.

Practicum

The part of the course (college or university) consisting of practical work in a particular field.

Process

A series of progressive stages in which interdependent activities have a specific educational purpose.

Public Relations

The methods or activities employed to promote a favorable relationship with the general population or with some part(s) of it.

Research

A diligent and systematic inquiry or investigation into a subject in order to discover or revise facts, theories, applications, or other.

Resource

Any object, person, or other aspect of the environment which can be used for support or help in an educational activity.

Scholar-Clinician in Midwifery

A person who is both academically educated and clinically trained in the art and science of midwifery. The academic preparation provides the midwife with concepts, theories, and scientific evidence needed to exercise judgment, to make clinical decisions, to provide comfort and pain relief, and to teach and council families throughout the childbearing cycle. The clinical experiences provide the 'hands on' practice and include a wide variety of psychomotor skills.

Skill

The capacity to perform some mental or physical act, whether it be easy and simple, or hard and complex.

Social Change

Involves the interaction of political and social forces, affecting an individual's cultural values.

Teaching Methodology

All teaching activities and learning experiences developed by faculty with student input, to facilitate student achievement.

Theme

A subject discourse, discussion, meditation or composition. synonymous with topic.

Theoretical Framework

The structuring of the content elements derived from the philosophy in such a way as to ensure systematic implementation of the curriculum philosophy.

Therapy

The treatment of illness or disability.

Vertical Strands

Content threads identified in the theoretical framework which are used to identify and plan progressive learning experiences that build one upon the other throughout all the courses.

Welfare

The provision of help or comfort for people who have been deprived of the goods and services thought to be essential in the society in which they live.

Appendix B

The following pages are examples out of the curricula analyzed in chapter III.

The curriculum of the Royal Prince Alfred Hospital in Australia:

The curriculum of the Dorset School of Midwifery in the United Kingdom:

The report of the curriculum design committee on the development of midwifery education in Ontario:

PHILOSOPHY OF THE SCHOOL OF NURSING

DEFINITION OF NURSING

Nursing is a caring profession, using a dynamic process to facilitate directly or indirectly, the efforts of individuals, families, and communities to attain, maintain, and regain optimum levels of well-being. This dynamic process includes the "Nursing Process", which utilises assessment, planning, implementation and evaluation in order to achieve the goal of optimum well-being.

Optimum well-being is defined as a level of bio-psycho-social functioning which enables a person to adapt to the environment, cope with problems, and strive for a positive self-concept.

THE ROLE OF THE NURSE

The nurse is a professional person capable of working alone or as a member of a multidiscipline team, focusing on the health care consumer; therefore the nurse's roles are many and varied. A major role of the nurse is the delivery of quality health care. In delivering that care, the nurse has independent functions of co-ordinating the health care team, assessing the individual's needs and planning, implementing and evaluating nursing care. The nurse also has an interdependent role in implementing and evaluating the therapeutic plan of the health team. Another major role is the education of the health care consumer and other members of the health team, both directly and indirectly as teacher, consultant and health and professional role model. The nurse also has a responsibility to continue to take advantage of opportunities for professional education. Inherent in the professional status of the nurse is the role of a leader in initiating and supporting action to meet the health and social needs of the public.

THE ROLE OF THE MIDWIFE

The role of the nurse is inherent in the role of the midwife, yet the emphasis is different. Whereas the role of the nurse often focuses on the process of disease implicit in the medical model, the midwife's role focuses on the process of birthing, which is a normal part of the life cycle. The emphasis in the midwife's practice, therefore, is on normal, with ability to manage pre-existing medical conditions and to institute appropriate measures to deal with complications if they should arise.

