

# Contemporary Maternity Care, Family, and Cultural Considerations

## Objectives

1. Define key terms listed.
2. Compare two current birth settings for women.
3. Review how technology and research have influenced maternal-infant care.
4. Discuss the Human Genome Project in relation to the development of gene therapy.
5. Contrast a nursing care plan with a clinical pathway.
6. Identify the role of the nurse in the community-based setting.
7. State the influence of the federal government on maternity care.
8. List two reasons that statistics are important in maternal-infant care.
9. Discuss how standards of care influence nursing.
10. Explain evidence-based practice.
11. Recall three major components of communication.
12. Recognize the importance of documentation.
13. Illustrate the HIPAA rights of patients.
14. Discuss the five steps in the nursing process.
15. Define *critical thinking* and illustrate its use in nursing and in test taking.
16. Discuss how examining one's own culture can affect the care of a patient during the labor and delivery process.
17. Contrast defining characteristics of four family types.
18. Contrast complementary and alternative health care with conventional health care.
19. Illustrate the role of the nurse in alternative or complementary health care.

## Key Terms

**alternative therapies** (p. 14)

**birthing centers** (p. 2)

**certified nurse-midwives** (p. 3)

**clinical pathways** (p. 3)

**collaborative care** (p. 3)

**complementary therapies** (p. 14)

**critical thinking** (p. 9)

**culture** (p. 11)

**documentation** (p. 8)

**evidence-based practice** (p. 8)

**family** (p. 13)

**integrative health care** (p. 14)

**managed care** (p. 3)

**maternity nursing care** (p. 1)

**nursing care plans** (p. 9)

**nursing process** (p. 9)

**Quality and Safety Education for Nurses (QSEN)** (p. 7)

**standards of care** (p. 5)

**variances** (p. 4)

## MATERNITY NURSING CARE

### DEFINITION AND GOALS

**Maternity nursing care** is viewed as the care, support, instruction, and health promotion given by the nurse to the expectant woman, partner, and family during pregnancy, during labor, and after birth (the postpartum period). Maternity nursing is unique in that, for 9 months of pregnancy through birth, the caregiver's attention is focused almost equally on two people: the expectant mother and the fetus or newborn infant. In principle and practice, maternity nursing emphasizes the integrity of the family unit and considers *childbearing to be a normal physiologic process*. Wellness is an overriding concern,

with symptoms and complications being treated if they occur.

The strength of a society rests on the health of its mothers, infants, and families. The nurse's investment in health promotion during the childbearing process can make a significant difference, not only for women and their infants, but also for society.

The goal of maternity nursing care is for the expectant woman's pregnancy, labor, and birth to be as uneventful (normal) as possible, with the additional goal of ensuring the well-being of the newborn infant. In addition, most health care consumers want a satisfying, family-centered, and meaningful experience that meets their needs and expectations. More specific goals of maternity nursing care are found in Box 1-1.

### Box 1-1 Goals of Maternity Nursing Care

- Ensure the health of the woman during pregnancy, labor, birth, and the postpartum period.
- Help the expectant woman view pregnancy, labor, and birth as normal physiologic processes.
- Provide adequate support to make pregnancy a positive, gratifying experience.
- Provide adequate instruction to the expectant woman during pregnancy, labor, birth, and the postpartum period.
- Be sensitive to the expectant woman's social, spiritual, and economic needs.
- Assist in the early detection of deviations from the normal process of fetal development and maternal health.
- Encourage the parent-newborn attachment process.

## CURRENT TRENDS

### Birth Settings

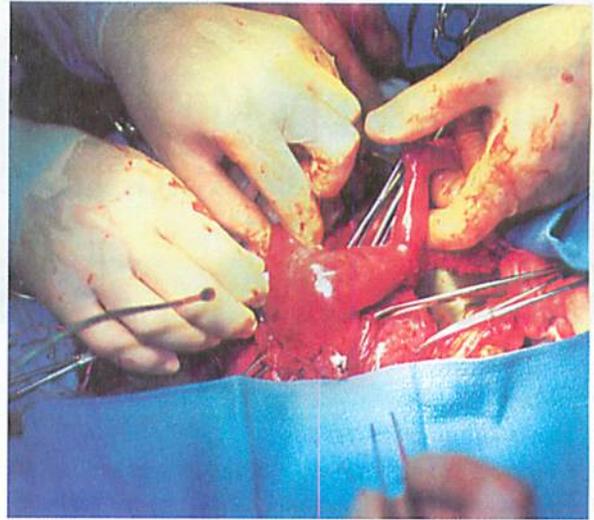
Health care consumers expect their childbirth experience to occur in “natural” surroundings. To meet this expectation, many hospitals have developed modified birth settings. The most common is the labor, delivery, and recovery (LDR) room, where normal birth and recovery take place in one setting. The woman may be transferred to a postpartum unit, but the newborn will usually remain with her. Some hospitals offer rooms in which women can remain throughout the postpartum experience (a labor, delivery, recovery, and postpartum [LDRP] room). In these settings, the family is encouraged to stay with the mother overnight, and nursing and medical care is available if an emergency arises. In addition, breastfeeding is encouraged, and the mother and father (or partner) are encouraged to bond with the new infant.

Freestanding **birthing centers** are an alternative for parents seeking a homelike atmosphere. Some of these settings have conveniences, such as a kitchen for family members, but many freestanding birthing centers do not have adequate technology and medical care readily available if complications to the mother or fetus arise.

Federal legislation has been passed that enables women who have a vaginal birth to stay in the birth facility for 24 to 48 hours and women who have a cesarean birth to stay for 72 hours. Home births in the United States represent only a small number of births because malpractice insurance for midwives attending home births is expensive and difficult to obtain. Many midwives have moved their practice to hospitals or birthing centers.

### Technology and Maternity Care

Technologic advances such as high-flow oxygen ventilation machines, 3-D ultrasonography, and genetic testing have enabled many infants to survive who years ago might have died. Intrauterine fetal surgery is being performed on a more routine basis (Figure 1-1), and



**FIGURE 1-1** Fetal surgery can be performed to correct a congenital defect before birth. Fetal surgery usually does not result in a scar at the incision site.

high-risk prenatal clinics and neonatal intensive care units (NICUs) provide care that the at-risk fetus and preterm infant need to survive. Chromosomal studies and biochemical engineering have made the identification of congenital anomalies and genetic counseling available to families who are at high risk for particular conditions. Cord blood, which is rich in stem cells, can be taken from a newborn at birth. This blood can be banked or stored for later use if certain disorders arise.

### Human Genome Project

The Human Genome Project is an international effort to identify and “map” all genetic material present in the human body. The genes responsible for diseases such as cystic fibrosis, fragile X syndrome, and breast cancer have been isolated and identified. The findings of the Human Genome Project may enable gene therapy to replace missing genes or alter defective genes, thus eliminating the cause of many genetic disorders. The technique of inserting new or replacement genes into the human body has been developed, but social issues still need to be resolved before it becomes a routine medical practice.

### Gender Selection

Gender selection itself is not a new practice. Pregnancies have been terminated when the sex of the fetus was not the “right one,” and some newborns have been abandoned or killed if they were not of the desired sex. The ability to determine and select the sex of the fetus before conception places an end to inhumane practices, but the impact on the population and society needs to be more fully researched. Gender selection of the fetus can be accomplished by sperm separation. For example, sperm carrying the Y chromosome can be identified and used for the fertilization of an ovum to

produce a male child. A couple may desire a child of a specific sex to avoid passing on a genetic disorder that affects a specific sex only or because the couple already has several children of one sex and now wants a child of the opposite sex. Moral and ethical issues abound with this technology.

### Global Genetics Therapy

According to the World Health Organization (WHO), more than 7 million children throughout the world are born annually with severe genetic disorders or birth defects, with 90% occurring in developing countries (Callister, 2006). It is known that specific cultural and ethnic groups and specific geographic locations are associated with specific genetic disorders. For example, persons of African, Greek, Italian, and Middle Eastern ancestries may be at risk for inherited thalassemia, a type of anemia. The African ethnic group may be at increased risk for sickle cell anemia, and the Ashkenazi Jewish population may be at increased risk for inherited Tay-Sachs disease. Preconception genetic testing can reduce the occurrence of these genetic disorders, and, in the near future, gene therapy may be able to treat many genetic defects. Newborn screening is already standard procedure in most countries. The integration of genetics in general health care worldwide is a goal of the international health organizations. The WHO is helping develop standards and regulations to deal with the social and ethical issues, including informed consent and confidentiality.

