Contents in Brief

UNIT 1

Overview of Maternal and Pediatric Health Care 1

1 The Nurse's Role in a Changing Maternal–Child Healthcare Environment *2*
2 Family-Centered and Community-Based Maternal and Pediatric Nursing *18*

UNIT 2

Foundations of Maternity Nursing 33

3 Structure and Function of the Reproductive System *34*
4 Special Issues of Women's Healthcare and Reproduction *48*

UNIT 3

Pregnancy 83

5 Fetal Development *84*
6 Maternal Adaptation During Pregnancy *103*
7 Prenatal Care *120*

UNIT 4

Labor and Birth 149

8 The Labor Process *150*
9 Pain Management During Labor and Birth *167*
10 Nursing Care During Labor and Birth *184*
11 Assisted Delivery and Cesarean Birth *217*

UNIT 5

Postpartum and Newborn 239

12 The Postpartum Woman *240*
13 Nursing Care During Newborn Transition *266*
14 Nursing Care of the Normal Newborn *286*
15 Newborn Nutrition *307*

UNIT 6

Childbearing at Risk 327

16 Pregnancy at Risk: Conditions That Complicate Pregnancy *328*
17 Pregnancy at Risk: Pregnancy-Related Complications *356*
18 Labor at Risk *384*
19 Postpartum Woman at Risk *403*
20 The Newborn at Risk: Gestational and Acquired Disorders *427*
21 The Newborn at Risk: Congenital Disorders *455*

UNIT 7

Health Promotion for Normal Growth and Development 491

22 Principles of Growth and Development *492*
23 Growth and Development of the Infant: 28 Days to 1 Year *512*
24 Growth and Development of the Toddler: 1 to 3 Years *530*
25 Growth and Development of the Preschool-Aged Child: 3 to 6 Years *547*
26 Growth and Development of the School-Aged Child: 6 to 10 Years *561*
27 Growth and Development of the Adolescent: 11 to 18 Years *574*

UNIT 8

Foundations of Pediatric Nursing 591

28 Data Collection (Assessment) for the Child *592*
29 Care of the Hospitalized Child *612*
30 Procedures and Treatments *631*
31 Medication Administration and Intravenous Therapy *649*

UNIT 9

Special Concerns of Pediatric Nursing 667

32 The Child With a Chronic Health Problem *668*
33 Abuse in the Family and Community *679*
34 The Dying Child *692*

UNIT 10

The Child With a Health Disorder 707

35 The Child With a Sensory/Neurologic Disorder *708*
36 The Child With a Respiratory Disorder *742*
37 The Child With a Cardiovascular/Hematologic Disorder *770*
38 The Child With a Gastrointestinal/Endocrine Disorder *795*
39 The Child With a Genitourinary Disorder *837*
40 The Child With a Musculoskeletal Disorder *851*
41 The Child With an Integumentary Disorder/Communicable Disease *872*
42 The Child With a Cognitive, Behavioral, or Mental Health Disorder *907*

Appendix A *Standard and Transmission-Based Precautions 926*
Appendix B *Good Sources of Essential Nutrients 928*
Appendix C *Breast-Feeding and Medication Use 929*
Appendix D *Cervical Dilation Chart 931*
Appendix E *Growth Charts 932*
Appendix F *Pulse, Respiration, and Blood Pressure Values for Children 938*
Appendix G *Temperature and Weight Conversion Charts 939*

Glossary 941
References and Selected Readings 953
Index 971

Introductory Maternity & Pediatric Nursing

EDITION **5**

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To John

My partner, my best friend; you are the light and love of my life!

To Mikayla, Jeff, Greg, and Chelsea

You continue to show me that children bring happiness, joy, and love to a mother—even when those children are adults and parents themselves!

To Sierra, Jaymin, Riley, Hayley, Jettison, Jia, and Jagger

Being your Nana brings me new understanding, every single day, of the depth and meaning of love!

In Memory of my Dad, Edgar A. Thomas, and my Mother, Lucy L. Thomas

Dad and Mom, I miss you so much. I feel so fortunate to have the gift of being able to look at the beauty that surrounds me and see how much you both continue to bless me. Your unconditional love allowed me to be the child I was and the adult I am. My love for you is unending!

~Nancy

To Kinley

You are a true gift of grace and a beautiful example of peace. I love you!

To Margot and in Memory of Zern

You are a timeless illustration of love and friendship. Margot, your strength and courage is amazing and your love for my family is heart-warming. Zern, you are loved and missed.

To Flossie and Lester

You model faith and marriage daily. You "young pups" are a joy and a treasure and bless all who know you. Flossie you are an inspiration. Lester, thank you for your military service and laughter.

~Cynthia

Preface

This fifth edition of *Introductory Maternity & Pediatric Nursing* reflects the underlying philosophy of love, caring, and support for childbearing women, their children, and their families. The content has been updated and revised according to the most current information available. Our goal in this text is to keep the readability of the text at a level with which the student can be comfortable because we recognize that the nursing student has limited time to study and learn maternity and pediatric nursing content. This fifth edition was carefully reviewed, edited, and developed in format to make what was a very readable text even more readable and easy to follow.

In this text, we recognize that cultural sensitivity and awareness are important aspects of caring for childbearing and child-rearing families. We also recognize that many children and pregnant people live in families other than two-parent family homes and therefore refer to reinforcing teaching and supporting childbearing clients and family caregivers of children in all situations and family structures.