The Royal Prince Alfred Hospital School of Nursing accepts the definition of a midwife which has been accepted by the Council of the World Health Organisation and the Council of International Confederation of Midwives. This definition is as follows:

Definition of a Midwife

A midwife is a person, who, having been regularly admitted to a midwifery programme, duly recognised in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery

Sphere of Practice

She must be able to give the necessary supervision, care and advice to women during pregnancy, labour, and the post-partum period, to conduct deliveries on her own responsibility, and to care for the newborn infant. This care includes preventive measures, the detection of abnormal conditions in the mother and child, the procurement of medical assistance and the execution of emergency measures in the absence of medical help

She has an important task in health counselling and education, not only for patients but also within the family and community. The work should involve ante-natal education and preparation for parenthood and extends to certain areas of gynaecology, family planning, and child care.

She may practise in hospitals, clinics, health units, domiciliary conditions, or in any other service.

RIGHTS AND RESPONSIBILITIES OF THE HEALTH CARE CONSUMER

Man is a bio-psycho-social being with individual needs, who, as a health care consumer, has certain rights. These rights include:

* quality care, without discrimination.
* access to full information regarding his state of health
* self-determination in seeking, refusing, or participating in health care
* privacy of information and person
* respect and dignity in life, dying, and death.

In exercising these rights, the individual also has the responsibility to do so in a way which respects the rights of others.

THE LEARNING ENVIRONMENT

Learning is a continuing process of interaction between the individual and the environment, resulting in changes in one or all of the following: knowledge, attitudes, skills and behaviour. It is the teacher's responsibility to create a climate conducive to learning in which the student is best able to acquire essential knowledge, appropriate attitudes, and necessary skills. The student has the responsibility to seek out and utilise learning opportunities.

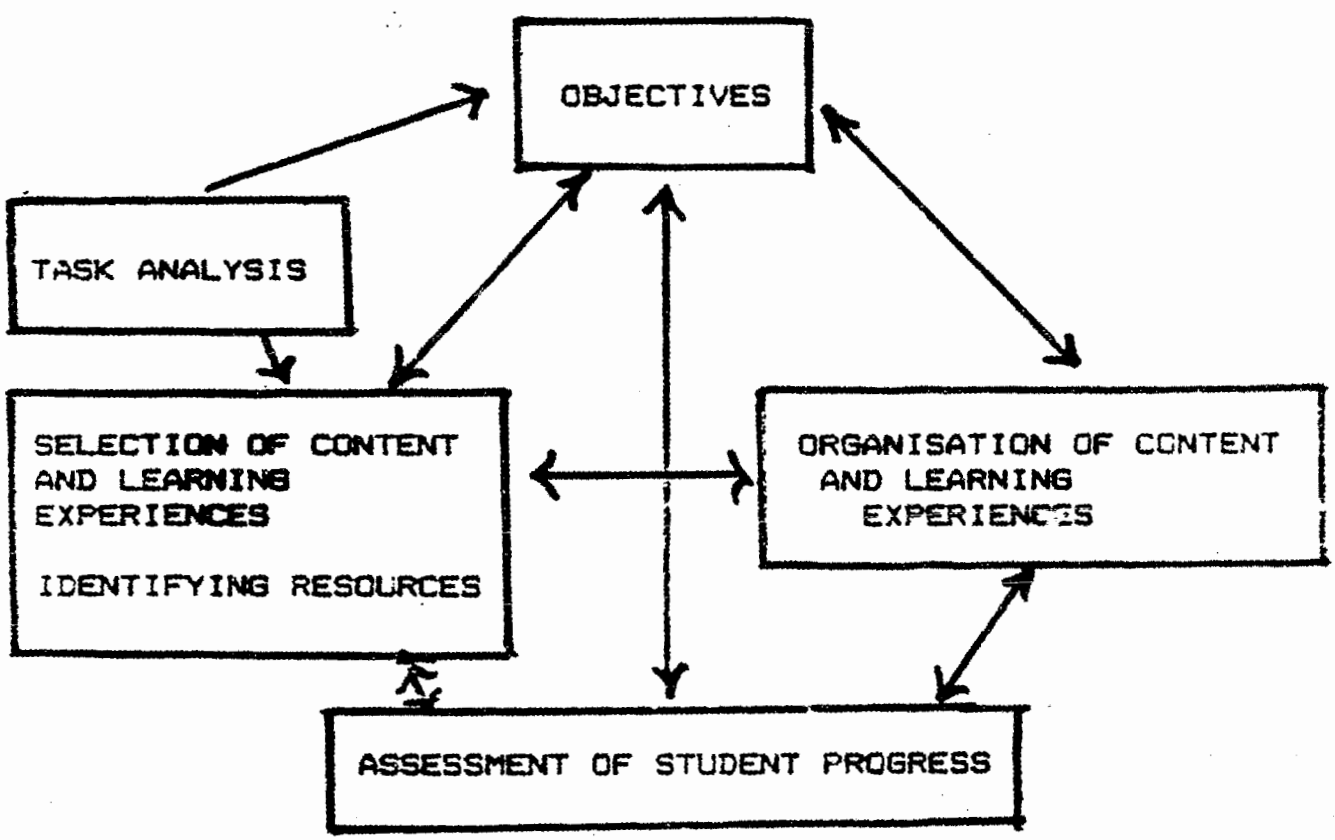
The extensive resources available in the School of Nursing and in King George V. Hospital will ensure a wide range of learning experiences within the obstetrical care system, and provide an opportunity to interact with and care for individuals experiencing all phases of the reproductive cycle.