### Providers of Maternity Care

Maternal-newborn health care professionals include **certified nurse-midwives** (CNMs); registered professional nurses who have completed an advanced program approved by the American College of Nurse-Midwives; and **nurse practitioners**, registered nurses who have completed a master's program, including the area of women's health, and are certified by a national credentialing organization, such as the American Nurses Credentialing Center (ANCC). **Obstetricians/gynecologists** are licensed physicians who have completed a residency program that specializes in the diseases related to women and the care of pregnant women and their fetuses throughout pregnancy, labor, childbirth, and the postpartum period. **Pediatricians** are licensed physicians who have completed a residency program that specializes in pediatrics and are responsible for the diagnosis, treatment, and well-being of infants and children. **Neonatologists** are pediatricians who have received additional preparation, training, and board certification in the care of neonates (newborns from birth to age 28 days).

Several other health care professionals may assist in maternal-infant health care and in meeting the family's needs. **Geneticists** may provide testing and counseling for families at risk for genetically determined disorders.

**Social workers** may be asked to find assistance for families in financial need. **Dietitians** may educate the family about nutrition and infant feeding. **Lactation specialists** help new mothers initiate breastfeeding.

Together, all of these health care providers work toward collaborative care. **Collaborative care** involves working together cooperatively, sharing the responsibilities for solving problems, and making decisions about patient care. The focus is on multidisciplinary care, which may include a licensed practical nurse/ licensed vocational nurse (LPN/LVN), registered nurse, physician, nutritionist, and social worker. Collaboration among the health care team, the patient, and the family can increase the satisfaction among all participants, facilitate the provision of appropriate health care, and assist in meeting patient goals. As a part of this team, the nurse is a key member in making referrals to appropriate resources.

### Health Care Delivery Systems

It is estimated that 15.9% of the U.S. gross domestic product was spent on health care in 2010. Thus, there has been concerted effort by the government, insurance companies, hospitals, and health care providers to control the ever-increasing costs of health care. One way that insurance companies and institutions have attempted to control these costs is through the use of diagnosis-related groups (DRGs), which is the basis of financial compensation through Medicare, in which a fixed amount of money is determined in advance for providing necessary services for specifically diagnosed conditions. If the hospital spends more on a patient than the specific diagnosis allows, the hospital typically absorbs the excess cost. If the hospital spends less than what is allowed for a patient with a specific diagnosis, the hospital usually keeps the profit. This type of plan provides incentives to decrease the average length of stay in the hospital, thereby reducing the cost of service.

**Managed Care.** Some health insurance companies have examined the cost of health care and instituted a health care delivery system called **managed care**. Examples of managed care organizations are **health maintenance organizations (HMOs)**, which provide total health care for members. Most of the cost savings come from efforts to reduce hospitalization days and hospital admissions. **Preferred provider organizations (PPOs)** contract with a network of providers (physicians and hospitals) to provide services at a discounted rate to members. Patients may use non-PPO providers, but they must pay those expenses out of pocket. Monthly payment premiums are required in managed care health plans.

**Clinical Pathways.** **Clinical pathways** are also known as care paths, care maps, case management plans, coordinated care plans, clinical guidelines, and outcome

management. Clinical pathways are maps of collaborative care given by the interdisciplinary health care team. The pathways are designed from evidence-based standards of care concerning the expected progress and timelines for specific patient diagnoses. This approach provides research-based care rather than tradition-based care. Clinical pathways include independent nursing assessments, teaching, and interventions; medical orders given by physicians or other health care providers, such as nurse practitioners; and recommendations by nutritionists, social workers, or other community agencies involved in the patient's care. These pathways also provide information regarding the patient's expected progress each day.

By stating the specific care and progress of a patient within a specified timeline that is related to a planned outcome, health care providers can clearly identify and address any deviations. These deviations from the expected timelines are called **variances**. If the patient's progress is slower than expected or the outcome (goal) is not achieved within the set timeline, a negative variance occurs, and the length of stay in the hospital may be increased. Identification of variances helps nurses reorganize the care plan to meet individual patient needs.

The use of clinical pathways improves the quality of care and reduces hospitalization time. Clinical pathways are an essential component of managed care that promotes coordination of the health care team, resulting in high-quality patient care delivered in a more cost-effective time frame. The nurse documents the care on the clinical pathway and reports any variances to the charge nurse or physician. Selected examples of clinical pathways are presented in chapters concerning postpartum care, newborn care, and breastfeeding.

### Community-Based Nursing

Nursing care within the community and in the home is not a new concept in maternal-child nursing. The work of Lillian Wald, founder of the Henry Street Settlement in New York City, brought home health care to poor children. Margaret Sanger's work as a public health nurse provided care for poor pregnant women and was the seed for the development of today's Planned Parenthood programs. The community is now one of the major health care settings for all patients, and the challenge is to provide safe, caring, cost-effective, high-quality care to mothers, infants, and families. This challenge involves the nurse as a patient advocate in influencing the government, businesses, and the community to recognize the need for supporting preventive care of maternal-infant patients, thereby ensuring a healthy population for the future.

The nurse must work with the interdisciplinary health care team to identify needs within the community and to create cost-effective approaches to comprehensive preventive and therapeutic care. The nurse's

role as an educator within the community is facilitated by the use of schools, churches, health fairs, Internet websites, and the media. Some registered nurses are branching out into the community as private practitioners, such as lactation consultants for new mothers. The nursing care plan is expanding to become a family care plan because the nurse provides care to the patient in the home. Creativity, problem solving, coordination of multidisciplinary caregivers, case management, assessment, and referral are just some of the essential skills required of a nurse providing community-based care to maternal-infant patients.

Preventive care is only one aspect of current and future home care and community-based nursing. Therapeutic care is also provided in the home setting, and the nurse must educate the family concerning monitoring, care, and need for professional referral when necessary. Specialized care such as fetal monitoring of high-risk pregnant women, apnea monitoring of high-risk newborns, diabetic glucose monitoring, heparin therapy, and total parenteral nutrition can be safely accomplished in the home setting, often with computer or telephone accessibility to a nurse case manager (see Chapter 18).

The home health care team, as advocated by the American Academy of Pediatrics Committee on Children with Disabilities, includes a pediatrician; licensed nurses; occupational, physical, and respiratory therapists; speech therapists; home teachers; social workers; and home health aides. The American Academy of Home Care Physicians has expressed a medical commitment to the concept of home care for the future.

### Specific Government Influences in Maternal-Infant Care

Government involvement in maternal-newborn care is designed to reduce maternal and infant morbidity and mortality rates. The National Institutes of Health (NIH) supports and provides funds for maternity research and education. The Title V amendment of the Public Health Service Act established maternity-infant care centers in public clinics. Title XIX of the Medicaid program provides care for indigent women. The Center for Family Planning provides contraception information, and the Women, Infants, and Children (WIC) program provides supplemental food and education for those in need. The Medicaid program assists in funding care for eligible women and children who cannot afford to pay health insurance premiums.

Senators, representatives, and others in the federal government designed a health care reform plan to reduce the cost of health care while making it more accessible to all. Nurses are involved in the health care reform movement as patient advocates to ensure that the patient receives high-quality care. Health insurance plays an important role in health care delivery. However, having health insurance has not

always assured access to appropriate care because the insurance company often had to approve the expenditure before the test or care was provided. Those families who cannot afford health insurance often did not seek preventive health care, such as prenatal care, infant immunizations, and well-baby checkups. This can lead to a number of undiagnosed or improperly treated health conditions. These types of problems are dealt with as health care reform evolves.

The Health Care Reform Bill of 2010 expanded coverage to millions of Americans who were previously uninsured. Some provisions were immediately effective in 2010, some will be effective in 2012, and all provisions will be fully effective by 2014. Children will not be denied insurance because of preexisting conditions and can stay on their parents' policy until age 26. Payment for the plan will come from a Medicare payroll tax on investment income and some unearned income by 2012 and a special 3.8% tax on individuals earning more than \$200,000. In 2018, an excise tax will be paid by insurance companies with high-end health care plans.

**Healthy People 2020.** *Healthy People 2020* is the U.S. contribution to the WHO's Health for All plan. National health objectives are periodically developed and published in a document titled, *Healthy People*. Each document is a decade-long action agenda with goals to improve the health of all Americans. *Healthy People 2020* (U.S. Department of Health and Human Services [USDHHS], 2010) establishes national health goals and identifies the greatest preventable threats to our nation's health. The two main goals identified for 2020 are to (1) increase years of healthy life and (2) eliminate health disparities. These broad goals are supported by four subgoals, which are to (1) promote healthy behaviors, (2) protect health, (3) provide access to high-quality health care, and (4) strengthen community prevention and provide access to care.

The USDHHS has developed national objectives covering all areas of health and the environment. *Healthy People 2020* focuses on population-based health planning and stresses the importance of improving the public health infrastructure. State health departments must assess their residents' health status and the existing resources and provide this information to the USDHHS. The state and local communities use this information to develop action plans that contribute to families' and individuals' behaviors and lifestyles to achieve and maintain healthy lives. See Chapter 18 for a detailed listing of *Healthy People 2020* goals relating to maternal-newborn care.