Maternal–child healthcare has seen a shift from the hospital setting into community and home settings. More responsibility has fallen on the family and family caregivers to look after the pregnant client or ill child. We stress the importance of reinforcing teaching with the client, the family, and the child, with an emphasis on prevention.

We have attempted to identify all possible unfamiliar terms and define them within the text in recognition of the frustrations that can result from having to turn to a dictionary or glossary for words that are unfamiliar. This increases reading ease for students, decreases time necessary to complete assigned readings, and enhances understanding of the information.

The nursing process is used as the foundation for presenting nursing care. Nursing care plans are included that support the student in the clinical setting in recognizing potential concerns of their clients. Implementation information is presented in a narrative format to enable discussion of how planning, goal setting, and evaluation can be put into action. In the nursing process sections, nursing care focus is used instead of "nursing diagnosis" to more accurately reflect what the nurse is doing—that is, focusing on nursing care.

A full-color format, current photos, drawings, tables, and diagrams further aid students in using this text. Hundreds of drawings and photos are included in this fifth edition.

CLINICAL JUDGMENT

When caring for clients, the nurse uses their nursing knowledge and goes through a decision-making process to determine client needs. The nurse recognizes and prioritizes client concerns and takes action to help the client attain goals and have positive outcomes. The nurse uses clinical reasoning and clinical judgment throughout this process.

An important aspect of the National Council Licensing Exam (NCLEX) is to measure the ability of the nurse to use critical thinking skills and good clinical judgment to provide safe, effective, and quality care for every client. A goal in this text is to give the student opportunities and support to help in developing those clinical judgment skills.

RECURRING FEATURES

In an effort to provide the student opportunities to develop those clinical judgment skills and to offer the student and instructor a text that is informative, exciting, and easy to use, we have incorporated a number of special features throughout the text, many of which are included in each chapter.

Unfolding Case Studies

A short client-based clinical scenario is presented at the beginning of each chapter. The student is provided relevant information so they have the opportunity to critically evaluate the appropriate course of action. The student is challenged to think about the information introduced in the case study as they read the chapter. A mid-chapter scenario helps keep the student engaged and offers an opportunity to review content and again use critical thinking and clinical judgment skills. At the end of the chapter, the student is reminded of the clinical scenario from the beginning and mid-chapter and posed questions to promote critical thinking, review understanding of content material found in the chapter, and use clinical judgment to determine appropriate actions in caring for this client.

Learning Objectives

Measurable, student-oriented objectives are included at the beginning of each chapter. These help guide the student in recognizing what is important and why, and they provide the instructor with guidance for evaluating student understanding of the information presented in the chapter.

Key Terms

A list of terms that may be unfamiliar to students but essential to understanding the chapter's content are found at the beginning of each chapter. The first appearance of these terms in the chapter is in boldface type alongside the definition as part of the paragraph. All key terms can be found in the glossary at the end of the text.

Nursing Process and Care Plans

The nursing process serves as an organizing structure for the discussion of nursing care covered in the text. This feature provides the student with a foundation from which individualized nursing care plans can be developed. Throughout the text, Nursing Process and Care Plan sections provide students with a model to follow when using the information from the nursing process to develop specific nursing care plans for use in their clinical experiences. Each of these sections includes nursing assessment (data collection), outcome identification and planning, relevant nursing care focuses, implementations, and evaluation of the goals and desired outcomes. Emphasis is placed on the importance of involving the family and family caregivers in the assessment (data collection) process. In the Nursing Process and Care Plan sections, we have used terminology from Lippincott Advisor's Problem-based Care Plans. These are used to represent appropriate concerns for a particular condition, but we do not attempt to include all problems that could be identified. The student will find the goals specific, measurable, and realistic and will be able to relate the goals to client situations and care plan development. The evaluation of the goal and desired outcome provide a goal for each nursing care focus and criteria to measure the successful accomplishment of that goal.

Nursing Procedures

Nursing Procedures detail needed equipment and step-by-step instructions to help the students understand procedure they will encounter as nurses. These instructions can be easily used in a clinical setting to perform nursing procedures.

Concept Mastery Alerts

Concept Mastery Alerts are placed in select locations throughout the texts and highlight commonly misunderstood concepts. They also provide students with helpful explanations to clarify the concepts.

Tips for Reinforcing Family Teaching

Information that the student can use in reinforcing teaching with maternity clients, family caregivers, and children is presented in highlighted boxes ready for use.

Clinical Secrets

This is a recurring feature that shows a nurse who provides brief clinical pearls that students will find valuable in caring for clients in clinical settings. Examples of the types of important issues highlighted include safety, nutrition, and pharmacology concerns, as well as cultural and communication tips.

Personal Glimpse With Learning Opportunity

Personal Glimpses, included in every chapter, present actual first-person narratives that are unedited and just as the individual wrote them. Personal Glimpses offer the student an individual's view of an experience they had and expounds upon that person's feelings about or during the incident. These narratives are presented to enhance student understanding and appreciation for others' feelings. A Learning Opportunity at the end of each Personal Glimpse encourages students to think of how they might react or respond in the situation presented. These questions further enhance the student's critical thinking skills.

Cultural Snapshot

These boxes highlight issues and topics with cultural considerations. The student is encouraged to think about cultural differences and stress the importance of accepting the attitudes and beliefs of individuals from cultures other than their own.

