UNIT ONE

Maternal and Child Health Nursing Practice

CHAPTER 1

A Framework for Maternal and Child Health Nursing

Key Terms

clinical nurse specialist
evidence-based practice
family nurse practitioner
fertility rate
maternal and child health nursing
mortality rate
neonatal nurse practitioner
neonate
nurse-midwife
nursing research
pediatric nurse practitioner
puerperium
scope of practice
women's health nurse practitioner

Objectives

After mastering the contents of this chapter, you should be able to:

1. Identify the goals and philosophy of maternal and child health nursing.
2. Describe the evolution, scope, and professional roles for nurses in maternal and child health nursing.
3. Define common statistical terms used in the field, such as infant and maternal mortality.
4. Discuss the implications of the common standards of maternal and child health nursing and the health goals for the nation for maternal and child health nursing.
5. Discuss the interplay of nursing process, evidence-based practice, and nursing theory as they relate to the future of maternal and child health nursing practice.
6. Use critical thinking to identify areas of care that could benefit from additional research or application of evidence-based practice.
7. Apply concepts of family-centered care to maternal and child health nursing.
8. Integrate knowledge of trends in maternal and child health care with the nursing process to achieve quality maternal and child health nursing care.

Anna Chung is a premature neonate who must be transported to a regional center for care about 30 miles from your local hospital. Her parents, Melissa and Robert, have many concerns. They don't want to be so far from their daughter, and they don't know how they will pay for her special care. Also, Melissa, 37 years old, believes she is too old to leave the hospital so soon after having a cesarean birth. She recalls staying in the hospital much longer after having her first child, Micko, now 6 years old.

This chapter discusses standards and philosophies of maternal-child health care and how these standards and philosophies affect care.

What are some health care issues evident in this scenario? How has modern cost containment changed this scenario?

What is the nursing role here?

After you've studied this chapter, access the accompanying website. Read the patient scenario and answer the questions to further sharpen your skills, grow more familiar with RN-CLEX types of questions, and reward yourself with how much you have learned.

The care of childbearing and childrearing families is a major focus of nursing practice, because to have healthy adults you must have healthy children. To have healthy children, it is important to promote the health of the childbearing woman and her family from the time before children are born until they reach adulthood. Both preconceptual and prenatal care are essential contributions to the health of a woman and fetus and to a family's emotional preparation for childbearing and childrearing. As children grow, families need continued health supervision and support. As children reach maturity and plan for their families, a new cycle begins and new support becomes necessary. The nurse's role in all these phases focuses on promoting healthy growth and development of the child and family in health and in illness.

Although the field of nursing typically divides its concerns for families during childbearing and childrearing into two separate entities, maternity care and child health care, the full scope of nursing practice in this area is not two separate entities, but one: maternal and child health nursing (Fig. 1.1).

FIGURE 1.1 Maternal and child health nursing includes care of the pregnant woman, child, and family. (**A**) During a prenatal visit, a maternal child health nurse assesses that a pregnant woman's uterus is expanding normally. (**B**) During a health maintenance visit, a maternal child health nurse assesses a child's growth and development. (© Barbara Proud.)

GOALS AND PHILOSOPHIES OF MATERNAL AND CHILD HEALTH NURSING

The primary goal of **maternal and child health nursing** care can be stated simply as the promotion and maintenance of optimal family health to ensure cycles of optimal childbearing and childrearing. Major philosophical assumptions about maternal and child health nursing are listed in Box 1.1. The goals of maternal and child health nursing care are necessarily broad because the scope of practice is so broad. The range of practice includes

- Preconceptual health care
- Care of women during three trimesters of pregnancy and the **puerperium** (the 6 weeks after childbirth, sometimes termed the fourth trimester of pregnancy)
- Care of children during the perinatal period (6 weeks before conception to 6 weeks after birth)
- Care of children from birth through adolescence
- Care in settings as varied as the birthing room, the pediatric intensive care unit, and the home

In all settings and types of care, keeping the family at the center of care delivery is an essential goal. Maternal and

BOX 1.1

Philosophy of Maternal and Child Health Nursing

- Maternal and child health nursing is family-centered; assessment data must include a family and individual assessment.
- Maternal and child health nursing is community-centered; the health of families depends on and influences the health of communities.
- Maternal and child health nursing is research-oriented, because research is the means whereby critical knowledge increases.
- Both nursing theory and evidence-based practice provide a foundation for nursing care.
- A maternal and child health nurse serves as an advocate to protect the rights of all family members, including the fetus.
- Maternal and child health nursing includes a high degree of independent nursing functions, because teaching and counseling are so frequently required.
- Promoting health is an important nursing role, because this protects the health of the next generation.
- Pregnancy or childhood illness can be stressful and can alter family life in both subtle and extensive ways.
- Personal, cultural, and religious attitudes and beliefs influence the meaning of illness and its impact on the family. Circumstances such as illness or pregnancy are meaningful only in the context of a total life.
- Maternal and child health nursing is a challenging role for a nurse and is a major factor in promoting high-level wellness in families.

child health nursing is always family-centered; the family is considered the primary unit of care. The level of family functioning affects the health status of individuals, because if the family's level of functioning is low, the emotional, physical, and social health and potential of individuals in that family can be adversely affected. A healthy family, on the other hand, establishes an environment conducive to growth and health-promoting behaviors that sustain family members during crises. Similarly, the health of an individual and his or her ability to function strongly influences the health of family members and overall family functioning. For these reasons, a family-centered approach enables nurses to better understand individuals and, in turn, to provide holistic care. Box 1.2 provides a summary of key measures for the delivery of family-centered maternal and child health care.

STANDARDS OF MATERNAL AND CHILD HEALTH NURSING PRACTICE

The importance a society places on human life can best be measured by the concern it places on its most vulnerable members—its elderly, disadvantaged, and youngest citizens. To promote consistency and ensure quality nursing care and outcomes in these areas, specialty organizations develop guidelines for care in their specific areas of nursing practice. In maternal-child health, standards have been developed by the Division of Maternal-Child Health Nursing Practice of the American Nurses Association in collaboration with the Society of Pediatric Nurses. These are shown in Box 1.3.

The Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) has developed similar standards for the nursing care of women and newborns. These are summarized in Box 1.4.

BOX 1.2

Common Measures to Ensure Family-Centered Maternal and Child Health Care

Principle

- The family is the basic unit of society.
- Families represent racial, ethnic, cultural, and socioeconomic diversity.
- Children grow both individually and as part of a family.

Nursing Interventions

- Consider the family as a whole as well as its individual members.
- Encourage families to reach out to their community so that family members are not isolated from their community or from each other.
- Encourage family bonding through rooming-in in both maternal and child health hospital settings.
- Participate in early hospital discharge programs to reunite families as soon as possible.
- Encourage family and sibling visits in the hospital to promote family contacts.
- Assess families for strengths as well as specific needs or challenges.
- Respect diversity in families as a unique quality of that family.
- Encourage families to give care to a newborn or ill child.
- Include developmental stimulation in nursing care.
- Share or initiate information on health planning with family members so that care is family-oriented.

A FRAMEWORK FOR MATERNAL AND CHILD HEALTH NURSING CARE

Maternal and child health nursing can be visualized within a framework in which nurses, using nursing process, nursing theory, and evidence-based practice, care for families during childbearing and childrearing years through four phases of health care:

- Health promotion
- Health maintenance
- Health restoration
- Health rehabilitation

Examples of these phases of health care as they relate to maternal and child health are shown in Table 1.1.

The Nursing Process

Nursing care, at its best, is designed and implemented in a thorough manner, using an organized series of steps, to ensure quality and consistency of care (Carpenito, 2004). The nursing process, a proven form of problem solving based on the scientific method, serves as the basis for assessing, making a nursing diagnosis, planning, organizing, and evaluating care. That the nursing process is applicable to all health care settings, from the prenatal clinic to the pediatric intensive care unit, is proof that the method is broad enough to serve as the basis for all nursing care.

Because nurses rarely work in isolation, but rather as a member of a health care team or unit, Multidisciplinary Care Maps are included throughout the text to demonstrate the use of the nursing process for selected clients, provide examples of critical thinking, and clarify nursing care for specific client needs. Multidisciplinary care maps rather than nursing care plans are shown, because they not only demonstrate the nursing process but accentuate the increasingly important role of the nurse as a coordinator of client care.

In addition, selected chapters also identify specific nursing outcomes using the terminology presented in the Nursing Outcomes Classification (NOC) and nursing activities using the terminology presented in the Nursing Interventions Classification (NIC) developed by the Iowa Intervention Project (Johnson et al., 2000; McCloskey & Bulechek, 2000).

Evidence-Based Practice

Evidence-based practice involves the use of research or controlled investigation of a problem in conjunction with

BOX 1.3

American Nurses Association/Society of Pediatric Nurses Standards of Care and Professional Performance

Standards of Care

Comprehensive pediatric nursing care focuses on helping children and their families and communities achieve their optimum health potentials. This is best achieved within the framework of family-centered care and the nursing process, including primary, secondary, and tertiary care coordinated across health care and community settings.

Standard I: Assessment

The pediatric nurse collects patient health data.

Standard II: Diagnosis

The pediatric nurse analyzes the assessment data in determining diagnoses.

Standard III: Outcome Identification

The pediatric nurse identifies expected outcomes individualized to the child and the family.

Standard IV: Planning

The pediatric nurse develops a plan of care that prescribes interventions to obtain expected outcomes.

Standard V: Implementation

The pediatric nurse implements the interventions identified in the plan of care.

Standard VI: Evaluation

The pediatric nurse evaluates the child's and family's progress toward attainment of outcomes.

Standards of Professional Performance

Standard I: Quality of Care

The pediatric nurse systematically evaluates the quality and effectiveness of pediatric nursing practice.

Standard II: Performance Appraisal

The pediatric nurse evaluates his or her own nursing practice in relation to professional practice standards and relevant statutes and regulations.

Standard III: Education

The pediatric nurse acquires and maintains current knowledge and competency in pediatric nursing practice.

Standard IV: Collegiality

The pediatric nurse interacts with and contributes to the professional development of peers, colleagues, and other health care providers.

Standard V: Ethics

The pediatric nurse's assessment, actions, and recommendations on behalf of children and their families are determined in an ethical manner.

Standard VI: Collaboration

The pediatric nurse collaborates with the child, family, and other health care providers in providing client care.

Standard VII: Research

The pediatric nurse contributes to nursing and pediatric health care through the use of research methods and findings.

Standard VIII: Resource Utilization

The pediatric nurse considers factors related to safety, effectiveness, and cost in planning and delivering patient care.