**Statistics Important to Maternal and Newborn Care.** Health professionals need to obtain information about the way maternity care is given and the outcomes of maternal and newborn care. One way they can do this is by looking at statistics (Table 1-1). In the United

States, it is a legal requirement in all 50 states and the District of Columbia to have a birth certificate completed for every infant born alive. The birth certificate is registered with the local government, and a state report is ultimately sent to the National Office of Vital Statistics. These statistics are important because they depict the health status of the nation's women and children. This information helps the government allocate resources to various identified needs. The outcomes of pregnancies in different states and counties can be compared; these outcomes generally show that maternal and infant mortality rates fall when the overall health of the people improves. Current statistics show that health care improvement must be directed toward having healthy babies (Box 1-2).

### Standards of Care

**Standards of care** establish minimum criteria for competent nursing care. They are designed to protect the public and are used to judge the quality of care provided. Legal interpretation of actions within the standards of care is based on what a reasonable nurse with similar education and work experience would do in like circumstances. Sources that have provided standards of care include the American Nurses Association (ANA); the ANA Divisions of Practice; and organizations such as the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). The Joint Commission (TJC) (formerly the Joint Commission on Accreditation of Healthcare Organizations [JCAHO]) and federal and state governments establish minimum standards that hospitals must meet to receive accreditation, licensing, funding, and approval to continue providing patient care.

**National Patient Safety Goals.** National Patient Safety Goals (NPSGs) established by the Joint Commission are updated annually and include:

- Ensure accurate patient identification with a minimum of two identifiers, such as name and date of birth.
- Ensure effective communication among caregivers and a timely report of critical test results.
- Improve the safety of medication labeling with name, expiration date, strength, etc.
- Reduce health-care-associated infections. Use the Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.
- Provide medication reconciliation protocols.
- Identify patients at risk for falls and self-harm.
- Use universal protocol for preventing wrong patient, site, or procedure for surgery.
- Use list of "do not use" abbreviations.
- Encourage active patient involvement.
- Prevent pressure ulcers.
- Have organizations identify safety risks inherent in their patient population.

**Table 1-1** Birth Rate Statistics in the United States, 2002 to 2006

AREA	LIVE BIRTHS 2006	LIVE BIRTHS 2002	INFANT MORTALITY 2005	EARLY PRENATAL CARE 2002-2004	LOW BIRTH WEIGHT 2003-2006
Alabama	63,235	58,599	8.96	83.7	10.35
Alaska	10,991	9,939	6.45	80.2	6.02
Arizona	102,475	87,889	6.69	76.5	7.05
Arkansas	40,973	37,833	8.29	81.1	9.04
California	562,431	529,420	5.22	87.0	6.71
Colorado	70,750	68,289	6.27	79.5	9.04
Connecticut	41,807	42,613	5.53	88.1	7.74
Delaware	11,998	11,151	9.03	85.6	9.31
District of Columbia	8,529	7,622	9.22	76.8	11.06
Florida	236,882	205,541	7.4	No data	8.59
Georgia	148,619	133,664	8.35	84.2	9.27
Hawaii	18,982	17,424	6.67	82.7	8.23
Idaho	24,184	20,936	6.12	No data	6.65
Illinois	180,583	180,197	7.53	85.3	8.40
Indiana	88,674	85,367	7.87	81.2	8.10
Iowa	40,610	36,674	5.40	88.7	6.92
Kansas	40,964	40,328	7.12	87.0	7.28
Kentucky	58,291	54,216	6.79	No data	8.86
Louisiana	63,399	64,841	9.79	84.5	11.02
Maine	14,151	13,558	5.87	87.9	6.58
Maryland	77,478	73,381	8.0	83.4	9.17
Massachusetts	77,769	80,844	4.89	89.8	7.77
Michigan	127,476	129,951	8.02	85.9	8.28
Minnesota	73,559	68,213	4.78	86.1	6.43
Mississippi	46,069	41,512	10.74	84.4	11.62
Missouri	81,388	74,368	7.63	88.2	8.12
Montana	12,506	11,033	6.35	83.8	7.02
Nebraska	26,733	25,166	5.89	83.2	6.97
Nevada	40,085	32,392	5.86	75.6	8.11
New Hampshire	14,380	14,439	5.02	No data	6.65
New Jersey	115,006	114,913	5.44	79.8	8.19
New Mexico	29,937	27,715	6.13	69.1	8.38
New York	250,091	257,940	6.02	No data	8.11
North Carolina	127,841	117,084	8.58	84.3	9.07
North Dakota	8,622	7,677	6.35	86.4	6.49
Ohio	150,590	148,486	7.82	87.8	8.51
Oklahoma	54,018	50,341	7.86	77.6	7.92
Oregon	48,717	45,094	5.68	81.1	6.09
Pennsylvania	149,082	140,898	7.30	No data	8.20
Rhode Island	12,379	12,682	6.20	90.2	8.12
South Carolina	62,271	54,501	9.03	No data	10.15
South Dakota	11,917	10,843	7.18	78.0	6.71
Tennessee	84,345	77,534	8.87	No data	9.35

**Table 1-1** Birth Rate Statistics in the United States, 2002 to 2006—cont'd

AREA	LIVE BIRTHS 2006	LIVE BIRTHS 2002	INFANT MORTALITY 2005	EARLY PRENATAL CARE 2002-2004	LOW BIRTH WEIGHT 2003-2006
Texas	399,612	368,481	6.45	81.1	8.07
Utah	53,499	49,244	4.92	79.9	6.68
Vermont	6,509	6,392	5.37	89.8	6.57
Virginia	107,817	99,701	7.50	85.4	8.23
Washington	86,848	79,152	53.9	No data	6.13
West Virginia	20,928	20,404	7.73	85.9	9.16
Wisconsin	72,335	68,455	6.34	84.9	6.93
Wyoming	7,670	6,520	6.95	85.5	8.71

Data from Health, United States (2007) with chart book on trends in the health of Americans and *National Vital Statistics Report 52(19)*. Retrieved May 9, 2009, from [www.cdc.gov/nchs/data/hus/06trend.pdf](http://www.cdc.gov/nchs/data/hus/06trend.pdf).

**Box 1-2** Maternal-Infant Statistics

- Birth rate:** Number of live births in 1 year per 1000 population
- Infant mortality rate:** Number of deaths of infants younger than 1 year per 1000 live births
- Maternal mortality rate:** Number of maternal deaths per 100,000 live births that occur as a direct result of pregnancy (including the 42-day postpartum period)
- Neonatal mortality rate:** Number of deaths of infants younger than 28 days per 1000 live births per year
- Perinatal mortality rate:** Number of fetal deaths (20 weeks' gestation or more) and number of neonatal deaths per 1000 live births per year
- Fetal mortality rate:** Number of fetal deaths (fetuses weighing 500 g [1 lb] or more) per 1000 live births per year
- Stillbirth:** A newborn who, at birth, demonstrates no signs of life, such as breathing, heartbeat, or voluntary muscle movements

The Institute of Medicine (IOM) established **Quality and Safety Education for Nurses (QSEN)** competencies for nurses, which are the basis of nursing knowledge, skills, and attitudes taught in schools of nursing. The broad competencies include patient-centered care, teamwork and collaboration, evidence-based practice, safety, and informatics. Details can be accessed at [www.qsen.org](http://www.qsen.org) (NLN, 2008).

The emergence of technology in the hospital setting is thought to promote patient safety, and technologic tools are being integrated into the nursing process. Information technology improves communication between caregivers and prevents medication errors (The Joint Commission, 2010). Electronic health records starting in the prenatal ambulatory care setting provide a continuum of care record that is easily accessible at any point in the perinatal cycle by any member of the multidisciplinary health care team. A computerized

medication reconciliation process and an “intelligent IV pump” can reduce medication errors and are in current use at many hospitals. Caution must be taken not to override any computerized system without proper authorization. Some common acronyms used in information technology are shown in Box 1-3.

Nurses are also responsible for practicing according to the accepted standards of their state, and nursing actions must meet the nurse practice acts of that state. The California Board of Vocational Nursing and Psychiatric Technicians (BVNPT) and the National Federation of Licensed Practical Nurses (NFLPN) are examples of organizations for LPNs/LVNs that describe their role in clinical practice today. All nurses should familiarize themselves with their state’s nurse practice acts.

Although some standards are not legally based, they carry important legal significance. A nurse who fails to provide the expected standards of care invites legal allegations of negligence or malpractice. The intent of standards of care, care plans, critical pathways, and written procedures is to provide a measure against which a nurse can compare his or her practice, assess patients’ responses, and compile the required documentation that the appropriate care was provided, thus minimizing any legal and ethical problems that may arise.