INTRODUCTION TO THE CURRICULUM

Development of the Curriculum

The midwifery curriculum was developed in response to the release of the draft midwifery syllabus of 1981. It was obvious that the implementation of the sylabus would be facilitated by a curriculum interpreting the syllabus by setting out units of study containing general information, rationale, objectives, content and resources.

This curriculum was developed by a committee consisting of various members of the staff of the School of Nursing Studies: the midwifery nurse ecucators, the Principal Nurse Educator, the Deputy Principal Nurse Educator and the Senior Nurse Educator, Curriculum Development (See ACKNOWLEDGEMENTS). The Committee, chaired by the Principal, met weekly in order to develop the unit plans contained in this document. Basically a modified Tylerian, non-sequential model of curriculum development was used, as depicted by the model below:



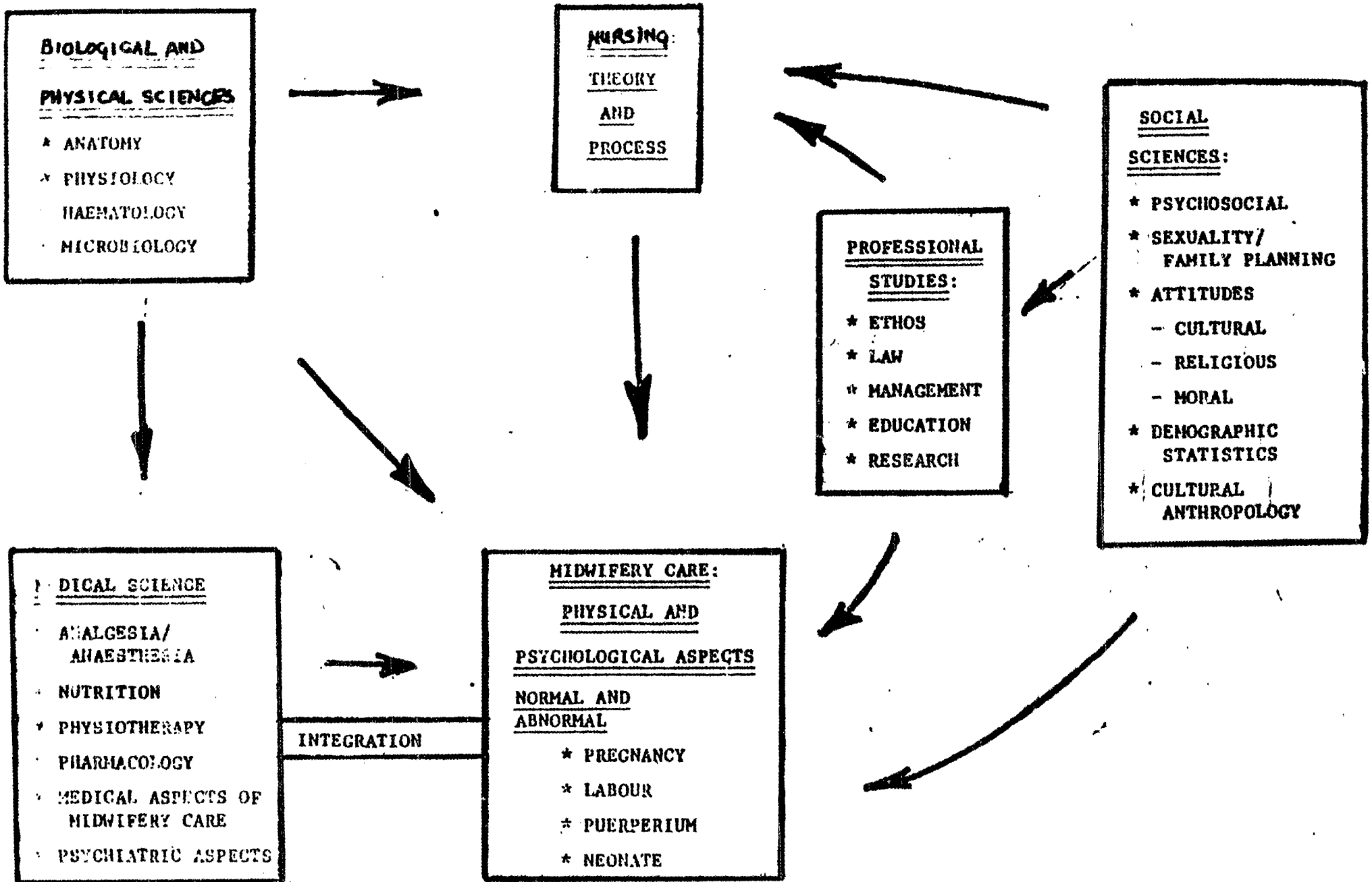
Theoretical Basis

The midwifery curriculum uses as its basis the philosophy of the School and two models which may loosely classified as theories of nursing, although they are more properly methods of conceptualising delivery of nursing care. The Principles of Nursing of Virginia Henderson, accepted by I.C.N., and the "Nursing Process" are used as a framework for stating the unit plans in the hope that they will promote a systematic, logical approach to the delivery of midwifery care. They are, however, only tools for achieving this aim. As well as a scientific approach to midwifery care, however, there is also the "art", and the professional midwifery practitioner will hopefully have the skills to marry the "art" and "science" of midwifery nursing.

Domains of the Curriculum

The syllabus is re-arranged into five broad domains: Biological Science, Social Science, Nursing, Professional Studies and Midwifery Care and Associated Medical Sciences (See Model on next page). These domains are constructed slightly differently from the domains set out in the syllabus in order to increase the prominence of nursing and to de-emphasise the medical model.

The Biological science, Social Science and Nursing domains all form a theoretical underlay for the Midwifery Care domain which is the central core of the programme. Bioscience is necessary for the understanding of the structure, function and pathophysiology of the childbearing woman and fetus/neonate. The study of Social Science provides the student with a broad understanding of the context of midwifery care. The Nursing domain gives the student a basis for understanding the reasons for midwifery nursing actions. Professional Studies helps the student to place midwifery care in a global framework. Finally, Midwifery Nursing is the cardinal domain of the midwifery programme. It encompasses all nursing interactions of the midwife and the client(s), and incorporates knowledge drawn from the preceding domains. The student will hopefully be able to integrate the knowledge from all the domains of the curriculum in order to offer quality midwifery care to the client(s).



AN INTERPRETATION OF THE MIDWIFERY SYLLABUS

11.3 Frequency of Meetings

Curriculum planning team will meet frequently until course is planned.