American Nurses Association and Society of Pediatric Nurses. (2003). *Scope and standards of pediatric clinical practice.* Washington, D.C.: American Nurses Publishing House.

clinical expertise as a foundation for action. Bodies of professional knowledge grow and expand to the extent that people in that profession plan and carry out research. **Nursing research,** the controlled investigation of problems that have implications for nursing practice, provides evidence for practice, upon which the foundation of nursing grows, expands, and improves. In addition, evidence-based practice provides the justification for implementing activities for outcome achievement, ultimately resulting in improved and cost-effective patient care.

A classic example of how the results of nursing research can influence nursing practice is the application of the research carried out by Rubin (1963) on a mother's approach to her newborn. Before the publication of this study, nurses assumed that a woman who did not immediately hold and cuddle her infant at birth was a "cold" or unfeeling mother. After observing a multitude of new mothers, Rubin concluded that attachment is not a spontaneous procedure; rather, it more commonly begins with only fingertip touching. Armed with Rubin's findings and integrating these findings into practice, nurses became better able to differentiate healthy from unhealthy bonding behavior in postpartum women and their newborns. Women following this step-by-step pattern of attachment were no longer recognized as unfeeling, but normal. By documenting these normal parameters, nurses can identify women who do not follow such a pattern, and interventions can be planned and instituted to help these mothers gain a stronger attachment to their new infants. Additional nursing research in this area (discussed in Chapter 22) has provided further substantiation about the importance of this original investigation.

Evidence-based practice requires ongoing research to substantiate current actions as well as to provide guidelines for future actions. Some examples of current questions that warrant nursing investigation in the area of maternal and child health nursing include the following:

BOX 1.4

Association of Women's Health, Obstetric, and Neonatal Nurses Standards and Guidelines

Standards of Professional Performance

Standard I: Quality of Care
The nurse systematically evaluates the quality and effectiveness of nursing practice.

Standard II: Performance Appraisal
The nurse evaluates his/her own nursing practice in relation to professional practice standards and relevant statutes and regulations.

Standard III: Education
The nurse acquires and maintains current knowledge in nursing practice.

Standard IV: Collegiality
The nurse contributes to the professional development of peers, colleagues, and others.

Standard V: Ethics
The nurse's decisions and actions on behalf of patients are determined in an ethical manner.

Standard VI: Collaboration
The nurse collaborates with the patient, significant others, and health care providers in providing patient care.

Standard VII: Research
The nurse uses research findings in practice.

Standard VIII: Resource Utilization
The nurse considers factors related to safety, effectiveness, and cost in planning and delivering patient care.

Standard IX: Practice Environment
The nurse contributes to the environment of care delivery within the practice settings.

Standard X: Accountability
The nurse is professionally and legally accountable for his/her practice. The professional registered nurse may delegate to and supervise qualified personnel who provide patient care.

Association of Women's Health, Obstetric, and Neonatal Nurses. (1998). *Standards for the nursing care of women and newborns* (5th ed.). Washington, D.C.: Author.

- What is the most effective stimulus to encourage women to come for prenatal care or parents to bring children for health maintenance care?
- How can nurses be instrumental in fostering diversity in care?
- What are the special needs of women who are discharged from a hospital or birthing center within a short time after childbirth? Of children, after ambulatory surgery?
- How much self-care should young children be expected (or encouraged) to provide during an illness?
- What is the effect of market-driven health care on the quality of nursing care?
- What active measures can nurses take to reduce the incidence of child or intimate partner abuse?
- How can nurses best help families cope with the stress of long-term health care?
- What are the long-term effects of violence on families, and how can nurses help modify these effects?
- How can nurses be active in helping prevent violence in communities?

TABLE 1.1

Definitions and Examples of Phases of Health Care

Term	Definition	Examples
Health promotion	Educating clients to be aware of good health through teaching and role modeling	Teaching women the importance of rubella immunization before pregnancy; teaching children the importance of safer sex practices
Health maintenance	Intervening to maintain health when risk of illness is present	Encouraging women to come for prenatal care; teaching parents the importance of safeguarding their home by childproofing it against poisoning
Health restoration	Promptly diagnosing and treating illness using interventions that will return client to wellness most rapidly	Caring for a woman during a complication of pregnancy or a child during an acute illness
Health rehabilitation	Preventing further complications from an illness; bringing ill client back to optimal state of wellness or helping client to accept inevitable death	Encouraging a woman with gestational trophoblastic disease to continue therapy or a child with a renal transplant to continue to take necessary medications

- What do maternal-child health nurses need to know about alternative therapies such as herbal remedies to keep their practices current?

The answers to these and other questions provided by research help to bolster a foundation for specific actions and activities that have the potential to improve maternal and child health care. The Focus on Evidence-Based Practice boxes included in chapters throughout the text contain summaries of current maternal and child health research studies and are designed to assist you in developing a questioning attitude regarding current nursing practice and in thinking of ways to incorporate research findings into care.

Nursing Theory

One of the requirements of a profession (together with other critical determinants, such as member-set standards, monitoring of practice quality, and participation in research) is that the concentration of a discipline's knowledge flows from a base of established theory.

Nursing theorists offer helpful ways to view clients so that nursing activities can best meet client needs—for example, by seeing a pregnant woman not simply as a physical form but as a dynamic force with important psychosocial needs, or by viewing children as extensions or active members of a family as well as independent beings. Only with this broad theoretical focus can nurses appreciate the significant effect on a family of a child's illness or of the introduction of a new member.

Another issue most nursing theorists address is how nurses should be viewed or what the goals of nursing care should be. At one time, the goal of nursing care could have been stated as "Providing care and comfort to injured and ill people." Most nurses today would perceive this view as a limited one, because they are equipped to do preventive care as well. Extensive changes in the scope of maternal and child health nursing have occurred as health promotion, or keeping parents and children well, has become a greater priority.

A third issue addressed by nurse theorists concerns the activities of nursing care: as goals become broader, so do activities. For example, when the primary goal of nursing was considered to be caring for ill people, nursing actions were limited to bathing, feeding, and providing comfort. Currently, with health promotion as a major nursing goal, teaching, counseling, supporting, and advocacy are also common roles. In addition, with new technologies available, nurses are caring for clients who are sicker than ever before. Because care of women during pregnancy and of children during their developing years helps protect not only current health but also the health of the next generation, maternal-child health nurses fill these expanded roles to a unique and special degree.

Table 1.2 summarizes the tenets of a number of common nursing theorists and suggests ways in which they could be applied to maternal-child health care through the situation of one child. The third column of the table ("Emphasis of Care") demonstrates that although the theoretical bases of these approaches to nursing care differ, the result of any one of them is to provide a higher level of care. These different theories, therefore, do not contradict but rather complement each other in the planning and implementation of holistic nursing care.

Checkpoint Question 1

Suppose Melissa Chung asks you whether maternal child health nursing is a profession. What qualifies an activity as a profession?

a. Members supervise other people.
b. Members use a distinct body of knowledge.
c. Members enjoy good working conditions.
d. Members receive relatively high pay.

MATERNAL AND CHILD HEALTH NURSING TODAY

At the beginning of the 20th century, the infant mortality rate in the United States (i.e., the number of infants per 1,000 births who die during the first year of life) was greater than 100 per 1,000. In response to efforts to lower this rate, health care shifted from a treatment focus to a preventive one, dramatically changing the scope of maternal and child health nursing. Research on the benefits of early prenatal care led to the first major national effort to provide prenatal care to all pregnant women through prenatal nursing services (home visits) and clinics. Today, thanks to these and other community health measures (such as efforts to encourage breast-feeding, increased immunization, and injury prevention), as well as many technological advances, the U.S. infant mortality rate has fallen to 6.9 per 1,000 (National Center for Health Statistics [NCHS], 2005).

Medical technology has contributed to a number of important advances in maternal and child health: childhood diseases such as measles and poliomyelitis are almost eradicated through immunization; specific genes responsible for many inherited diseases have been identified; stem cell therapy may make it possible in the next few years to replace diseased cells with new growth cells; new fertility drugs and techniques allow more couples than ever before to conceive; and the ability to delay preterm birth and improve life for premature infants has grown dramatically. In addition, a growing trend toward health care consumerism, or self-care, has made many childbearing and childrearing families active participants in their own health monitoring and care. Health care consumerism has also moved care from hospitals to community sites and from long-term hospital stays to overnight surgical and ambulatory settings.

Even in light of these changes, much more still needs to be done. National health care goals established in 2000 for the year 2010 continue to stress the importance of maternal and child health to overall community health (Department of Health and Human Services [DHHS], 2000). Although health care may be more advanced, it is still not accessible to everyone. These and other social changes and trends have expanded the roles of nurses in maternal and child health care and, at the same time, have made the delivery

TABLE 1.2

Summary of Nursing Theories

Terry is a 7-year-old girl who is hospitalized because her right arm was severely injured in an automobile accident. There is a high probability she will never have full use of the arm again. Terry's mother is concerned because Terry showed promise in art. Previously happy and active in Girl Scouts, Terry has spent most of every day since the accident sitting in her hospital bed silently watching television.

Theorist	Major Concepts of Theory	Emphasis of Care
Patricia Benner	Nursing is a caring relationship. Nurses grow from novice to expert as they practice in clinical settings.	Assess Terry as a whole. An expert nurse is able to do this intuitively from knowledge gained from practice.
Dorothy Johnson	A person comprises subsystems that must remain in balance for optimal functioning. Any actual or potential threat to this system balance is a nursing concern.	Assess the effect of lack of arm function on Terry as a whole; modify care to maintain function to all systems, not just musculoskeletal.
Imogene King	Nursing is a process of action, reaction, interaction, and transaction; needs are identified based on client's social system, perceptions, and health; the role of the nurse is to help the client achieve goal attainment.	Discuss with Terry the way she views herself and illness. She views herself as a well child, active in Girl Scouts and school; structure care to help her meet these perceptions.
Madeleine Leininger	The essence of nursing is care. To provide trans-cultural care, the nurse focuses on the study and analysis of different cultures with respect to caring behavior.	Assess Terry's family for beliefs about healing. Incorporate these into care.
Florence Nightingale	The role of the nurse is viewed as changing or structuring elements of the environment such as ventilation, temperature, odors, noise, and light to put the client into the best opportunity for recovery.	Turn Terry's bed into the sunlight; provide adequate covers for warmth; leave her comfortable with electronic games to occupy her time.
Betty Neuman	A person is an open system that interacts with the environment; nursing is aimed at reducing stressors through primary, secondary, and tertiary prevention.	Assess for stressors such as loss of self-esteem and derive ways to prevent further loss such as praising her for combing her own hair.
Dorothea Orem	The focus of nursing is on the individual; clients are assessed in terms of ability to complete self-care. Care given may be wholly compensatory (client has no role); partly compensatory (client participates in care); or supportive-educational (client performs own care).	Arrange overbed table so Terry can feed herself; urge her to participate in care by doing as much for herself as she can.
Ida Jean Orlando	The focus of the nurse is interaction with the client; effectiveness of care depends on the client's behavior and the nurse's reaction to that behavior. The client should define his or her own needs.	Ask Terry what she feels is her main need. Terry says that returning to school is what she wants most. Stress activities that allow her to maintain contact with school, such as doing homework or telephoning friends.
Rosemarie Rizzo Parse	Nursing is a human science. Health is a lived experience. Man-living-health as a single unit guides practice.	Ask Terry what being sick means to her. Allow her to participate in care decisions based on her response.
Hildegard Peplau	The promotion of health is viewed as the forward movement of the personality; this is accomplished through an interpersonal process that includes orientation, identification, exploitation, and resolution.	Plan care together with Terry. Encourage her to speak of school and accomplishments in Girl Scouts to retain self-esteem.
Martha Rogers	The purpose of nursing is to move the client toward optimal health; the nurse should view the client as whole and constantly changing and help people to interact in the best way possible with the environment.	Help Terry to make use of her left side as much as possible so that she returns to school and to her previous level of functioning as soon as possible.
Sister Callista Roy	The role of the nurse is to aid clients to adapt to the change caused by illness; levels of adaptation depend on the degree of environmental change and state of coping ability; full adaptation includes physiologic interdependence.	Assess Terry's ability to use her left hand to replace her right-hand functions, which are now lost; direct nursing care toward replacing deficit with other factors, self-concept, role function, and skills.

of quality maternal and child health nursing care a continuing challenge.

