ANSWERS TO WORKSHEET QUESTIONS

Chapter 1

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. Analgesia was only available in the hospital setting and women wanted to have the pain of laboring reduced; thus, they sought hospital care over home births. A is an incorrect response due to the fact that more infections occurred in the hospital setting than in the home setting after giving birth. C is an incorrect response since the home setting afforded greater privacy than in a public hospital. The woman could have her family present in the home birth, but not so in the hospital setting. D is an incorrect response since midwives were very well trained to perform births, and the gender of the birth attendant had no bearing on birthing experience.

2. The correct response is A. Infant mortality rates are compared to 1000 live births and maternal mortality rates are compared to 100,000 live births since they are much rarer than infant mortality. B is an incorrect response since both statistical rates are gathered in the same manner, but the comparison of maternal deaths is based on higher rates than the infant mortality ones. C is an incorrect response since both rates are compiled annually worldwide. D is an incorrect response since both maternal and infant mortality rates would be included in the health index of countries. The health index of a country examines many statistics to give an overall view of its health status.

3. The correct response is D. Over 500,000 women die from cardiovascular disease annually in the United States. This number is higher than that for men, but heart disease remains in the minds of many a "man's disease." A is an incorrect response in comparison to CVD, although most women believe this is their number one health concern. The breast cancer mortality rate pales when compared to cardiovascular deaths. B is an incorrect response since annually in the United States, approximately 350 deaths occur secondary to childbirth complications. C is an incorrect response since this statistic would be much less than when compared to the half million deaths from CVD.

4. The correct response is C. 43 million Americans have no health insurance, with the majority of them being women. Without health insurance, many have limited options to procure prenatal care. A is an incorrect response since statistics will demonstrate the better outcomes with prenatal care and most women do want to have medical supervision for a better outcome. B is an incorrect response because most women seek care early in the pregnancy, with the exception of teenagers hiding or not aware of their pregnancy. D is an incorrect response since the majority of women receive quality prenatal care and the outcome is positive. This mistrust of traditional medical practices may play a role in some women from different cultures since they differ from their own cultural health practices.

CRITICAL THINKING EXERCISES

1.

a. **What changes in the clinic service hours might address this situation?**

Many of the clients may have employment based on an hourly wage. If they don't work, they don't get paid, and therefore can't attend the clinic during their normal work hours. Offer evening and Saturday hours to improve their attendance at clinic appointments.

b. **Outline what you might say at your next staff meeting to address the issue of clients making one clinic visit and then never returning.**

Acceptance and a supportive tone are frequently set at the initial meeting, and one may need to examine how this is communicated to the client at their first encounter with the clinic staff. Offer suggestions of how the staff can set a positive, welcoming tone so clients will return for additional care.

c. **What strategies might you use to improve attendance and notification?**

Have a staff person call each client to remind her of her appointment the next day and offer any needed assistance to get her there. Assign a staff member to be an "outreach" person to make home visits to follow up on clients who habitually miss appointments.

d. **Describe what cultural and customer service techniques might be needed.**

Educate staff concerning cultural norms regarding the clientele served. Based on the culture served, devise culturally appropriate policies and procedures.

STUDY ACTIVITIES

1. Depending on the student's frame of reference, some will think it is a right and the government should provide it for all citizens. Others will think it should be a privilege and should be paid for by the person and not the government. There is no right or wrong answer, but this topic can provide for a lively classroom discussion.
2. Women lack insurance to pay for services, no transportation available to get to services, language or cultural barriers, health care agency hours are in conflict with their work hours, and negative health staff attitudes.
3. Depending on which article they select on which Web site, these answers will vary.

Chapter 2

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. Having a knowledge of the various cultural variations in health care practices helps the nurse to utilize them in his or her everyday practice settings. This cultural sensitivity and application of it makes a culturally competent nurse. A is an incorrect response because knowing your own culture doesn't foster tolerance and acceptance of people from different ones. Only when the nurse gains knowledge about other cultures will she or he become culturally competent. B is an incorrect response because being open to different cultural customs and beliefs is only the beginning of becoming culturally competent; application of this knowledge is critical too. D is an incorrect response because working on policies without seeing them applied in the health setting is not going to break down barriers to care. What is written policy may not be utilized in the real world; thus, everyone can refer to the policy, but attitudes and actions haven't changed.
2. The correct response is B. Secondary prevention includes early diagnosis, screening for disease, and treating it early to prevent spread or exacerbation. A is an incorrect answer because primary prevention would be carried out on people to prevent early symptoms of any disease or condition. Examples would include daily exercise, eating low-fat meals, getting adequate sleep, and maintaining ideal weight. These preventive measures would reduce risk of disease before it started. C is an incorrect answer due to the fact that tertiary prevention focuses on disease progression after the person already has acquired the disease. Going to rehabilitation after suffering a stroke will help prevent a worsening of the existing condition or extension of it. D is an incorrect response because the community can band together to reduce a particular disease or condition, but it is up to every individual to prevent it within himself or herself. Community education can only go so far without individual action.
3. The correct response is A. Americans place great value on youth, technology, and their time. The wisdom and advice of the elders from past generations is not valued and respected in many cases. The use of technology has exploded in the last century, and much time and resources are being spent on its improvement. Time is very precious to Americans, and there never seems to be much of it to accomplish our goals. B is an incorrect response since elders of our society are not respected for their opinion or ideas in many families. As one ages in this society, their value becomes lessened. Americans believe in what can be scientifically proven through research and are skeptical about fate and spiritual phenomena. C is an incorrect response since many Americans live by the clock and can't be flexible or accept lateness in others. Family focus is important to some extent, but other cultures hold the family in higher regard. D is an incorrect response in two respects: extended families are not in the majority in our culture, and folk medicine is not practiced by the majority of the population. Traditional medicine with scientific proof is the norm within our society.
4. The correct response is A. Not enough studies have been done on natural herbs to validate their effectiveness or rule out their teratogenic properties. It is best to avoid them during any pregnancy to prevent any fetal or maternal complications. B is an incorrect response for the above reasons and because safety has not been established for pregnant women. C is an incorrect response since harm could be brought to the growing fetus, and the nurse should warn her not to take unproven remedies during pregnancy. D is an incorrect response since increasing her prenatal vitamins will not necessarily improve her energy level, but may harm the fetus by introducing mega doses of vitamins.

5. The correct response is C. The question doesn't imply any judgment on the nurse's part and it invites the patient to describe the nontraditional therapies that are used. A is an incorrect response because it may imply judgment, depending on the tone in which it was asked. B is similar to A since the negative attitude can be realized by the manner in which the question is asked. The patient may pick up a "disapproving attitude" and not admit to any non-traditional therapies. D is an incorrect response because it places a judgment on herbs in the question itself. It doesn't allow the patient the freedom of response without prejudice.

CRITICAL THINKING EXERCISE

1.

a. **What resources would you use to research this topic prior to the meeting?**

Community leaders from diverse cultures, library resources, and the Internet

b. **What information will you present to address the nursing staff's attitudes toward their culturally diverse clientele?**

Give out a survey to ascertain the staff's feelings about working with people from different cultures and use these data to open the discussion up to bring about awareness of various attitudes, beliefs, and values. Discussion about prejudice, stereotyping, and ethnocentricity will be explained and explored.

c. **What steps would you take to help the nursing staff to become culturally competent?**

Set up weekly cultural awareness/educational meetings and invite speakers from various cultures that the community-based clinic serves to help the staff learn and become more open-minded about different points of view. Also, send staff to culturally oriented conferences to bring back information to other staff members.

STUDY ACTIVITIES

1. The discussion will vary depending on which cultures are represented on the panel. It will be an eye-opening experience for many nursing students to hear the various members describe the differences.
2. Cultural competence or cultural competency
3. Depending on the Web site selected, answers will vary, but most of them offer a variety of resources to learn about different cultures and could be helpful to nurses seeking information.
4. This visit would be very educational for nursing students to "see" what is happening in the real world when faced with cultural barriers in the health care setting. Hopefully, the community health center staff will be open to these students and will share their strategies. These strategies can be used by the student later in their practice.

Chapter 3

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. FSH is secreted from the anterior pituitary gland to initiate the development of the ovarian follicles and the secretion of estrogen by them within the ovarian cycle. A is incorrect: TSH stimulates the thyroid gland and plays a limited role in the menstrual cycle. C is incorrect: CRH is released from the hypothalamus, not the anterior pituitary gland. D is incorrect: GnRH is released from the hypothalamus to stimulate the release of FSH and LH from the anterior pituitary gland.
2. The correct response is C. Skene's glands since they are located close to the urethral opening and secrete mucus and lubricate during urination and sexual intercourse. A is incorrect: Cowper's glands are located on either side of the male urethra, not the female urethra. B is incorrect: Bartholin's glands are located on either side of the vaginal opening and secrete alkaline mucus that enhances the viability of the male sperm. D is incorrect: seminal glands are pouch-like structures at the base of the male urinary bladder that secrete an alkaline fluid to enhance the viability of the male sperm.

3. The correct response is A. The secretory phase is the second part of the endometrial cycle after ovulation, *not* a phase of the ovarian cycle. B, the follicular phase, is the first phase of the ovarian cycle, when the immature ovum begins to mature inside the follicle. C, ovulation, is the second phase of the ovarian cycle, when the rupture of the graafian follicle occurs with the release of the mature ovum. D, the luteal phase, is the final or postovulation phase of the ovarian cycle, when the corpus luteum degenerates and the levels of estrogen and progesterone decline if fertilization did not take place.

4. The correct response is D. Progesterone is the dominant hormone after ovulation to prepare the endometrium for implantation. A is incorrect: estrogen levels decline after ovulation, since it assists in the maturation of the ovarian follicles before ovulation. Estrogen levels are highest during the proliferative phase of the menstrual cycle. B is incorrect: prostaglandin production increases during the follicular maturation and is essential during ovulation but not after ovulation. C is incorrect: prolactin is inhibited by the high levels of estrogen and progesterone during pregnancy; when their levels decline at birth, an increase in prolactin takes place to promote lactation.

5. The correct response is C. The function of the epididymis is to store and mature sperm until ejaculation occurs. A is incorrect: the testes manufacture sperm and send them to the epididymis for storage and continued maturation. B is incorrect: the main function of the vas deferens is to rapidly squeeze the sperm from their storage site (epididymis) into the urethra. D is incorrect: the function of the seminal vesicles is to secrete an alkaline fluid rich in fructose and prostaglandins to help provide an environment favorable to sperm motility and metabolism.

CRITICAL THINKING EXERCISES

1.

a. How should the nurse respond to this question?

The nurse should respond by explaining to the student that conception is achieved only during the time of ovulation, which occurs at midcycle and not during menstruation. Further explanation might outline the phases of the menstrual cycle and how each phase contributes to the preparation of the endometrial lining if conception were to take place. If conception does not occur, sloughing of the prepared endometrial lining takes place, and this is what is shed during menstruation.

b. What factor regarding the menstrual cycle was not clarified?

The student apparently did not understand the concept of ovulation and the potential uniting of sperm and ovum. At ovulation, bodily changes occur that assist the sperm to impregnate the ovum that was released from the ovary. It is only during this midcycle period that the sperm can find the ovum and begin a pregnancy.

c. What additional topics might this question lead into that might be discussed?

Sexually transmitted infections and barrier protection; abstinence until marriage and personal responsibility; responsibilities and outcomes of becoming a young parent; self-esteem and taking pride in their bodies; future educational and career goals

STUDY ACTIVITIES

1. This answer will vary depending on which web site the student selects and which topic of interest he or she researches. With luck, a variety of topics will be presented and lend itself to a lively class discussion.

2. The predominant hormones involved in the menstrual cycle are gonadotropin-releasing hormone (GnRH), which is responsible for reproductive hormone control and timing of the cycle; follicle-stimulating hormone (FSH), which stimulates the ovary to produce estrogen and follicles in the ovary that will mature; luteinizing hormone (LH), which induces the mature ovum to burst from the ovary and stimulate production of corpus luteum; estrogen, which induces growth and thickening of the endometrial lining; progesterone, which prepares the endometrial lining for implantation; and prostaglandins, which help to free the mature ovum inside the graafian follicle.

3. Ovum or ova

4. The correct responses are F (testes) and G (seminiferous tubules). Sperm is produced in the seminiferous tubules of the testes. A is incorrect: the vas deferens is a cordlike duct that transports sperm from the epididymis and has no role in making sperm cells. B is incorrect: the penis is the organ for copulation and serves as the outlet for sperm, but it plays no role in the manufacture of sperm cells or testosterone. C is incorrect: the scrotum serves as the climate-control

system for the testes to allow for normal sperm development, but it plays no direct role in their manufacture. D is incorrect: the ejaculatory ducts secrete fluids to help nourish the sperm but do not play a part in their development. E is incorrect: the prostate gland produces fluid that nourishes the sperm but does not participate in the production of sperm cells. H is incorrect: the bulbourethral glands (Cowper's glands) secrete a mucus-like fluid that provides lubrication during the sex act.

Chapter 4

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. The definition of infertility is the inability of a couple to conceive after 12 months of unprotected sexual intercourse. A is incorrect: 6 months isn't long enough to diagnose infertility in a couple not using birth control. C is incorrect: 18 months is 6 months beyond the time needed to diagnose infertility based on the definition. D is incorrect: 24 months is double the time needed to diagnose infertility.

2. The correct response is B. If EC is taken within 72 hours after unprotected sexual intercourse, pregnancy will be prevented by inhibiting implantation. The next morning would still afford time to take EC and not become pregnant. A is incorrect: it would be too late to use a spermicidal agent to prevent pregnancy, since the sperm have already traveled up into the female reproductive tract. C is incorrect: douching with vinegar and hot water 24 hours after unprotected sexual intercourse will not change the course of events; by then it is too late to prevent a pregnancy, and this combination would not be effective anyway. D is incorrect: a laxative will stimulate the gastrointestinal tract to produce defecation but will not disturb the reproductive tract, where fertilization takes place.

3. The correct response is A. Seasonale is the only FDA-approved oral contraceptive that is packaged to provide 84 days of continuous protection. Although any oral contraceptive can be taken continuously, the FDA has not approved this, and it would be considered an "off-label" use. B is incorrect: this product has not gained FDA approval for continuous use; it is to be left in 3 weeks and then removed for 1 week to create monthly cycles. C is incorrect response: the FDA has not given approval to use this transdermal patch on a continuous basis; it is placed on the skin for 3 weeks and removed for 1 week. D is incorrect: this implantable device is protective for 5 years, but it is not a combination contraceptive; it releases synthetic progesterone only, not estrogen.

4. The correct response is D. Weight-bearing exercise is an excellent preventive measure to preserve bone integrity, especially the vertebral column and hips. Walking strengthens the skeletal system and prevents breakdown that leads to osteoporosis. A is incorrect: iron does not prevent bone breakdown; while iron supplementation will build up blood and prevent anemia, it has a limited effect on bones. B is incorrect: being in the horizontal position while sleeping is not helpful to build bone. Weight-bearing on long bones helps to maintain their density, which prevents loss of bone matrix. C is incorrect: protein gained from eating lean meats helps the body to build tissue and muscles but has a limited effect on maintaining bone integrity or preventing loss of bone density.

5. The correct response is B. Smoking cigarettes causes vasoconstriction of the blood vessels, increasing peripheral vascular resistance and thus elevating blood pressure. These vascular changes increase the chances of CVD by placing additional pressure on the heart to pump blood with increasing vessel resistance. A is an incorrect answer since fiber would be a positive diet addition and assist with elimination patterns and prevent straining, which stresses the heart. C is an incorrect response because vitamins do not cause narrowing of the vessel lumen, which places an additional burden on the heart. D is an incorrect response since alcohol produces vasodilation and reduces blood pressure. Alcohol in moderation is said to be good for the heart.

6. The correct response is C. Vasomotor instability, which causes hot flashes, is directly related to declining estrogen levels. Increasing the estrogen levels by hormone replacement therapy reduces vasomotor instability and thus hot flashes. A is an incorrect response since weight gain or loss is associated with calorie intake and metabolic output in the form of energy expended through exercise. Although many women report a weight gain associated with HRT, when question closely they admit to a reduction in activity level. B is incorrect since estrogen has the opposite effect on bone density–it increases and/or maintains it. HRT is prescribed for post-menopausal women to prevent osteoporosis, or loss of bone density. D is incorrect since the incidence of heart disease (myocardial infarction and

strokes) was found to increase in women taking HRT in the WHI research study, if hormones were taken in high doses over a long period. Based on that landmark study, women on HRT should take the lowest dose possible to relieve symptoms and should not take HRT for more than 5 years.