Tables, Drawings, and Photographs

These important aspects of the text have been updated and developed in an effort to help the student visualize the covered content. Many color photographs in a variety of settings are included.

Key Points

Key Points listed at the end of each chapter help students focus on important aspects of the chapter. Key Points provide a quick review of essential content and address all Learning Objectives stated at the beginning of the chapter.

Internet Resources

Current websites are included at the end of each chapter as starting-point resources to help students gather information on certain conditions, diseases, and disorders. Websites that offer support and information for families are listed as well.

LEARNING OPPORTUNITIES

In order to offer students opportunities to check their understanding of material they have read and studied, we have included many learning opportunities throughout the text.

Test Yourself

These questions are interspersed throughout each chapter and are designed to test understanding and recall of the material presented. The student will quickly determine if a review of what was just read is needed.

Developing Clinical Judgment—Chapter Workbook

At the end of each chapter, the student will find a workbook section to help bolster development of clinical judgment and mastery of critical thinking needed to care for maternity and pediatric clients. This section includes:

- **NCLEX-Style Review Questions** written to test the student's ability to apply the material from the chapter. These questions use the client–nurse format to encourage the student to critically think about client situations as well as the nurse's response or action. Alternate format style questions, including multiple response questions, are included.
- **Study Activities** which are interactive activities that require the student to participate in the learning process. Important material from the chapter is incorporated into this section to help the student review and synthesize chapter content. Instructors will find many of the activities appropriate for individual or class assignments.
  - » Within the Study Activities, many chapters include an **Internet Activity** that guides students in exploring the internet. Each activity takes the student step-by-step into a website where they can access new and updated information as well as resources to share with clients and families. Some websites include fun activities to use with pediatric clients. These activities may require the use of Acrobat Reader, which can be downloaded free of charge.
- **Critical Thinking: What Would You Do?** which present real-life situations and encourage the student to think about the chapter content in practical terms. These situations require students

to incorporate knowledge gained from the chapter and apply it to real-life problems using clinical judgment skills. Questions provide the student with opportunities to problem solve, think critically, and discover their own ideas and feelings. The instructor can also use the questions as tools to stimulate class discussion.

» **Dosage Calculations** are found in the workbook section of each pediatric chapter where diseases and disorders are covered. These questions ask students to practice dosage calculations. This skill can be directly applied in a clinical setting.

ORGANIZATION

The text is divided into 10 units to provide content in an orderly approach. The first unit helps build a foundation for students who are beginning their study of maternity and pediatric nursing. This unit introduces the student to caring for childbearing women and children in various settings.

Maternity nursing content is covered in Units 2 to 6. Maternity topics that address low-risk women are covered first in Units 2 to 5. Unit 6 addresses issues related to at-risk pregnancy, childbirth, and newborn care. The instructor may choose to teach the normal content of pregnancy followed by the at-risk pregnancy chapters. The authors designed the content so that normal considerations would be covered first by instructors and then followed by discussion of the at-risk woman, fetus, and neonate with the hope that this grouping will ensure all normal content is covered before any at-risk topics are addressed, thereby reducing the need for parenthetical content in the at-risk chapters. It also encourages the student to review the normal chapters alongside studying at-risk content. This repetition of content is designed to help cement student understanding of the material. In Unit 6, the at-risk disorders are organized so that an explanation of the disorder is covered first and then followed by a discussion of medical treatment and nursing care.

Pediatric nursing content comprises Units 7 through 10. The basic approach to the study of caring for children is organized within a unit discussing health promotion for normal growth and development in each age group. Subsequent units discuss foundational pediatric nursing topics as well as special concerns. Finally, the specific health problems seen in children are covered using a body systems approach. This user-friendly approach to the study of nursing care of children is often used in nursing education curricula.

Unit 1, Overview of Maternal and Pediatric Healthcare

Unit 1 introduces the student to a brief history of maternity and pediatric nursing in Chapter 1 and discusses current trends in maternal–child healthcare in addition to maternal–child health status concerns. A discussion of the nursing process is also included. This edition uses Lippincott Advisor's Problem-based Care Plans as the foundation for developing and defining the nursing care focuses for each nursing care plan. Chapter 2 follows with a discussion of the family, its structure, and family factors that influence childbearing and child-rearing. The chapter introduces community-based healthcare and discusses various settings in the community through which healthcare is provided for maternity clients and children.

Unit 2, Foundations of Maternity Nursing

Unit 2 introduces the student in Chapter 3 to male and female reproductive anatomy, which is essential to the understanding of maternity nursing. The menstrual cycle and the sexual response cycle are also addressed. (Note: Pelvic anatomy is addressed in Chapter 8, and breast anatomy is addressed in Chapter 15.) Chapter 4 continues with a discussion of special reproductive issues to include family planning, elective termination of pregnancy, and issues of fertility.

Unit 3, Pregnancy

Unit 3 begins in Chapter 5 with a discussion of fetal development from fertilization through the fetal period. Chapter 6 introduces the student to how pregnancy is determined and physiologic and psychological adaptations of women during pregnancy; the chapter ends by outlining nutritional requirements of pregnancy. Chapter 7 covers the nurse's role in prenatal care and common fetal assessment tests. This chapter also discusses common discomforts of pregnancy women may experience, elements of self-care during pregnancy that the nurse needs to inform women about, substance use during pregnancy, and information to help women prepare for labor, birth, and parenthood.