National Health Goals

In 1979, the U.S. Public Health Service first initiated the formulation of health care objectives. Health care goals were reestablished in 2000, to be completed in 2010 (DHHS, 2000). Many of these objectives directly involve maternal and child health care, because improving the health of this young age group will have such long-term effects. The nation's priority goals (leading health indicators) are shown in Box 1.5. Goals specific for each content area are highlighted in later chapters. National health goals are intended to help everyone more easily understand the importance of health promotion and disease prevention and to encourage wide participation in improving health in the next decade. Maternal and child health nurses need to be familiar with these goals, because nurses play a vital role in helping the nation achieve these objectives through both practice and research. The goals also serve as the basis for grant funding and financing of evidence-based practice.

Trends in the Maternal and Child Health Nursing Population

The maternal and child population is constantly changing because of changes in social structure, variations in family lifestyle, and changing patterns of illness. Table 1.3 summarizes some of the social changes that have occurred over the past 20 to 30 years that have altered health care priorities for maternal and child health nurses. Today, client advocacy, a philosophy of cost containment, an increased focus on health education, and new nursing roles are ways in which nurses have adapted to these changes.

Measuring Maternal and Child Health

Measuring maternal and child health is not as simple as defining a client as ill or well. Individual clients and health care practitioners may have different perspectives on illness and wellness. For example, some children with chronic but controllable asthma think of themselves as well; others with the same degree of involvement consider themselves ill. Although pregnancy is generally considered a well state, some women think of themselves as ill during this period. A more objective view of health is provided by national health statistics.

A number of statistical terms are used to express the outcome of pregnancies and births and to describe maternal child health (Box 1.6). Statistics for these terms require accurate collection and analysis so that the nation's health can be described accurately. Such statistics are useful for comparisons among states and for planning of future health care needs.

Birth Rate

The birth rate in the United States has gradually decreased over the past 10 years to 13.9 per 1,000 population at present (NCHS, 2005) (Fig. 1.2). Currently, the average family in the United States has 1.2 children. Boys are born more often than girls, at a rate of 1,050 boys to every 1,000 girls (NCHS, 2005). Births to teenaged mothers are steadily declining, and those to women older than 40 years of age are steadily increasing.

Fertility Rate

The term **fertility rate** reflects what proportion of women who could have babies are having them. The fertility rate is currently at 64.8%, a healthy reproductive rate for a country (NCHS, 2005).

Fetal Death Rate

Fetal death is defined as the death in utero of a child (fetus) weighing 500 g or more, roughly the weight of a fetus of 20 weeks' or more gestation. Fetal deaths may occur because of maternal factors (e.g., maternal disease, premature cervical dilation, maternal malnutrition) or fetal factors (e.g., fetal disease, chromosome abnormality, poor placental attachment). Many fetal deaths occur for reasons unknown. The fetal death rate is important in evaluating the health of a nation because it reflects the overall quality of maternal health and prenatal care. The emphasis on both preconceptual and prenatal care has helped to reduce this rate from a number as high as 18% in 1950 to 6.4% at present (NCHS, 2005).

Neonatal Death Rate

The first 28 days of life are known as the neonatal period, and an infant during this time is known as a **neonate.** The neonatal death rate reflects not only the quality of care available to women during pregnancy and childbirth but also the quality of care available to infants during the first month of life.

The leading causes of infant mortality during the first 4 weeks of life are prematurity (early gestational age), low birthweight (less than 2,500 g), and congenital anomalies. Approximately 80% of infants who die within 48 hours after birth weigh less than 2,500 g (5.5 lb). The proportion of infants born with low birthweight is about 7% of all births. This number rises slightly each year as better prenatal care allows infants who would have died in utero (fetal death) to be born and survive (Martin et al., 2005).

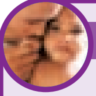
Perinatal Death Rate

The perinatal period is defined in a number of ways. Statistically, the period is defined as the time beginning when the fetus reaches 500 g (about week 20 of pregnancy) and ending about 4 to 6 weeks after birth. The perinatal death rate is the sum of the fetal and neonatal rates.

Maternal Mortality Rate

The **maternal mortality rate** is the number of maternal deaths that occur as a direct result of the reproductive process per 100,00 live births. Early in the 20th century, this rate in the United States reached levels as high as 600

BOX 1.5 FOCUS ON . . .



NATIONAL HEALTH GOALS

Leading Health Indicators

Physical Activity

Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychologic well-being, and preventing premature death. The objectives selected to measure progress in this area are:

- Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.
- Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.

Overweight and Obesity

Overweight and obesity are major contributors to many preventable causes of death. The objectives selected to measure progress in this area are:

- Reduce the proportion of children and adolescents who are overweight or obese.
- Reduce the proportion of adults who are obese.

Tobacco Use

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined. The objectives selected to measure progress in this area are:

- Reduce cigarette smoking by adolescents.
- Reduce cigarette smoking by adults.

Substance Abuse

Alcohol and illicit drug use are associated with many of this country's most serious problems, including violence, injury, and HIV infection. The objectives selected to measure progress in this area are:

- Increase the proportion of adolescents not using alcohol or any illicit drugs during the past 30 days.
- Reduce the proportion of adults using any illicit drug during the past 30 days.
- Reduce the proportion of adults engaging in binge drinking of alcoholic beverages during the past month.

Responsible Sexual Behavior

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual behavior. The objectives selected to measure progress in this area are:

- Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.
- Increase the proportion of sexually active persons who use condoms.

Mental Health

Approximately 20% of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. More than 19 million adults in the United States suffer from depression. Major depression is the leading cause of disability and is the cause of more than two thirds of suicides each year. The objective selected to measure progress in this area is:

- Increase the proportion of adults with recognized depression who receive treatment.

Injury and Violence

More than 400 Americans die each day from injuries, due primarily to motor vehicle crashes, firearms, poisonings, suffocation, falls, fires, and drowning. The risk of injury is so great that most persons sustain a significant injury at some time during their lives. The objectives selected to measure progress in this area are:

- Reduce deaths caused by motor vehicle crashes.
- Reduce homicides.

Environmental Quality

An estimated 25% of preventable illnesses worldwide can be attributed to poor environmental quality. In the United States, air pollution alone is estimated to be associated with 50,000 premature deaths and an estimated $40 billion to $50 billion in health-related costs annually. The objectives selected to measure progress in this area are:

- Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's health-based standards for ozone.
- Reduce the proportion of nonsmokers exposed to environmental tobacco smoke.

Immunization

Vaccines are among the greatest public health achievements of the 20th century. Immunizations can prevent disability and death from infectious diseases for individuals and can help control the spread of infections within communities. The objectives selected to measure progress in this area are:

- Increase the proportion of young children who receive all vaccines that have been recommended for universal administration for at least 5 years.
- Increase the proportion of noninstitutionalized adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Access to Health Care

Strong predictors of access to quality health care include having health insurance, a higher income level, and a regular primary care provider or other source of ongoing health care. Use of clinical preventive services, such as early prenatal care, can serve as indicators of access to quality health care services. The objectives selected to measure progress in this area are:

- Increase the proportion of persons with health insurance.
- Increase the proportion of persons who have a specific source of ongoing care.
- Increase the proportion of pregnant women who begin prenatal care in the first trimester of pregnancy.

Department of Health and Human Services. (2000). Leading health indicators. *Healthy People 2010.* Washington, D.C.: DHHS.

TABLE 1.3

Trends in Maternal and Child Health Care and Implications for Nurses

Trend	Implications for Nursing
Families are smaller than in previous decades.	Fewer family members are present as support in a time of crisis. Nurses must fulfill this role more than ever before.
Single parents are increasing in number.	A single parent may have fewer financial resources; this is more likely if the parent is a woman. Nurses need to inform parents of care options and to provide a backup opinion when needed.
An increasing number of women work outside the home.	Health care must be scheduled at times a working parent can bring a child for care. Problems of latch-key children and the selection of child care centers need to be discussed.
Families are more mobile than previously; there is an increase in the number of homeless women and children.	Good interviewing is necessary with mobile families so a health database can be established; education for health monitoring is important.
Abuse is more common than ever before.	Screening for child or intimate partner abuse should be included in family contacts. Be aware of the legal responsibilities for reporting abuse.
Families are more health-conscious than previously.	Families are ripe for health education; providing this can be a major nursing role.
Health care must respect cost containment.	Comprehensive care is necessary in primary care settings because referral to specialists may no longer be an option.

per 100,000 live births. It is still that high in developing countries. In the United States at present, the maternal mortality rate has declined to a low of 6.5 per 100,000 live births (NCHS, 2005) (Fig. 1.3). This dramatic decrease can be attributed to improved preconceptual, prenatal, labor and birth, and postpartum care, such as the following:

- Greater detection of disorders such as ectopic pregnancy or placenta previa and prevention of related complications through the use of ultrasound
- Increased control of complications associated with hypertension of pregnancy
- Decreased use of anesthesia with childbirth

For most of the 20th century, uterine hemorrhage and infection were the leading causes of death during pregnancy and childbirth. This has changed because of the increased ability to prevent or control hemorrhage and infection, and now hypertensive disorders are the leading causes of death in childbirth. Pregnancy-induced hypertension adds to preexisting hypertensive disorders, especially in older women. Nurses who are alert to the signs and symptoms of hypertension are invaluable guardians of the health of pregnant and postpartum women.