7. The correct response is A. Exercise is heart-healthy, weight-healthy, and emotionally healthy. The motto "Keep moving" is the basis for a healthy lifestyle, since it will help maintain an ideal weight, improve circulation, and improve moods. B is incorrect: socialization does not necessarily involve physical activity and would not be proactive in preserving health. C is incorrect: quiet time alone, although needed to reduce stress, reduces movement and may result in depression and weight gain. D is incorrect: water, although needed to hydrate the body, will not maintain circulation, prevent weight gain, or improve one's emotional mindset. Exercise will accomplish all three.

CRITICAL THINKING EXERCISE

1.

a. **Is an IUD the most appropriate method for her? Why or why not?**

In this case, based on her history of STIs, PID, and multiple partners, she is not a candidate for an IUD. This method would increase her risk of further ascending infections, which could hinder her future fertility. Unless her lifestyle choices change dramatically, she is placing herself at risk. She should be encouraged to use barrier methods for contraception.

b. **What myths/misperceptions will you address in your counseling session?**

This client states she isn't interested in using birth control pills because they cause cancer. That is not true, and an explanation of risk factors for cancer needs to be given, along with a discussion of the lower doses of estrogen in the birth control pills prescribed today. Positive noncontraceptive impacts such as a reduction in ovarian and colorectal cancers should also be addressed.

c. **Outline the safer sex discussion you plan to have with her.**

- Having a monogamous relation reduces the incidence of STIs.
- Using barrier methods (condom, cap, diaphragm) protects against both pregnancy and STIs.
- Oral sex using a dental dam reduces the risk of STIs.
- Dry kissing with no sores or broken skin reduces the risk of STIs.
- Inform client of relationship between PID and infertility.
- Encourage prompt treatment of any vaginal discharge.

STUDY ACTIVITIES

1. Typically, the family planning nurse will ask the woman about any sociocultural, spiritual, and religious beliefs that will influence the decision. Lifestyle and economics also play a big role in the choice of a family planning method. Ideally this should be a decision made by both partners, but rarely is the partner involved. Important teaching involves the risks, benefits, side effects, and efficacy of each method, along with instructions on how to use it correctly. Information regarding follow-up care should be stressed.

2. Numerous web sites are available, many of them sponsored by infertility healthcare agencies.

3. Prices will be higher in metropolitan versus rural areas of the county. Students will discover that the risk is higher for a woman undergoing a tubal ligation than a man undergoing a vasectomy. The costs will vary, but male sterilization is generally both less risky and less expensive.

4. The students will find numerous brands of male condoms and only one brand of female condom. Male condoms prices can range from 35 cents each to over $4, depending on the manufacturer. Most female condoms are priced around $2.50 to $3.50 each.

5. A, B, D, E, and G are correct responses: research studies have validated a reduced incidence of these cancers and conditions. C and F are incorrect: research has not shown a reduction, and some studies have actually found an increase in the incidence of breast cancer and deep vein thrombosis.

Chapter 5

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. It creates a mechanical barrier so that bacteria and viruses cannot gain access to the internal reproductive tract and proliferate. A is incorrect: there is no barrier or protection offered by taking an oral pill. Oral contraceptives offer protection against pregnancy by preventing ovulation, but none against STIs. B is incorrect: since an infected partner can still transmit the infection through preejaculate fluids, which may contain an active STI. D is incorrect: an IUD offers no barrier to prevent entrance of bacteria or viruses into the internal reproductive tract. Because it is an internal device, the string emerging from the external uterine os can actually enhance STI infiltration into the uterus in susceptible women.

2. The correct response is A. The HIV virus is not spread through casual contact between individuals. HIV is spread through unprotected sexual intercourse, breastfeeding, blood contact, or shared needles or sex toys. B is incorrect: HIV can be spread by sharing injection equipment because the user can come into contact with HIV-positive blood. C is incorrect: sexual intercourse (unprotected vaginal, anal, or oral) poses the highest risk of HIV transmission. D is incorrect: the newborn can receive the HIV virus through infected breast milk. HIV-positive women are advised not to breastfeed to protect their offspring from getting a HIV infection.

3. The correct response is B. The human papillomavirus (HPV) causes warts in the genital region. HPV is a slow-growing DNA virus belonging to the papilloma group. Types 6 and 11 usually cause visible genital warts. Other HPV types in the genital region (16, 18, 31, 33, and 35) are associated with vaginal, anal, and cervical dysplasia. A is incorrect: a pus-filled discharge is not typical of an HPV infection, but rather a chlamydial or gonococcal STI. C is incorrect: a single painless ulcer would be indicative of primary syphilis rather than an HPV infection. D is incorrect: multiple vesicles would indicate a herpes outbreak, not an HPV infection. The woman would also experience tingling, itching, and pain in the affected area.

4. The correct response is D. A ruptured tubal pregnancy secondary to an ectopic pregnancy can cause life-threatening hypovolemic shock. Without immediate surgical intervention, death can result. A is incorrect: involuntary infertility may be emotionally traumatic, but it is not life-threatening. B is incorrect: chronic pelvic pain secondary to adhesions is unpleasant but typically isn't life-threatening. C is incorrect: depression may be caused by the chronic pain or involuntary infertility but is not life-threatening.

5. The correct response is C. The classic chancre in primary syphilis can be described as a painless, indurated ulcer-like lesion at the site of exposure. A is incorrect: a highly variable rash is characteristic of secondary syphilis, not primary. B is incorrect: this is more descriptive of a trichomoniasis vaginal infection rather than primary syphilis, which manifests with a chancre on the external genitalia. D is incorrect: a localized gumma formation on the mucous membranes, such as the lips or nose, is characteristic of late syphilis, along with neurosyphilis and cardiovascular syphilis.

CRITICAL THINKING EXERCISE

1.

a. What STI would the nurse suspect?

Based on the description of the genital lesions, the nurse would suspect genital herpes. Typically the herpetic lesions begin as erythematous papules that then develop into vesicles. The vesicles rupture and leave ulcerated lesions and then crust over. This is essentially what Sally described in her history.

b. The nurse should give immediate consideration to which of Sally's complaints?

As with any STI, treatment should aim at promoting comfort, promoting healing, preventing secondary infection, and decreasing transmission of the disease. A sample from a genital lesion should be obtained for a definitive diagnosis. A urine sample should be checked for bacteria to rule out a bladder infection. Giving information about the specific STI is important to promote understanding. Information concerning her antiviral medication therapy is paramount to reduce the viral shedding. Sitz baths and mild analgesics may be needed for pain relief.

c. What should be the goals of the nurse in teaching Sally about this STI?

Although acyclovir or another antiviral medication can reduce the symptoms of herpes, the nurse needs to point out that it is not a cure for herpes. Antiviral drugs act to suppress viral replication but do not rid the body of them. This STI is a lifetime one, and she may experience numerous episodes. The nurse should teach Sally that this condition is manageable, but she will need to be able to identify stress factors that may trigger a

recurrence and reduce them. Common triggers may include hormonal changes, such as ovulation during the menstrual cycle; prolonged exposure to sunlight; emotional distress; lack of sleep; and overwork. The final goal is to make sure Sally understands how to prevent transmission of herpes and what changes in her behaviors need to take place immediately to protect her health.

STUDY ACTIVITIES

1. Depending on which web site the students select and which STI they choose to learn educated, discussions will vary. We hope that each student will bring additional information to the discussion and will share interesting "finds" with his or her peers.
2. Statistics will vary depending on the student's location. This research will help students learn what is happening in their area and what preventive measures are being used to reduce the incidence of STIs.
3. The counseling role of the STI nurse should be one of patience and sensitivity. The nurse should be nonjudgmental and should see the client as someone who needs both treatment and education. The nurse should counsel the patient about high-risk behaviors and prevention of disease transmission.
4. *Chlamydia* and *gonorrhea*
5. The correct responses are B, C, and D: all three therapies assist in reducing the viral load in the warty lesion. Treatment may reduce but does not necessarily eradicate infection. A is incorrect: penicillin is a bacteriostatic agent and is not effective against viruses. E is incorrect: antiretroviral therapy is used for HIV infections. F is incorrect: acyclovir is typically used to treat herpes infections.

Chapter 6

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. Visible changes to the skin of the breast takes place and can be seen if inspected in front of a mirror (dimpling, contour changes, nipple discharge). A is incorrect: breast cancer first spreads to the axillary lymph nodes, not the cervical nodes. Palpation of the axillary lymph nodes is warranted, not the cervical ones. B is incorrect: spontaneous nipple discharge is more indicative of breast cancer than discharged produced by squeezing the nipple. D is incorrect: a mammogram is not part of a breast self-examination, which the woman does in the privacy of her home.
2. The correct response is A. The incidence of breast cancer increases with aging, especially over age 50. Only 1% of breast cancers occur in men. B is incorrect: bearing children interrupts the menstrual cycle and decreases a woman's risk of breast cancer. C is incorrect: only 7% of women have a genetic mutation resulting in breast cancer, whereas in the remaining 93% it is a sporadic occurrence. D is incorrect: colon cancer is not a risk factor for breast cancer.
3. The correct response is B. This describes the procedure for performing a sentinel node biopsy. A is incorrect: there is no dye used and a biopsy is taken of the breast mass, not the node. C is incorrect: this is an actual surgical removal of the axillary nodes and not just a biopsy, and no dye is used in this procedure. D is incorrect: an advanced breast biopsy doesn't use dye and involves taking a tissue sample of the breast mass, not the nodes in the axillary area.
4. The correct response is D. When the bone marrow is suppressed secondary to chemotherapy, the woman experiences bleeding tendencies (low platelets), limited immunity (low white blood cells), and anemia (low red blood cells). This myelosuppression can become life-threatening. A is incorrect: a decrease in the number of platelets in the circulating blood may cause bleeding tendencies if the body is traumatized, but it is not as life-threatening as having all bone marrow cells depressed. B is incorrect: having blood clots in deep veins is typically not a frequent response to chemotherapy, whereas myelosuppression is very common. C is incorrect: losing one's hair, while emotionally and aesthetically traumatizing, it is not a life-threatening event, and the hair will grow back after therapy ends.
5. The correct response is B. The discomfort is usually mild and analgesics will relieve it in most cases. A is incorrect: women are advised to reduce caffeine to reduce the stimulation of breast tissue, not increase it. C is incorrect: women are advised to increase their intake of leafy vegetables, not reduce them, since this would be a part of a balanced healthy diet. D is incorrect: women are advised to wear a firm supportive bra to reduce the strain on the breast tissue, not a bra that offers no support.

6. The correct response is D. This volunteer organization offers support and practical advice to women with breast cancer; all the volunteers have had breast cancer themselves. A is incorrect: NOW doesn't focus on breast cancer per se, but all women's issues, especially equality ones. B is incorrect: the FDA is concerned with the regulation, security, and safety of all foods and drugs in the United States, not breast cancer issues. C is incorrect: the March of Dimes focuses on prevention of preterm births and reduction of birth defects, not breast cancer.

CRITICAL THINKING EXERCISE

1.

a. What specific questions would you ask this client to get a clearer picture?

The nurse needs to assess this client's risk factors for breast cancer by asking about:

- Her family history of breast or ovarian cancer
- Her own health history
- Her gynecologic history (menarche, parity, family planning)
- Her history of breast problems (previous benign disorders)
- Her lifestyle habits, which may be associated with cancer (i.e., smoking, high intake of fat, alcohol intake)

b. What education is needed for this client regarding breast health?

The nurse needs to reassure the client that most breast lesions are benign, but this problem will need to be explored. The fact she experiences cyclic pain suggests this problem may be fibrocystic breast changes and not cancer, but she should undergo a further workup. Stress the importance of the performing monthly breast self-examinations, receiving yearly mammograms, and scheduling annual clinical breast examinations with her healthcare provider to assist in taking control of her health.

c. What community referrals are needed to meet this client's future needs?

During October of each year, many healthcare agencies honor National Breast Cancer month by offering free or reduced-cost mammograms. The nurse needs to make this client aware of this and urge her to receive a mammogram to maintain her health.

STUDY ACTIVITIES

1. A woman's breasts have a variety of meanings and symbolize various things to women. To some women, her breasts symbolize her female self and her ability to suckle her newborn, and separate her biologically from a man. To society, a woman's breasts can be viewed as a sex symbol and denote sexiness. Different cultures view a woman's breasts differently, dictating whether if she is welcome to expose them for breastfeeding or not.

2. Feelings might include fear of cancer, anxiety, helplessness, embarrassment, denial, or depression. A nurse can help her cope with these feelings by giving her the facts and reassuring her that most breast disorders are benign. Guide the woman through the diagnostic tests needed to validate her condition.

3. Lifestyle modifications that can reduce the discomfort of fibrocystic breast changes might include taking oral contraceptives, eating a low-fat diet rich in fruits and vegetables, avoiding caffeine intake, reducing salt intake, wearing a well-fitting, supportive bra most of the time, and taking over-the-counter analgesics to reduce mild discomfort.

4. Mastitis

Chapter 7

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. Pressure against adjacent structures and stretching of the uterine muscle with increasing growth of the fibroid creates pain. A is incorrect: migraines are not caused by growing fibroids, but rather a change within the vasculature in the cranium. B is incorrect: bladder pressure to cause urinary urgency would be secondary to pelvic structure relaxation, not uterine fibroids. D is incorrect: constipation would be more common in a woman experiencing pelvic organ prolapse rather than one with fibroids, since fibroids usually involve the uterus, not the rectum.

2. The correct response is A. Both pessaries and Kegel exercises help hold up and strengthen the pelvic floor to restore the pelvic organs to their correct anatomic position. B is incorrect: an external fixation device would not be a tolerable long-term solution; it would also be invasive and would place the woman at risk for infection. C is incorrect: weight gain is not usually a healthy

intervention for women as they age. Additional weight would increase the pressure on pelvic organs and exacerbate the problem. Yoga is relaxing and could reduce the woman's stress level, but it would not be therapeutic for pelvic organ prolapse. D is incorrect: wearing firm support garments might increase intra-abdominal pressure and cause further downward descent of the pelvic organs.

3. The correct response is A. Preventing constipation and straining with defecation would lessen the strain on pelvic organs. B is incorrect: sitting for long periods will not affect pelvic organ movement. Gravity will create a downward pull on all organs regardless of the position, sitting or standing. C is incorrect: exercise will help to tone muscles within the body and strengthen the pelvic floor. D is incorrect: frequent childbirth contributes to pelvic organ prolapse rather than preventing it. Spacing children only a year apart would negatively influence the pelvic-floor musculature and would be a contributing factor for prolapse.

4. The correct response is C. Insulin resistance is characterized by failure of insulin to enter cells appropriately, resulting in hyperinsulinemia, a characteristic of PCOS. Factors that contribute to this include obesity, physical inactivity, and poor dietary habits. This person is at risk for developing type 2 diabetes secondary to insulin resistance. A is incorrect: osteoporosis develops in aging women because of declining estrogen and calcium levels, not due to PCOS. B is incorrect: lupus is an autoimmune condition and is not related to PCOS. D is incorrect: migraine headaches are not associated with PCOS but rather changes in cranium vessels.

5. The correct response is D. GnRH agonists block the production of estrogen, which produces menopausal symptoms. A is incorrect: osteoporosis would be a long-term result of estrogen deprivation and calcium, and typically women do not stay on GnRH agonists for long-term therapy. B is incorrect: the blocking of estrogen would not contribute to the development of arthritis. C is incorrect: inhibiting estrogen is not a cause of depression; a change in serotonin levels in the brain is a cause of depression.

CRITICAL THINKING EXERCISE

1.

a. **What condition might Faith have based on her symptoms?**

The symptoms are suggestive of uterine fibroids. She presents with a typical profile.

b. **What treatment options are available to address this condition?**

If Faith desires to preserve her childbearing ability, she can be treated medically with oral contraceptives, gonadotropin-releasing hormones, mifepristone, or a myomectomy. If she is finished with childbearing, a vaginal hysterectomy would be advised.

c. **What educational interventions should the nurse discuss with Faith?**

The nurse needs to make sure that Faith understands what the disorder is and how it can be treated and should provide information to assist her in making a decision about treatment. In addition to the treatment modalities for fibroids, her iron deficiency anemia needs attention with iron preparations and dietary changes to increase her iron and vitamin C intake.