**Box 1-3** Acronyms Used in Information Technology

- ADE:** Adverse drug event
- ADU:** Automated drug-dispensing unit
- BCMA:** Bar code medication administration
- CPOE:** Computerized provider order entry (physician’s order)
- EHR:** Electronic health record
- EMAR:** Electronic medication administration record
- POC:** Point of care
- PRBC:** Pump readable bar code



## Legal and Ethical Considerations

### Documentation

For legal purposes, if the nurse does not document an intervention, then the intervention was not done!

**Evidence-Based Practice.** Evidence-based practice refers to the use of research data in the design of a care plan. AWHONN standards of practice in the care of women and newborns include an evidence-based approach to practice. Nursing journals publish the results of studies about nursing practice. Evidence from these research studies is the basis of modifications in the approach to care, procedures, and practices. The *Cochrane Pregnancy and Childbirth Group* disseminates reviews of current clinical research in maternal and child care.

### Communication

Effective communication is an important nursing skill that is essential in promoting positive interpersonal relationships. Communication is the process of exchanging ideas, beliefs, thoughts, and feelings; it involves both verbal and nonverbal language. Nonverbal language can be conveyed through symbols, actions, gestures, smiles, frowns, or body postures.

Three major components of communication are listening, observation, and documentation. A good listener can provide reassurance and respect. Through observation of words and nonverbal language, the nurse can pick up subtle cues of how the patient perceives the nurse-patient relationship and mutual exchange of ideas. Therapeutic communication is a skill that is learned through practice. This level of communication requires the nurse to be open-minded, honest, and nonjudgmental. Reporting is a form of oral communication among health care workers that can summarize the status and care of patients. Status reports are usually given at the end of each shift to ensure smooth continuity of care. Oral reporting enhances documentation found in the individual patient's chart but does not replace it.

**SBAR.** SBAR is a technique of structured communication between health care team members that is designed to reduce errors of miscommunication, improve patient safety, and provide a more concise method of communicating to other health care providers about the patient's condition. This structured technique of communication can be used at the shift change report, during the transfer of patients, or during the reporting of a critical change of condition to the health care provider. It includes:

**Situation:** Patient identification, vital signs, and nursing concerns

**Background:** Patient's mental status, skin condition, oxygen needs, and updated medications and critical laboratory values list

**Assessment:** Description of nursing assessment of the patient

**Recommendations:** Health care provider's response to the report received

The SBAR communication tool is in compliance with The Joint Commission Patient Safety Goals and is currently used in many hospitals across the country.

**Documentation.** Documentation in nursing is the written communication of nursing care in the form of charting, recording, and reporting. Nursing notes and flow sheets may be used. Standardized nursing notes are becoming more common in hospital settings, especially in a 24-hour flow sheet format. Computerized documentation in the form of clinical record systems is also used. Documentation is important because it verifies nursing interventions, patient responses, and the involvement of the multidisciplinary health care team in the provision of patient care. Accurate and detailed documentation helps identify whether standards of care are met and often provides a basis of legal protection for the nurse when quality of care is challenged.

**Patient Privacy and HIPAA Rights.** Patient privacy is protected by federal law and regulated by accrediting agencies. The Privacy Act of 1974 required that a patient's consent be obtained before any identifying information such as a name, Social Security number, or diagnosis is disclosed from the medical records. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) required more detailed protection of patient privacy. The Joint Commission also requires that strict standards be adhered to concerning the patient's right to privacy (TJC, 2010).

Names of patients must not be posted where they are visible to the public. This includes placing card inserts on newborn bassinets that contain the infant's name, sex, and personal information when the newborn nursery has a viewing window available to the public. Nurses must not discuss patients outside of the hospital or in elevators, and information on written care plans taken out of the hospital by nursing students must not contain patients' identifying information. All patients have a right to privacy, and the nurse must protect that right.



## Legal and Ethical Considerations

### Confidentiality

HIPAA regulations mandate that the names and personal information of patients be kept in a secure and private place. Nurses and other health care personnel must maintain strict confidentiality concerning all patient information. The 2009 HITECH addition to the regulations includes the management of access to electronic medical records.

## THE NURSING PROCESS

The **nursing process** is a method that applies patient and nursing responses based on a structured problem-solving approach to a clinical situation. It provides a way to use clinical judgment to recall facts and apply the information to meet individual needs of patients or provide a method of comprehensive nursing care. **Nursing care plans** that use the nursing process are included in many chapters in this book, and nursing diagnoses approved by NANDA International (NANDA-I) are found on the inside back cover of this book. A nursing diagnosis differs from a medical diagnosis (Table 1-2). Terminology common to nursing is listed in Box 1-4. The nursing process follows five steps that have been internationally accepted (Nursing Care Plan 1-1):

1. **Assessment:** Collecting objective and subjective patient data
2. **Diagnosis:** Identifying problems or potential problems, validating them through a process called **critical thinking**, and grouping them as **nursing diagnoses**
3. **Planning:** Planning care for the problems that were identified, which are stated in specific, individualized, measurable goals
4. **Implementation:** Carrying out specific interventions necessary to achieve the desired outcomes or goals (putting the plan into action)
5. **Evaluation:** Determining how well the plan worked and, if necessary, modifying the plan accordingly to meet the goals and outcomes

### CRITICAL THINKING

Nurses have job-specific knowledge and skills they incorporate into their daily nursing practice by applying thought. *General thinking* involves random or

### Box 1-4 Common Terms Used in Nursing

**Patient:** An individual, group, family, or community that is the focus of a nursing intervention.

**Nursing activity:** An action that implements an intervention to assist the patient toward a desired outcome. (A series of activities may be needed to implement an intervention.)

**Nursing diagnosis:** A clinical judgment about a patient's response to an actual or potential health problem. (The nursing diagnosis provides the basis for selecting nursing interventions to achieve an outcome for which the nurse is accountable.)\*

**Nursing intervention:** Any treatment or nursing activity based on clinical judgment and knowledge that a nurse performs to achieve a specific outcome for the patient, including direct or indirect patient care or community or public health activities.

**Scope of practice:** Legal authority to perform specific activities related to health care or health promotion. (These activities require substantial knowledge or technical skill. Specific activities are listed by individual states' nurse practice acts; nurses must practice within these limitations. For example, an LPN/LVN cannot perform surgery; that activity is within the scope of a medical doctor.)

\*Data from *Nursing Diagnoses—Definitions and Classification 2009–2011*. © 2009, 2007, 2005, 2003, 2001, 1998, 1996, 1994 NANDA International. Used by arrangement with Wiley-Blackwell Publishing, a company of John Wiley and Sons, Inc.

memorized thoughts. An example of general thinking would be memorizing the steps in a clinical procedure or skill. *Critical thinking*, however, is purposeful, goal-directed thinking based on scientific evidence rather than assumption or memorization.

The way a nurse solves the problems of a patient is not always found in a textbook or in class lectures. Sometimes the nurse must consider factors that are specific to the individual patient or affected by an individual situation. For example, the cultural background of the patient or the age of the patient influences the effectiveness of a given intervention. If the problem is a protein deficiency, and the nurse selects the intervention to teach the importance of meat in the diet, the intervention will be ineffective and will not have a positive outcome if this patient is a vegetarian, because meat will not be eaten. Thus, **critical thinking** must enter the picture for optimum nursing care to be provided. Critical thinking entails applying creativity and ingenuity to solve a problem: combining basic standard principles with data specific to the patient. The basic steps in preparing a care plan involve critical thinking.

Evidence-based practice starts when the nurse uses the best evidence obtained from current, valid, published research. When the nurse combines that information with his or her critical thinking process and experiences and patient needs, it is then possible to plan

Table 1-2 Comparison of Medical and Nursing Diagnoses

MEDICAL DIAGNOSIS	POSSIBLE NURSING DIAGNOSIS
Acquired immunodeficiency syndrome	<i>Imbalanced nutrition: less than body requirements</i> related to anorexia and evidenced by weight loss
Gestational diabetes mellitus	<i>Deficient knowledge</i> related to gestational diabetes mellitus (GDM) and its effects on pregnant woman and fetus: manifested by crying, anxiety
Cystic fibrosis	<i>Ineffective airway clearance</i> related to mucus accumulation; manifested by rales, fatigue

Data from *Nursing Diagnoses—Definitions and Classification 2009–2011*. © 2009, 2007, 2005, 2003, 2001, 1998, 1996, 1994 NANDA International. Used by arrangement with Wiley-Blackwell Publishing, a company of John Wiley and Sons, Inc.



## Nursing Care Plan 1-1

## Care of Childbearing Families Related to Potential or Actual Stress Caused by Cultural Diversity

**Scenario**

A 22-year-old woman, para 0 gravida 1, is admitted to the labor room in active early labor. Her partner is with her, and they do not speak English.