Course management team will meet at the end of each term.

All meetings are to be minuted and copies of minutes will be available through the Senior Midwife Teacher.

12 **COURSE CURRICULUM**

PHILOSOPHY OF CARE

The philosophy of midwifery care is based on individualised care, utilising a family centred and holistic approach. Expectant women and their partners are encouraged to make informed decisions and be 'partners in care' with the midwives. The emphasis is placed on the physiological aspect of pregnancy but in the event of illness, the midwife will provide the following care:

1 Wholly compensating: when the midwife meets all the client's requirements because the client is unable to care for herself, her baby.

2 Partly compensatory: when both the midwife and client engage in helping the client to meet her own needs.

Midwifery care should be research based and requires constant evaluation and change.

12.1 **Related policies that may influence the course:**

- **facilities available for hospital and home births;**
- **expanding peripheral antenatal clinics, i.e. in the Swanage/Purbeck area, Wimborne;**
- **increasing antenatal booking in the community;**
- **link with Dorset Institute of Higher Education have been made.**

12.2.2 Philosophy of the Common Core Programme

The development of a common core programme reflects the trend of the future advancement of professional education.

Current students are exposed to training which arguably encourages narrow horizons and an undercurrent of professional misunderstanding which arises from ignorance of roles. Such practitioners lack the concept of unity of purpose so essential to a holistic approach to care.

It is the intention of the Dorset School of Midwifery to fulfil its role as a precursor to change and be instrumental in bringing about innovation in midwifery practice through the development of a common core programme.

It is believed that the common core programme is a philosophically sound proposition for the following reasons:

- it will develop the future midwifery practitioner into a critical thinker, with depth and breadth of vision.

- it contains an input of knowledge and expertise from other academic disciplines, ie sociology, psychology.

- it will enable midwifery educators and other sequence tutors to concentrate on areas where they exhibit high levels of competence and skill, hence improving the quality and content of their teaching.

It is recognised that midwifery is a specialist subject and as such, abstract knowledge gained by students from the common core programme will be put into the midwifery context. Facilities have been arranged at the Dorset Institute of Higher Education for this purpose, ie an extra classroom, specific for the use of students midwives and the midwifery tutor.

Dorset Institute of Higher Education lecturers are currently lecturing in the School of Midwifery, Poole. The midwifery tutors attend lectures in order to apply abstract knowledge to midwifery structure.

13 COURSE CONTENT, STRUCTURE AND ORGANISATION

13.1 Aims of the Course to:

- prepare the midwife for her specific role;
- enable the midwife to be competent to fulfil her practitioner role at the point of registration;
- prepare the midwife to be innovative and have the ability to think analytically;
- centre the client as a pivotal point for the understanding and development of caring skills;
- emphasise the student as a focus for educational strategies;
- promote clinical practice based on theory and research, grounded in the biological, social and behavioural sciences;
- promote the concept of holistic care;
- develop a practitioner who would be motivated towards continuous and progressive learning.

THE FOUNDATIONS OF MIDWIFERY EDUCATION

THE INTERNATIONAL DEFINITION OF A MIDWIFE

The Interim Regulatory Council for Midwifery in Ontario and the Association of Ontario Midwives have adopted this definition of the midwife:

> A midwife is a person who, having been regularly admitted to a midwifery education program duly recognized in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery;
>
> Sphere of practice: The midwife must be able to give the necessary supervision, care and advice to women during pregnancy, labour and the post-partum period, to conduct deliveries on her own responsibility and to care for the newborn and the infant. This care includes preventative measures, the detection of abnormal conditions in mother and child, the procurement of medical assistance and the execution of emergency measures in the absence of medical help. She has an important task in health counselling and education, not only for the patients but also within the family and community. The work should involve antenatal education and preparation for parenthood, and extends to certain areas of gynaecology, family planning and child care.
>
> A midwife may practise in hospitals, clinics, health units, domiciliary conditions or in any other service.