STUDY ACTIVITIES

1. Offer an explanation of how this inconspicuous exercise can help build muscle volume. Show a picture of where this pelvic floor muscle is located. Pelvic floor relaxation comes with the aging process in women secondary to childbirth, weight gain, and the force of gravity. The easiest way to instruct a woman how to do Kegel exercises is to have her practice using the pubococcygeus muscle by starting and stopping the flow of urine. Have her tighten the pubococcygeus muscle for a count of three, then relax it. This maneuver should be done at least 10 times each day.

2. The symptoms that accompany pelvic organ prolapse might include stress incontinence, urinary frequency and urgency, a feeling of bladder fullness after voiding, constipation, rectal fullness, painful intercourse, and pelvic pressure. All of the symptoms combined would tend to keep a woman isolated from society and her partner because of the embarrassment of odor, discomfort, and accidents. A woman would not feel in control of her body functions and would thus feel vulnerable in most social or intimate circumstances. Joining a support group of women experiencing similar problems would allow her to express her feelings and find support through others. Suggestions about what

works and what doesn't work and how to cope with this situation would be very helpful.

3. Symptoms common in women with uterine fibroids include low back pain, menorrhagia, anemia, dyspareunia, dysmenorrhea, bloating, and feelings of heaviness in the pelvic region. A woman might delay seeking treatment because she fears she has cancer and thus might be in denial as a protective mechanism. Many women associate irregular bleeding and pain with the diagnosis of cancer.

4. *cystocele*

5. *rectocele*

Chapter 8

MULTIPLE CHOICE QUESTIONS

1. The correct answer is B. Typically, there are no glaring features of ovarian cancer. Many of the symptoms are nonspecific and can easily be explained away and rationalized as changes related to the aging process. A is incorrect: ovarian cancer is aggressive and spreads early. C is incorrect: women do not have to die to be diagnosed with ovarian cancer. D is incorrect: most women with acute pain bring it to the attention of their health care provider, but acute pain is a late symptom of cancer.

2. The correct response is D. Any postmenopausal bleeding is suspicious for endometrial cancer. This event warrants immediate evaluation, which would include an endometrial biopsy. A is incorrect: postmenopausal women do not have menstrual periods unless they are taking hormone replacement therapy. B is incorrect: any postmenopausal bleeding is abnormal and needs evaluation to determine its cause. The exception would be for a woman taking hormone replacement therapy and still experiencing monthly cycles. C is incorrect: warm-water douches would not be advised for a woman experiencing postmenopausal bleeding, since it would not be therapeutic or warranted. Determining the etiology of the spotting or bleeding is imperative.

3. The correct response is A. Women need clear information to make informed choices about treatment and aftercare. This information will help reduce her anxiety and chose the best course of action for her. B is incorrect: hand-holding is important if used appropriately, but having clear information about what to expect and treatment options will go a longer way to meet her psychosocial needs. C is incorrect: cheerfulness is not necessarily therapeutic in the face of a grave prognosis. D is incorrect: instilling hope is important, but giving clear information would be more of a priority.

4. The correct response is C. Pap smears are done specifically to detect abnormal cells of the cervix that might be cancerous. A is incorrect: a fecal occult blood test would be useful in detecting blood in the gastrointestinal tract and might be diagnostic of colorectal cancer, not cervical cancer. B is incorrect: this glycoprotein is not specific for cervical cancer, but levels may rise in pancreatic, liver, colon, breast, and lung cancers. D is incorrect: a sigmoidoscopy is used to visualize the sigmoid colon to identify cancer, polyps, or blockages. It is not diagnostic of cervical cancer.

5. The correct response is B. Typically, ovarian cancer is not diagnosed until it is in advanced stages, when the prognosis and survival rates are poor. A is incorrect: vulvar cancer is usually recognized earlier, and treatment when it is in its early stages is curable. C is incorrect: endometrial cancer can usually be detected secondary to postmenopausal bleeding and can be treated if detected early by surgery to remove the uterus or source of cancer. D is incorrect: cervical cancer, if detected early and treated, can be eliminated. With early treatment, it does not carry a high mortality rate.

CRITICAL THINKING EXERCISES

1.

a. **Based on her history, which risk factors for cervical cancer are present?**

This client is at high risk for several conditions, including sexually transmitted infections as well as cervical cancer: smoking, early onset of sexual activity, multiple partners, and no previous Pap smears.

b. **What recommendations would you make for her and why?**

Schedule an appointment for a Pap smear and instruct her to keep it. It may save her life. The ACS strongly recommends cervical cancer screening for all women who are sexually active within 3 years of the start of sexual activity or at the age of 21. This client hasn't undergone any assessment and engages in high-risk behavior.

c. What are this client's educational needs concerning health maintenance?
Cigarette smoking and multiple sexual partners from an early age strongly correlate with cervical dysplasia and cancer and increase risk. This client needs to undergo a Pap smear annually, stop smoking, use barrier methods for protection, and reduce the number of sexual partners. The nurse should refer her to community social services to obtain employment and thus health insurance to continue health maintenance activities. The nurse should stress the importance of lifestyle behavioral changes that she needs to make to preserve her health.

d. Is Jennifer typical for a woman with this diagnosis?
Yes, Jennifer represents the typical presentation of a woman with epithelial ovarian cancer. She was diagnosed with advanced ovarian cancer that had spread to other abdominal organs and the lymph nodes by the time she was diagnosed. She essentially experienced no symptoms of concern prior to her diagnosis. Her 5-year survival rate is poor because of her advanced cancer state.

e. What in her history might have increased her risk for ovarian cancer?
Jennifer already had been diagnosed with breast cancer, which places her at an increased risk for ovarian cancer. In addition, she had no prior pregnancies to interrupt her menstrual cycles, which would be helpful in lowering her risk of developing ovarian cancer. Finally, Jennifer has a history of perineal talc exposure, which increases her risk because of its similarity to asbestos.

f. What can this nurse do to increase awareness of this cancer for all women?
Community education can be very effective in increasing awareness of this condition. Education should focus on pertinent information about risk-reduction measures, screening options for women at high risk, and the importance of annual examinations. In addition, nurses should keep current on research concerning ovarian cancer and should be able to disseminate this information at health fairs and women's support groups.

STUDY ACTIVITIES

1. Depending on the type of reproductive cancer the student selects, the responses will vary. Typically the symptoms described are vague, and the woman may have delayed seeking help from her healthcare provider. Her preoperative emotions are usually fear, denial, and anxiety regarding the unknown. Her postoperative feelings can include relief, worry, depression, and anxiety again. Her future may seem bright if the cancer was detected early, but it may be bleak if it is advanced.
2. Depending on where the student lives and what community resources are available, their responses will vary. The purpose of this field trip to acquaint the students with their community resources and to visualize the equipment used in cancer treatment. Cancer treatment centers are very specialized and most offer numerous modalities of care. It is important that students know what is available in their communities and be informed referral agents.
3. Most web sites address the lay public and offer education about each type of cancer. Most urge clients to seek specific information concerning their symptoms or situation from their healthcare practitioner.
4. *Ovarian*
5. *Breast* and *ovarian*

Chapter 9

MULTIPLE CHOICE QUESTIONS

1. **The correct response is D. Giving women the ability to gain control over their lives allows them to make the changes needed to protect themselves and their children. As long as they feel victimized, they will take little action to make change. A is incorrect: being the victim of abuse is not a mental illness, but involves being in circumstances where her courage and self-esteem may be hindered. B is incorrect: leaving the abuser is a process, not an abrupt action, and a great deal of preparation is needed before making this move. C is incorrect: nurses don't have the resources to provide financial support to abused women, but they can make referrals to community agencies that could help with job training.**
2. **The correct response is B. Tension builds within the abuser and he demonstrates increased anger and violent behavior without any provocation from the woman. This tension-building phase starts the cycle of violence. A is incorrect: typically the woman doesn't provoke the abuser's violent behavior, but he blames her for his lack of anger control. C is incorrect: in the honeymoon phase, the final phase in the cycle of violence, the abuser says he is sorry, he loves her, and it will never happen again. D is incorrect: in the explosion stage of the cycle of violence, the abuser physically harms the woman. This stage follows the tension-building phase.**
3. **The correct response is C. Women with low self-esteem and limited communication skills**

seem more likely to become victims of abuse than those with good communication skills and assertiveness. Women possessing these skills would be able to make changes in their life and would not fall victim to abuse. A is incorrect: cooking skills have a limited impact on abusive relationships. The woman's ability to communicate and feel strong within herself will provide her with better preventive tools than her cooking skills. B is incorrect: being a good decorator will not prevent abuse. Good self-esteem and work skills will go further to help her recover from an abusive relationship than being a good homemaker. D is incorrect: improving her appearance would not prevent her from becoming a victim again if her self-esteem remains low. Improving her appearance through weight loss and exercise would, however, improve her overall health status and ability to survive her abusive past.

4. The correct response is A. This statement promotes a sense of self-worth, which may have been destroyed by her abuser in the relationship. This statement indicates to the woman that she has a lot to offer and that she shouldn't put up with this abusive behavior. The victim may not have heard this message before: her abuser may have convinced her that she did deserve the violence. B is incorrect: many children living in violent homes are abused themselves and extremely stressed. No children should live under such stressful circumstances; a two-parent household is not healthy if one is an abuser. C is incorrect: in most cases the woman doesn't trigger the abuse; rather, the abuser has limited control over his anger and does not need to be provoked before lashing out. There is not necessarily a cause-and-effect relationship between the woman's behavior and the violence. D is incorrect: over time the abuse typically escalates rather than lessens; thus, giving the partner more time will not bring him to his senses.

CRITICAL THINKING EXERCISE

1.

a. Outline your conversation when you broach the subject of abuse with Mrs. Boggs.

Since you suspect abuse, asking a direct question about whether she feels safe in her own home might open up the conversation and allow Mrs. Boggs to talk about the situation. If she denies that there is a problem, reassure her that you care, that you are afraid for her safety, and that she deserves better. Opening the door for discussion is the first step toward change.

b. What is your role as a nurse in caring for this family in which you suspect abuse?

Allow Mrs. Boggs to know that you are there for her when she is ready to talk about her situation and that she deserves better than this. If she is unwilling to do so at this time, continue to ask screening questions about abuse on each subsequent visit. Providing her with the National Domestic Violence Hotline number might be helpful.

c. What ethical/legal considerations are important in planning care for this family?

If you notice that Mrs. Boggs has suffered acute abuse, by law you must report it. You also need to document any injuries to strengthen this case if it were to go to trial. Accurate documentation can also be used as justification for a variety of other actions, such as restraining orders, compensation, and insurance and welfare payments. You have an ethical and legal responsibility to report the abuse and assist the woman; do not ignore it and pass it off as "a private family dispute."

STUDY ACTIVITIES

1. This web site includes postings from women in abusive relationships. It may help the students grasp the extent of violence in our society and may prompt them to lobby legislators to pass stricter laws to protect the victims of abuse.

2. This exercise may help the students put the issue of domestic violence into perspective and determine whether they live in a safe state. They may also discover what interventions might help to reduce domestic violence.

3. Campus security personnel often present safety programs for women about how to protect themselves against date rape and sexual assault. This information will serve any woman well whether she lives on the campus or not.

4. This activity should provide an eye-opening experience about the frequency of calls related to domestic violence and how much time police officers spend dealing with it.

Chapter 10

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. Scientists have determined that conception/fertilization occurs in the upper portion of the fallopian tube. A is an incorrect response because this is where implantation takes place after fertilization has occurred. B is an incorrect response because this describes the inner lining of the uterus, where implantation takes place; not where fertilization of the ovum and sperm occur. D is an incorrect response because the sperm does not travel outside the fallopian tube to the ovary, but rather meets the ovum for purposes of fertilization in the fallopian tube.

2. The correct response is B. hCG is secreted by the formation of the zygote after fertilization has taken place. Its presence in the maternal urine or serum signals a pregnancy has started. Its absence denotes no pregnancy. A is an incorrect response because it is not detected until weeks later, after fertilization has taken place. It is secreted by the placenta after it is formed. C is an incorrect response because FSH stimulates ovulation, but bows out once ovulation is accomplished. D is an incorrect response because TSH, although needed to support a pregnancy, has a limited affect on fertilization and its aftermath.

3. The correct response is A. Alpha-fetoprotein is produced by the fetal liver, and increasing levels are detectable in the serum of pregnant women from 14 to 34 weeks. Through scientific studies, a lower than normal level of alpha-fetoprotein is associated with Down syndrome, and elevated levels are associated with neural tube defects such as spina bifida or anencephaly. B is an incorrect response because fetoscopy, once popular in the 1970s and 1980s, has been replaced by amniocentesis and serum marker tests to detect neural tube defects. C is an incorrect response because CT scans are rarely used on pregnant women except in trauma cases, because it would expose the fetus to ionizing radiation, which might be harmful to the developing fetus. D is an incorrect response because Coombs tests are used to detect RBCs coated with antibody such as what would occur in Rh incompatibility.

4. The correct response is D. Many common congenital malformations are caused by the interaction of many genes and environmental factors, such as health status, age, and potential exposure to pollutants and viruses. A is an incorrect response to this question because human genetics plays a major role in fetal development from conception on. B is an incorrect response because there is an understanding of cause-and-effect relationships of most health conditions. C is an incorrect response because although poor lifestyles can have a major impact on fetal development, genetics must also be factored into the equation. Poor outcomes secondary to poor nutrition and health status can negatively influence any pregnancy, but they are not necessarily the sole factor.

5. The correct response is C. Uncovering an individual's family history can identify previous genetic disorders that have a high risk for recurrence in subsequent generations. A is an incorrect response to this question because observing a patient and their family would be costly and unproductive to diagnose a genetic disorder. This observation would have to take place over several generations to yield results. B is an incorrect response because psychological testing might not uncover genetic predispositions to disorders. D is an incorrect response because excluding the numerous genetic conditions would be a time-consuming and tedious task.

6. The correct response is D. The risk of having a Down syndrome offspring or other chromosomal disorder increases with advancing age in women. It is thought that the woman's ovum become aged and malformations can result. A is an incorrect response because multiple pregnancies do not carry any higher risk of chromosomal abnormalities than a singleton gestation. B is an incorrect response because emotions, although they play a big role in accepting the pregnancy, have limited impact on causing chromosomal abnormalities. C is an incorrect response because primigravidas run no higher risk of producing genetic mutations than multigravidas, unless maternal age is advanced.

7. The correct response is D. Down syndrome offspring will receive the abnormal chromosome from one parent, plus a normal 21 chromosome from the carrier parent, which will result in an extra amount of chromosomal material on the 21st gene pair. A is an incorrect response because a Down syndrome infant has 47 chromosomes (47,XX+21 or 47,XY+21). B is an incorrect response because not only male offspring are affected by this genetic abnormality. C is an incorrect response because the genetic mutation occurs on gene pairing 21 and not on the sex chromosome determining the sex.

CRITICAL THINKING EXERCISES

1.

a. What information/education is needed for this couple to consider before deciding whether to have the test? The nurse needs to outline the facts about the genetic inheritance:

- CF is a recessive disorder that affects 1 in every 2500 babies.
- It predominately is seen in white infants and is less common in other races.
- Because it is a recessive disorder, Mrs. Martin must also be a carrier to pass it on to their offspring.
- If Mrs. Martin is a carrier, their chance of having a child with CF is one in four.
- The risk is the same each time they have a child.
- The nurse should provide general information about cystic fibrosis.

b. How can you assist this couple in their decision-making process?

Start by providing all the facts about the nature of the inheritance risk. Also, outline all options so the couple can make an informed decision. Options include the following:

- The couple does not receive genetic testing and takes their chances.
- If Mrs. Martin is a CF carrier, then they could choose not to have children or adopt a baby.
- Prenatal testing could be done on the fetus to determine whether both its genes carry a CF mutation. If so, the couple could elect to abort the pregnancy.
- Use an ovum or sperm from a donor who does not carry CF.
- Make a referral to a reproductive technology health facility for the couple to become educated regarding alternatives to maximize their outcome.
- Be realistic with this couple about not having any guarantees that another genetic disorder might not occur.
- Discuss the expense involved in genetic testing and in vitro fertilization that probably will not be covered by health insurance.

c. What is your role in this situation if you do not agree with their decision?

As a nurse, your role is to provide the facts and allow the couple to make their own decision about what they wish to do. They must live with their decision, not the nurse. As a nurse, your role would be to respect and support whatever this couple decides to do.