BOX 1.6

Statistical Terms Used to Report Maternal and Child Health

Birth rate: The number of births per 1,000 population.
Fertility rate: The number of pregnancies per 1,000 women of childbearing age.
Fetal death rate: The number of fetal deaths (over 500 g) per 1,000 live births.
Neonatal death rate: The number of deaths per 1,000 live births occurring at birth or in the first 28 days of life.
Perinatal death rate: The number of deaths of fetuses more than 500 g and in the first 28 days of life per 1,000 live births.
Maternal mortality rate: The number of maternal deaths per 100,000 live births that occur as a direct result of the reproductive process.
Infant mortality rate: The number of deaths per 1,000 live births occurring at birth or in the first 12 months of life.
Childhood mortality rate: The number of deaths per 1,000 population in children, 1 to 14 years of age.

Infant Mortality Rate

The infant mortality rate of a country is an index of its general health, because it measures the quality of pregnancy care, nutrition, and sanitation as well as infant health. This rate is the traditional standard used to compare the state of national health care with that of previous years or of other countries.

Thanks to health care advances and improvements in child care, the infant mortality rate in the United States has been steadily declining in recent years; it has reached a record low of 6.9 per 1,000 population (NCHS, 2005). Unfortunately, infant mortality is not equal for all people. African-American infants, for example, have a mortality rate of almost 15% (NCHS, 2005). This difference in African-American and white infant deaths is thought to be related to the higher proportion of births to young African-American

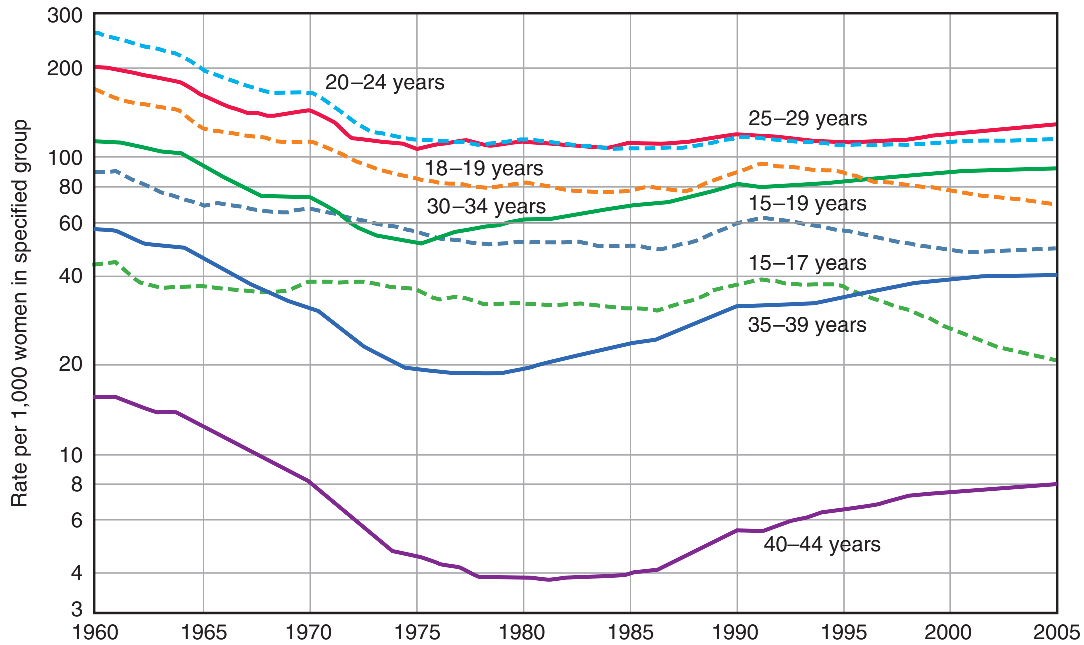


FIGURE 1.2 Birth rates by age of mother: United States, 1960–2004. (National Center for Health Statistics. [2004]. Births, marriages, divorces and deaths. *National Vital Statistics Report, 49*(1), 6.)

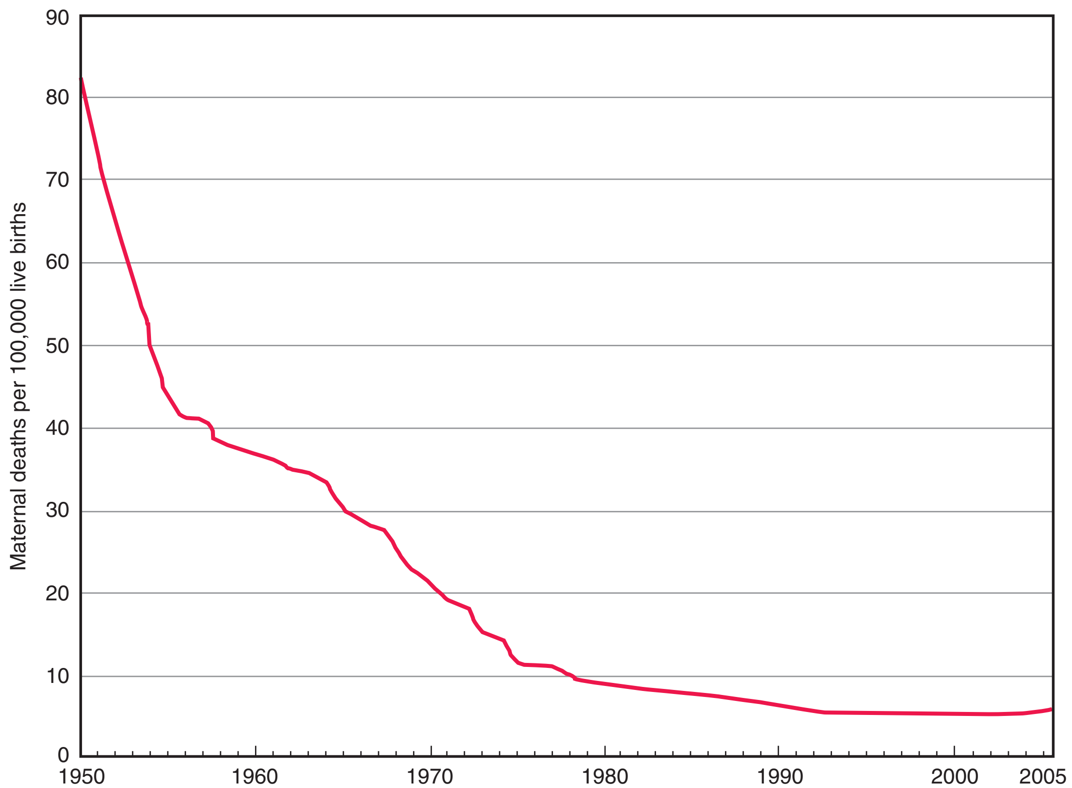


FIGURE 1.3 Maternal mortality rates, 2004. (National Center for Health Statistics. [2004]. *National Vital Statistics Report, 50*(1), 3.)

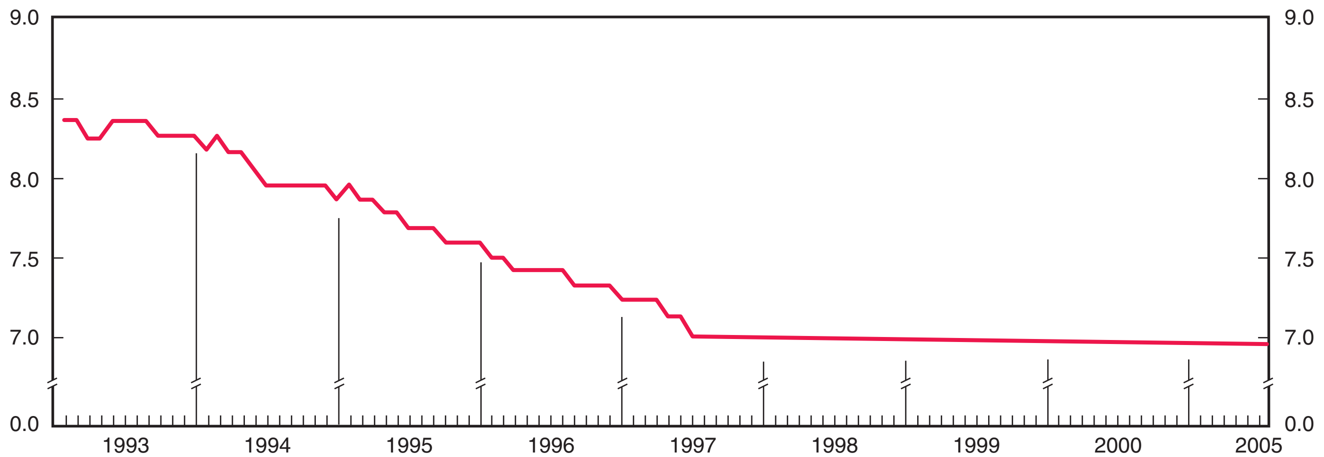


FIGURE 1.4 Infant mortality rates per 1,000 live births for successive 12-month periods ending with month indicated: United States, 2004. (National Center for Health Statistics. [2004]. Births, marriages, divorce and deaths. *National Vital Statistics Report, 50*(1), 2.)

mothers, unequal provision of health care, and the higher percentage of low-birthweight babies born to African-American women: 12%, compared with approximately 5% for white and Asian women (NCHS, 2005). Despite this negative trend, the overall steady drop in total infant mortality is encouraging (Martin et al., 2005) (Fig. 1.4).

The infant mortality rate also varies greatly from state to state within the United States (Table 1.4). For example, in the District of Columbia, the area with the highest infant mortality, the rate is more than two times that in Massachusetts, the state with the lowest rate.

Table 1.5 shows the ranking of the United States compared with other developed countries. One would expect that a country such as the United States, which has one of the highest gross national products in the world and is known for its technological capabilities, would have the lowest infant mortality rate. However, in 2000, the U.S. infant mortality rate was higher than that of 27 other countries (United Nations, 2000).

One factor that may contribute to national differences in infant mortality is the type of health care available. In Sweden, for example, a comprehensive health care program provides free maternal and child health care to all residents. Women who attend prenatal clinics early in pregnancy receive a monetary award; this almost guarantees that all women will come for prenatal care. Many people believe that a guaranteed health care system such as this would lead to lower infant mortality in the United States.