**Selected Nursing Diagnosis**

*Impaired verbal communication* related to language barriers

Expected Outcomes	Nursing Interventions	Rationales
Patient will have an opportunity to share information and will state she understands what is explained to her.	Arrange for a family or staff member interpreter as needed.	Interpreter can provide support for woman and help lessen her anxieties. Poor communication can result in time delays, errors, and misunderstandings of intent.
	Clearly define instructions in woman's language of origin.	A shared language is necessary for communication to take place.
	Provide written instructions in woman's language whenever possible.	Patient can review written instructions at a less stressful time. In some cases, it is necessary to determine whether person can read.
	Explain the use and purpose of all instruments and equipment, along with the effects or possible effects on the mother and fetus.	Education of family reduces anxiety and provides family with a sense of control.
	Provide opportunities for clarification and questions.	Learning takes time; repetition of important material promotes learning. Nurse can determine woman's understanding of information and clarify misconceptions.

**Selected Nursing Diagnosis**

*Compromised family coping* related to isolation, different customs, attitudes, or beliefs

Expected Outcomes	Nursing Interventions	Rationales
Family members will state that they feel welcome and safe in the environment provided.	Encourage orientation visit to the maternity unit before delivery.	Families who have clear, accurate information can better participate in labor and delivery. Viewing the delivery setting before using it decreases anxiety about the unknown.
	Inform families about routines, visiting hours, significant persons who can assist in labor and delivery, and location of newborn after delivery.	Families have different expectations of the health care system. They may hesitate to ask questions because of shyness or fear of "losing face."
	Determine and respect practices and values of family and incorporate them into nursing care plans as much as possible.	Clarification of culturally specific values and practices will avoid misunderstanding and conflict with the nurse's value system. Nursing care plans promote organization of care and communication among staff members.

**Critical Thinking Questions**

1. The extended family of a patient in the labor room requests permission to stay with the patient and the husband throughout labor. How should you respond?
2. A patient admitted to the labor room refuses to let a male physician perform a vaginal examination. What should be the nursing role?

safe, effective nursing care for the patient. Two nursing journals that focus on evidence-based practices in maternal and child health are the *Journal of Obstetric, Gynecologic & Neonatal Nursing* (JOGNN) and the *American Journal of Maternal/Child Nursing* (MCN).

An example of critical thinking would be modifying the steps in a clinical procedure or skill so that the

individual patient's needs are met, and the basic principles of the skill are not violated. With critical thinking, *problem solving* is effective and *problem prevention* occurs. General thinking can occur naturally, but critical thinking is a skill that must be learned.

Because critical thinking is an active process, the regular use of critical thinking can assist in moving

general information into long-term memory and can increase creativity. Critical thinking skills help the nurse adapt to new situations that occur every day and aid in clinical decision-making about care. Critical thinking can improve the care that nurses give to patients, improve test scores (through critical thinking about a scenario in the question), and improve working conditions by enabling the nurse to analyze and find creative ways to improve existing policies and practices (Box 1-5).

### The Nursing Process and Critical Thinking

The nursing process (assessment, diagnosis, outcomes identification, planning, implementation, and evaluation) is a tool for effective critical thinking. When a nurse uses the nursing process in critical thinking, a clinical judgment can be made that is specific to the data collected and the clinical situation. In every clinical contact, a nurse must identify actual and potential problems and make decisions about a plan of action that will result in a positive patient outcome, know the reason the actions are appropriate, differentiate between those problems that the nurse can handle independently and those that necessitate contacting other members of the health care team, and prioritize those actions.

Differentiating between actions that can be carried out independently and those requiring collaboration with other health care providers is based on the *scope of practice* of the LPN or LVN. The scope of practice of the LPN/LVN is published by the state board of nursing.

### Using Critical Thinking to Improve Test Scores

Attending class, reading the text, and studying are the basis of learning, and the evaluation of learning is achieved by testing. Weekly tests evaluate short-term learning. Final examinations evaluate long-term learning or retention of learning. Retained learning is subject to later recall and therefore is most useful in nursing practice after graduation from nursing school. Recalling facts that have been retained is what makes critical thinking in nursing practice possible. For a nurse to recognize or analyze abnormal findings, the normal findings must be recalled and used for comparison. An intervention can then be formulated.

#### Box 1-5 The Process of Critical Thinking

1. Identify the problem.
2. Differentiate fact from assumption.
3. Check reliability and accuracy of data.
4. Determine what is relevant and irrelevant.
5. Identify possible conclusions or outcomes.
6. Set priorities or goals.
7. Evaluate the response of the patient.

Using critical thinking in studying involves the following:

1. *Understanding* facts before trying to memorize them
2. *Prioritizing* information to be memorized
3. *Relating* facts to other facts (clusters, patterns, and groups)
4. *Using all five senses* to study (read, write, draw, listen to tapes, and see pictures of symptoms)
5. *Reviewing* before tests
6. *Reading critically* (identifying key concepts and using critical thinking) when working with sample questions during study

## CULTURE

**Culture** is the body of socially inherited characteristics that one generation can hand down or tell to the next generation. It is shaped by values, beliefs, norms, and practices that are shared by persons of the same background. Culture guides thoughts and actions and becomes a patterned expression of what we are. As these expressions or traditions are passed down from one generation to the next, they become cultural values that are preferred behaviors. To understand why patients respond as they do, a nurse must assess their cultural background.

The United States is a culturally diverse nation. It is estimated that by the year 2020, 40% of school-age children will be from nonwhite ethnic groups. Just as variations are seen among cultures, variations exist within each culture. These variations often are related to social and economic factors and to education level. Attitudes about pregnancy and the sex of the child vary among cultures. In general, Hispanics and many Native Americans view pregnancy as a natural and desirable experience. In these cultures, children are desired. Some cultures put a high priority on having a son, and the woman who gives birth to a son receives a higher status within the family. This is noticeably true in traditional Chinese families. Among Hispanics and other groups, having children is evidence of the male's virility and manliness. In some cultures, the grandmother is expected to play a role in caring for the newborn.

The effect of different cultures and individuality on health care delivery challenges nurses to reevaluate expectations of others. Nurses must first develop a *cultural awareness*, which is an understanding of the reasons that patients respond as they do related to cultural practices; and develop a *cultural sensitivity* to recognize practices and values that differ from their own; and only then can nurses develop *cultural competence*, that is, use skills and knowledge necessary to understand and appreciate cultural differences, and be able to adapt clinical skills and practices as necessary. Nurses who are interacting with expectant

families from a different culture or ethnic group can provide culturally sensitive nursing care by critically examining their own cultural beliefs; identifying biases, attitudes, and prejudices; learning practices of

major cultures; and recognizing that ultimately it is the woman's right to make her own health care choices (Table 1-3). Issues related to culture are integrated in nursing care plans that appear throughout this book.