STUDY ACTIVITIES

1. The video entitled *Miracle of Life* is a wonderful visualization of conception through fetal development and birth. A photographer was able to photograph sperm swimming and ovum being released from the ovary. He then photographed the developing embryo and fetal development through birth. It is realistic and a true wonder of life. The title depicts the images.

2. Most large hospitals have obstetric ultrasound departments that schedule pregnant women throughout the day for a variety of ultrasounds for diagnostic purposes. Some departments offer level II and three-dimensional ultrasounds, which demonstrate facial features of the fetus. It would provide a tremendous learning experience for a nursing student to see the developing fetus via ultrasound. This field trip would enhance the student's understanding of fetal growth and development.

3. Depending on which Web site the student selects, the critique will vary. Most sites are very user friendly and are geared to the lay public's understanding. Student will choose their own area of interest, depending on their frame of reference. Their information would make for an educational discussion in class.

4. Students should draw their own family pedigree to identify their past health history. This information is important to determine genetic conditions and inheritable diseases. By identifying their past health ancestry, perhaps motivation for wiser lifestyle choices might surface.

5. Results will vary depending on which fetal screening test is chosen. An example might be the fetal nuchal translucency screening test. The *purpose* of the test is to identify genetic disorders and/or physical anomalies. The *procedure* involves ultrasound measurement of fluid in the nape of the neck between 10 and 14 weeks' gestation. A nuchal translucency measurement of 3 mm or more is highly suggestive of fetal abnormalities and diagnostic genetic testing is indicated. The student playing the role of the nurse discussing this test should be very supportive, but factual to the expectant couple. They can reverse roles with a different fetal screening test to discuss.

Chapter 11

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. Progesterone is the relaxation hormone throughout pregnancy because it relaxes smooth muscles, including the uterus. Estrogen is responsible for vascularization of the reproductive organs and preparing the breasts for lactation, and does not cause the uterine muscle to relax to prevent contractions. Oxytocin is secreted by the posterior pituitary gland and is responsible for stimulating uterine contractions and initiating the milk let-down reflex for lactating mothers. Prolactin promotes lactation but has no influence on calming the uterus.

2. The correct response is C. Urinary frequency occurs during early pregnancy secondary to pressure on the bladder by the expanding uterus. This is one of the presumptive signs of pregnancy. Restlessness or elevated mood is not a sign of pregnancy. As hormones increase during pregnancy, the mood might change, but it is not indicative of pregnancy. Low backache is frequently experienced by many women during the third trimester of pregnancy secondary to the change in their center of gravity, but it is not a presumptive sign of pregnancy.

3. The correct response is A. The corpus luteum secretes hCG early after conception to signal that fertilization has taken place. Without fertilization, hCG is not detected. Thus, it is the basis for pregnancy tests. hPL is the hormone secreted by the placenta to prepare the breasts for lactation. It is also an antagonist to insulin, competing for receptor sites that force insulin secretion to increase to meet the body's demands. FSH is secreted by the anterior pituitary gland to stimulate the ovary to mature an ovum for ovulation. It is not detected during pregnancy tests. LH is secreted by the pituitary gland. An increase in LH occurs immediately before ovulation and is responsible for release of the ovum. It is not the basis for pregnancy tests.

4. The correct response is D. The feeling of ambivalence is experienced by most women when they question their ability to become a mother. Feelings fluctuate between happiness about the pregnancy, and anxiety and fear about the prospect of new responsibilities and a new family member. Acceptance usually develops during the second trimester after fetal movement is felt by the mother and the infant becomes real to her. Depression is not a universal feeling experienced by most women unless there has been past history of underlying depression experienced by the woman. Jealousy is not a universal feeling of pregnant women. It can occur in partners, because attention is being diverted from them to the pregnancy and the newborn.

5. The correct response is C. Seeking acceptance of self to the infant is the basis for establishing a mutually gratifying relationship between mother and infant. This "binding in" is a process that changes throughout the pregnancy, starting with the mother's acceptance of the pregnancy and then the infant as a separate entity. Ensuring safe passage through pregnancy, labor, and birth focuses on the mother initially and her concern for herself. As the pregnancy progresses, the fetus is recognized and concern for its safety becomes a priority. The mother–infant relationship is not the mother's concern yet. Seeking acceptance of this infant by others includes the world around the mother and how they will integrate this new infant into their world. The infant–maternal relationship is not the focus in this task. Learning to give of one's self on behalf of one's infant focuses on delaying maternal gratification, focusing on the infant's needs before the mother's needs.

CRITICAL THINKING EXERCISES

1.

a. How should the nurse answer her question?

The feelings that the woman is describing are those of ambivalence and they are very common in women when they first learn they are pregnant. The nurse needs to explain this to the woman, emphasizing that it is common for women to question themselves in relation to the pregnancy because it is "unreal" to them during this early period. Fetal movement helps to make the pregnancy a reality.

b. What specific information is needed to support the client during this pregnancy?

The nurse can be supportive to this woman during this time by providing emotional support and validating the various ambivalent feelings she is experiencing. Including her husband and/or family members might also provide support for her.

2.

a. What explanation can the nurse offer Sally regarding her fatigue?

The nurse can explain in simple terms that the new embryo needs a great deal of her glucose and nutrients

to grow, and thus her energy level will be affected during early pregnancy, and this is why she is feeling tired frequently. The nurse can also inform her that her energy level will increase by the second trimester and she should not feel as drained.

b. What interventions can the nurse offer to Sally?
Interventions to help Sally cope with her fatigue during her early pregnancy would be for her to plan rest periods throughout the day and make sure she gets a good night's sleep daily. Taking naps on weekends to refresh her may also help her. Also, help with meal preparation would be beneficial.

3.

a. What strategies can a nurse discuss with a concerned mother when she asks how to deal with this?
Strategies to integrate a new infant into the family unit would include involving the sibling in planning the nursery for their new brother or sister, answering their questions about the new infant during the pregnancy, using age-specific books to inform the sibling of the fetus' growth and development, and providing special time set aside to be with that sibling before and after the new infant arrives into the home.

STUDY ACTIVITIES

1. Depending on the information obtained by the interview, each symptom and/or feeling can be placed on a list and matched to the appropriate trimester. For example: fatigue, breast tenderness, urinary frequency, ambivalence = first trimester. Increased energy level, less urinary frequency, fetal movement = second trimester. Backache, frequency, introspection = third trimester.
2. The student should select about three Web sites and present the URLs during a post conference or in a group with a thorough description of what each site has to offer.
3. Physiologic anemia of pregnancy
4. Compression of the vena cava by the heavy gravid uterus

Chapter 12

MULTIPLE CHOICE QUESTIONS

1. **The correct response is A. Research has linked a deficiency of folic acid to an increased incidence of neural tube defects. Pregnant women are given a folic acid supplement to prevent this fetal deformity. Vitamin A is not linked to neural tube defects. Vitamin C is not responsible for preventing neural tube defects. Vitamin K helps with blood clotting and is not linked to neural tube defects in newborns.**
2. **The correct response is C. Kegel exercises help to tighten and strength pelvic floor muscles to improve tone. They can help prevent stress incontinence in women after childbirth. These exercises don't strengthen the perineal area on the outside to prevent lacerations, but rather the internal pelvic floor muscles. Kegel exercises have nothing to do with the start of labor for postdates infants. A drop in progesterone levels and an increase in prostaglandins augment labor, not exercise. Kegel exercises don't burn calories.**
3. **The correct response is D. The uterus is constantly contracting throughout pregnancy, but the contractions are irregular and not usually felt by the woman, nor do they cause dilation of the cervix. Braxton Hicks contractions are not the start of early labor, since there aren't any measurable cervical changes. They are normal throughout the pregnancy, not an ominous sign of an impending abortion. A woman's hydration status is not related to Braxton Hicks contractions; they occur regardless of her fluid status.**
4. **The correct response is C. The underwater pressure incurred during scuba diving may cause oxygenation changes and a decrease in perfusion to the placenta. There is also a risk of trauma from coral reefs and boating. Swimming is an appropriate sport if the woman does not swim alone or after a heavy meal. Walking is an appropriate exercise to promote well-being. Bike riding provides good leg exercise and is appropriate if safety precautions are observed.**
5. **The correct response is D. In using Nagele's rule, 3 months are subtracted and 7 days are added, plus 1 year from the date of the last menstrual period.**

CRITICAL THINKING EXERCISES

1.

a. What subjective and objective data do you have to make your assessment?

Subjective data: reports feeling extreme fatigue; sleeps 8 to 9 hours each night; eats poorly

Objective data: pale and tired appearance; pale mucous membranes, low H & H

b. What is your impression of this woman?

She is in her first trimester of pregnancy, when fatigue is a normal complaint due to the diversion of the maternal glucose to the developing fetus. In addition, she is anemic (low H & H) due to eating habits or perhaps pica. It is important for the nurse to report this finding to the health care professional for further investigation of the cause.

c. What nursing interventions would be appropriate for this client?

Reassure her that the fatigue is a common complaint of pregnancy in the first trimester, but her poor dietary habits are contributing to her fatigue. She is anemic and needs to improve her diet and increase the amount of iron and vitamin C she takes. She also needs to increase her fiber intake to prevent constipation. An iron supplement might be advised by the healthcare provider to address her anemia. Request that the client keep a food log to bring with her to the next visit to review. A referral for nutritional counseling would be appropriate.

d. How will you evaluate the effectiveness of your interventions?

To assess compliance with the iron supplement, ask her what color her stools are. If they are dark, then she is taking the iron; if not, she probably isn't. Ask what dietary changes she has made to improve her nutrition by reviewing her food log and making suggestions to increase her iron consumption. Also review the importance of good nutrition for the positive outcome of this pregnancy. Do another H & H level to monitor her anemia.

2.

a. In addition to the routine obstetric assessments, which additional ones might be warranted for this teenager?

Calculate Monica's body mass index (BMI) based on height and weight (BMI = 17.8, which places her at high risk for not gaining enough weight during pregnancy).

Ask Monica if she takes drugs or alcohol, which might have a negative impact on the pregnancy.

Request a 24-hour diet recall, which might reveal low calorie and calcium intake.

Ascertain who does the cooking and food purchasing in her house; ask that the person accompany her to the clinic for her next visit for dietary teaching.

Explore reasons why she won't drink milk, and provide her with information about other sources of calcium that she might substitute for milk, such as yogurt.

b. What dietary instruction should be provided to this teenager based on her history?

Stress the importance of gaining weight for the baby's health.

Encourage she eat three meals each day plus three high-fiber snacks.

Go over the Food Guide Pyramid with her to show her selections from each group that she needs to consume daily.

Request that she take a peanut butter and jelly sandwich on whole-wheat bread to school to make sure she eats a good lunch each day.

Instruct her on limiting her intake of sodas and caffeinated drinks.

Encourage her to drink calcium-fortified orange juice for breakfast daily.

Reinforce the importance of taking her prenatal vitamin daily.

Send her home with printed materials for review.

c. What follow-up monitoring should be included in subsequent prenatal visits?

Increase the frequency of prenatal visits to every 2 weeks to monitor weight gain for the next few months.

Refer Monica and her mother to the nutritionist in the WIC program for a more thorough dietary instruction.

Request a 24-hour dietary recall at each prenatal visit to provide a basis for instruction and reinforcement.

3.

a. What additional information would the nurse need to assess her complaint?

Ask Maria for a 24-hour food intake recall to assess what other food she eats.

Ask Maria if she had this problem before becoming pregnant.

Ask Maria if she takes iron supplementation in addition to her prenatal vitamin.

Ask Maria how much and what kind of fluid intake she has in 24 hours.

Ask Maria whether she engages in any exercise consistently.

b. What advice would be appropriate for the nurse to give Maria?

The nurse needs to discuss with her the reasons why she is constipated: heavy gravid uterus compressing the intestines, reduced peristalsis and smooth muscle relaxation secondary to progesterone, low fiber and fluid intake, and limited exercise. To reduce the problem, Maria will need to make changes in the areas of food, fluid, and exercise.

c. What lifestyle adaptations will Maria need to make to alter her constipation?
Maria will need to consume high-fiber foods (fruits and vegetables) and increase her fluid intake to 2,000 mL daily to overcome the constipation. In addition, she will need to get off the couch and get some exercise, perhaps walking. Finally, she will need to stop taking stimulant laxatives and change to bulk-forming ones if the increase in high-fiber foods and fluids doesn't work for her.

STUDY ACTIVITIES

1–4. The answers to activities 1 to 4 are highly individualized.

5. Doula

Chapter 13

MULTIPLE CHOICE QUESTIONS

1. The correct response is A. Frequency is measured from the start of one contraction to the start of the next contraction. The duration of a contraction is measured from the beginning of one contraction to the end of that same contraction. The intensity of two contractions is measured by comparing the peak of one contraction with the peak of the next contraction. The resting interval is measured from the end of one contraction to the beginning of the next contraction.

2. The correct response is B. A longitudinal lie places the fetus in a vertical position, which would be the most conducive for a spontaneous vaginal birth. A transverse lie would not allow for a vaginal birth because the fetus would be lying perpendicular to the maternal spine. A perpendicular lie describes the transverse lie, which would not be conducive for a spontaneous birth. An oblique lie would not allow for a spontaneous vaginal birth because the fetus would not fit through the maternal pelvis in this side-lying position.

3. The correct response is C. After the placenta separates from the uterine wall, the shape of the uterus changes from discord to globular. The uterus continues to contract throughout the placental separation process and the umbilical cord continues to pulsate for several minutes after placental separation occurs. Maternal blood pressure is not affected by placental separation because the maternal blood volume has increased dramatically during pregnancy to compensate for blood loss during birth.

4. The correct response is A. The release of amniotic fluid through an amniotomy stimulates uterine contractions and is used to augment labor by reducing the distention of the uterus. Rupturing the amniotic sac will increase the risk of an ascending infection by removing the protection of a closed system. An amniotomy allows an increase in fetal head compressions; thus, fetal heart decelerations, not accelerations, might result. With less fluid to absorb the impact of muscular contractions, contraction intensity increases and discomfort increases.

5. The correct response is C. The transitional phase of the first stage of labor occurs when the contractions are 1 to 2 minutes apart and the final dilation is taking place. The transition phase is the most difficult and, fortunately, the shortest phase for the woman, lasting approximately 1 hour in the first birth and perhaps 15 to 30 minutes in successive births. Many women are not able to cope well with the intensity of this short period, become restless, and request pain medications. During the latent phase, contractions are mild. The women is in early labor and able to cope with the infrequent contractions. This phase can last hours. The active phase involves moderate contractions that allow for a brief rest period in between, helping the woman to be able to cope with the next contraction. This phase can last hours. The placental expulsion phase occurs during the third stage of labor. After separation of the placenta from the uterine wall, continued uterine contractions cause the placenta to be expelled. Although this phase can last 5 to 30 minutes, the contraction intensity is less than that of the transition phase.

CRITICAL THINKING EXERCISES

1.

a. What additional information do you need to respond appropriately?

- Ask about the frequency and duration of her contractions.
- Ask about how long she has experienced "labor pains."
- Ask about any other signs she may have experienced such as bloody show, lightening, backache, ruptured membranes, and so forth.
- Ask if walking tends to increase or decrease the intensity of contractions.
- Ask her when she last felt fetal movement.
- Ask her how far away (distance) she is from the birthing center.
- Ask her if she has a support person in the home with her.

b. What suggestions/recommendations would you make to her?

- Stay in the comfort of her home environment as long as possible.
- Advise her to walk as much as possible to see what effect it has on the contractions. Also, tell her to drink fluids to hydrate herself.
- Review nonpharmacologic comfort measures she can try at home.
- Tell her to keep in contact with the birthing center staff regarding her experience.

c. What instructions need to be given to guide her decision making?

- Instruct her on how to time frequency and duration of contractions.
- Wait until contractions are 5 minutes apart or her membranes rupture to come to the birthing center.
- Tell her to come to the birthing center when she cannot talk during a contraction.
- Reinforce all instructions with her support partner.

2.

a. What other premonitory signs of labor might the nurse ask about?

- Has she experienced the feeling of the fetus dropping (lightening) lower down?
- Has her energy level changed (increased) in the last day or so?
- Has she noticed any reddish discharge (bloody show) from her vagina?
- Has she had any episodes of diarrhea within the last 48 hours?
- Has her "bag of waters" broken or does she feel any leakage?

b. What manifestations would be found if Cindy is experiencing true labor?