TABLE 1.4

Infant Mortality Rates per 1,000 by State

State	Rate	State	Rate	State	Rate
Massachusetts	4.8	South Dakota	6.4	Missouri	7.7
New Hampshire	4.9	Wyoming	6.5	Ohio	7.7
Maine	5.1	Idaho	6.6	Illinois	7.8
Utah	5.3	Arizona	6.7	North Dakota	7.8
California	5.4	Kentucky	6.7	West Virginia	7.9
Minnesota	5.5	Rhode Island	6.7	Oklahoma	8.0
Oregon	5.5	Alaska	6.8	Michigan	8.1
Texas	5.5	Montana	6.9	Arkansas	8.3
Washington	5.5	Wisconsin	6.9	North Carolina	8.4
Iowa	5.8	Kansas	7.0	Georgia	8.7
Colorado	6.0	Nebraska	7.0	South Carolina	9.0
Nevada	6.0	Florida	7.2	Tennessee	9.0
New Jersey	6.1	Hawaii	7.2	Alabama	9.3
New York	6.1	Virginia	7.2	Delaware	9.6
Vermont	6.2	Pennsylvania	7.3	Louisiana	9.8
Connecticut	6.4	Indiana	7.7	District of Columbia	11.4
New Mexico	6.4	Maryland	7.7		

National Center for Health Statistics. (2005). *Trends in the health of Americans.* Hyattsville, MD: NCHS.

TABLE 1.5

Infant Mortality Rate (Deaths per 1,000 Live Births) for Selected Countries, 2000

COUNTRY	Girls	Boys
1. Japan	3	4
2. Sweden	3	4
3. Finland	4	4
4. Hong Kong SAR	4	4
5. Austria	4	5
6. Belgium	4	5
7. Germany	4	5
8. Iceland	4	5
9. Netherlands	4	5
10. Norway	4	5
11. Singapore	4	5
12. Switzerland	4	5
13. Czech Republic	5	5
14. Denmark	5	5
15. France	5	5
16. Australia	5	6
17. Canada	5	6
18. Italy	5	6
19. Slovenia	5	6
20. Spain	5	6
21. United Kingdom	5	6
22. Ireland	6	6
23. Israel	6	6
24. Luxembourg	6	6
25. New Zealand	6	6
26. Greece	6	7
27. Portugal	6	7
28. United States	7	7

United Nations Statistics Division. (2000). Infant mortality. *The world's women 2000: Trends and statistics.* New York: Author.

Fortunately, the proportion of pregnant women who receive prenatal care in the United States is increasing (about 80% now begin care in the first trimester). Early prenatal care is important, because it identifies potential risks and allows preventive strategies to help reduce complications of pregnancy. The United States also differs from other countries in the increased number of infants born to adolescent mothers (30% of infants are born to mothers younger than 20 years of age). Because teenage pregnancy leads to increased premature births, this may result in infants being born who are not as well prepared as others to face extrauterine life.

The main causes of early infant death in the United States are problems that occur at birth or shortly thereafter. Prematurity, low birthweight, congenital anomalies, sudden infant death syndrome, and respiratory distress syndrome are major causes. Although other factors that contribute to sudden infant death syndrome are yet to be determined, the recommendation to place infants on their back or side to sleep, made by the American Academy of Pediatrics in 1992, has led to an almost 50% decrease in its incidence (Daley, 2004).

Before antibiotics and formula sterilization practices became available, gastrointestinal disease was a leading cause of infant death. By advocating breast-feeding and teaching mothers strict adherence to good sanitary practices, health care practitioners can help ensure that gastrointestinal infection does not again become a major factor in infant mortality.

Checkpoint Question 2

Nursing is changing because social change affects care. Which of the following is a trend that is occurring in nursing because of social change?

a. So many children are treated in ambulatory units that nurses are hardly needed.
b. Immunizations are no longer needed for infectious diseases.
c. The use of skilled technology has made nursing care more complex.
d. Pregnant women are so healthy today that they rarely need prenatal care.

Childhood Mortality Rate

Like the infant mortality rate, the childhood mortality rate in the United States is also declining. In 1980, for example, the mortality rate was about 6.4% for children aged 1 to 4 years and 3.1% for children aged 4 to 14 years; today, it is 3.0% and 1.8%, respectively (NCHS, 2005). The risk of death in the first year of life is higher than that in any other year before age 55. Children in the prepubescent period (age 5 to 14 years) have the lowest mortality rate of any child age group (NCHS, 2005).

The most frequent causes of childhood death are shown in Box 1.7. Motor vehicle accidents remain the leading cause of death in children, although many of these accidents are largely preventable through education about the value of car seats and seat belt use, the dangers of drinking/drug abuse and driving, and the importance of pedestrian safety.

A particularly disturbing mortality statistic is the high incidence of suicide in the 15-to-24-year-old age group (more girls than boys attempt suicide, but boys are more successful). Although school-age children and adolescents may not voice feelings of depression or anger during a health care visit, such underlying feelings may actually be a primary concern. Nurses who are alert to cues of depression or anger can be helpful in detecting these emotions and lowering the risk of suicide. The high incidence of homicide (1.5% in school-age children and 20% in adolescents) and an increase in the number of adolescents infected with human immunodeficiency virus (HIV) are also growing concerns.

Childhood Morbidity Rate

Health problems commonly occurring in large proportions of children today include respiratory disorders (including asthma and tuberculosis), gastrointestinal disturbances, and consequences of injuries. As more immunizations become available, fewer children in the United States are affected by common childhood communicable diseases. For instance, the incidence of poliomyelitis (once a major killer

BOX 1.7

Major Causes of Death in Childhood

Under 1 Year

Congenital malformations, chromosomal abnormalities
Disorders related to short gestation age and low birthweight
Sudden infant death syndrome
Newborn affected by maternal complications of pregnancy
Newborn affected by complications of placenta, cord, or membranes
Unintentional injuries
Respiratory distress of newborn
Bacterial sepsis of newborn
Diseases of the circulatory system
Intrauterine hypoxia and birth asphyxia

1–4 Years

Unintentional injuries
Congenital malformations, chromosomal abnormalities
Homicide
Malignant neoplasms
Diseases of the heart
Influenza and pneumonia
Septicemia
Chronic lower respiratory tract diseases
Disorders originating in the perinatal period
Benign neoplasms

5–14 Years

Unintentional injuries
Malignant neoplasms
Congenital malformations, chromosomal abnormalities
Homicide
Suicide
Diseases of the heart
Chronic lower respiratory tract diseases
Septicemia
Cerebrovascular accident
Influenza and pneumonia

15–24 Years

Unintentional injuries
Homicide
Suicide
Malignant neoplasm
Diseases of the heart
Congenital malformations, chromosomal abnormalities
Chronic lower respiratory tract diseases
Human immunodeficiency virus (HIV) disease
Diabetes mellitus
Cerebrovascular diseases

National Center for Health Statistics. (2005). *Trends in the health of Americans.* Hyattsville, MD: NCHS.

of children) is now extremely low (almost zero), because almost all children in the United States are immunized against it (NCHS, 2005). Measles flared in incidence in the early 1990s but now is scheduled as a disease to be completely eradicated by 2010. It is important that this happen, because measles encephalitis can be as destructive and lethal as poliomyelitis. Continued education about the benefits of immunization against rubella (German measles) is also needed, because if a woman contracts this form of measles during pregnancy, her infant may be born with severe congenital anomalies.

Although the decline in the overall incidence of preventable childhood diseases is encouraging, as many as 50% of children younger than 4 years of age in some communities are still not fully immunized (NCHS, 2005). There is a potential for childhood infectious diseases to increase again if immunization is not maintained as a high national priority.

The advent of HIV disease has changed care considerations in all areas of nursing, but it has particular implications for maternal and child health nursing. Childbearing women and sexually active teenagers are at risk for becoming infected with HIV through sexual contact or exposure to blood and blood products; in addition, infected women may transmit the virus to a fetus during pregnancy through placental exchange. To help prevent the spread of HIV, adolescents and young adults must be educated about safer sexual practices. Standard precautions must be strictly followed in maternal and child health nursing, as in other areas of nursing practice, to safeguard health care providers and other clients.

Other infectious diseases that are increasing in incidence include syphilis, genital herpes, hepatitis A and B, and tuberculosis. The rise in cases of syphilis and genital herpes probably stems from an increase in nonmonogamous sexual relationships and lack of safer sex practices. The increase in hepatitis B is due largely to drug abuse and the use of infected injection equipment. One reason for the increase in hepatitis A is shared diaper-changing facilities in day care centers. Tuberculosis, once considered close to eradication, has experienced a resurgence, occurring today at approximately the same rate as measles in young adults. One form occurs as an opportunistic disease in HIV-positive persons and is particularly resistant to the usual therapy (Burgos et al., 2003).

Trends in Health Care Environment

The settings for maternal and child health care are changing to better meet the needs of increasingly well-informed and vocal consumers.

Cost Containment

Cost containment refers to systems of health care delivery that focus on reducing the cost of health care by closely

monitoring the cost of personnel, use and brands of supplies, length of hospital stays, number of procedures carried out, and number of referrals requested (Schwartz, 2003).

Before the philosophy of cost containment became prominent, health care insurance paid separately for each procedure or piece of equipment the client received. Under managed care, the agency receives a certain sum of money for the client's care, no matter how many supplies, procedures, or personnel are used in care. In a managed care environment, helping to curtail cost is an important nursing function. Suggestions such as using generic-brand supplies, never breaking into kits of supplies to remove a single item, and urging the use of disposable supplies so that less personnel time will be spent on cleaning and sterilizing are welcome, cost-effective suggestions.

Cost containment has had dramatic effects on health care, most noticeably in limiting the number of hospital days and changing the roles of personnel. Before managed care, women stayed in a hospital for 3 or 4 days after childbirth; today, they rarely stay longer than 48 hours. Before managed care, nurses completed all care procedures for patients, no matter how small or unskilled the task. With managed care, ancillary personnel (e.g., unlicensed assistive personnel) perform many tasks under the supervision of the nurse. This system is designed to move the registered nurse (RN) to a higher level of function, because it makes the RN accountable for a fuller range of services to patients. It accentuates point-of-service care. It also increases the accountability and responsibility of RNs to delegate tasks appropriately. As a result of managed care, the new advanced-practice role of case manager has been created.

It is important to know the legal aspects of delegation, as identified in individual state nursing practice acts, because some laws address specific tasks and activities that RNs may or may not delegate in that state. Accountability for completion and quality of the task remains with the nurse, so the nurse is responsible for knowing that the condition of the patient and the skill level of the assistive person are conducive to safe delegation. There are four rules to follow when delegating:

- Right task for the situation
- Right person to complete the task
- Right communication concerning what is to be done
- Right feedback or evaluation that the task was completed

Examples of delegation responsibility that can occur in maternal and child health are highlighted in the Multidisciplinary Care Maps located throughout this text.

When managed care was introduced, it was viewed as a system that could lead to poor-quality nursing care because it limits the number of supplies and time available for care. In settings where it works well, however, it has increased opportunities for nurses because it rewards creativity.