This definition was developed and adopted by the International Confederation of Midwives and adopted by the International Federation of Gynaecologists and Obstetricians, in 1972 and 1973 respectively. Used by the World Health Organization, it captures the essence of the midwife's role and function and appropriately delineates her sphere of practice.

THE ROLE OF THE MIDWIFE

The following description of the midwife's role appears in the 1987 report of the Task Force on the Implementation of Midwifery in Ontario and provides a useful and accurate description of the work of the midwife.

The basic elements of the midwife's activities are:

1. carrying out examinations necessary to establish and monitor normal pregnancies;

2. advising on and securing the examinations necessary for the earliest possible diagnosis of pregnancies at risk;

3. providing education and preparation for childbirth, including advice on exercise and nutrition;

4. caring for and assisting the mother during labour and monitoring the condition of the foetus by the appropriate clinical and technical means;

5. conducting spontaneous vaginal deliveries;

6. recognizing the warning signs of abnormality in the mother or infant that necessitate referral to a physician;

7. taking necessary emergency measures in the absence of a physician;

8. examining and caring for the newborn infant;

9. caring for the mother in the postpartum period and advising her on infant care and family planning.

(adapted from the European Community Midwives Directives Directive 80/155/EEC Article 4)

The midwife's activities can be classified as those relating to the assessment of client status or condition, those relating to the provision of care, and those relating to emergencies. These activities will be delineated in detail by the governing body for midwifery. The following discussion provides some examples of the midwife's activities but is not exhaustive.

Her activities relating to assessment of client status during pregnancy include obtaining the woman's medical, family, obstetric, social, and emotional history, and performing appropriate physical examinations such as pelvic and breast examinations. The midwife ensures that basic laboratory assessments, including blood tests and urinalysis, are performed. During labour, her activities relating to assessment of the client's condition include monitoring the foetal heart, abdominal palpation, and pelvic examination. After birth, they include performing the initial examination of the newborn and performing post-partum physical examinations of the mother.

The midwife's activities in the provision of care include providing comfort measures during pregnancy, labour and birth, conducting spontaneous vaginal births and delivering the placenta, performing and repairing episiotomies, and repairing first and second degree lacerations. The midwife administers routine medications on her own authority, including anti-haemorrhagic agents after birth for mother and newborn, local anaesthetics for use in repairing episiotomies and lacerations, and erythromycin or silver nitrate for the newborn's eyes. After the birth, she provides comfort measures for the mother, educates and counsels her on newborn care, and counsels her on family planning and contraception.

In emergencies, the midwife may administer Cardio-pulmonary resuscitation, and may provide initial treatment of prolapsed umbilical cord, hemorrhage, seizures, and foetal distress.

It is important to note that the midwife exercises independent clinical judgment within her scope of practice. She is responsible for the management of the pregnancies and births of the women under her primary care. As the international definition puts it, she conducts deliveries "on her own responsibility". The activities within the midwife's scope of practice are not delegated to her by physicians; rather the authority for performing them originates with her.

SCOPE OF PRACTICE

This Scope of Practice comprises Section 2 of the Midwifery Act from the Recommendations of the Health Professions Legislation Review, January, 1989.

2.01 The practice of midwifery is the assessment, monitoring and provision of care during normal pregnancy, labour and the post-partum period and conducting spontaneous normal vaginal deliveries.

2.01A In the course of practising as a midwife, a member may perform the following licensed acts:

(1) Managing labour and conducting spontaneous normal vaginal deliveries.
(2) Performing episiotomies and amniotomies and repairing episiotomies and lacerations, not involving the anus, anal sphincter, rectum, urethra and periurethral area.

(3) Using drugs as are specified by regulation.
(4) Administering by injection or inhalation substances as specified by regulation.
(5) Performing invasive instrumentation, including manual and digital instrumentation beyond the labia majora during pregnancy, labour and the post-partum period.