There would be progressive dilation and effacement of her cervix if true labor is occurring. Contraction pain also would not be relieved with walking, and the pain would start in the back and radiate around toward the front of the abdomen. Contractions also would occur regularly, becoming closer together, usually 4 to 6 minutes apart, and last 30 to 60 seconds. If she is experiencing false labor, slight effacement might be present, but not dilation.

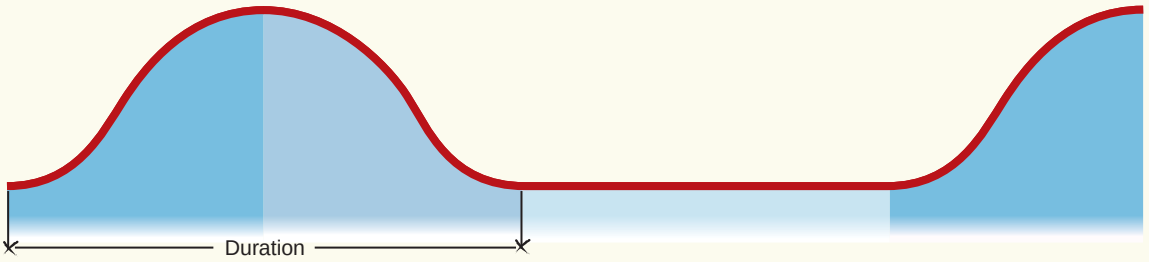
3.

a. Topics to address in the community education program would include

- Information about the stages of labor, including what to expect
- Explanation of risks and benefits about any interventional procedures that might be performed during the labor process
- Information about the available pain relief measures
- Methods of involvement and participation during the labor and birthing process by partner/doula/family member
- Information about variables that may alter or influence the course of labor and include preoperative teaching for cesarean birth

STUDY ACTIVITIES

1. This discussion should involve the passenger, powers, passageway, position, and psychological response of the student's assigned women going through labor and how each affected the length and stages of labor.
2. Answers A, B, and E are correct. The cardinal movements of labor by the fetus include engagement, descent, flexion, international rotation, extension, external rotation, and expulsion only. The other choices describe the various fetal positions.
3. This discussion will vary depending on the women's labor and birth experience. Psychological factors that could be addressed might include previous birth experiences, age, pregnancy discomforts, cultural beliefs, expectations for this birth experience, preparation for birth, and effectiveness and participation of support system.
4. See the following figure. For duration, the "X" is placed at the start of one contraction and at the end of it.



Chapter 14

MULTIPLE CHOICE QUESTIONS

1. The correct response is D. Intermittent pushing with each contraction is more effective than continuous pushing, which reduces perfusion to the placenta. Holding the breath and pushing through the entire contraction is incorrect because this action reduces blood flow and oxygenation to the uterus and to the fetus. Chest breathing is not an effective breathing pattern to increase intra-abdominal pressure, which assists the contraction to expel the fetus. Panting and blowing is used between contractions to abstain from pushing.
2. The correct response is B. A full bladder causes displacement of the uterus above it, and increased bleeding results secondary to the uncontracted status of the uterus. Massaging the uterus will help to make it firm but will not help to bring it back into the midline, since the full bladder is occupying the space it would normally assume. Notifying the primary healthcare provider is not necessary unless the woman continues to have difficulty voiding and the uterus remains displaced. The normal location of the uterus in the fourth stage of labor is in the midline. Displacement suggests a full bladder, which is not considered a normal finding.
3. The correct response is C. The entire focus of the labor and birth experience is for the family to make decisions, not the caretakers. The nurse's role is to respect and support those decisions. Decisions about pain management are not based on length of the various stages of labor, but rather on what provides effective pain relief for the laboring woman. Pain-relief measures differ. Each individual responds differently and uniquely to various pain-relief measures. Not recommending nonpharmacologic measures demonstrates bias on the nurse's part; it is not the nurse's decision to make, but rather the client's decision.
4. The correct response is A. Several professional women's health organizations have published guidelines concerning the timing of intermittent FHR assessments during the active stage of labor. The current recommendation is that intermittent FHR is assessed every 15 minutes during the active phase of labor.
5. The correct response is C. Fetal accelerations denote an intact central nervous system and appropriate oxygenation levels demonstrated by an increase in heart rate associated with fetal movement. Accelerations are a reassuring pattern, so no intervention is needed. Turning the woman on her left side would be an appropriate intervention for a late deceleration pattern. Administering 100% oxygen via face mask would be appropriate for a late or variable deceleration pattern. Since fetal accelerations are a reassuring pattern, no orders are needed from the healthcare provider, nor does the healthcare provider need to be notified of this reassuring pattern.

CRITICAL THINKING EXERCISE

1.

a. Based on your assessment data and the woman's request not to have medication, what nonpharmacologic interventions could the nurse offer her?

- Progressive relaxation techniques of locating, then releasing tension from one muscle group at a time until the entire body is relaxed
- Visual imagery such as taking a journey in the woman's mind to a relaxing place that is far away from the discomfort of labor
- Music to bring about a calming effect as well as a distraction or attention focusing to divert attention away from the laboring process; focusing on sound or rhythm helps release tension and promote relaxation.
- Massage/acupressure to enhance relaxation, improve circulation, and reduce pain in labor; counterpressure on the lower back to help relieve back pain
- Breathing techniques for effective attention-focusing strategies to enhance coping mechanisms during labor

b. What positions might be suggested to help facilitate fetal descent?

- Upright positions such as walking, swaying, slow-dancing with her partner, or leaning over a birthing ball will all enhance comfort and use the force of gravity to facilitate fetal descent.
- Kneeling and leaning forward will help relieve back pain.
- Pelvic rocking on hands and knees and lunging with one foot elevated on a chair may help with internal fetal rotation and speed a slow labor.

2.

a. What assessment needs to be done to determine what is happening?

The nurse should perform a vaginal examination to validate that she is in the transition phase (8 to 10 cm dilated).

b. What explanation can you offer Carrie's partner regarding her change in behavior?

Explain to her partner that she is in the transition phase of the first stage of labor and that her behavior is typical, since she is having hard contractions frequently. Reassure him not to take Carrie's comments personally, but to stay and be supportive to her.

STUDY ACTIVITIES

1. This information will vary depending on what the woman reports to the student. Unrealistic pain-management plans need to be identified and valid evidence-based ones presented to the woman. Misconceptions can be cleared up also.

2. *Acceleration*—elevation of FHR above the baseline; a reassuring pattern

3. The findings will vary from facility to facility, but the student might find a more liberal use of non-pharmacologic techniques in the birthing center compared to the hospital setting and more frequent use of hydrotherapy and ambulation to relieve discomfort. Also, intermittent assessment using a hand-held Doppler is probably used more frequently in the birthing center compared to the hospital, where continuous electronic fetal monitoring is prevalent.

4. Many childbirth web sites present very basic information about childbirth and attempt to target a wide audience of educational levels. Many of the childbirth web sites promote various pregnancy and infant products.

Chapter 15

MULTIPLE CHOICE QUESTIONS

1. The correct response is A. Engorgement refers to the swelling of the breast tissue as a result of an increase in blood and lymph supply to produce milk for the newborn. Estrogen and progesterone levels decrease considerably and are not restored until the first menses returns several weeks or months later, depending on the lactation status of the mother. Colostrum can be secreted as early as 16 weeks' gestation. The mother's body is going through profuse diuresis to restore prepregnant fluid levels to her body and therefore would not be retaining fluid in the breasts.

2. The correct response is C. According to Reba Rubin, the mother is very passive and is dependent on others to care for herself for the first 24 to 48 hours after giving birth. Gaining self-confidence would characterize a mother in the taking-hold phase, during which the mother demonstrates mastery over her own body's functioning and feels more confident in caring for her newborn. Adjustment to relationships does not occur until the third phase—letting go, when the mother begins to separate from the symbiotic relationship she and her newborn enjoyed during pregnancy and birth. Resuming control over her life would denote the second phase of

taking hold, during which the mother does resume control over her life and gains self-confidence in her newborn care.

3. The correct response is D. The direct cause of afterpains is uterine contractions. Mothers experience abdominal pain secondary to contractions, especially when breast-feeding because sucking stimulates the release of oxytocin from the posterior pituitary gland, which causes uterine contractions. Manipulation of the uterus during labor would only occur during a surgical birth and this discomfort would not be sustained weeks later. The size of the infant might cause additional stretching of the uterus, but it is not the underlying cause of the afterpains. Pregnancies spaced too close together can contribute to frequent stretching of the uterus, but this is not the cause of afterpains.

4. The correct response is B. Lochia discharge from the uterus proceeds in an orderly fashion, regardless of a surgical or vaginal birth. Its color changes from red to pink to whitish cream consistently, unless there is a complication. The correct sequence is rubra (red), then serosa (pink), and then alba (white, creamy).

5. The correct response is C. The body attempts to rid the woman's body of excess fluids retained during pregnancy after giving childbirth. This is accomplished in two ways: an increase in urinary output and profuse diaphoresis. There is no relationship between lactation and profuse diaphoresis. The body increases blood and lymph fluid to the breasts in preparation for lactation. Pain medications used during labor and birth are metabolized in the liver and excreted in the urine, not through profuse sweating. Fever would accompany an infectious process and there is no mention of an elevated temperature in the mother.

CRITICAL THINKING EXERCISES

1.

a. Is there something "wrong" with Ms Griffin's behavior?

No, this is typical behavior for a new mother within the first 2 days after giving birth.

b. What maternal role phase is being described by the new nurse?

This behavior is characteristic of Reba Rubin's taking-in phase, which covers the first 48 hours after childbirth. The new mother is typically focused on her own needs for rest, food, and comfort. New mothers in this phase tend to be passive and take directions/suggestions well from staff. Preoccupation with themselves rather than their newborns is normal during this phase. Their needs must be met before they can begin to care for others.

c. What role can the nurse play to support the mother through this phase?

The nurse can be supportive through this early phase by providing a restful, quiet environment to facilitate her recovery from childbirth. Providing her with simple guidance and suggestions of how she can care for herself and her newborn will assist the new mother in expanding her focus. Praising her for her accomplishments in care will reinforce it.

2.

a. Would you consider Mr. Lenhart's paternal behavior to be normal at this time?

Yes, inexperienced first-time fathers are anxious around their newborns because this is a new experience for them and many do not know how to handle or care for their newborns yet. Paternal attachment is a gradual process that occurs over weeks and months.

b. What might Mr. Lenhart be feeling at this time?

He is probably feeling overwhelmed with this tiny baby and, although he probably wants to help, he is anxious about how or what to do without appearing awkward.

c. How can the nurse help this new father adjust to their new role?

The nurse can help new fathers adjust to their role by taking time to listen to their concerns and demonstrating how they can become involved in the care of their newborn. Staying in the room and physically supporting the father as he tries out his new role will provide encouragement for him to become involved. The nurse can slowly introduce fathers to the care needs of their newborn and encourage their participation. This supportive role by the nurse can help reduce role strain and enhance family adjustment.

STUDY ACTIVITIES

1. Possible Internet resources helpful to parents after childbirth would be
   - The Center for Postpartum Health, www.postpartumhealth.com
   - Postpartum Support International, www.chss.iup.edu/postpartum
2. The teaching plan might include the following topics:
   - Involution of uterus
   - Stages and color of lochia
   - Diaphoresis
   - Breast changes (lactating and nonlactating)
   - Discomforts after birth, such as perineal healing (ice packs, sitz baths), afterpains (analgesics), breast engorgement (supportive bra)
   - Follow-up care for mother
3. Involution
4. Full bladder

Chapter 16

MULTIPLE CHOICE QUESTIONS

1. The correct response is C. Periodic crying and insomnia are characteristic of postpartum blues, in addition to mood changes, irritability, and increased sensitivity. Panic attacks and suicidal thoughts or anger toward self and the infant would be descriptive of postpartum psychosis, when some women turn this anger toward themselves and have committed suicide or infanticide. Women experiencing postpartum blues do not lose touch with reality. Obsessive thoughts and hallucinations would be more descriptive of postpartum psychosis.
2. The correct response is D. Nurses need first to become educated about various cultural practices to incorporate them into their care delivery. By gaining an understanding of diverse cultures different from their own, nurses can become sensitive to these different practices and not violate them. Attending a transcultural course might be beneficial, but this would take several weeks to complete and the information is needed much sooner to provide culturally sensitive care for an admitted patient and her family. Caring for only families of the nurse's cultural origin would not be possible or realistic in our global, culturally diverse population within the United States. Nurses need to care for every person regardless of their color, creed, or nationality with respect and competence. Teaching diverse cultural families Western beliefs would demonstrate ethnocentric behavior and would not be professional. Each culture needs to be respected and learned about with tolerance and understanding.
3. The correct response is B. Because weight loss is based on the principle of intake of calories and output of energy, instructing this woman to avoid high-calorie foods that yield no nutritive value and expending more energy through active exercise would result in weight loss for her. Acid-producing foods (plums, cranberries, and prunes) are typically recommended for women to prevent urinary tract infections to acidify the urine and not for weight loss purposes. Increasing fluid intake (water) would be good for weight loss because it fills the stomach and reduces hunger sensations; however, this option does not identify which fluids should be increased. Increasing high-calorie juice and soda drinks would be counterproductive to weight loss measures. Fluid restriction combined with a high-protein diet would increase the risk of gout and formation of kidney stones. Carbohydrates are needed by the body to make ATP and convert it to energy for cellular processes. Limiting snacks might be a good suggestion depending on which ones are selected. Raw fruits and vegetables are excellent high-fiber snacks that will help in an overall weight loss program.
4. The correct response is C. Lactating mothers need an extra 500 cal to sustain breast-feeding. An additional 20 g of protein is also needed to help build and regenerate body cells for the lactating woman. Additional intake of carbohydrates or fiber is not suggested for lactation. An increase in fats is not recommended nor is it needed for breast-feeding. To obtain adequate amounts of vitamins during lactation, women are encouraged to choose a varied diet that includes enriched and fortified grains and cereals, fresh fruits and vegetables, and lean meats and dairy products. An increase in vitamins via supplements is not recommended. Choosing a variety of foods from the food pyramid will provide the lactating women with adequate iron and minerals.
5. The correct response is D. A swollen, tender area on the breast would indicate mastitis, which would need medical intervention. Fatigue and irritability are not complications of childbearing, but rather the norm during the early postpartum period secondary to infant care demands and lack of sleep on the caretaker's part. Perineal dis-

comfort and lochia serosa are normal physiologic events after childbirth and indicate normal uterine involution. Bradycardia is a normal vital sign for several days after childbirth because or the dramatic circulatory changes that take place with the loss of the placenta at birth and the return of blood back to the central circulation.

6. The correct response is A. Desiring to be in close proximity to another human being is all part of the bonding process. Bonding cannot take place with separation of individuals. Closeness is needed by the two people bonding, and not having others hold the infant. Buying or wearing expensive clothes has no emotional effect on a bonding relationship. Requesting that nurses provide care separates the parent from the infant and suggests that the parents lack the desire for closeness with their infant.

7. The correct response is C. Older sibling needs to feel they are still loved and not upstaged by the newest family member. Allowing special time for that sibling reinforces the parent's love for them also. Regression behavior is common when there is stress in that sibling's life, and punishing him brings attention to negative behavior, possibly reinforcing it. The older sibling might feel he/she is being replaced and is not wanted by the parents when he/she is sent away. Including the older sibling in the care of the newborn is a better way to incorporate the newest member into the family unit. Sharing a room with the infant could lead to feelings of displacement in the sibling. In addition, frequent interruptions during the day and night will awaken the sibling and not allow a full night's sleep or undisturbed nap.

CRITICAL THINKING EXERCISES

1.

a. What is your nursing assessment of this encounter?

Nursing observations would indicate poor bonding/attachment behaviors between mother and infant based on

- Disinterest in holding or being close to infant
- Lack of concern for infant's needs
- More concerned about phone conversation
- Negative comment about newborn ("monkey")

b. What nursing interventions would be appropriate?

Assess for risk factors in client—age, outside family support, multiple life stressors, unrealistic expectations of newborn behaviors, level of education, family support system—and determine the client's perception of newborn behaviors and educate her about normal newborn behaviors and mothering activities needed. In addition, model parent care behaviors in caring for a newborn and ascertain the availability of any family support—extended family, neighbors, and community resources.

c. What specific discharge interventions may be needed?