Alternative Settings and Styles for Health Care

The last 100 years has seen several major shifts in settings for maternity care. At the turn of the 19th century, most births took place in the home, with only the very poor or ill giving birth in "lying-in" hospitals. By 1940, about 40% of live births occurred in hospitals, and today the figure has risen to 98% (DHHS, 2005). Today, a less dramatic but no less important trend is occurring: an increasing number of families are once more choosing childbirth at home or in alternative birth settings rather than hospitals. These alternative settings provide families with increased control of the birth experience and options for birth surroundings unavailable in hospitals. One strength of this movement is its encouragement of family involvement in birth. It also increases nursing responsibility for assessment and professional judgment and provides expanded roles for nurse practitioners, such as the nurse-midwife. Of all births in the United States, 5% currently are attended by midwives rather than physicians (Martin et al., 2005).

Hospitals have responded to consumers' demand for a more natural childbirth environment by refitting labor and delivery suites as birthing rooms, often called labor-delivery-recovery (LDR) or labor-delivery-recovery-postpartum (LDRP) rooms. Partners, family members, and other support people may remain in the room, which is designed to be a homelike environment, and participate in the childbirth experience (Fig. 1.5). Couplet care—care for both the mother and newborn by the primary nurse—is encouraged after the births. LDRP rooms promote a holistic, family-centered approach to maternal and child health care and are appealing to many families who might otherwise have opted against a hospital birth. However, LDRPs are not without fault. It has been argued that they are less private for laboring families, tend to be less relaxing for postpartum families, and make it difficult for nurses to manage the needs of women both in labor and after birth. Many hospitals are continuing to search for the best labor, delivery, and postpartum options. Whether childbirth takes place at home, in a birthing center, or in a hospital, the goal is to keep it as natural as possible while ensuring the protection that experienced nurse-midwives or physicians can provide.

Health care settings for children are also changing. Clients' homes, community centers, ambulatory clinics, well-baby clinics, schools, and group homes are some settings in which comprehensive health care may be administered. In these settings, a nurse may provide immunizations, screenings, health and safety education, counseling, crisis

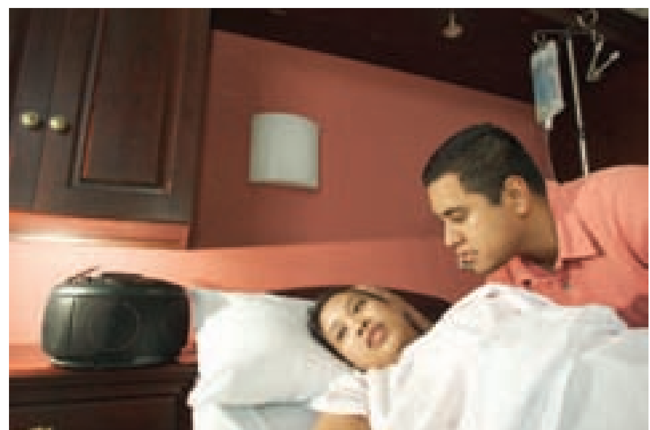


FIGURE 1.5 A couple, soon to be parents, share a close moment in a birthing room.

intervention for teens, parenting classes, and care of the ill child and family. Community-based care can provide cost-effective health promotion, disease prevention, and patient care to a large number of children and families in an environment that is familiar to them.

Strengthening the Ambulatory Care System

The ambulatory care system continues to broaden its base. More and more people who might otherwise have been admitted to a hospital are now being cared for in ambulatory clinics or at home. This option has proved especially important in the care of sick children and women who are experiencing a pregnancy complication or who want early discharge after childbirth. Separating a child from his or her family during an illness has been shown to be potentially harmful to the child's development, so any effort to reduce the incidence of separation should have a positive effect (see Chapter 35). Avoiding long hospital stays for women during pregnancy is also a preferable method of care, because it helps to maintain family contact.

What if... Melissa Chung has to remain in the hospital after the birth of her new baby while her baby is transported to a regional center for care? How could you help her keep in touch with her new baby?

Shortening Hospital Stays

More and more hospitals perform children's surgeries such as tonsillectomy or umbilical or inguinal hernia repair without requiring an overnight stay. Early on the morning of surgery, the parent and child arrive at the hospital, and the child receives a preoperative physical examination and medication. After surgery, the child is sent to a recovery room and then to a short-term observation unit. If the child is doing well and shows no complications by about 4 hours after surgery, he or she can be discharged. Similarly, women who have begun preterm labor stay in the hospital while labor is halted and then are allowed to return home on medication with continued monitoring. The routine hospital stay for mothers and newborns after an uncomplicated birth is now 2 days or less.

Short-term hospital stays require intensive health teaching by the nursing staff and follow-up by home care or community health nurses. Parents must be taught to watch for danger signs in the child without being frightened. A woman with a complication of pregnancy must be taught to watch for signs that warrant immediate attention. New parents must be taught about their newborn's nutritional needs, umbilical cord care, bathing, and safety considerations, all before the euphoria and fatigue of childbirth have begun to wear off. This type of teaching is difficult, because it includes not only imparting the facts of self-care but also providing support and reassurance that the client or parents are capable of this level of care.

Including the Family in Health Care

Most hospitals have developed policies that minimize the effects of separation from parents when children must be admitted for extended stays. Open visiting hours allow parents to visit as much as possible and sleep overnight in a bed next to their child. Parents also are allowed and encouraged to do as much for the child as they wish during a hospital stay, such as feeding and bathing the child or administering oral medicine. Most of a parent's time, however, is spent simply being close by to provide a comfortable, secure influence on the child. For the same reasons, parents on a maternity unit are encouraged to room-in and give total care to their well newborn (Box 1.8).

Because parents are so important to their child's hospital experience and overall well-being, family-centered nursing is vital. Therefore, the nurse's client load will not be just four children, for example, but four children plus four sets of parents; not just a single newborn, but his or her two parents as well.

Increase in the Number of Intensive Care Units

Over the past 20 years, care of infants and children has become extremely technical. It is generally assumed that newborns with a term birthweight (more than 2,500 g or 5.5 lb) will thrive at birth. However, many infants are born each year with birthweights lower than 2,500 g or who are ill at birth and do not thrive. Such infants are regularly transferred to a neonatal intensive care unit (NICU) or in-

BOX 1.8 FOCUS ON . . .

EVIDENCE-BASED PRACTICE

What are the ingredients of effective family-centered care?

Working on the premise that family-centered care is best achieved when a mutually beneficial partnership exists between health care providers and families, nurse researchers attempted to identify health care practices that promote or limit a family-centered philosophy. For the study, 34 women (mostly African-American) who were using maternity services at a large urban hospital were interviewed as to what they liked or didn't like about their maternity care. The results revealed two important perceived barriers to family-centered maternity care: problems among health caregivers in coordinating services and lack of patient access to services. Factors that aided effective care were prompt response to high-risk patients and the availability of health-related support outside the hospital. The authors concluded that each childbearing woman and her family should be treated, in clinical situations, as if they were extraordinary. In this way, practitioners can alter routines that cause the woman and her family to lose individualized care.

Source: Gramling, L., Hickman, K., & Bennett, S. (2004). What makes a good family-centered partnership between women and their practitioners? A qualitative study. *Birth, 31*(1), 43–48.

tensive care nursery (ICN). Children who are undergoing cardiac surgery or recovering from near-drownings or multiinjury accidents are cared for in a pediatric intensive care unit (PICU). Intensive care at this early point in life is one of the most costly types of hospitalization. Expenses of $1,000 a day, or $20,000 to $100,000 for a total hospital stay, are not rare for care during a high-risk pregnancy or care for a high-risk infant. As the number of these settings increases, the opportunities for advanced-practice nurses also increase.

Regionalization of Intensive Care

To avoid duplication of care sites, it is an accepted practice for communities to establish centralized maternal or pediatric health services. Such planning creates one site that is properly staffed and equipped for potential problems. For example, ill newborns may be transported to a central high-risk nursery for care. High-risk pregnant women and ill children may be cared for in a regional setting equipped with specialized resources for the diagnosis and treatment of specific health problems. When a newborn, older child, or parent is hospitalized in a regional center, the family members who have been left behind need a great deal of support. They may feel they have "lost" their infant, child, or parent unless health care personnel keep them abreast of the ill family member's progress by means of phone calls and snapshots and encourage the family to visit as soon as possible.

When regionalization concepts of newborn care first became accepted, transporting the ill or premature newborn to the regional care facility was the method of choice (Fig. 1.6). Today, however, if it is known in advance that a child may be born with a life-threatening condition, it may be safer to transport the mother to the regional center during pregnancy, because the uterus has advantages as a transport incubator that far exceed those of any commercial incubator yet designed.

An important argument against regionalization for pediatric care is that children will feel homesick in strange settings, overwhelmed by the number of sick children they see, and frightened because they are miles from home. An important argument against regionalization of maternal care is that being away from her community and support network places a great deal of stress on the pregnant woman and her family and limits her own doctor's participation in her care. These are important considerations. Because nurses more than any other health care group set the tone for hospitals, they are responsible for ensuring that clients and families feel as welcome in the regional centers as they would have been in a small hospital. Staffing should be adequate to allow sufficient time for nurses to comfort frightened children and prepare them for new experiences or to support the pregnant woman and her family. Documenting the importance of such actions allows them to be incorporated in critical pathways and preserves the importance of the nurse's role.

Increased Reliance on Comprehensive Care Settings

Comprehensive health care is designed to meet all of a child's needs in one setting. In the past, care of children tended to be specialized. For example, a child born with an illness (e.g., myelomeningocele, cerebral palsy) might have been followed by a team of specialists for each facet of the problem. Such a team might include a neurologist, a physical therapist, an occupational therapist, a psychologist for intelligence quotient testing, a speech therapist, an orthopedic surgeon, and finally, a special education teacher. The parents might need to find a special dentist who accepts clients with multiple disabilities. Each specialist would look at only one area of the child's needs rather than the whole child's development. Without extra guidance, parents would find themselves lost in a maze of visits to different health care personnel. If they were not receiving financial support for their child's care, they might not have been able to afford all the necessary services at one time. It might have been difficult to decide which of the child's problems needed to be treated immediately and which could be left untreated without worsening and developing into a permanent disability. Although specialists are still important to a child's care, a trusted primary care provider to help parents coordinate these specialized services is essential in today's managed care environment. In many settings, this primary care provider, who follows the child through all phases of care, is an advanced-practice nurse such as a family nurse practitioner, pediatric nurse practitioner, or a women's health nurse practitioner. Nurses can be helpful in seeing that both parents and children have all their needs met by a primary health care provider in this way. The family must become empowered to seek out a family-centered setting that will be best for their health (Box 1.9).