**Table 1-3** Examples of Cultural Beliefs and Practices: Pregnancy, Birth, Postpartum, and Newborn Care\*

PREGNANCY	DURING BIRTH	POSTPARTUM PERIOD, NEWBORN CARE
<b>Hispanic/Latin American</b>		
<p>Pregnancy is usually desired soon after marriage.</p> <p>Cool air motion is thought dangerous during pregnancy.</p> <p>Food cravings that are not satisfied are thought to cause birthmarks.</p> <p>Milk is avoided because it is thought to cause large babies with difficult labor.</p> <p>Massage is given to aid fetus into favorable position.</p> <p>Pregnant woman lies on back to protect baby. Pelvic examination by male caregiver is unacceptable and frightening.</p> <p>Herbs are used to treat common discomforts.</p> <p>Permission of grandparents may be required before treatment.</p>	<p>In lower economic class, presence of grandmother is preferred over presence of husband.</p> <p>After birth of baby, mother's legs are brought together to prevent air from entering womb (uterus).</p> <p>Some still use lay midwife.</p> <p>Loud behavior is common during labor.</p>	<p>They believe in hot-cold balance of health. Currents of air are thought dangerous (keep warm).</p> <p>Diet may be restricted to special foods; hot or warm beverages preferred after birth.</p> <p>Bathing is permitted after several days.</p> <p>During recovery, grandmother cares for mother.</p> <p>Baby is usually breastfed after third day (colostrum considered dirty).</p> <p>Infant is given olive oil or castor oil for passage of meconium.</p> <p>Male newborn is often uncircumcised.</p> <p>Female newborn's ears are frequently pierced.</p> <p>Newborn is firmly swaddled in blankets.</p> <p>Belly band is used to prevent umbilical hernia.</p> <p>Fontanelles may be manipulated if newborn is ill.</p>
<b>Asian</b>		
<p>Pregnancy is perceived as a normal process.</p> <p>Sour and spicy foods may be avoided.</p> <p>Soy sauce may be avoided to prevent dark-skinned baby.</p> <p>Rice is main food.</p> <p>Female health care provider is preferred.</p> <p>Alcohol is not allowed.</p> <p>Physical activities are not limited (except carrying heavy loads).</p> <p>Daily baths are taken to produce a clean baby.</p> <p>Sitting in doorways is avoided because of fear labor will be complicated.</p> <p>Eye contact is avoided as a sign of respect.</p> <p>Herbs and folk medicine are used for discomforts.</p>	<p>Father usually does not actively participate.</p> <p>Mother labors in silence; she must not cry out because it would embarrass family.</p> <p>They may wrap white yarn around wrist of newborn to "lock the soul in."</p>	<p>They believe in hot-cold balance of health. Room must be warm; heat lost during birth needs to be replaced; may request space heater under bed.</p> <p>Many women are vegetarians.</p> <p>Lactose deficiency or intolerance is common.</p> <p>Birth of boy is preferred over girl.</p> <p>They may ask to take placenta home to dispose of it (a ritual carried out in Korea, Philippines, China, and Thailand).</p> <p>Touching head of newborn may be considered offensive to a Southeast Asian family; Hmong believe it is bad luck to praise newborn.</p> <p>They may swaddle newborn even in hot weather.</p>
<b>Middle Eastern</b>		
<p>Friends and family expect to be present during hospital stay. Family may fulfill obligation with demanding behavior.</p> <p>Touching is limited to members of the same sex.</p> <p>Man's permission is needed when family member requires health care.</p> <p>Future is left to the will of God; thus prenatal care may not be sought; they may have home cures such as herbs, hot and cold foods.</p> <p>Pork, intoxicants, and illicit drugs are avoided.</p> <p>Modesty is important.</p>	<p>Pain is expressed privately, except during labor and birth, when pain may be expressed vehemently.</p>	<p>They breastfeed newborns.</p> <p>Only parents are allowed to touch the baby's head.</p>

**Table 1-3** Examples of Cultural Beliefs and Practices: Pregnancy, Birth, Postpartum, and Newborn Care\*—cont'd

PREGNANCY	DURING BIRTH	POSTPARTUM PERIOD, NEWBORN CARE
<b>African American</b>		
<p>Pregnancy is considered state of wellness.</p> <p>Lower-income group may be passive about prenatal care until a crisis develops.</p> <p>Strong kinship bond exists with extended family.</p> <p>They may treat illness with home remedies.</p> <p>Old wives' tales include the following: reaching up above head will cause cord to strangle baby; having picture taken during pregnancy will cause a stillbirth; emotional fright will mark baby.</p> <p>Mother may have cravings for food nutrients and non-nutrients, mustard or turnip greens, or pica (laundry starch, clay).</p>	<p>Mothers have varied emotional responses; some appear stoic to avoid showing weakness.</p> <p>Emotional support is often provided by women, usually own mother.</p> <p>Women often report to labor unit in advanced labor.</p> <p>Muslim women oppose use of analgesia for labor.</p> <p>Premature rupture of membranes is considered harmful (called <i>dry labor</i>).</p>	<p>Mothers are afraid of spoiling baby.</p> <p>Baby crying excessively may be seen as behaving in a "bad way."</p> <p>Emphasis is placed on feeding baby ("A good mother is one whose baby eats well").</p> <p>Oil is put on baby's head and skin.</p> <p>Belly band is often used to prevent umbilical hernia.</p> <p>Clothing for newborn tends to be excessive.</p> <p>Muslim women, if possible, breastfeed their newborns.</p>
<b>Native American</b>		
<p>They are family oriented.</p> <p>Herbs are used to treat ailments.</p> <p>Traditionally, society is matriarchal.</p> <p>Food preferences vary among tribes; milk is not commonly desired.</p> <p>Two-visitor rule often has no meaning to them.</p> <p>Mothers have below-recommended intake of calcium, iron, and vitamins.</p> <p>They are not time oriented; do not see importance of clocks (important for taking medications and follow-up care).</p> <p>Native healing ceremonies and healing practices are common.</p>	<p>They do not see need to limit visitors.</p> <p>Relatives often come to hospital to care for woman.</p>	<p>Infant mortality rate is high.</p> <p>Newborn birth rate is less than average.</p> <p>They may want to carry newborn on papoose board.</p>

\*Many of these cultural beliefs and customs reflect the traditional culture and may not be currently practiced. These lists are intended to serve as guidelines while discussing cultural beliefs with women and their families.

## FAMILY

### FAMILY TYPES

A **family** is defined by the U.S. Census Bureau as a group of two or more people who reside together and who are related by blood, marriage, or adoption (U.S. Census Bureau, 2004). This definition is workable for gathering comparative statistics; however, it is limited when assessing a family for health purposes because families can and do contain unmarried couples. Some define the family in a much broader content as "two or more people who live in the same household, share a common emotional bond, and perform certain interrelated social tasks" (Levine, Carey, & Crocker, 1999, p. 119). Nurses must be aware of and respect family types and values that differ from their own. Box 1-6 presents family types, along with some of their defining characteristics.

### THE ROLE OF THE FAMILY IN HEALTH CARE DELIVERY

The role of the family in self-care and health care has influenced the way health care is provided in the United States. Since the 1960s, parents began to expect to be part of the decision-making process and questioned routine care that excluded family members. Fathers waited in waiting rooms for news that their child was born. The father's presence in the labor and delivery room is now the norm. Visiting hours are liberal, and contact with the newborn is encouraged. It has been demonstrated that informed parents can make wise decisions about their own care during pregnancy, birth, and delivery if they are adequately educated and given professional support.

**Box 1-6** Family Types

**Nuclear:** Husband, wife, and their biologic children living together

**Blended or reconstituted:** A combination of two families with children from one or both families

**Cohabiting:** An unmarried couple living together (they may have their own children, children from previous marriages, or adopted children.)

**Communal:** Several families living together who share responsibilities of work and child care

**Extended:** More than one generation, expanded to include relatives outside of the nuclear family (e.g., grandparents, aunts, uncles, and their families)

**Same-sex:** A gay or lesbian couple with or without children (children may be adopted, from previous relationships, or artificially conceived.)

**Single-parent:** Never married, divorced, separated, or widowed male or female who has at least one child

**Stepparent:** A person who has married a man or woman who has at least one child

**COMPLEMENTARY AND ALTERNATIVE THERAPIES**

**Alternative therapies** for health problems are treatments not typically recommended by health care providers and differ from conventional or mainstream remedies. Alternative therapy does not rely on evidence-based practice, and some therapists are not state or nationally licensed or certified.

**Complementary therapies** are nontraditional methods used in conjunction with conventional therapy. The

body is thought to have a self-healing ability that can be aided by complementary and alternative therapies commonly used alone or sometimes integrated with standard medical practice. Although nurses do not advocate or discourage the use of specific health care practices, knowledge of various types of complementary and alternative medicine (CAM) therapies can aid the nurse in identifying the reason the individual is using them and in recognizing a contraindication or interaction with traditional medicine that may have been prescribed.

Alternative and complementary therapies in health care are not new. The use of herbs and oils, therapeutic touch, and the treatment of forms of energy within the human body have existed for years. The shift toward self-care has increased the use of unconventional therapies. Today, community-based nurses will encounter some **alternative health care practices** involving patients who want increasing control over their health problems, wish to be a part of the decision-making process, and want to incorporate these practices in their care. **Integrative health care** involves the use of both CAM treatments and traditional allopathic medicine tailored to meet individual needs in a safe, least invasive, and most cost-effective manner (Rakel, 2007). The NIH National Center for Complementary and Alternative Medicine has classified alternative medicine into major categories. An overview of alternative and complementary health care practices is discussed in Chapter 21.

**Get Ready for the NCLEX® Examination!****Key Points**

- Changes in childbirth practices have created a more homelike and family-centered approach to maternity care.
- Advances in technology have increased neonatal survival rates.
- Technology in the hospital setting can promote patient safety.
- The Human Genome Project identifies genetic materials present in the body. Inserting missing genes or replacing defective genes may be a way to eliminate genetic disorders.
- Major efforts by government, insurance companies, and health care providers to control health care costs have resulted in a decreased length of patients' hospital stays.
- Managed care is a health care delivery system designed to reduce health care costs.
- Nursing care plans and clinical pathways provide a basis for critical thinking and judgment that guide patient care toward positive outcomes.
- Home- and community-based nursing includes preventive care and therapeutic management.
- Statistics provide information about the outcomes of maternal-newborn care.
- Standards of care establish minimum criteria for competent nursing care. Legal interpretation of actions based on standards of care determine what nurses are expected to do.
- Evidence-based practice is the use of research data in the design and implementation of a care plan.
- Effective communication is an important nursing skill with three main components: listening, observing, and documenting.
- Documentation can facilitate continuity of care, which can enhance patient outcomes and minimize legal problems.
- The patient's right to privacy is protected by HIPAA; nurses must protect these rights.
- Culture is an organized structure that guides behavior for a particular group. It is shaped by values, beliefs, and practices shared by persons of the same background.