Based on observations and assessment data, this client would need a referral to the discharge planner, social services department, or local health department for home visit follow-up care. Bonding/attachment behaviors are lacking, possibly placing the newborn at risk for neglect or abuse.

2.

a. Which of these assessment findings warrants further investigation?

- Tearful client pacing the floor holding her crying son
- Distended bladder upon palpation; reporting frequency
- Fundus firm and displaced to right of midline

b. What interventions are appropriate at this time and why?

It is apparent that Jennifer is overwhelmed and does not seem to be coping well with her new parenting role. She may be experiencing postpartum blues as well. She needs support during this critical period. The home care nurse needs to ascertain what family or support systems are available and make contact with them for help. Questioning Jennifer about previous crying episodes or feeling "down" recently is in order to ascertain whether she is feeling the "blues" in addition to being overwhelmed. If limited resources are available, assigning a home health aide to come daily to assist Jennifer might be needed. Counseling and active listening will be helpful during the home care visit.

The uterine fundus is displaced out of the midline as a result of a distended bladder. The bladder needs to be emptied for the uterus to assume midline positioning. Jennifer's urinary frequency may be the result of distention secondary to poor bladder tone or a developing urinary tract infection. The nurse should attempt to get Jennifer to void on her own and obtain a clean-catch urine specimen. Checking for bacteria with a chemical reagent strip ("dipstick") is appropriate. Instituting measures to promote voiding—tap water running, forcing fluids, and cranberry juice—also would be appropriate interventions. If a bacterium is found in the clean-catch urine specimen, calling Jennifer's health care provider to obtain an order for medication would be necessary. Otherwise, advising Jennifer to increase her fluid intake and voiding frequently to empty her bladder would be in order.

c. What health teaching is needed before you leave this home?

Information about postpartum blues should be discussed, emphasizing that it is benign and self-limiting. Assuring Jennifer that this is very common and allowing time for Jennifer to vent her frustrations and to express her feelings can be very therapeutic. Increasing awareness about postpartum blues can bring it into focus and help her understand this event in her life. In addition, review of self-care and newborn care measures that allow Jennifer to rest need to be outlined. Suggesting that Jennifer nap when the baby sleeps throughout the day is a start. Attempting to cluster baby care (bathing, feeding, and dressing) might give her additional time for herself. Calling on friends and family to help out should be stressed. Other interventions would include

- Reassurance that her mothering ability is fine and the newborn is healthy
- Referral to community home health agency to gain home health aide assistance
- Discussions concerning accepting help and support from others
- Times and dates of follow-up care appointments
- Community resources available to assist her through this time

3.

a. What response by the nurse would be appropriate at this time?

Reply in a sensitive, nonjudgmental manner that this bottle of formula has been sitting out for 3 hours since the last feeding and has not been refrigerated. It may be contaminated and would not be appropriate to feed her baby with now.

b. What action by the nurse should take place?

Take the old bottle of formula and tell Lisa that you will get her a fresh bottle for this feeding. Leave the room with the formula bottle and replace it with another one.

c. What health teaching is needed for Lisa prior to discharge?

A thorough explanation is needed about feeding practices, emphasizing that formula is milk and needs to be refrigerated when not being used for feeding at that time. Leaving formula sit at room temperature for long periods increases the risk of bacterial contamination and may give her infant gastroenteritis. In addition, as the infant grows, more formula will be consumed at each feeding, and making up an approximate amount that will consumed will become easier for her to avoid waste.

STUDY ACTIVITIES

1. How have you been feeling recently? How has your sleep been? Have you felt low in spirits and/or able to enjoy the things you usually enjoy?

2. A possible Internet site might be La Leche League International (www.lalecheleague.org)

3.

- Wash your hands with soap and water, and dry them.
- Fill your peribottle with warm tap water and replace the top.
- Straddle the toilet and spray all the water from the peribottle over your perineal area.
- Pat the area dry with a clean towel and replace your peripad from front to back.
- Place the empty peribottle on the sink for the next time.
- Wash your hands with soap and water before leaving the bathroom.

4. Engorgement

Chapter 17

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. The behaviors demonstrated by the newborn, such as alertness, stabilized heart and respiratory rates, and passage of meconium are associated with the second period of reactivity. The first period of reactivity starts with a period of quiet alertness followed by an active alertness with frequent bursts of movement and crying. During the decreased responsiveness period, also called the *sleep period,* the newborn is relatively unresponsive and difficult to waken.

2. The correct response is C. Convection is loss of heat from an object to the environment. Using the portholes instead of opening the isolette door prevents rapid heat loss from the inside of the isolette. This action also protects the newborn from drafts. Evaporation is the loss of heat as water is lost from the skin to the environment. Keeping the newborn dry will prevent this type of heat loss. Conduction is the transfer of heat from one object to another when in direct contact, such as placing a newborn onto a cold scale to be weighed. Radiation is the loss of heat between objects that are not in direct contact, such as a cold window near the newborn's isolette.

3. The correct response is D. Evaporation is the loss of heat as water is lost from the skin to the environment. Drying the newborn at birth and after bathing, keeping linens dry, and using plastic wrap blankets and heat shields will all prevent

heat loss through evaporation. Placing the newborn on a warmed surface will prevent heat loss via conduction. Maintaining a warm room temperature will prevent heat loss via convection. Transporting the newborn in an isolette will prevent heat loss via radiation.

4. The correct response is A. The foramen ovale is the fetal structure within the heart that allows blood to cross immediately to the left side and bypass the pulmonary circuit. When left-side pressure gradients increase at birth, this opening closes, thereby establishing an extrauterine circulation pattern. The ductus venosus is not located in the heart; it is located between the umbilical vein and the inferior vena cava, and it shunts blood away from the liver during fetal life. The ductus arteriosus connects the pulmonary artery to the aorta to bypass the pulmonary circuit. It begins to constrict as pulmonary circulation increases and arterial oxygen tension increases. The umbilical vein, along with two umbilical arteries, is part of the umbilical cord that is cut at birth.

CRITICAL THINKING EXERCISE

1.

a. What is your impression of this observation?

It is evident the new nurse's behaviors demonstrate a lack of awareness or knowledge about thermoregulation in newborns. Reinforcement of these principles is needed. Perhaps she needs to be reminded of newborns' inability to keep themselves warm as a result of a variety of factors. Or perhaps she may feel overwhelmed with caring for more than one newborn at a time. An in-service for all nursery personnel might be a good reinforcement of this concept.

b. What principles concerning thermoregulation need to be reinforced?

All four. The nurse is subjecting the newborn to heat loss by all four methods—evaporation (bathing), radiation (leaving door open), convection (cap off), and conduction (weighing). Newborns have an inability to conserve body heat and experience heat loss through four mechanisms: conduction, convection, evaporation, and radiation. Placing newborns on cold surfaces without any protection (such as a blanket or cover), will cause them to lose body heat via conduction. By exposing them while wet, such as during bathing, heat is lost through evaporation. Leaving the storage room open permits cool air flow over the newborn, allowing heat loss by convection. Placing the infant transporter near cold rooms allows for transfer of neonatal body heat via radiation.

c. How will you evaluate your instruction after the in-service is presented?

The effectiveness of the in-service can be evaluated by observing the behavior of the staff while caring for the newborns. Hopefully, the principles reinforced during the discussion will be applied in the handling of the newborns. For the new nurse, it would be important to observe the nurse covering the newborn when bathing, placing a warmed blanket on the scale prior to weighing, closing hallway doors to prevent drafts, and keeping a cap on the newborn's head when showing him or her to his or her parents. In addition, the nurse should verbalize why she is performing all these actions.

STUDY ACTIVITIES

1. First period of reactivity behavior: burst of rapid, jerky movements of the extremities; sucking activity; smacking and rooting; and fine tremors of the extremities. Second period behavior: newborn's alertness gradually declines and they sleep. Third period: newborns awaken and become more interactive with the environment. Movement is smoother compared with the first period of reactivity. Meconium may be passed during this period.

2. Initially the heart rate immediately on admission to the nursery would be high (120–180 bpm), but after several hours it typically will decline (120–140 bpm). The respiratory rate will be rapid (60–80 bpm), with periods of apnea lasting 5 seconds or less. After several hours, the respiratory rate will decline (30–50 bpm) and periods of apnea will become less frequent. The temperature of the newly admitted newborn may be on the low end of normal (36.5–37°C) if there has been no hypothermia while transporting the newborn from the birthing area. After being under a radiant heat source for several hours and not exposed to drafts or moisture, the temperature should be in the mid range of temperature norms. If the temperature remains stabilized, a bath can be given.

3. American Academy of Pediatrics, www.aap.org; Neonatal Network, www.neonatalwork.com

4. Evaporation

Chapter 18

MULTIPLE CHOICE QUESTIONS

1. The correct response is D. One point would be subtracted for color (acrocyanosis) and 1 point for fair flexion of extremities. All the assessment parameters should rate 2 points, except for color and flexion. Therefore, any score except 8 points would be incorrect.

2. The correct response is D. Phototherapy reduces the bilirubin on the newborn's skin via oxidation. Phototherapy does not affect surfactant levels in the newborn's lungs nor does it help to stabilize temperatures in the newborn. In fact, it might cause hyperthermia at times if not monitored closely. Phototherapy cannot destroy Rh antibodies attached to RBCs within the circulation.

3. The correct response is B. Vitamin K is needed for blood clotting and is a vital component of the blood-clotting cascade. The newborn's gut is sterile at birth and unable to manufacture vitamin K on its own without an outside source initially. Vitamin K has no impact on bilirubin conjugation, transport, or excretion. It is not involved in closing the foreman ovale; cutting the cord and changing gradient vascular pressures are responsible for this closure. Vitamin K has no influence over the digestive process of complex proteins.

4. The correct response is A. The eyes of newborns can be exposed to gonorrhea and/or chlamydial organisms if present in the mother's vagina during the birth process, possibly resulting in a severe infection and blindness. Therefore, eye prophylaxis is administered. Thrush and *Enterobacter* typically do not affect the eyes. Thrush develops in the newborn's mouth after exposure to maternal vaginal yeast infections during the birth process. Infections with *Staphylococcus* and syphilis are contracted through blood stream exposure or via the placenta and not by contact with the maternal vagina during birth. Eye treatment would not impact/treat either infectious process. Hepatitis B and herpes are not treatable with eye ointment.

5. The correct response is C. Research has identified sleeping position and its link to SIDS. Since 1992, the AAP has recommended all newborns be placed on their backs to sleep. This recommendation has reduced the incidence of SIDS dramatically. Respiratory distress syndrome involves a lack of surfactant in the lungs, not sleeping position. The intake of formula or juice (high lactose exposure) being allowed to sit in the infant's mouth while sleeping is the cause of bottle mouth syndrome. Positioning on the back might aggravate the GI regurgitation syndrome rather than help it.

6. The correct response is D. Most newborns are started on the hepatitis B series before discharge from the hospital and receive the remaining two immunizations at 1 month and at 4 to 6 months of age. The pneumococcal vaccine is given between 2 to 23 months of age, not at birth. Varicella immunization is not given until 12 to 18 months of age. Hepatitis A immunization is recommended for children and adolescents in selected states and regions, and for high-risk groups. It is not a universal vaccine for all children.

7. The correct response is C. Ingestion of certain amino acids found in breast milk or formula must be accumulated in the newborn to identify a deficiency in an enzyme that cannot metabolism them. If the PKU test is done prior to 24 to 48 hours after feeding, it must be repeated after the infant has tolerated feedings for at least that length of time. Identifying hypothyroidism is not linked to ingesting protein feedings. Cystic fibrosis is a genetic inherited condition not related to protein intake. Sickle cell disease is a genetically inherited condition unrelated to protein ingestion in the newborn.

CRITICAL THINKING EXERCISES

1.

a. How should the nurse respond to Ms. Scott's questions?

In a calm manner, explain to Ms. Scott that all her observations are normal variations and address each one separately:

- "Banana-shaped head"—is molding where the newborn had a slight overriding of the skull bones to navigate the bony pelvis and birth canal during the birth process
- "Mushy" feel to head—caput succedaneum, which is an edematous area of the scalp as a result of sustained pressure of the occiput against the cervix during labor and birth process
- "White spots on nose"—milia, which are plugged, distended, small, white sebaceous glands that are present in most newborns and should not be squeezed by the mother
- "Blue bruises on buttocks"—Mongolian spots, which are bluish black areas of pigmentation that are common in African-Americans and have no clinical significance, but can be mistaken for bruises

b. What additional newborn instruction might be appropriate at this time?

At this time, it might be appropriate for the nurse to unwrap the newborn and complete a thorough bedside assessment, pointing out any minor deviations to the mother and explaining their significance. This will allay any future anxiety about her newborn and will afford the opportunity to instruct Ms. Scott on various physiologic and behavioral adaptations present in her daughter.

c. What reassurance can be given to Ms. Scott regarding her daughter's appearance?

One can assume that Ms. Scott's concern about these various normal deviations might be permanent. The nurse can identify each and provide reassurance about their approximate time of disappearance:

- Molding—transient in nature and should disappear within 72 hours
- Caput succedaneum—disappears spontaneously within 3 to 4 days
- Milia—will clear up spontaneously within the first month
- Mongolian spots—will gradually fade during the first or second year

2.

a. What impact does an infant abduction have on family and the hospital?

The abduction of an infant is a devastating event that poses significant emotional, legal, and financial risks to both the family and the hospital. The sudden, unexpected loss of an infant followed by an infinite period of uncertainty concerning the child's well-being places the traumatized family in crisis. The hospital typically will change their security systems, policies, and procedures; heighten supervision; and increase accountability for all staff.

b. What security measure was the weak link in the chain of security here?

The nurse was able to pass into the hospital via the emergency room posing as a "nurse" without anyone checking her name tag. The security cameras were not working at the time of the abduction. This allowed the abductor to pass down the hall with the infant unnoticed and unrecorded. The nurses on the unit were unaware of this woman on their unit, which should not happen. There should be an alarm on the doors leading into the unit and the doors should remain locked and only be opened electronically by a staff member on the unit after the person has been identified. There was truly a breakdown of several security measures in this scenario.

c. What can hospitals do to prevent infant abduction from happening?

Keys to infant security are awareness and education. The hospital staff should attend annual in-services on these measures and participate in a mock infant abduction drill to heighten awareness of infant security. Specially color-coded staff badges should be worn by all obstetrics staff, and parents should be instructed not to give their newborn to any one without that specific color badge. Parents' wristbands should match the infant's ankle and wrist bands. Everyone must work together to keep all infants safe.

STUDY ACTIVITIES

1. The discussion of newborn changes noticed will vary from student to student, depending on the interview information obtained from the new mother.

2. This discussion will vary depending on questions asked during the bath demonstration as well as each individual mother's response to it.

3. The La Leche Web site is filled with helpful information with pictures to assist new mothers with breastfeeding. Each student will have their own opinion about how helpful and what educational level the Web site addresses.

4. The risks of neonatal circumcision include hemorrhage, infection, adhesions, dehiscence, urethral fistula, meatal stenosis, and pain. The benefits of neonatal circumcision include prevention of penile cancer, decreased incidence of UTIs and STIs, and preservation of male body consistent with father and peers where the procedure is common. Students will express their own opinion about their thoughts based on their value system and cultural background.

Chapter 19

MULTIPLE CHOICE QUESTIONS

1. The correct response is A. Magnesium sulfate is a central nervous system depressant that interferes with calcium uptake in the cells of the myometrium, thus reducing the muscular ability to contract. Magnesium sulfate is not used as supplementation during pregnancy because most pregnant women do not have a deficiency of this mineral. Magnesium sulfate would not be effective against constipation in pregnant women. Magnesium sulfate does not stimulate musculoskeletal tone to augment labor contractions; rather, it has the opposite effect.

2. The correct response is D. Women with a history of preterm birth are at highest risk for the same in subsequent pregnancies. Because there is not a

complete understanding of causes of preterm labor, whatever situation existed in a previous pregnancy to initiate early labor may still be present for this pregnancy. Having had twins previously would have no bearing on this singleton pregnancy to influence a preterm labor. Location of residence is not a risk factor for preterm labor. The woman's occupation as a computer programmer and sitting at a computer all day would not increase her risk for preterm labor. However, standing for long periods in a work environment might increase her risk.

3. The correct response is B. When the placenta separates from the uterine wall, it causes irritation and bleeding into the muscle fibers, which causes pain. Painless, bright-red bleeding indicates placenta previa symptomatology. Excessive nausea and vomiting would be characteristic of hyperemesis gravidarum. Hypertension and headache would be associated with gestational hypertension.