Unit 4, Labor and Birth

Unit 4 begins with a discussion of the labor process in Chapter 8. The four components of birth, the process of labor, and maternal and fetal adaptations to labor are covered. Female pelvic anatomy is discussed here. Chapter 9 introduces the student to concepts of pain management during labor and birth. The chapter begins with an overview of the characteristics and nature of labor pain as well as general principles of labor pain management. Nonpharmacologic and pharmacologic methods of pain management are reviewed. Chapter 10 covers the nurse's role during labor and birth to include observation of uterine contractions and fetal heart rate. Chapter 11 discusses procedures the health care provider may utilize to assist in delivery of the fetus. Topics covered include induction and augmentation of labor, assisted delivery (episiotomy, vacuum, and forceps delivery), cesarean birth, and vaginal birth after cesarean.

Unit 5, Postpartum and Newborn

Unit 5 begins with a discussion of normal postpartum adaptation, nursing assessment, and nursing care in Chapter 12. Chapter 13 covers topics related to normal transition of the neonate to extrauterine life, general characteristics of the neonate, and the initial nursing assessment of the newborn. Chapter 14 presents the nurse's role in caring for the normal newborn and includes nursing care considerations in the stabilization and transition of the newborn, normal newborn care, assessment and facilitation of family interaction and adjustment, and discharge considerations. An emphasis is placed on teaching new parents how to care for their newborn. Chapter 15 explores issues related to infant nutrition. Breast-feeding and formula-feeding are presented, along with factors that affect a woman's selection of a feeding method. Advantages and disadvantages of each method are presented. Physiology of breast-feeding, including breast anatomy, is covered here. The nurse's role in assisting women who are breast-feeding and who are formula-feeding is discussed.

Unit 6, Childbearing at Risk

Unit 6 begins with Chapter 16 and focuses on the pregnancy that is placed at risk by preexisting and chronic medical conditions of the woman. This chapter covers the major medical conditions, such as diabetes and heart disease, as well as exposure to infectious agents harmful to the fetus, threats from intimate partner violence, and age-related concerns on either end of the age spectrum. Chapter 17 introduces the student to the pregnancy that becomes at-risk because of pregnancy-related complications and disorders. Threats from hyperemesis, blood incompatibilities, bleeding disorders of pregnancy, and hypertensive disorders are presented. Chapter 18 covers topics associated with the at-risk labor, such as dysfunctional labor, preterm labor, postterm labor, placental abnormalities, and emergencies associated with labor and birth. Chapter 19 looks at conditions that place the postpartum woman at risk. Postpartum hemorrhage, infection, venous thromboembolism, and postpartum mental health issues are addressed. In Chapter 20, gestational concerns and acquired disorders of the newborn are discussed. Chapter 21 addresses congenital disorders of the newborn, including congenital malformations, inborn errors of metabolism, and chromosomal abnormalities.

Unit 7, Health Promotion for Normal Growth and Development

Unit 7 begins with Chapter 22, Principles of Growth and Development, which provides a foundation for discussion of growth and development in later chapters. The issues of children of divorce, latchkey children, runaway children, and homeless children and families are examined. Influences on and theories of growth and development are presented. The rest of this unit is organized by developmental stages from infancy through adolescence. It includes aspects of normal growth and development.

Unit 8, Foundations of Pediatric Nursing

Unit 8 presents Chapter 28, which covers collecting subjective and objective data from children and families. The chapter also includes interviewing and obtaining a history, general physical assessments and examinations, and assisting with diagnostic tests. Chapter 29 presents the pediatric unit, infection control in the pediatric setting, admission and discharge, children undergoing surgery, pain management, the hospital play program, and safety in the hospital. Chapter 30 covers specific procedures for pediatric clients as well as the role of the nurse in assisting with procedures

and treatments. Chapter 31 includes dosage calculation, administration of medications by various routes, and intravenous therapy.

Unit 9, Special Concerns of Pediatric Nursing

Unit 9 begins with Chapter 32, which presents concerns that face the family of a child with a chronic condition. The chapter discusses the impact on families caring for a child with a chronic condition and the nurse's role in assisting and supporting them. Chapter 33 explores the serious issue of child abuse in its many forms. It addresses the problems of domestic violence and parental substance abuse and the impact that they have on children. This chapter also includes issues surrounding children who are the victim of bullying. Chapter 34 concludes this unit with the dying child. A teaching aid is included in this chapter to help the nurse perform a self-examination to help reflect on their personal attitudes about death and dying, as well as concrete guidelines to use when interacting with a grieving child or adult.

Unit 10, The Child With a Health Disorder

Unit 10 is structured according to a body systems approach as the basis for discussion of diseases and disorders seen in children. Each chapter begins with a brief review of basic anatomy and physiology of the discussed body system. Throughout the text, family-centered care is stressed. Nursing process and care plans are integrated throughout this unit. Developmental enrichment and stimulation are stressed in sections on nursing process. The basic premise of each child's self-worth is fundamental in all of the nursing care presented.