- There are many different family types. A family can be defined as two or more people who share a common emotional bond and relate to each other with specific patterns of behavior.
- Critical thinking is purposeful, goal-directed thinking based upon scientific evidence rather than on assumption or memorization.
- Evidence-based practice occurs when the nurse uses the best evidence obtained from current, valid published research combined with critical thinking concerning patient needs.
- Alternative and complementary therapies include unconventional ways to heal the body and are becoming acceptable to a larger percentage of the population. Although nurses do not advocate or discourage the use of these therapies, they should be knowledgeable about them.

### Additional Learning Resources

**SG** Go to your Study Guide on pages 473–474 for additional Review Questions for the NCLEX® Examination, Critical Thinking Clinical Situations, and other learning activities to help you master this chapter content.

**evolve** Go to your Evolve website (<http://evolve.elsevier.com/Leifer/maternity>) for the following FREE learning resources:

- Animations
- Answer Guidelines for Critical Thinking Questions
- Answers and Rationales for Review Questions for the NCLEX® Examination
- Concept Map Creator
- Glossary with pronunciations in English and Spanish
- Patient Teaching Plans
- Skills Performance Checklists and more!

**Online Resources**

- [www.ahcpr.gov](http://www.ahcpr.gov)
- [www.cdc.gov/nchs](http://www.cdc.gov/nchs)
- [www.cochrane.org](http://www.cochrane.org)
- [www.dol.gov/ebsa/newsroom/fsnmhafs.html](http://www.dol.gov/ebsa/newsroom/fsnmhafs.html)
- [www.genome.gov/e/si](http://www.genome.gov/e/si)
- [www.georgetown.edu/research/gucdc/nccc](http://www.georgetown.edu/research/gucdc/nccc)
- [www.healthcare.gov](http://www.healthcare.gov)
- [www.ihl.org/IHL/Topics/PerinatalCareGeneral/emergingcontent/perinatalSBARtools.htm](http://www.ihl.org/IHL/Topics/PerinatalCareGeneral/emergingcontent/perinatalSBARtools.htm)
- [www.jointcommission.org](http://www.jointcommission.org)
- [www.nln.org/aboutnln/positionstatement/index.htm](http://www.nln.org/aboutnln/positionstatement/index.htm)
- [www.npsf.org](http://www.npsf.org)
- [www.qsen.org](http://www.qsen.org)

### Review Questions for the NCLEX® Examination

1. Federal legislation has been passed that enables women who have a cesarean birth to stay in the birth facility for:
  1. 24 hours
  2. 48 hours

3. 72 hours
  4. 96 hours
2. Individuals at increased risk for inherited Tay-Sachs disease are those in the:
    1. Ashkenazi Jewish population
    2. African American population
    3. Hispanic population
    4. Greek population
  3. The founder of the Henry Street Settlement in New York City, which brought home health care to poor children, was:
    1. Margaret Sanger
    2. Florence Nightingale
    3. Lillian Wald
    4. Jean Watson
  4. Place the 5 steps of the nursing process in the correct order.
    1. Assessment
    2. Evaluation
    3. Planning
    4. Diagnosis
    5. Implementation
  5. Several families living together who share responsibilities of work and child care are called a(n):
    1. Communal family
    2. Cohabiting family
    3. Nuclear family
    4. Extended family
  6. Complementary therapies can be described by which characteristic(s)? (*Select all that apply.*)
    1. New in health care
    2. Nontraditional
    3. Involve implementation of experimental medications
    4. Should neither be advocated nor discouraged by the nurse
    5. Used in conjunction with conventional therapy

### Critical Thinking Questions

1. You are going to interview someone whose background differs from your own. You will ask this patient about her health beliefs and practices that might influence her pregnancy, childbirth, and care of the infant. If you use this interview for future teaching, what self-assessment might you need to consider after the interview?
2. You are scheduling an interview with an unmarried pregnant girl and her parents. You want to identify how the parents plan to assist their daughter during her pregnancy and childbirth, as well as in caring for the grandchild. What questions are essential to ask in the interview? What self-assessment will you need to consider before beginning the interview?

### Objectives

1. Define key terms listed.
2. Discuss puberty in the developing male and female.
3. Identify the female external reproductive organs.
4. Describe the female internal reproductive organs.
5. Describe the influence of hormones on the female reproductive process.
6. Explain the menstrual and ovarian cycles.
7. Discuss the functions of the uterus.
8. Identify the bones that make up the pelvis.
9. Identify the male organs of reproduction.
10. Review the functions of the male hormone testosterone.
11. Explain the physiology of the sex act in the male and female.

### Key Terms

**diagonal conjugate** (DĪ-āg-ēn-ūl KŌN-jū-gīt, p. 21)

**fimbriae** (fim'bre-ə, p. 20)

**follicle-stimulating hormone (FSH)** (FŌL-lī-kūl STĪ-mū-lā-tīng HŌR-mŏn, p. 26)

**luteinizing hormone (LH)** (LŪ-tē-nī-zīng HŌR-mŏn, p. 26)

**ovulation** (ŏv-ū-LĀ-shŭn, p. 20)

**oxytocin** (ŏks-ē-TŌ-sīn, p. 22)

**perineum** (pē-rī-NĒ-ŭm, p. 18)

**prostate gland** (PRŌS-tāt glānd, p. 26)

**rugae** (ROO-jē, p. 18)

**testosterone** (tēs-TŌS-tē-rŏn, p. 25)

Human reproduction is a complex and fascinating process. The male and female reproductive systems functioning together produce a new life. For an understanding of how human reproduction is possible, knowledge of the structural features and functions of various organs is needed.

### PUBERTY

Before puberty, male and female children appear very much alike except for their genitalia. Puberty involves changes in the whole body and the psyche as well as in the expectations of society toward the individual.

**Puberty** is a period of rapid change in the lives of boys and girls during which the reproductive systems mature and become capable of reproduction. Puberty begins when the secondary sex characteristics appear (e.g., pubic hair). Puberty ends when mature sperm are formed or when regular menstrual cycles occur. This transition from childhood to adulthood has been identified and often celebrated by various rites of passage. Some cultures have required demonstrations of bravery, such as hunting wild animals or displays of self-defense. Ritual circumcision is another rite of passage in some cultures and religions. In the United States today, some adolescents participate in religious ceremonies such as bar or bat mitzvah or confirmation, but for others, these ceremonies are unfamiliar.

The lack of a “universal rite of passage” to identify adulthood has led to confusion for some contemporary adolescents in many industrialized nations.

### THE MALE

Male hormonal changes normally begin between 10 and 16 years of age. Outward changes become apparent when the size of the penis and testes increases and there is a general growth spurt. Testosterone, the primary male hormone, causes the boy to grow taller, become more muscular, and develop secondary sex characteristics such as pubic hair, facial hair, and a deep voice. The voice deepens but is often characterized by squeaks or cracks before reaching its final pitch. Testosterone levels are constant, not cyclic like female hormones, although levels may decrease with age to 50% of peak levels by age 80 years. Nocturnal emissions (“wet dreams”) may occur without sexual stimulation. These emissions usually do not contain sperm.

### THE FEMALE

The first outward change of puberty in females is the development of breasts. The first menstrual period (**menarche**) occurs 2 to 2½ years later (ages 11 to 15 years). Female reproductive organs mature to prepare for sexual activity and childbearing. The female experiences a growth spurt, but hers ends earlier than the

male's. Her hips broaden as her pelvis assumes the wide basin shape needed for birth. Pubic and axillary hair appears. The quantity varies, as it does in males.

## FEMALE REPRODUCTIVE SYSTEM

### EXTERNAL GENITALIA: VULVA

The female external reproductive organs consist of the mons pubis, which is covered with pubic hair; two paired folds of tissue, called the *labia majora* and *labia minora*, which surround a space called the vestibule; the vaginal opening; the fourchette; the perineum; the clitoris; and glandular structures (Figure 2-1). Collectively these structures are known as the *vulva*.

#### Mons Pubis

The mons pubis is formed at the upper margin of the symphysis pubis and is shaped like an inverted triangle. It is located over the two pubic bones of the pelvis. This structure is composed of fatty tissue lying beneath the skin and, from puberty on, is covered with varying amounts of pubic hair. The mons pubis surrounds delicate tissue and protects it from injury.

#### Labia Majora and Labia Minora

The labia majora are two folds of fatty tissue that form the lateral boundaries of the vulva. They are covered with coarse skin and pubic hair on the outer aspect and are smooth and moist on the inner aspect, where the openings of numerous small glands are found. The labia are analogous to the scrotum in the male. Just inside the labia majora are two smaller folds of skin called the labia minora that meet at the fourchette above the anus. This area is also known as the *obstetric perineum*. It is often the site of lacerations during childbirth.