2.02 Subject to the regulations passed pursuant to this Act, no person except a member shall

(a) hold himself or herself out as,
(i) registered by or with the College of Midwives of Ontario, or
(ii) the holder of a certificate of registration issued by the College of Midwives of Ontario, or
(iii) a member of the College of Midwives of Ontario, or
(b) use the title "midwife" or "registered midwife".

2:03 When in any proceeding an issue arises as to the interpretation of section 2.01 or 2.01A, the Court may have regard to the expert evidence adduced by the parties with respect thereto.

The Curriculum Design Committee gave much consideration and effort to the development of principles upon which midwifery education in Ontario should be based. We recommend that Ontario enact a midwifery education program which is consistent with these guiding principles.

GUIDING PRINCIPLES OF MIDWIFERY EDUCATION IN ONTARIO

Midwifery is an autonomous primary-care profession to be recognized under the Health Professions Legislation of Ontario as a self-regulating health profession. The international definition of a midwife is accepted as the foundation upon which midwifery in Ontario will be developed.

The following fundamental principles of midwifery shall form the philosophical framework of midwifery education.

The midwife is a primary care-giver and a full member of the health care team

Midwifery practice is based on the provision of informed choice

The focus of midwifery is normal childbearing

Every midwife shall have adequate knowledge of the abnormal to ensure appropriate care is provided

Midwifery care is woman-centred and family-centred. It emphasizes continuity of care throughout the pre-natal, intra-partum and post-natal periods

The midwife is a responsible member of an autonomous self-regulating profession

The midwife promotes improvement in Ontario's maternity care system in order to improve the health of mothers and babies.

In order to prepare students for the practice of midwifery, the educational program shall

Integrate theoretical and clinical learning

Incorporate a variety of learning approaches with an emphasis on student-centred learning

Provide the student with experience in a variety of models of care and settings for practice

Develop an understanding of the importance of community health, health education and promotion, and preventive care

Emphasize critical thinking, the analysis of research findings and their appropriate use in practice

Promote self-evaluation and the need for maintaining continuing competence

Utilize midwifery educators who maintain active practice in institutional and community settings, including the home.

Recognizing that initially there will only be one educational program, the educational program shall:

Be sensitive to and promote diversity among the student population

Develop admission standards which provide access to those students who have a reasonable chance of success in the program

Be accessible to individuals who might be discriminated against on the basis of factors such as culture, disability, economic status, ethnicity, geographic location, language, race, religion, sex, or sexual orientation.

ESSENTIAL COMPONENTS OF A MIDWIFERY CURRICULUM

The central challenge for Ontario's midwifery program is to develop an educational process which promotes the acquisition of essential midwifery knowledge while creating a broadly prepared health care provider.

The midwife must have sound practical skills, based on and reinforced through clinical experience. She will develop and use clinical judgement, and must be capable of critical thinking, and of developing sensitivity to the larger issues surrounding pregnancy, childbirth and parenting.

PROGRAM LENGTH AND COMPOSITION

It is recommended that a four-year educational program be developed which may be completed in three calendar years. We recommend that at least 50% of the program content be clinical practice experience. The length and structure of the program must reflect the importance in midwifery of providing continuity of care throughout pregnancy, birth and the post-partum period.

DIDACTIC AND CLINICAL CONTENT

The Curriculum Design Committee recommends that student midwives be instructed in the following subjects to the level appropriate to entry to practice. Recommendations refer to essential components of midwifery education by topic areas and do not describe actual courses.

Topic Areas

- **Basic sciences**
  - **General anatomy and physiology**
  - **Female/reproductive anatomy and physiology**
  - **Embryology and genetics**
  - **Microbiology, biochemistry and laboratory sciences**
  - **Nutrition**
  - **Pharmacology**