Appendices, Glossary, and References

Seven appendices are included at the back of the text and contain important information for the nursing student in maternity and pediatrics courses. **Appendices** include:

- Appendix A: Standard and Transmission-Based Precautions
- Appendix B: Good Sources of Essential Nutrients
- Appendix C: Breast-Feeding and Medication Use
- Appendix D: Cervical Dilation Chart
- Appendix E: Growth Charts
- Appendix F: Pulse, Respiration, and Blood Pressure Values for Children
- Appendix G: Temperature and Weight Conversion Charts

The text concludes with a **Glossary** of key terms, an **English–Spanish Glossary** of maternity and pediatric phrases, and a listing of **References and Selected Readings.**

TEACHING AND LEARNING RESOURCES

Resources for Instructors

Tools to assist you with teaching your course are available on the Instructor Resources on thePoint at https://thePoint.lww.com/Hatfield5e. Resources include:

- A **Test Generator** that lets you put together exclusive new tests from a bank containing over 1,200 questions that span the text's topics in both maternity and pediatrics and is meant to help you assess student understanding of the material.
- An extensive collection of materials is provided for each book chapter.
  1. **Pre-lecture Quizzes** (and answers) are quick, knowledge-based assessments that allow you to check student reading.
  2. **PowerPoint Presentations** provide an easy way for you to integrate the textbook into the classroom experience, either via slide shows or handouts.
  3. **Guided Lecture Notes** walk you through the chapters, objective by objective, and provide you with corresponding PowerPoint slide numbers.
  4. **Discussion Topics** (and suggested answers) can be used as conversation starters or in online discussion boards.
  5. **Assignments** (and suggested answers) include group, written, clinical, and web assignments.
  6. **Case Studies** with related questions (and suggested answers) give students an opportunity to apply their knowledge to a client case similar to one they might encounter in practice.

- An **Image Bank** lets you use the photographs and illustrations from this textbook in your own presentation materials for your course.
- **Answers to Workbook Questions** from the book are provided and may be given to students.
- A sample **syllabus** provides guidance for structuring your maternity and pediatric nursing course.

Resources for Students

Valuable learning tools for students are available on thePoint at https://thePoint.lww.com/Hatfield5e. Resources include:

- **NCLEX-style Review Questions** that correspond with each book chapter help students review important concepts and practice for the NCLEX.
- **Watch and Learn Videos** demonstrate important concepts related to the developmental tasks of pregnancy, cesarean delivery, breast-feeding, care of the hospitalized child, medication administration, and developmental considerations in caring for children. Icons appear in the text to direct students to relevant video clips.
- A **Spanish–English Audio Glossary** provides helpful terms and phrases for communicating with clients who speak Spanish.
- **Learning Objectives** from each chapter, **Heart & Breath Sounds**, and **CDC Immunization Schedule** for children are also included.

Lippincott CoursePoint+

Lippincott® CoursePoint is an integrated, digital curriculum solution for nursing education that provides a completely interactive and adaptive experience geared to help students understand, retain, and apply their course knowledge and be prepared for practice. The time-tested, easy-to-use, and trusted solution includes engaging learning tools, evidence-based practice, case studies, and in-depth reporting to meet students where they are in their learning, combined with the most trusted nursing education content on the market to help prepare students for practice. This easy-to-use digital learning solution of *Lippincott® CoursePoint,* combined with unmatched support, gives instructors and students everything they need for course and curriculum success!

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- Unparalleled reporting provides in-depth dashboards with several data points to track student progress and help identify strengths and weaknesses.
- Unmatched support includes training coaches, product trainers, and nursing education consultants to help educators and students implement *Lippincott® CoursePoint* with ease.

Acknowledgments

As we began the exciting process of revising and updating this fifth edition of ***Introductory Maternity & Pediatric Nursing*****,** thinking of the students who will use this text was always our top priority. Our goal was to continue to provide the student with an accessible, user-friendly textbook in order to easily read, comprehend, and enjoy learning about childbearing women, children, and their families. Many people were involved in the creation of this project. With gratitude and appreciation, we would like to express our thanks to all of the Wolters Kluwer team whether they had a small or a large part in the process of publishing this textbook:

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Nancy T. Hatfield
Cynthia A. Kincheloe

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Contents

UNIT 1

Overview of Maternal and Pediatric Health Care 1

1 The Nurse's Role in a Changing Maternal–Child Healthcare Environment *2*
- **Changing Concepts in Maternal–Child Healthcare** *3*
  - Development of Maternity Care *3*
  - Development of Pediatric Care *4*
- **Current Trends in Maternal–Child Healthcare** *5*
  - Family-Centered Care *5*
  - Centralized Care *5*
  - Advances in Research *6*
  - Bioethical Issues *6*
  - Demographic Trends *7*
  - Poverty *7*
  - Cost Containment *7*
- **Payment for Health Services** *8*
  - Federally Funded Sources *8*
  - Specialized Services *9*
- **Maternal–Child Health Today** *9*
  - Maternal–Infant Health Status *9*
  - Child and Adolescent Health Status *10*
  - Campaigns to Improve Maternal–Child Health Status *11*
- **Critical Thinking** *13*
- **The Nursing Process** *13*
  - Assessment (Data Collection) *13*
  - Nursing Care Focus (Nursing Diagnosis) *14*
  - Outcome Identification and Planning *14*
  - Implementation *14*
  - Evaluation *14*
- **Documentation** *14*