4. The correct response is C. Calcium channel blockers, such as nifedipine (Procardia), inhibit calcium from entering smooth muscle cells, thus reducing uterine contractions. This type of drug would help in slowing down contractions associated with preterm labor. Diazepam (Valium) has little or no effect on uterine muscles. It was used in the past to inhibit seizure activity, but fetal side effects were great. Phenobarbital, although a central nervous system depressant, has little effect on calming uterine muscles. It was previously used to control maternal anxiety and prevent seizures. Butorphanol (Stadol) is an analgesic to decrease pain and has no effect on uterine muscles to stop contractions.

5. The correct response is A. Any time there is a pregnancy with the chance of maternal and fetal blood mixing, RhoGAM is needed to prevent sensitization or antibody production. Head injury resulting from a car crash is not a situation in which there would be mixing of fetal or maternal blood. The trauma would cause hemorrhage, but not a sensitization reaction. A blood transfusion after hemorrhage would require typing and crossmatching of the client's blood; thus, she would receive blood with her own Rh factor, not one with Rh-positive blood. Because the artificial insemination procedure was unsuccessful, no pregnancy occurred and RhoGAM would not be necessary.

CRITICAL THINKING EXERCISES

1.

a. What is your impression of this condition?

From her history, it appears she has hyperemesis gravidarum, because she is beyond the morning sickness time frame (6–12 weeks) and her symptoms are continual.

b. What risk factors does Suzanne have for this condition?

Her risk factors include young age and primigravida status.

c. What intervention is appropriate for this woman?

- Question Suzanne further concerning previous eating patterns and food intake.
- Ask what measures has she used at home to stop the nausea and vomiting.
- Consult the healthcare provider concerning hospitalization of Suzanne for IV therapy to correct hypovolemia and electrolyte imbalances.
- If home care is in order, advise her to avoid the intake of greasy or highly seasoned foods and to separate food from fluid intake, instruct her on antiemetic medication ordered and possible side effects, and instruct her to return to the clinic if symptoms do not subside within 48 hours.

2.

a. Based on her history, what might this client be at risk for? Why?

This client is at high risk for preterm labor and birth because of the following risk factors in her history: African-American race, smoker, poor nutrition, anemia, history of UTIs, and low socioeconomic and educational status.

b. What client education is needed at this visit?

A frank discussion of risk factors associated with preterm labor and birth and how they can be changed to reduce her risk is needed. Signs and symptoms of preterm labor need to be stressed. Education should address diet, working conditions, taking prenatal vitamins, hydration, and goals for her future.

c. What specific nursing interventions might reduce her risk?

A smoking cessation program and a referral to a nutritionist and enrollment in the WIC program should be made. A Healthy Start referral would allow closer supervision of this client throughout the pregnancy. Increasing the frequency of her visits would be helpful in monitoring her closely. Reinforcing the signs and symptoms of preterm labor at each visit would help her identify it early. A referral to a social worker to assess her home environment would also be beneficial.

STUDY ACTIVITIES

1. The answers will vary, but a common theme would probably be more diversional activities to combat the boredom and additional information regarding the health status of the fetus. Additional attention/participation in the treatment plan might also be discussed as a possible problematic area.
2. Hopefully the signs and symptoms would be taught to woman during their first trimester, and written material would be handed out too. During each prenatal visit, the information should be reinforced to make sure the woman understands what they are and what to do about them if they should occur.
3. Appropriate Internet sites might include Sidelines High Risk Pregnancy Support Office (www.sidelines.org) and Resolve through Sharing (http://www.ectopicpregnancy.com).
4. Ectopic
5. Choriocarcinoma
6. Various activities for the woman on prolonged bed rest at home could in include watching TV, reading, visiting computer sites with chat rooms, talking on the telephone, playing cards or engaging in crafts, having visitors in frequently, and completing educational courses online. The woman could also use the bed rest time to develop lists for managing the house while on bed rest, read or play games with her other children, and expand her knowledge related to the upcoming birth of her babies.
7. Tocolytics

Chapter 20

MULTIPLE CHOICE QUESTIONS

1. The correct response is B. Levels of the hormone hPL (insulin antagonist) progressively rise throughout pregnancy, and additional insulin is needed to overcome its resistance. Having a carbohydrate craving is not associated with gestational diabetes. Hyperinsulinemia in the fetus develops in response to the mother's high blood glucose levels. Glucose levels are diverted across the placenta for fetal use, and thus maternal levels are reduced in the first trimester. This lower glucose level doesn't last throughout the gestation, just the first trimester. For the remaining two trimesters, the maternal glucose levels are high because of the insulin resistance caused by hPL.
2. The correct response is D. A pregnant woman with asthma who is having an acute exacerbation will be poorly oxygenated, and thus perfusion to the placenta is compromised. Immediate treatment is needed for her well-being as well as that of the fetus. Corticosteroids are used as a first-line drug therapy for asthma treatment and management because of their anti-inflammatory properties. Having asthma has no influence on the woman's glucose levels, unless she also had diabetes. Bronchodilators usually are inhaled, not given subcutaneously, so instruction about this route of administration would not be necessary.
3. The correct response is B. Extreme nausea and vomiting as part of hyperemesis gravidarum would cause fluid and electrolyte imbalances and would alter blood glucose levels tremendously. With placenta previa, the placenta is dislocated, not malfunctioning; it would not have as much of an impact on the pregnancy as would an imbalance of fluids and electrolytes. Abruptio placentae would place the mother at risk for hemorrhage, but the placenta does not govern the blood glucose levels of the mother. Rh incompatibility affects the fetus, not the mother, by causing hemolysis of the red blood cells in the fetus. This process would not influence the mother's glucose levels.
4. The correct response is C. Alcohol ingested by the woman during pregnancy is teratogenic to the fetus, and the newborn can be born with fetal alcohol spectrum disorder. Drinking alcohol would decrease production of dehydrogenase, an enzyme that mobilizes the hydrogen of a substrate so that it can pass it to a hydrogen acceptor. Becoming intoxicated faster during pregnancy is not the underlying problem associated with alcohol ingestion and pregnancy. The woman's genetic makeup, how much alcohol is ingested, her amount of body fat, metabolic rate, and ingestion of food are a few of the factors that determine the metabolism of alcohol. Alcohol contains calories and if enough is ingested along with food, weight gain would occur, not weight loss.
5. The correct response is B. The highest percentage of HIV transmission results from sexual activity, followed by intravenous drug use. Transmission can occur despite a low viral load in the blood of the infected person. Pregnant women who take antiretroviral therapy during their gestation significantly reduce the chances of transmitting HIV to their newborn. The use of standard precautions will minimize the risk of transmission of HIV to healthcare workers. A very small percentage of nurses contract HIV through needlesticks if using appropriate precautions.

CRITICAL THINKING EXERCISES

1.

a. What additional information will you need to provide care for her?

- Explore her typical daily dietary intake.
- Ask her if there is a family history of diabetes mellitus.
- Take her vital signs, weight, and fetal heart rate.
- Assess her coping abilities and capacity for managing diabetes.
- Assess her knowledge of the disease process and lifestyle changes needed.
- Ask her about symptoms of fatigue, polyuria, polyphagia, and polydipsia.
- Ask about previous pregnancy outcomes and the weight of infants.

b. What education will she need to address this new diagnosis?

- Dietary modifications to reduce the amount of simple sugars and carbohydrates
- Thorough explanation of potential complications of diabetes in pregnancy:
  - Infection: urinary tract infections and monilial vaginitis
  - Difficult labor and birth: shoulder dystocia, birth trauma, cesarean section
  - Congenital anomalies: cardiac, CNS, and skeletal anomalies
- Literature describing diet, exercise, and glucose monitoring
- Outline of hypoglycemia and hyperglycemia symptoms
- Referral to nutritionist for diet planning

c. How will you evaluate the effectiveness of your interventions?

- Schedule more frequent prenatal visits to evaluate her health status.
- Evaluate glucose values at each visit to validate that they are in the normal range.
- Monitor HbA1C to determine past glucose levels.

2.

a. What is your first approach with the client to gain her trust?

Open the conversation by asking questions about school activities and her friends. Remain nonjudgmental, and bring the discussion to general questions about her monthly cycles. Finally work toward questions about when she last had her period, and assess how many months pregnant she is. Adolescents usually deny a pregnancy for several months, so she may be well into her second trimester.

b. List the client's educational needs during this pregnancy.

- Signs and symptoms of preterm labor
- Nutritional needs during pregnancy
- Need for prenatal care throughout pregnancy
- Importance of early detection of complications
- Decision about whether to involve her partner
- Reasons for the frequency of prenatal visits and importance of keeping them
- Symptoms of sexually transmitted infections
- Impact of substance abuse on fetal growth and development
- Childbearing and parenting classes
- Infant growth and development and newborn care

c. What prevention strategies are needed to prevent a second pregnancy?

- Ask about her educational goals and encourage her to complete school; perhaps refer her for vocational counseling.
- Identify her personal strengths and reinforce positive self-esteem.
- Actively involve her in her care at each visit and praise her for her efforts.
- Discuss family planning methods appropriate for her and let her decide.
- Enhance a positive perception of her ability to succeed in life.

3.

a. What aspects of this woman's history make you concerned that this infant is at risk for fetal alcohol spectrum disorder?

- Lack of prenatal care
- History of substance abuse (alcohol) during previous pregnancies
- Children placed in foster care from birth due to poor mothering ability
- Appearance on arrival and evidence of being malnourished
- Statement about not having any "recent" use of alcohol
- Delivery of newborn weighing 4 lb

b. What additional screening or laboratory tests might validate your suspicion?

Screening questionnaires can be used to diagnose problem drinking, along with a drug screen (urine or blood) on both her and the newborn to identify specific substances present. The social service agency can also be called to do a more thorough history on this woman.

c. What physical and neurodevelopmental deficits might present later in life if the infant has fetal alcohol spectrum disorder?

The infant might have attention-deficit/hyperactivity disorder (ADHD), poor impulse control, learning disabilities, communication problems, as well as growth restriction/developmental problems. It is important to address this woman's alcohol dependence by offering care options such as addiction treatment, mental health therapy, and support. As a nurse, it is important to be sensitive to the client's cultural, spiritual, religious, and emotional needs during this time. Discussion of effective contraception while she is struggling with her addiction is important to prevent fetal alcohol spectrum disorder.

STUDY ACTIVITIES

1. Responses will vary based on the woman's preexisting condition. Common themes might be changes in activity level if the woman interviewed has one of the anemias or hypertension and dietary modifications if she is diabetic; all might express concern about the pregnancy outcome.
2. This study activity is one to which many college students can relate. Confronting the friend who is in denial is the most effective way to bring the issue up. Back it up with observed behaviors that demonstrate the friend's drug or alcohol dependency. Telling the person that you care about her and her well-being can go a long way toward modifying her behavior.
3. The answers will vary depending on which side the student takes. Some of the common themes might center on civil rights and the positive aspects marijuana has had on nausea and vomiting for cancer patients and controlling glaucoma pressure. On the other side of the debate, allowing this drug to be legalized might afford many pregnant women access to it, without long-term research studies to document effects on offspring.
4. The nurse should present the facts that taking the medications will reduce the risk of transmission of HIV and should discuss how the woman and her newborn will benefit from them. Stressing the importance of lowering her viral load throughout her pregnancy and relating it to her well-being might help. Presenting her with the facts is all that the nurse can do, since the final decision will be hers.
5. A, B, C, E, and F. Women with all the infections listed except HIV can choose to breastfeed. An HIV-positive woman can pass the virus to her newborn through breast milk and should be discouraged from breastfeeding.

Chapter 21

MULTIPLE CHOICE QUESTIONS

1. The correct response is D. Fetopelvic disproportion is defined as a condition in which the fetus is too large to pass through the maternal pelvis. Cervical insufficiency would lead to an abortion, typically in the second trimester, when the heavy gravid uterus would cause pressure on the weakened cervix. A contracted pelvis might cause passageway problems, but if the fetus was small, no problem might occur. Maternal disproportion doesn't indicate where the disproportion is located.
2. The correct response is B. Herpes exposure during the birth process poses a high risk for mortality to the neonate. If the woman has active herpetic lesions in the genital tract, a surgical birth is planned to avoid this exposure. Hepatitis is a chronic liver disorder, and the fetus if exposed would at most become a carrier; a surgical birth would not be expected for this woman. Toxoplasmosis is passed through the placenta to the fetus prior to birth, so a cesarean birth would not prevent exposure. HPV would be manifest clinically by genital warts on the woman, and a surgical birth would not be anticipated to prevent exposure unless the warts caused an obstruction.
3. The correct response is A. Having a fetus in a posterior position would cause intense back pain secondary to the fetal head facing the maternal vertebra and causing pressure. Leg cramps are common during pregnancy and not caused by an occiput posterior position, but rather pressure from the heavy gravid uterus toward term. Fetal position would not contribute to nausea and vomiting. Going through transition in labor might cause nausea and vomiting, not the fetal position. A precipitous birth occurs rapidly and is not associated with intense back pain.
4. The correct response is D. Prostaglandins soften and thin out the cervix in preparation for labor induction. Although they do irritate the uterus, they aren't as effective as oxytocin in stimulating contractions. Prostaglandin gel would stimulate cervical nerve receptors rather than numb them. Prostaglandins have no power to prevent cervical lacerations, only to soften and thin the cervix.
5. The correct response is C. Hypotonic labor typically occurs in the active phase; it involves ineffective contractions to evoke cervical dilation and causes secondary inertia. Hypertonic labor is characterized by painful, high-intensity contractions that usually occur in the latent phase. A precipitous labor occurs within 3 hours and cervical dilation is very fast secondary to effective, high-intensity contractions. Dysfunctional labor describes any pattern that doesn't produce dilation and effacement in a timely manner.

CRITICAL THINKING EXERCISES

1.

a. Based on the nurse's findings, what might you suspect is going on?

Since Marsha is multiparous and is in the active phase of labor without progression and the contraction pattern has become less intense, a hypotonic uterine dysfunction should be suspected.

b. How can the nurse address Marsha's anxiety?

Give her, in an easily understood manner, facts about dysfunctional labor. Outline expected treatment and outcome. Encourage questions and expression of feelings. Identify how this dysfunctional labor pattern may alter her labor plan. Reassure Marsha about the status of her fetus. Maintain a positive attitude about her ability to cope with this situation.

c. What are the appropriate interventions to change this labor pattern?

Typically some form of labor augmentation is initiated to produce more effective contractions to facilitate cervical dilatation—rupture of membranes or use of IV oxytocin to stimulate the intensity of contractions. If neither one of these interventions changes the hypotonic pattern, a surgical birth is in order.

2.

a. What new development might be occurring?

Based on Marsha's description, the nurse might suspect spontaneous rupture of membranes.

b. How will the nurse confirm her suspicion?

Depending on the agency protocol, the nurse may perform or assist with a sterile speculum examination to observe for evidence of fluid pooling in the posterior vagina, any discharge present, inflammation or lesions, or protrusion of the membranes through the cervix. The nurse should also document the amount, color, and consistency of any fluid found during the examination.

c. What interventions are appropriate for this finding?

- Obtain a baseline set of vital signs to assess FHR patterns for changes possibly indicating a prolapsed umbilical cord.
- Use Nitrazine paper to test for the presence of amniotic fluid: it will turn blue in the presence of amniotic fluid because it is alkaline.
- Examine a sample of fluid from the vagina under the microscope for a fern pattern once it dries.

STUDY ACTIVITIES

1. This international web site offers numerous educational and personal testimonies to assist parents who have suffered a perinatal loss. There are listings of local support groups in which they can participate.

2. Maternal/fetal risks associated with a prolonged pregnancy include maternal exhaustion, psychological depression, macrosomia, dysmaturity syndrome, fetal hypoxia, meconium aspiration syndrome, hypoglycemia, and stillbirth.