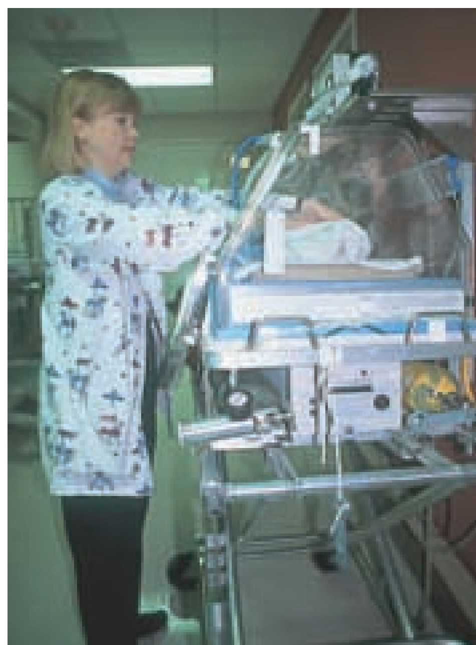


FIGURE 1.6 A nurse prepares an infant transport incubator to move a premature infant to a regional hospital. Helping with safe movement of pregnant women and ill newborns to regional centers is an important nursing responsibility. (© Caroline Brown, RNC, MS, DEd.)

BOX 1.9 FOCUS ON . . .

FAMILY TEACHING

Tips for Selecting a Health Care Setting

Q. Melissa Chung, the patient you met at the beginning of the chapter, asks you, "With so many health care choices and settings available, how do we know which one to choose?"

A. When selecting a health care setting, use the following as a guide to help you decide what is best for your family:

- Can it be reached easily? (Going for preventive care when well or for care when ill should not be a chore.)
- Will the staff provide continuity of care so you'll always see the same primary care provider if possible?
- Does the physical setup of the facility provide for a sense of privacy, yet a sense that health care providers share pertinent information so you do not have to repeat your history at each visit?
- Is the cost of care and the number of referrals to specialists explained clearly?
- Are preventive care and health education stressed (keeping well is as important as recovering from illness)?
- Do health care providers respect your opinion and ask for your input on health care decisions?
- Do health care providers show a personal interest in you?
- Is health education done at your learning level?
- Is the facility accessible to handicapped individuals?

Increased Use of Alternative Treatment Modalities

There is a growing tendency for families to consult providers of alternative forms of therapy, such as acupuncture or therapeutic touch, in addition to, or instead of, traditional health care providers. Nurses have an increasing obligation to be aware of complementary or alternative therapies, which have the potential to either enhance or detract from the effectiveness of traditional therapy (Fletcher & Clarke, 2004; Weier & Beal, 2004).

In addition, health care providers who are unaware of the existence of some alternative forms of therapy may lose an important opportunity to capitalize on the positive features of that particular therapy. For instance, it would be important to know that an adolescent who is about to undergo a painful procedure is experienced at meditation, because asking the adolescent if she wants to meditate before the procedure could help her relax. Not only could this decrease the child's discomfort, but it could also offer her a feeling of control over a difficult situation. People are using an increasing number of herbal remedies, so asking about these at health assessment is important to prevent drug interactions. Ginger, for example, is frequently taken during pregnancy to relieve morning sickness (Senyak et al., 2005).

Increased Reliance on Home Care

Early hospital discharge has resulted in the return home of many women and children before they are fully ready to care for themselves. Ill children and women with complications of pregnancy may choose to remain at home for care rather than be hospitalized. This has created a "second system" of care requiring many additional care providers (Asensio et al., 2005). Nurses are instrumental in assessing women and children on hospital discharge to help plan the best type of continuing care, devise and modify procedures for home care, and sustain clients' morale and interest in health care during such situations as home monitoring to prevent premature labor. Because home care is a unique and expanding area in maternal and child health nursing, it is discussed in relation to maternal care in Chapter 16 and in relation to children in Chapter 35.

Increased Use of Technology

The use of technology is increasing in all health care settings. The field of assisted reproduction (e.g., in vitro fertilization), with the possibility of stem cell research, is forging new pathways (Jain et al., 2004). Charting by computer, seeking information on the Internet, and monitoring fetal heart rates by Doppler ultrasonography are other examples. In addition to learning these technologies, maternal and child health nurses must be able to explain their use and their advantages to clients. Otherwise, clients may find new technologies more frightening than helpful to them.

Health Care Concerns and Attitudes

The 1980s brought about considerable change in the health care system. As we progress through the 21st century, there are likely to be even more changes as the United States actively works toward effective health goals and improved health care for all citizens. These steps can create new concerns.

Increasing Concern Regarding Health Care Costs

The advent of managed care has concentrated efforts on reducing the cost of health care. This has direct implications for maternal and child health nursing, because nurses must become more cost-conscious about supplies and services. Lack of financial ability to pay and health care provider's insensitivity to cultural values are major reasons why women do not obtain prenatal care. A woman may fear that changing jobs or not working during pregnancy may lead to loss of insurance coverage, thereby reducing her ability to pay for services. As a result, she may continue to work long hours or in unfit conditions during pregnancy. Nurses are challenged to help reduce costs while maintaining quality care so that prenatal care remains available.

Increasing Emphasis on Preventive Care

A generally accepted theory is that it is better to keep individuals well than to restore health after they have become ill. Counseling parents on ways to keep their homes safe for children is an important form of illness prevention in maternal and child health nursing. Research supporting the facts that accidents are still a major cause of death in children and that women still do not receive preconceptual or prenatal care are testaments to the need for much more anticipatory guidance in this area.

Increasing Emphasis on Family-Centered Care

Health promotion with families during pregnancy or childrearing is a family-centered event, because teaching health awareness and good health habits is accomplished chiefly by role modeling. Illness in a child is automatically a family-centered event. Parents may need to adjust work schedules to allow one of them to stay with the ill child; siblings may have to sacrifice an activity such as a birthday party or having a parent watch their school play; and family finances may have to be readjusted to pay for hospital and medical bills. When a mother is pregnant, family roles or activities may have to change to safeguard her health. A family may feel drawn together by the fright and concern of an acute illness. On the other hand, if an illness becomes chronic, it may pull a family apart or destroy it.

By adopting a view of pregnancy, childbirth, or illness as a family event, nurses are well equipped to provide family-centered care. Nurses can be instrumental in including family members in events from which they were once totally excluded, such as an unplanned cesarean birth. They can help child health care to be family-centered by consulting with family members about a plan of care and providing clear health teaching so that family members can monitor their own care (Fig. 1.7). Nurses play an active role in both teaching health promotion and sustaining families through a child's illness.

In recent years, the U.S. government has recognized that the care of individual family members is a family-centered event. The Family Medical Leave Act of 1993 is a federal law that requires employers with 50 or more employees to provide a minimum of 12 weeks of unpaid, job-protected leave to employees under four circumstances crucial to family life:

- Birth of the employee's child
- Adoption or foster placement of a child with the employee
- Need for the employee to care for a parent, spouse, or child with a serious health condition
- Inability of the employee to perform his or her functions because of a serious health condition

A serious health condition is defined as "an illness, injury, impairment, or physical or mental condition involving such circumstances as inpatient care or incapacity requiring 3 workdays' absence" (U.S. Department of Labor, 1995). Specifically mentioned in the law is any period of incapacity due to pregnancy or for prenatal care with or without treatment. Illness must be documented by a health care provider. Nurse practitioners and nurse-midwives are specifically listed as those who can document a health condition.

FIGURE 1.7 A nurse involves the mother in a physical exam to promote family-centered care. (© Barbara Proud.)

Increasing Concern for the Quality of Life

In the past, health care of women and children was focused on maintaining physical health. More recently, however, a growing awareness that quality of life is as important as physical health has expanded the scope of health care to include the assessment of psychosocial facets of life in such areas as self-esteem and independence. Good interviewing skills are necessary to elicit this information at health care visits. Nurses can help obtain such information and also plan ways to improve quality of life in the areas the client considers most important.

One way in which quality of life is being improved for children with chronic illness is the national mandate to allow them to attend regular schools, guaranteeing entrance despite severe illness or use of medical equipment such as a ventilator (Public Law 99-452). Nurses serving as school nurses or consultants to schools play important roles in making these efforts possible.

Increasing Awareness of the Individuality of Clients

Maternal and child clients today do not fit readily into any set category. Varying family structures, cultural backgrounds, socioeconomic levels, and individual circumstances lead to unique and diverse clients. Some women having children are younger than ever before, and an increasing number of women are experiencing their first pregnancies after the age of 35 (Carolan, 2003). Many women are having children outside of marriage. Gay and lesbian couples are also beginning to raise families, conceiving children through artificial insemination or adoption. As a result of advances in research and therapy, women who were once unable to have children, such as those with cystic fibrosis, are now able to manage a full-term pregnancy. Individuals with cognitive and physical challenges are also establishing families and rearing children.

Many families who have come from foreign countries enter the U.S. health care system for the first time during a pregnancy or with a sick child. This requires a greater sensitivity on the part of health care providers to the sociocultural aspects of care. As the level of violence in the world increases, more and more families are exposed to living in violent communities. The incidence of abused children and pregnant women is also increasing. All of these concerns require increased nursing attention.

Empowerment of Health Care Consumers

In part because of the influence of market-driven care and a strengthened focus on health promotion and disease prevention, individuals and families have recently begun to take increased responsibility for their own health. This begins with learning preventive measures to stay well. For some families, it means following a more nutritious diet and planning regular exercise; for others, it can mean an entire change in lifestyle. When a family member is ill, empowerment means learning more about the illness, participating in the treatment plan, and preventing the illness from returning. Families are very interested in participating in decision making regarding their childbearing options. Parents want to accompany their ill children into the hospital for overnight stays. They are eager for information about their child's health and want to contribute to the decision-making process. They may question treatments or care plans that they believe are not in their child's best interest. If health care providers do not provide answers to a client's questions or are insensitive to needs, many health care consumers are willing to take their business to another health care setting.

Nurses can promote empowerment of parents and children by respecting their views and concerns, addressing clients by name, and regarding parents as important participants in their own or their child's health, keeping them informed and helping them to make decisions about care. Although a nurse may have seen 25 clients already in a particular day, he or she can make each client feel as important as the first by showing a warm manner and keen interest. Family Teaching displays are presented throughout this text to provide insight into ways in which nurses can help empower families.

What if... In the past, children with pneumonia were always hospitalized. What if Melissa Chung demands that her 6-year-old, diagnosed with pneumonia, be hospitalized, even though it is your clinic's policy to have such children cared for at home by their parents? Would you advocate for hospitalization or not?

ADVANCED-PRACTICE ROLES FOR NURSES IN MATERNAL AND CHILD HEALTH

As trends in maternal and child health care change, so do the roles of maternal and child health nurses. All maternal and child health nurses function in a variety of settings as caregivers, client advocates, researchers, case managers, and educators.

Many nurses with a specified number of years of direct patient care, clinical expertise, and validated completion of pertinent continuing education programs are certified in their specialty. In addition, maternal and child health nurses function in a variety of advanced-practice roles.

Clinical Nurse Specialists

Clinical nurse specialists are nurses prepared at the master's-degree level who are capable of acting as consultants in their area of expertise, as well as serving as role models, researchers, and teachers of quality nursing care. Examples of areas of specialization are neonatal, maternal, child, and adolescent health care; childbirth education; and lactation consultation.