When the labia majora are separated, the labia minora are exposed. The labia minora are soft folds of skin

that are rich in sebaceous glands. The labia minora are moist and are composed of erectile tissue containing loose connective tissue, blood vessels, and involuntary muscles. The functions of the labia minora are to lubricate and waterproof the vulvar skin and to provide bactericidal secretions that help prevent infections.

#### Clitoris

The clitoris is a small, sensitive structure that, like the penis, is composed of erectile tissue, nerves, and blood vessels; it is covered at its tip with very sensitive tissue. It exists primarily for female sexual enjoyment. Partially hidden at the upper end of the labia, the clitoris may seem to be the opening to an orifice and may be mistaken for the opening to the urethra. In addition, the clitoris secretes a cheese-like substance from the sebaceous glands, which is called *smegma*. The odor of smegma may be sexually stimulating to the male.

#### Vaginal Vestibule

The vaginal vestibule is a boat-shaped depression enclosed by the labia minora and is visible when the labia minora are separated. The vestibule contains the vaginal opening, or *introitus*, which is located between the external and internal genitalia. At the vaginal introitus, there is a thin, elastic, mucous membrane called the *hymen*. The hymen may be broken by the use of tampons, strenuous physical activity, or sexual intercourse. A broken hymen does not prove the loss of virginity.

The vestibule contains the openings of five structures that drain into it: the urethral meatus, Skene's ducts, and the ducts from Bartholin's glands that are located on each side of the vagina. These glands secrete yellowish mucus that lubricates the vagina, particularly during sexual arousal. Skene's glands are located just inside the urethra and are part of the vestibule. The vestibule ends with the formation of the fourchette.

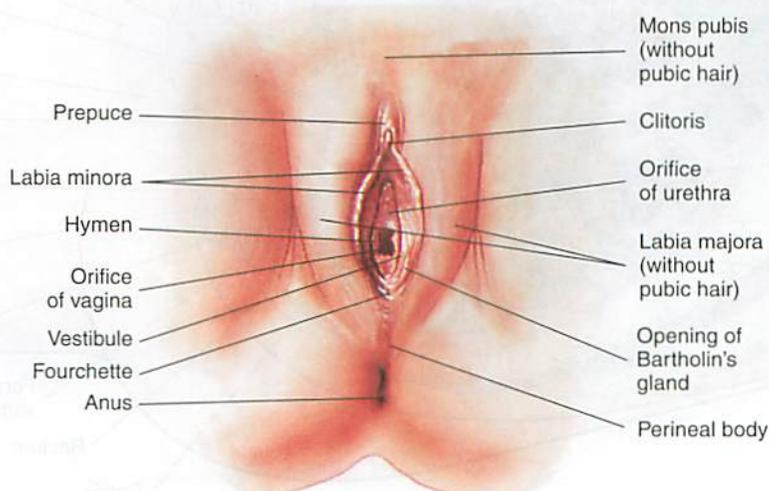


FIGURE 2-1 Female external genitalia. The obstetric perineum lies between the vaginal orifice and the anus.

When the nurse is preparing to do a urinary catheterization, he or she cleanses this area of the vestibule.

### Perineum

The **perineum** is the region of the genital area that lies between the vagina and the anus. Because of its location, it plays an important role in the birth process. It is composed of the levator ani muscles, the deep perineal muscles, and the external genitalia muscles. These muscles function as supports to the pelvic organs. The pudendal arteries, veins, and nerves supply the muscles, fascia, and skin of the perineum.

The perineum is supported during the delivery of the infant's head and shoulders because it stretches significantly during the infant's birth and may tear. An **episiotomy** (incision) in the perineal area may be performed to prevent tears in the underlying muscles or tissues; the episiotomy is repaired (sutured) immediately after delivery. Pelvic weakness or painful intercourse (dyspareunia) may result if this tissue does not heal properly.

### INTERNAL REPRODUCTIVE ORGANS

The internal female organs of reproduction are the ovaries, fallopian (uterine) tubes, uterus, and vagina (Figure 2-2).

### Vagina

The vagina is a curved tube leading from the uterus to the external opening at the vestibule. It lies between the urinary bladder and the rectum. Because it meets at a right angle with the cervix, the anterior wall is about 2.5 cm (1 inch) shorter than the posterior wall, which varies from 7 to 10 cm (approximately 2.8 to 4 inches). It consists of muscle and connective tissue and is lined with epithelial tissue, which contains folds called **rugae**. These folds allow the vagina to stretch considerably during childbirth. The epithelial cells lining the vagina show cyclic changes related to circulating estrogens, progesterins, and androgens. Doderlein's bacilli, which are normally present in the vagina, act on glycogen from the epithelial cells to produce lactic acid. This maintains the acidity of the vagina and is the reason that the vagina is resistant to most infections. A change in the pH of the vagina, which can be caused by frequent douching, antimicrobial therapy, or deodorant tampons, can increase the vagina's susceptibility to invading pathogens. The cyclic changes in the vagina related to age and changing pH are shown in Figure 2-3. The vagina functions as:

1. A passageway of the uterus through which the uterine secretions and menstrual flow escape

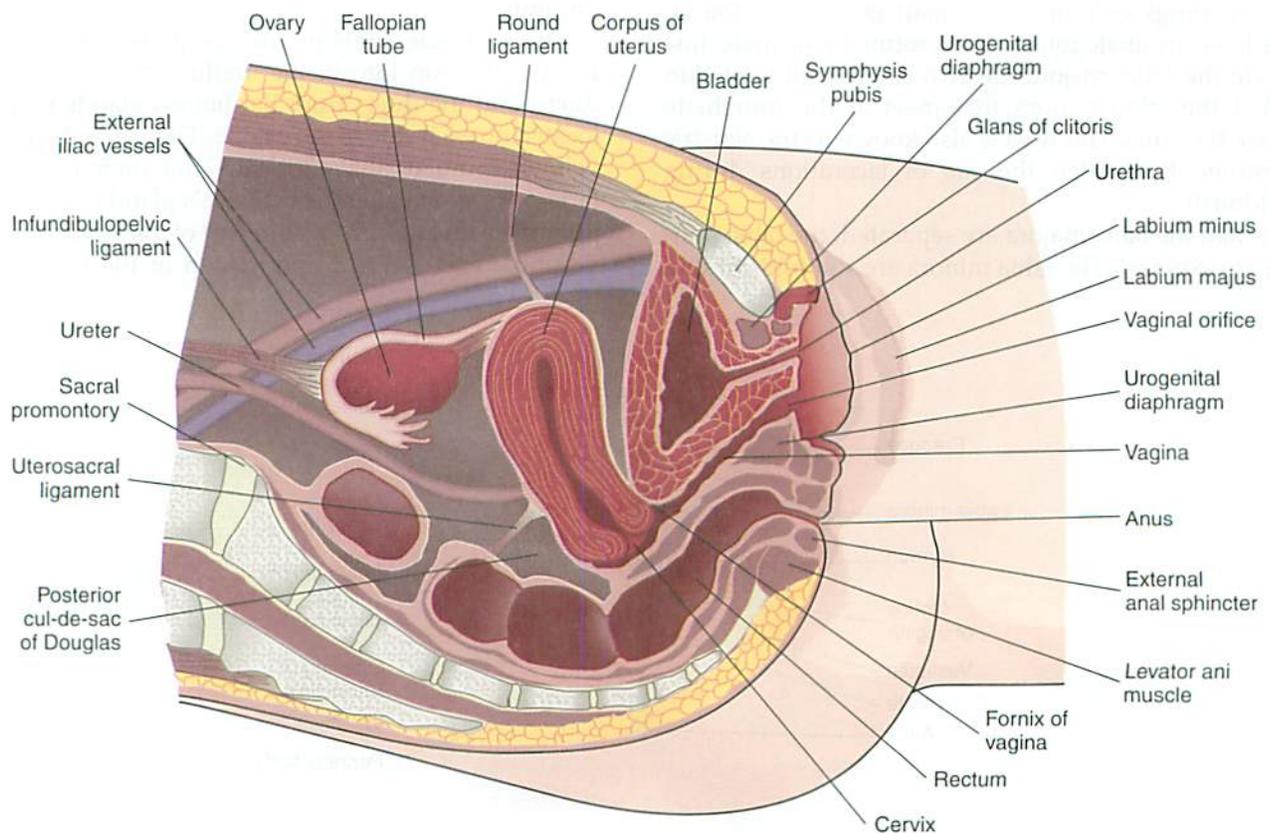


FIGURE 2-2 Internal female reproductive organs with woman lying supine.