- **Health sciences**
  - Midwifery care including care throughout pregnancy, labour, birth and the post-partum period
  - Sexually transmitted diseases
  - Well-woman assessment
  - Women's health care including family planning
  - Obstetric and neonatal pathology
  - Neonatal and infant care
- **Health education and promotion**
  - Nutrition
  - Smoking, drugs, alcohol and substance abuse
  - Preventive health care
  - Socio-economic determinants of health
  - Occupational and environmental health
- **Professional studies**
  - History and philosophy of midwifery
  - Legislation, standards and regulation of midwifery
  - Ethical issues in reproductive health care
  - Health and social policy including health economics and health administration in provincial and national contexts
  - Canada's health care system, Ontario's reproductive health care system
- **Social sciences**
  - Sociology and politics of health care
  - Psychology and counselling
  - Anthropology of childbirth
  - Traditional Native midwifery practices

- Sexuality
- Women's studies
- Sociology of the family including roles of women and men in parenting
- Women and disabilities

o **Education and research**

- Principles of adult education
- Education for childbirth and parenting
- Critical appraisal of scientific literature
- Application of research literature to clinical practice

o **Alternative health care practice**

- An introduction to other therapies of interest to midwives and their clients, relevant to pregnancy, birth and post-partum care such as:

  (i) massage therapy
  (ii) chiropractic
  (iii) natural remedies
  (iv) acupuncture

CLINICAL REQUIREMENTS

On successful completion of the program, the entry-to-practice level midwife should have clinical experience sufficient to help her be a competent and confident practitioner in the full range of settings, including the home, birth centres and hospitals.

The recommendations of the Curriculum Design Committee in the area of clinical requirements for student midwives meet and exceed the requirements of the European Economic Community (see Appendices).

o **Normal Births**

The midwifery student needs clinical experience, not only in attending births, but in all aspects of midwifery care. Working with a practising midwife will expose the student midwife to history taking, pre- and post-natal care, risk screening, labour care, as well as birth and immediate post-partum care. The student will develop an understanding of normal birth, the detection of abnormal conditions, the

principles and practice of consultation and referral, continuity of care, family dynamics and exposure to midwifery research. The nature of the student's involvement in care will depend upon her level of learning as she moves through the program.

We recommend that the student midwife be required to attend 60 births, the first 20 of which may involve the student as observer/assistant. Of these 60 births, 40 must involve the student as primary care-giver and 30 must occur within a program of continuity of care

Clinical experience gained in a program of continuity of midwifery care will involve the student midwife in:

- Well woman assessments
- Prenatal assessments and counselling
- Abdominal and vaginal examinations
- The development of technical skills for midwifery practice
- Post-partum assessments of mother and baby, and post-partum counselling

o Care of women and infants at risk

Midwifery students will also be involved in the care of women and infants at risk and those with medical and surgical problems. We recommend that the student midwife gain this experience in high risk care following extensive experience in continuity of care and normal childbearing.

CLINICAL LEARNING SITES

The ideal clinical setting for student midwives is a well-established midwifery practice. This setting provides extensive experience in normal childbearing and continuity of care. A student's experience may be supplemented with institutional placements where high volume and high risk experience is available. Midwives involved in clinical teaching should maintain current experience in the provision of care in both domiciliary and institutional settings.

Other health care professionals may also provide valuable clinical experiences for students. The development of interprofessional relationships should be encouraged in the clinical setting. During clinical education, students will have the opportunity to work with other health care professionals and gain experience in consultation and referral.

Because the focus of the midwife's practice is normal childbirth, it will be necessary to place students in high-risk settings to observe and participate in the care of women and infants at risk. This experience should be reserved for the student midwife's final years of education.

Clinical experience should include a variety of clinical sites, such as:

- The home setting
- Free-standing and in-hospital birth centres
- Community health centres
- Community health organizations
- Native health centres
- Women's health centres
- Hospitals, levels I, II, III

The criteria for consideration should include:

- Availability of births
- Range of birth experience (normal/low-risk/women at risk)
- Competition for experience with other health profession students
- Nature of teaching infrastructure
- Flexibility of birthing practices
- Receptiveness to midwives and midwifery values
- Geographical accessibility and representativeness
- Interaction with related health care providers and students
- Access to ongoing midwifery research.

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