Consider, for example, how a child health clinical specialist might intervene to help in the care of a 4-year-old child with diabetes mellitus who has been admitted to the hospital. The child is difficult to care for because he is so fearful of hospitalization and perplexed because his parents are having difficulty accepting his diagnosis. A clinical nurse specialist could be instrumental in helping a primary nurse organize care and in meeting with the parents to help them accept what is happening. Neonatal nurse specialists manage the care of infants at birth and in intensive care settings; they provide home follow-up care to ensure the newborn remains well. Childbirth educators teach families about normal birth and how to prepare for labor and birth. Lactation consultants educate women about breast-feeding and support them while they learn how to do this well themselves.

Case Manager

A case manager is a graduate-level nurse who supervises a group of patients from the time they enter a health care setting until they are discharged from the setting, or, in a seamless care system, into their homes as well, monitoring the effectiveness, cost, and satisfaction of their health care. Case management can be a vastly satisfying nursing role, because if the health care setting is "seamless," or one that follows people both during an illness and on their return to the community, it involves long-term contacts and lasting relationships (Peterson, 2004).

Women's Health Nurse Practitioner

A **women's health nurse practitioner** is a nurse with advanced study in the promotion of health and prevention of illness in women. Such a nurse plays a vital role in educating women about their bodies and sharing with them methods to prevent illness; in addition, they care for women with illnesses such as sexually transmitted infections, offering information and counseling them about reproductive life planning. They play a large role in helping women remain well so that they can enter a pregnancy in good health and maintain their health throughout life.

Family Nurse Practitioner

A **family nurse practitioner** (FNP) is an advanced-practice role that provides health care not only to women but to total families. In conjunction with a physician, an FNP can provide prenatal care for a woman with an uncomplicated pregnancy. The FNP takes the health and pregnancy history, performs physical and obstetric examinations, orders appropriate diagnostic and laboratory tests, and plans continued care throughout the pregnancy and for the family afterward. FNPs then monitor the family indefinitely to promote health and optimal family functioning.

Neonatal Nurse Practitioner

A **neonatal nurse practitioner** (NNP) is an advanced-practice role for nurses who are skilled in the care of newborns, both well and ill. NNPs may work in level 1, level 2, or level 3 newborn nurseries; neonatal follow-up clinics or physician groups. They also transport ill infants to different care settings. The NNP's responsibilities include managing and carrying out patient care in an intensive care unit, conducting normal newborn assessments and physical examinations, and providing high-risk follow-up discharge planning (Bissell, 2004).

Pediatric Nurse Practitioner

A **pediatric nurse practitioner** (PNP) is a nurse prepared with extensive skills in physical assessment, interviewing, and well-child counseling and care. In this role, a nurse interviews parents as part of an extensive health history and performs a physical assessment of the child (Fig. 1.8). If the nurse's diagnosis is that the child is well, he or she discusses with the parents any childrearing concerns mentioned in the interview, gives any immunizations needed, offers necessary anticipatory guidance (based on the plan of care), and arranges a return appointment for the next well-child checkup. The nurse has served as a primary health caregiver or as the sole health care person the parents and child see at that visit.

If the PNP determines that a child has a common illness (e.g., iron deficiency anemia), he or she orders the necessary laboratory tests and prescribes appropriate drugs for therapy. If the PNP determines that the child has a major illness (e.g., congenital subluxated hip, kidney disease, heart disease), he or she consults with an associated pediatrician; together, they decide what further care is necessary. Nurse practitioners may also work in inpatient or specialty settings providing continuity of care to hospitalized children. As school nurse practitioners, they provide care to all children in a given community or school setting.

Nurse-Midwife

Throughout history, the **nurse-midwife,** an individual educated in the two disciplines of nursing and midwifery and licensed according to the requirements of the American College of Nurse-Midwives (ACNM), has played an important role in assisting women with pregnancy and childbearing. Either independently or in association with an obstetrician, the nurse-midwife assumes full responsibility for the care and management of women with uncomplicated pregnancies. Nurse-midwives play a large role in making birth an unforgettable family event as well as helping to ensure a healthy outcome for both mother and child (Dawley, 2003) (Fig. 1.9).

LEGAL CONSIDERATIONS OF MATERNAL-CHILD PRACTICE

Legal concerns arise in all areas of health care. Maternal and child health nursing carries some legal concerns that extend above and beyond other areas of nursing, because care is often given to an "unseen client"—the fetus—or to clients who are not of legal age for giving consent for medical procedures. In addition, labor and birth of a neonate are considered "normal" events, so the risks for a lawsuit are greater when problems arise. Nurses are legally responsible for protecting the rights of their clients, including confidentiality, and are accountable for the quality of their individual nursing care and that of other health care team members. In a society in which child abuse is of national concern, nurses are becoming increasingly responsible for identifying and reporting incidents of suspected abuse in children.

FIGURE 1.8 A pediatric nurse practitioner examines a one-year-old child. (© Barbara Proud.)

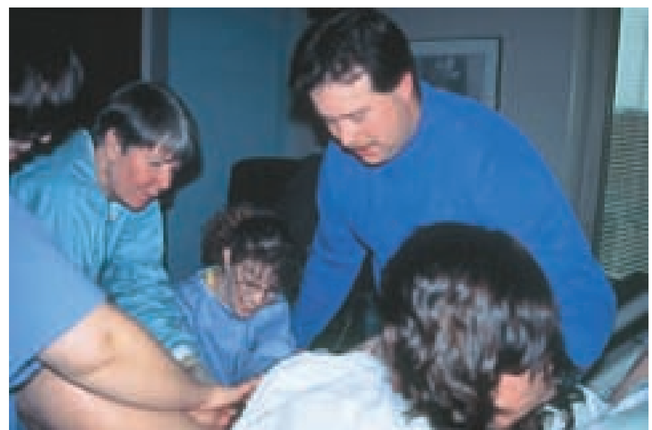


FIGURE 1.9 A nurse-midwife plays an important role in ensuring a safe and satisfying birth. (© Caroline Brown, RNC, MS, DEd.)

Understanding the **scope of practice** (the range of services and care that may be provided by a nurse based on state requirements) and standards of care can help nurses practice within appropriate legal parameters.

Documentation is essential in protecting a nurse and justifying his or her actions. This concern is long-lasting, because children who feel they were wronged by health care personnel can bring a lawsuit at the time they reach legal age. This means that a nursing note written today may need to be defended as many as 21 years into the future. Nurses need to be conscientious about obtaining informed consent for invasive procedures and determining that pregnant women are aware of any risk to the fetus associated with a procedure or test. In divorced or blended families (those in which two adults with children from previous relationships now live together), it is important to establish who has the right to give consent for health care. Personal liability insurance is strongly recommended for all nurses, so that they do not incur great financial losses during a malpractice or professional negligence suit.

If a nurse knows that the care provided by another practitioner was inappropriate or insufficient, he or she is legally responsible for reporting the incident. Failure to do so can lead to a charge of negligence or breach of duty.

The specific legal ramifications of procedures or care are discussed in later chapters that describe procedures or treatment modalities.

ETHICAL CONSIDERATIONS OF PRACTICE

Ethical issues are increasing in frequency in health care today. Some of the most difficult decisions in health care settings are those that involve children and their families. The following are just a few of the major potential conflicts:

- Conception issues, especially those related to in vitro fertilization, embryo transfer, ownership of frozen oocytes or sperm, cloning, stem cell research, and surrogate mothers
- Abortion, particularly partial-birth abortions
- Fetal rights versus rights of the mother
- Use of fetal tissue for research
- Resuscitation (for how long should it be continued?)
- The number of procedures or degree of pain that a child should be asked to endure to achieve a degree of better health
- The balance between modern technology and quality of life

Legal and ethical aspects of issues are often intertwined, which makes the decision-making process complex. Because maternal and child health nursing is so strongly family-centered, it is common to encounter some situations in which the interests of one family member are in conflict with those of another. It is not unusual for the values of a client not to match those of a health care provider. For example, if a pregnancy causes a woman to develop a serious illness, the family must make a decision either to terminate the pregnancy and lose the child or to keep the pregnancy and work to support the mother through the crisis. If the fetus is also at risk from the illness, the decision may be easier to make; however, the circumstances usually are not clearcut, and the decisions that need to be made are difficult. These and other issues are bound to emerge during the course of practice. Nurses can help clients who are facing such difficult decisions by providing factual information and supportive listening and by helping the family clarify their values.

The Pregnant Woman's Bill of Rights and the United Nations Declaration of Rights of the Child (see Appendix A) provide guidelines for determining the rights of clients in regard to health care.

Checkpoint Question 3

The best description of the FNP role is

a. To give bedside care to critically ill family members.
b. To supervise the health of children up to age 18 years.
c. To provide health supervision for families.
d. To supervise women during pregnancy.

Key Points

- Standards of maternal and child health nursing practice have been formulated by the American Nurses Association, the Society of Pediatric Nurses, and AWHONN to serve as guidelines for practice.
- Nursing theory and use of evidence-based practice are methods by which maternal and child health nursing expands and improves.
- The most meaningful and important measure of maternal and child health is the infant mortality rate. It is the number of deaths among infants from birth to 1 year of age per 1,000 live births. This rate is declining steadily, but in the United States it is still higher than in 27 other nations.
- Trends in maternal and child health nursing include changes in the settings of care, increased concern about health care costs, improved preventive care, and family-centered care.
- Advanced-practice roles in maternal and child health nursing include women's health, family, neonatal, and pediatric nurse practitioners; nurse-midwives; clinical nurse specialists; and case managers. All of these expanded roles contribute to make maternal and child health care an important area of nursing and health care.
- Maternal and child health care has both legal and ethical considerations and responsibilities over and above those in other areas of practice because of the role of the fetus and child.

Critical Thinking Exercises

1. How might family-centered care help the Chung family, described in the beginning of the chapter? How can you explain recent changes in health care so that

Melissa might understand why her hospital stay is so much shorter this time? How can you empower the family so that they feel more in control of what is happening to them?

2. Mrs. Chung says she has trouble paying for health care. Other countries throughout the world have a health care delivery system based not on profit but on provision of care for all citizens through a tax-supported program. The infant mortality rate in many of these countries is lower than in the United States. What are some reasons that might contribute to these lower rates?
3. The age at which women are having babies is increasing. For many women such as Melissa Chung, this age is now 35 years or older.
   a. How do you anticipate that this trend will change health care in the future?
   b. Are there special services that should be provided for such women?
   c. How will this trend influence childrearing in the future?
4. Examine the National Health Goals related to maternal, newborn, and child health. Most government-sponsored money for nursing research is allotted based on these goals. What would be a possible research topic to explore, pertinent to these goals, that would be applicable to the Chung family and would also advance evidence-based practice?

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