2 Family-Centered and Community-Based Maternal and Pediatric Nursing *18*
- **The Family as a Social Unit** *18*
  - Family Function *19*
  - Family Structure *20*
  - Family Factors That Influence Childbearing and Child-Rearing *21*
- **Healthcare Shift: From Hospital to Community** *23*
  - Community-Based Nursing *23*
  - Community Care Settings for the Maternity Client *24*
  - Community Care Settings for the Child *26*
  - Skills of the Community-Based Nurse *27*
  - Aspects of Community-Based Nursing *28*

UNIT 2

Foundations of Maternity Nursing 33

3 Structure and Function of the Reproductive System *34*
- **Reproductive System of Men** *35*
  - External Genitalia *35*
  - Internal Reproductive Organs *36*
- **Reproductive System of Women** *38*
  - External Genitalia (Vulva) *38*
  - Internal Reproductive Organs *39*
  - Blood Supply for the Pelvic Organs *41*
- **Regulation of Reproductive Function** *42*
  - Puberty *42*
  - Menstrual Cycle *42*
  - Menopause *44*
- **Sexual Response Cycle** *44*

4 Special Issues of Women's Healthcare and Reproduction *48*
- **Women's Health Issues** *49*
- **Health Screening for Women** *49*
  - Breast Cancer Screening *49*
  - Pelvic Examination and Pap Smear *49*
  - Vulvar Self-Examination *52*
- **Common Disorders of Women's Reproductive Tract** *52*
  - Menstrual Disturbances *52*
  - Infectious Disorders *55*
  - Disorders of the Uterus and Ovaries *56*
  - Pelvic Support Disorders *57*
- **Reproductive Life Cycle Issues** *58*
- **Family Planning** *58*
  - Planning Pregnancy *58*
  - Preventing Pregnancy *60*
- *Nursing Process and Care Plan for Assisting the Client With Choosing a Contraceptive Method* *71*
- **Abortion** *73*
- **Infertility** *73*
  - Causes of Infertility *73*
  - Initial Evaluation of Infertility *74*
  - Comprehensive Evaluation and Diagnostic Testing *76*
  - Management of Infertility *76*
  - Psychological Aspects of Infertility *77*
  - Nursing Care *77*
- **Menopause** *78*
  - Clinical Manifestations *78*
  - Treatment *78*
  - Nursing Care *78*

UNIT 3

Pregnancy 83

5 Fetal Development *84*
- **Introduction** *84*
- **Cellular Processes** *84*
  - Types of Cells *85*
  - Cellular Division *85*
- **Stages of Fetal Development** *86*
  - Pre-Embryonic Stage *86*
  - Embryonic Stage *89*
  - Fetal Stage *89*
- **Development of Supportive Structures** *90*
  - Fetal Membranes *90*
  - Amniotic Fluid *90*
  - Placenta *92*
  - Umbilical Cord *94*
- **Fetal and Placental Circulation** *94*
  - Fetal Circulation *94*
  - Placental Circulation *95*
- **Special Considerations of Fetal Development** *95*
  - Teratogens and the Fetus *95*
  - Ectopic Pregnancy *98*
  - Multifetal Pregnancy *98*

6 Maternal Adaptation During Pregnancy *103*
- **Signs of Pregnancy** *103*
  - Presumptive (Possible) Signs *103*
  - Probable Signs *104*
  - Positive Signs *104*
- **Physiologic Adaptation to Pregnancy** *105*
  - Reproductive Changes *105*
- **Changes to Body Systems During Pregnancy** *107*
  - Endocrine Changes *107*
  - Hematologic Changes *107*
  - Cardiovascular Changes *107*
  - Respiratory Changes *107*
  - Musculoskeletal Changes *108*
  - Gastrointestinal Changes *109*
  - Urinary Changes *109*
  - Integumentary Changes *109*
- **Psychological Adaptation to Pregnancy** *110*
  - First-Trimester Task: Accept the Pregnancy *111*
  - Second-Trimester Task: Accept the Baby *111*
  - Third-Trimester Task: Prepare for Parenthood *112*
- **Changing Nutritional Requirements of Pregnancy** *112*
  - Energy Requirements and Weight Gain *113*
  - Protein Requirements *113*
  - Mineral Requirements *113*
  - Vitamin Requirements *114*
  - Dietary Supplementation *114*
  - Dietary Restrictions During Pregnancy *115*
  - Special Nutritional Considerations *116*