3. Dystocia

Chapter 22

MULTIPLE CHOICE QUESTIONS

1. **The correct response is C. It is important to assess the situation before intervening. In addition, checking the bladder status and emptying a full bladder will correct uterine displacement so that effective contractions to stop bleeding can occur. Assessment of the situation is needed before the nurse can notify the healthcare provider. At this point, the nurse has no facts to report about the client's condition. Magnesium sulfate would relax the uterus and increase bleeding. Pallor and heavy bleeding are not normal findings during the postpartum period.**

2. **The correct response is A. Psychotic persons tend to lose touch with reality and frequently attempt to harm themselves or others. This behavior may occur when a woman experiences postpartum psychosis. Anxiety typically does not induce hallucinations or cause a person to want to harm herself or others. Depression involves feelings of sadness rather than hallucinations or thoughts of harming herself or others. Feeling "down," but not to the extreme of wanting to harm herself or her newborn, is suggestive of postpartum blues.**

3. **The correct response is D. Hemorrhage is possible if the uterus cannot contract and clamp down on the vessels to reduce bleeding. When the placenta is expelled, open vessels are then exposed and the risk of hemorrhage is great. Thrombophlebitis typically is manifested later in the postpartum period rather than within the first few hours after birth. Breast engorgement usually occurs on postpartum day 3 or later when the milk comes in, not within hours after birth. Infection usually is manifested 24 to 48 hours after birth, not within the first few hours.**

4. **The correct response is C. Applying compresses and giving analgesics would be helpful in provid-**

ing comfort to the woman with painful breasts. Treatment for mastitis encourages frequent breastfeeding to empty the breasts. Lanolin applied to the breasts will have little impact on mastitis other than to keep them moist. Binding both breasts will not bring relief; in fact, it could cause additional discomfort. Emptying the breasts frequently through breastfeeding would be helpful. Although wearing a nursing bra will help support the heavy breasts and fresh air is helpful to prevent cracked nipples, these are ineffective once mastitis develops.

CRITICAL THINKING EXERCISES

1.

a. What postpartum complication is this mother at highest risk for? Why?

Postpartum infection would be the highest risk for this client because of the risk factors present: anemia, prolonged ruptured membranes, prolonged labor before a surgical birth with an incision, the likelihood of frequent vaginal examinations during the prolonged labor, and the use of internal fetal monitoring devices.

b. What assessments need to be done to detect this potential complication?

Monitor the client for signs of early infection: fever, malaise, abdominal pain, foul-smelling lochia, boggy uterus, tachycardia, and anorexia. Test results would indicate an elevated white blood cell count and sedimentation rate. Assessment of her incision for drainage and approximation of edges should be done frequently.

c. What nursing measures will the nurse use to prevent this complication?

- Adhere to strict aseptic technique in providing nursing care to the incision.
- Instruct the client about self-care measures to help prevent infection such as handwashing, perineal hygiene, wiping from front to back, and hydration.
- Complete a thorough "BUBBLE=HE" assessment and record findings.
- Urge the client to change her peripads frequently and use the peri-bottle.
- Reinforce home care instructions to continue infection prevention.

2.

a. What factors place Tammy at risk for postpartum hemorrhage?

Tammy is a grand multipara with nine previous pregnancies, and thus her uterus has been stretched repeatedly with close pregnancies. She also had an epidural during labor and therefore has limited sensation to her bladder.

b. What assessments are needed before planning interventions?

If Tammy's fundus is boggy (uterine atony) and her bladder is full, intervention is needed to promote voiding. If the fundus is firm and her bladder is empty, additional evaluation is needed to rule out lacerations or retained placental fragments as a causative factor contributing to her heavy vaginal bleeding.

c. What nursing actions are needed to prevent a postpartum hemorrhage?

After the assessment is completed and the uterus is found to be boggy and bladder is full, the next step is to get the client up to void. After Tammy empties her bladder, reassess the fundus for firmness and location. With a full bladder, the uterus is typically displaced to the right of the midline. After emptying the bladder, the fundus should return to the midline and be firm. As a result, bleeding should decrease.

3.

a. What factors/behaviors place Lucy at risk for an emotional disorder?

Lucy had a previous episode of postpartum depression. Her behavior indicates limited interest in her newborn and herself by not providing care. She reports she is disappointed in the sex of this child. Lucy's inactivity and lack of appetite are also problematic since she will be going home and needs to care for herself and her newborn.

b. Which interventions might be appropriate at this time?

In a sensitive, caring manner, the nurse should approach Lucy and ask her questions to get a complete picture of her emotional status. Demonstrating concern and care might encourage Lucy to express her feelings about her situation and the newborn. Using therapeutic communication through open-ended questions might assist in gathering data. Notifying the healthcare provider of the findings is also crucial.

c. What education does the family need prior to discharge?

The family needs information on postpartum emotional disorders and referrals to community counseling centers to assist Lucy through this time. Providing the family with the addresses of web sites that offer assistance and information about emotional disorders might also be helpful. A good social support network of family and friends will be needed to care for both Lucy and her newborn initially when she is discharged.

STUDY ACTIVITIES

1. *Baby blues* are usually self-limiting and benign, occurring a few days after childbirth and ending within 2 weeks. The woman cries easily, is irritable, and is more emotionally labile than normal. This emotional disorder usually resolves without specific treatment other than reassurance and support from the family. *Postpartum depression* occurs within 6 months after childbirth and is similar to other depressive disorders. The woman feels inadequate as a parent and has disturbances in appetite, mood, sleep, concentration, and energy. Psychotherapy and antidepressants are helpful to address this disorder, which may take months to resolve. Family patience and support are very important for her. *Postpartum psychosis* may result in suicidal or homicidal behavior and requires immediate medical and psychiatric intervention. Clinical manifestations include hallucinations, delusions, or both within 3 weeks after giving birth. Inpatient psychiatric services may be needed for this severe emotional disorder.
2. Students will offer varying opinions based on the web site they select.
3. The information obtained from this interview will vary depending on the woman's experience. It is hoped that some of the comments about helpfulness will center on a nurse who was present and provided assistance to her.
4. Uterine atony
5. Information the nurse needs to care for this mother and her newborn should include vital signs, fundal assessment (firm or boggy and location), lochia characteristics (color, amount, smell, consistency), appearance of perineum (episiotomy site, lacerations, swelling, bruising), breast status (wearing a soft, supportive bra; any nipple problems), and elimination status (empty or not voiding).

Chapter 23

MULTIPLE CHOICE QUESTIONS

1. **The correct response is C. A postterm infant is one born after the 42nd week of gestation. Birth between 38 and 41 weeks is considered within a normal range for a term newborn. A gestation of 44 weeks would be considered extremely long if the dates were calculated correctly.**
2. **The correct response is A. The fetus's body, in an attempt to compensate for the low oxygen level, produces more red blood cells to carry the limited amount of oxygen available. Thus, polycythemia will be present at birth in a fetus experiencing hypoxia in utero. Hypoglycemia is typically caused by inadequate stores of glycogen and overuse while living in a hostile environment. Low serum calcium levels are associated with perinatal asphyxia and not an increase in red blood cells. Hypothermia is associated with a decrease in body fat, particularly brown fat stores, and is not linked to increased production of red blood cells.**
3. **The correct response is B. Subcutaneous and brown fat stores may be used by the stressed fetus to survive in utero and thus will not be available to provide extrauterine warmth. Excessive red blood cell breakdown is responsible for hyperbilirubinemia, not the breakdown of brown fat stores. Polycythemia is caused by a buildup of red blood cells in response to a hypoxic state in utero; it is not linked to loss of subcutaneous and brown fat stores. Glycogen stores are used for survival in an environment with depleted glycogen and are unrelated to brown fat stores.**
4. **The correct response is C. The parents need to validate the experience of loss. The best way to do this is to encourage them to participate in their newborn's care so that the grieving process can take place. Avoiding the experience of loss inhibits the grieving process. Avoidance prolongs the experience of loss and does not allow the parents to vent their feelings so that they can progress through their grief. It is not the nurse's responsibility, nor is it healthy for the family, to take over decisions for a family. Family members need to support each other and need to decide what is best for their situation. Leaving the family alone can be viewed as abandonment; privacy is important, but leaving them totally alone is not therapeutic.**
5. **The correct response is D. The ductus arteriosus and foramen ovale may remain open if pulmonary vascular resistance remains high and oxygen levels remain low. When a newborn is born too soon, fetal circulation may persist in extrauterine life; this would be manifested by a heart murmur. Milia (clogged sebaceous glands) are present in most newborns and are not a pathologic sign. The preterm newborn has not been able to store subcutaneous fat, which does not occur until the eighth month of gestation. Poor muscle tone is apparent in most preterm newborns due to poor development secondary to the premature birth.**

CRITICAL THINKING EXERCISES

1.

a. What might these behaviors indicate?
These behaviors are clinical signs of hypoglycemia, which is common in a postterm infant after a difficult birth; glycogen stores are depleted secondary to chronic placental insufficiency.

b. For what other conditions is this newborn at high risk?
Besides hypoglycemia, hypothermia, polycythemia, meconium aspiration, and hyperbilirubinemia are common in the postterm infant.

c. What intervention is needed to address this condition?
Feed the newborn as early as possible, or administer glucose/glucagon to counter the low blood glucose level. Decrease energy requirements to conserve glucose and glycogen stores. Maintain a neutral thermal environment to prevent cold stress, which can exacerbate the hypoglycemia.

2.

a. What might have contributed to this newborn's hypothermic condition?
The simple fact that the newborn was premature predisposes him to thermal instability because of his larger surface-to-weight ratio, immature muscle tone and decreased muscular activity to generate heat, diminished stores of subcutaneous and brown fat, and poor nutritional intake, which makes him unable to meet energy requirements for growth and development. In addition, placing the isolette close to the door might produce cold drafts, causing hypothermia.

b. What transfer mechanism may have been a factor?
This preterm newborn could experience loss of heat by convection (heat transfer via air currents).

c. What intervention would be appropriate for the nurse to initiate?
Bundle or nest the preterm newborn with warmed blankets and move the isolette away from the door to prevent heat loss by convection. Place a knitted cap on the newborn's head and monitor his temperature frequently.

3.

a. What complication common to SGA newborns might be manifested in this newborn?
The signs indicate polycythemia, which is common in SGA infants.

b. What factors may have contributed to this complication?
In SGA infants, polycythemia is thought to be secondary to chronic hypoxia in utero, with resulting erythropoietin production. Complications of polycythemia are related to the increased viscosity of blood, which interferes with organ circulation.

c. What is the appropriate intervention to manage this condition?
Obtain a venous hematocrit measurement within 4 to 6 hours after birth to validate this condition, since its manifestations are very similar to those of hypoglycemia. Hematocrit values over 65% should be brought to the healthcare provider's attention. Typically it is treated by a dilutional exchange transfusion.

STUDY ACTIVITIES

1. This program could be very effective to get the pregnant women to think about the harmful effects smoking has on a growing fetus. The emphasis should be on the vasoconstriction of the blood vessels and how this reduces nutritional and blood supplies to the fetus. Pictures of a narrowed blood vessel could be used to demonstrate this problem. Although each group will react in different ways to a presentation on smoking and pregnancy, ideally the seed will be planted for some to curtail or stop smoking.

2. The March of Dimes web site is full of ideas on how to prevent preterm births, which include early prenatal care for all women, diagnostic tests to detect changes in the cervix, and prevention of maternal infections. The students' comments may center on the inaccessibility of health care, which precludes some pregnant women from receiving early prenatal care, and the lack of insurance to cover the cost of diagnostic tests or prescriptions for treatment of infections.

3. hypoglycemia

4. Common birth injuries include clavicle fractures, facial palsies, and brachial plexus injuries.

5. Nursing measures to promote energy conservation would include a, b, and c.

Feeding and digestion will increase energy demands; thermal warmers might produce hyperthermia and thus increase energy demands; and preventing parents from visiting their infant is not a plan to reduce energy expenditure and could increase stress for both the parents and the baby.

Chapter 24

MULTIPLE CHOICE QUESTIONS

1. The correct response is D. Nasal flaring is a cardinal sign of air hunger in respiratory distress syndrome. When an infant becomes hypoxic due to poor lung expansion, the nares expand to "search" for more oxygen to relieve the low oxygen concentration. Abdominal distention denotes air in the intestines, not hypoxia. Acrocyanosis is present only in the extremities and might indicate sluggish circulation. An infant with respiratory distress syndrome would demonstrate generalized cyanosis secondary to hypoxemia. Depressed fontanels would indicate dehydration, not respiratory distress syndrome.

2. The correct response is C. Irritability is a prime symptom of drug withdrawal in newborns. As they experience physiologic withdrawal from the addictive substance, irritability with crying and the inability to be consoled are prevalent behaviors. Newborns exposed to substances are anything but calm when withdrawing from an addictive substance. They are extremely distressed, and their faces commonly exhibit that distress. Weight loss, not weight gain, is typical of the newborn exposed to substances. Although they show signs of hunger, vomiting is common and thus weight loss follows. These newborns are extremely distressed and agitated. Their feeding and sleeping patterns are disrupted and would not be described as normal.

3. The correct response is D. Detection of PKU depends on an accumulation of phenylalanine, which is found in protein. Protein is ingested with breast milk or formula, so newborns need at least 48 hours of protein ingestion via milk before they can be screened for PKU. The ingestion of protein is not related to thyroid hormone levels and thus is not necessary to screen for hypothyroidism. A heel stick blood sample can be taken prior to 48 hours of age to diagnose sickle cell anemia. This newborn screening test is not dependent on protein intake since it is a genetic disease. Cystic fibrosis is an inherited disorder and present at birth, not 48 hours later.

4. The correct response is D. The newborn with this anomaly cannot handle oral secretions since the esophagus ends in a blind pouch. The secretions typically foam out of the mouth, and this becomes a clue that a fistula exists. A tracheoesophageal fistula alone doesn't affect the newborn's temperature unless an infection is present. This defect is structural, not neurologic. The newborn's ability to swallow is not related to this structural defect. There would have to be an insult to the CNS for swallowing to be affected as well as a structural defect in the pharynx.

CRITICAL THINKING EXERCISES

1.

a. What in the mother's history might have raised a red flag to the nurse?

Prolonged rupture of the membranes provides an avenue for bacteria to ascend into the mother's genital tract. The fact she had a fever during labor is a key sign.

b. For what condition is this newborn at high risk?

Neonatal sepsis would be a likely diagnosis based on the mother's history and the nonspecific clinical manifestations in the newborn.

c. What interventions are appropriate for this condition?

The nurse should document the assessment findings and report them to the pediatrician so that cultures and blood work can be started to identify the offending organism. General antibiotic therapy is typically started until the offending organism is identified.

2.

a. What additional information do you need to obtain from her mother?

It is important to understand the extent and type of her drug use during pregnancy. Ask specific questions about her drug use so that you can plan care for her as well as her newborn. Place her at ease and ask direct, nonjudgmental questions.

b. What additional laboratory work might be needed for Terry?

Due to an increased risk of HIV in injection drug users, an HIV test along with a polydrug screen is needed. The mother's consent must be obtained prior to the HIV testing.

c. What specific referrals need to be made for her ongoing care?

After extensive counseling regarding the perinatal risks due to her heroin use, referral to a drug detoxification center and possibly methadone maintenance may be

necessary. Depending on her commitment to stop taking drugs to reduce harm to her newborn, additional social services need to be explored. Although the decision to change her lifestyle is her choice, the nurse can play a vital role in guiding the care to achieve a better outcome for the mother and her infant. Terry also will need to undergo detoxification and will require close supervision until withdrawal has been achieved. Tight wrapping, calming techniques, and reduced stimuli will help decrease the newborn's irritability.

3.

a. What is your impression of this newborn?

Based on the newborn's characteristics documented during the nurse's assessment, congenital hypothyroidism should be suspected.

b. What laboratory studies and results would you anticipate?

Elevated thyroid stimulating hormone (TSH) levels and low thyroxine (T4) levels

c. What explanation could be offered to the parents concerning this condition?

Discuss the condition and stress that the mainstay of treatment for congenital hypothyroidism is early diagnosis and thyroid hormone supplementation. Parents should be provided with the hormone supplementation and taught proper administration. Reinforce that this is a lifetime supplementation.

STUDY ACTIVITIES

1. This answer will vary depending on each student's perceptions, but common impressions of the role of NICU nurses would be their autonomy and the numerous types of technical equipment needed for each newborn. The students will probably note that the new parents seem overwhelmed because of the amount of equipment being used. Pointing out to expectant parents how capable and competent the nurses are will help in reducing their anxiety.

2. The students will find thorough descriptions of the specific congenital condition aimed at the level of laypeople. Many sites provide information about local support groups that parents can join.

3. The "take-home message" to all expectant parents concerning newborn screening tests is that they must actively participate in the follow-up testing to ensure that their newborn does not have an inborn error of metabolism or disease. It is critical for them to take their newborn back to the clinic or community laboratory after they are discharged from the hospital.

4. Gastroschisis

5. Ventricular septal defect