7 Prenatal Care *120*
- **Assessment of Maternal Well-Being During Pregnancy** *121*
  - First Prenatal Visit *121*
  - Subsequent Prenatal Visits *124*
- **Assessment of Fetal Well-Being During Pregnancy** *125*
  - Fetal Movement (Kick) Count *125*
  - Ultrasonography *126*
  - Maternal Serum Alpha-Fetoprotein Screening *127*
  - Amniocentesis *128*
  - Chorionic Villus Sampling *129*
  - Percutaneous Umbilical Blood Sampling *129*
  - Nonstress Test *129*
  - Contraction Stress Test *130*
  - Biophysical Profile *130*
- **Common Discomforts of Pregnancy** *130*
  - Nasal Stuffiness and Epistaxis *132*
  - Nausea *133*
  - Feeling Faint *133*
  - Frequent Urination *133*
  - Increased Vaginal Discharge *133*
  - Shortness of Breath *133*
  - Heartburn *133*
  - Backaches *134*
  - Round Ligament Pain *134*
  - Leg Cramps *134*
  - Constipation and Hemorrhoids *134*
  - Trouble Sleeping *134*
- **Self-Care During Pregnancy** *135*
  - Maintaining a Balanced Nutritional Intake *135*
  - Dental Hygiene *135*
  - Exercise *135*
  - Hygiene *136*
  - Breast Care *136*
  - Clothing *136*
  - Sexual Activity *136*
  - Employment *136*
  - Travel *137*
  - Medications and Herbal Remedies *137*
- **Substance Use and Abuse During Pregnancy** *138*
  - Caffeine *138*
  - Tobacco *138*
  - Alcohol *139*
  - Marijuana *139*
  - Cocaine *139*
- **Helping the Woman Prepare for Labor, Birth, and Parenthood** *139*
  - Packing for the Hospital or Birth Center *139*
  - Labor and Birth Preparation *139*
  - Choosing the Support Person *140*
  - Childbirth Education Classes *140*
  - Pregnancy Exercise Classes *141*
  - Baby Care Classes *141*
  - Breast-feeding Classes *141*
  - Siblings Classes *142*

Nursing Process and Care Plan for the Woman Seeking Prenatal Care *142*

UNIT 4

Labor and Birth 149

8 The Labor Process *150*
- **Four Essential Components of Labor** *151*
  - Passageway *151*
  - Passenger *153*
  - Powers *155*
  - Psyche *155*

The Process of Labor *156*
Onset of Labor *156*
Mechanisms of a Spontaneous Vaginal Delivery *157*
Stages and Duration of Labor *159*
Maternal and Fetal Adaptation to Labor *161*
Maternal Physiologic Adaptation *161*
Maternal Psychological Adaptation *162*
Fetal Adaptation to Labor *162*
9 Pain Management During Labor and Birth *167*
The Pain of Labor and Childbirth *168*
Uniqueness of Labor and Birth Pain *168*
Physiology and Characteristics of Labor Pain *168*
Factors Influencing Labor Pain *168*
Pain Management Principles and Techniques *168*
Principles of Pain Relief During Labor *169*
Nonpharmacologic Interventions *169*
Pharmacologic Interventions *173*
Nursing Process and Care Plan for the Woman in Labor *178*
10 Nursing Care During Labor and Birth *184*
The Nurse's Role During Admission *185*
Immediate Assessments *185*
Additional Assessments *187*
Performing Routine Admission Orders *188*
The Nurse's Role: Ongoing Assessment of Uterine Contractions and FHR *189*
Monitoring Uterine Contractions *189*
Monitoring FHR *192*
The Nurse's Role During the First Stage of Labor: Dilation *196*
Latent Phase *197*
Active Phase *199*
Transition Phase *201*
The Nurse's Role During the Second Stage of Labor: Delivery of the Fetus *202*
Assessment (Data Collection) *203*
Promoting Effective Pushing Despite Fatigue *203*
Effective Pushing Techniques *203*
Positions for Pushing and Delivery *203*
Preparing for Delivery of the Newborn *204*
The Nurse's Role During the Third Stage of Labor: Delivery of Placenta *206*
Assessment (Data Collection) *206*
Preventing Fluid Loss *208*
The Nurse's Role During the Fourth Stage of Labor: Recovery *208*
Assessment (Data Collection) *208*
Promoting Parent–Newborn Attachment *209*
Minimizing Bleeding *209*
Preventing Infection *209*
Promoting Urinary Elimination *210*
Managing Discomfort *210*
Reducing Fatigue *210*
Nursing Process and Care Plan for the Woman in Labor *210*
11 Assisted Delivery and Cesarean Birth *217*
Induction of Labor *218*
Indications *218*
Contraindications *218*
Labor Readiness *218*
Cervical Ripening *219*
Artificial Rupture of Membranes *219*
Oxytocin Induction *219*
Nursing Care *220*
Assisted Delivery *220*
Episiotomy *220*
Vacuum-Assisted Delivery *222*
Forceps-Assisted Delivery *222*
Operative Vaginal Delivery Indications *222*
Nursing Care *222*
Cesarean Birth *223*
Indications *223*
Incidence *223*
Risks *223*
Maternal Complications *224*
Fetal Complications *224*
Incision Types *224*
Steps of a Cesarean Delivery *225*
Nursing Care *229*
Vaginal Birth After Cesarean *230*
Prerequisites *231*
Contraindications *231*
Risks and Benefits *231*
Nursing Care *231*
Nursing Process and Care Plan for the Woman Undergoing Assisted Delivery *232*

UNIT 5

Postpartum and Newborn 239

12 The Postpartum Woman *240*
Maternal Adaptation During the Postpartum Period *240*
Physiologic Adaptation *240*
Psychological Adaptation *244*
Postpartum Assessment and Nursing Care *247*
Initial Physical Findings in the First Hour Following Delivery *247*
Breasts *248*
Uterus *248*
Lochia *249*
Bladder *249*
Bowel *250*
Perineum *250*
Lower Extremities *250*
Pain *250*
Laboratory Studies *253*
Bonding *253*
Maternal Emotional Status *253*
Nursing Process and Care Plan for the Postpartum Woman *254*
Nursing Process and Care Plan for Postpartum Care After Cesarean Birth *256*
Preparing the Postpartum Woman for Discharge *259*
Supporting Health-Seeking Behaviors *259*
Preventing Injury From Rh-Negative Blood Type or Nonimmunity to Rubella *259*
Providing Client Information *259*
Breast Care *260*

Fundal Massage 261
Perineum and Vaginal Care 261
Pain Management 261
Nutrition 261
Constipation 262
Proper Rest 262

13 Nursing Care During Newborn Transition 266
Physiologic Adaptation 267
Respiratory Adaptation 267
Cardiovascular Adaptation 268
Thermoregulatory Adaptation 268
Metabolic Adaptation 269
Hepatic Adaptation 269
Behavioral and Social Adaptation 270
Nursing Examination of the Normal Newborn 270
Initial Assessments at Birth 270
Continuing Data Collection During Newborn Transition 271
Initial Admitting Examination 271
Neurologic Examination 280
Behavioral Examination 282
Gestational Age Evaluation 282

14 Nursing Care of the Normal Newborn 286
Newborn Stabilization and Transition After Birth 287
Supporting Cardiovascular and Respiratory Transition 287
Maintaining Thermoregulation 288
Preventing Injury From Hypoglycemia 288
Preventing Infection 289
Potential for Hemorrhage 290
Preventing Misidentification of a Newborn 290
General Normal Newborn Care 291
Ongoing Cardiac and Respiratory Monitoring 291
Nutritional Intake 291
Preventing Transmission of Infection 291
Newborn Skin Care 292
Providing Safety From Abduction 292
Enhancing Organized Newborn Behavioral Responses 293
Pain in the Newborn 294
Preparing the Newborn for Discharge 295
Circumcision 295
Neonatal Immunization 298
Neonatal Screening 298
Reinforcing Information 299
Handling the Newborn 299
Clearing the Airway 299
Maintaining Adequate Temperature 300
Monitoring Stool and Urine Patterns 300
Providing Skin Care 302
Maintaining Safety 302
Nursing Process and Care Plan for the Normal Newborn 302

15 Newborn Nutrition 307
Selection of a Feeding Method 308
Factors That Influence Choice of Method 308
Nursing Considerations 308
Breast-feeding 309
Advantages and Disadvantages of Breast-feeding 309
Physiology of Breast-feeding 310
Composition of Breast Milk 311
Nutritional Needs of the Woman Who Breastfeeds 311
Nursing Care of the Woman Who Breastfeeds 312
Formula-Feeding 318
Advantages and Disadvantages of Formula-Feeding 318
Composition of Formula 318
Nursing Care of the Woman Who Formula-Feed 319

UNIT 6

Childbearing at Risk 327

16 Pregnancy at Risk: Conditions That Complicate Pregnancy 328
Pregnancy Complicated by Medical Conditions 329
Diabetes Mellitus 329
Nursing Process and Care Plan for the Pregnant Woman With Diabetes 332
Cardiovascular Disease 335
Anemia 337
Asthma 338
Epilepsy 340
Pregnancy Complicated by Infectious Diseases 340
TORCH 341
Sexually Transmitted Infections 344
Nursing Process and Care Plan for the Pregnant Woman With an STI 345
Pregnancy Complicated by Intimate Partner Violence 348
Clinical Manifestations 348
Screening and Interventions 349
Nursing Care 350
Pregnancy Complicated by Age-Related Concerns 351
Adolescent Pregnancy 351
Pregnancy in Later Life 352

17 Pregnancy at Risk: Pregnancy-Related Complications 356
Hyperemesis Gravidarum 357
Clinical Manifestations 357
Treatment 357
Nursing Care 358
Blood Incompatibilities 358
Rh Incompatibility 358
ABO Incompatibility 359
Bleeding Disorders 360
Ectopic Pregnancy 360
Early Pregnancy Loss 361
Cervical Insufficiency 364
Gestational Trophoblastic Disease 364
Placenta Previa 366
Placental Abruption (Abruptio Placentae) 367
Nursing Process and Care Plan for the Woman With a Bleeding Disorder 369
Hypertensive Disorders in Pregnancy 371
Gestational Hypertension 371

Preeclampsia–Eclampsia 371
Chronic Hypertension and Preeclampsia Superimposed on Chronic Hypertension 377
Nursing Process and Care Plan for the Woman With Preeclampsia 378
Multiple Gestation 380
Clinical Manifestations 380
Treatment 380
Nursing Care 380
18 Labor at Risk 384
Dysfunctional Labor (Dystocia) 384
Complications 385
Clinical Manifestations and Diagnosis 385
Causes of Labor Dysfunction 385
Treatment 386
Nursing Care 386
Fetal Malpresentation 386
Clinical Manifestations and Diagnosis 387
Treatment 387
Nursing Care 387
Prelabor Rupture of Membranes 388
Clinical Manifestations and Diagnosis 388
Treatment 388
Nursing Care 389
Preterm Labor 389
Clinical Manifestations and Diagnosis 389
Treatment 390
Nursing Process and Care Plan for the Woman With Preterm Labor 390
Postterm Pregnancy and Labor 393
Clinical Manifestations and Diagnosis 393
Treatment 393
Nursing Care 393
Intrauterine Fetal Death 394
Clinical Manifestations and Diagnosis 394
Treatment 394
Nursing Care 394
Emergencies Associated With Labor and Birth 394
Amniotic Fluid Embolism 394
Shoulder Dystocia 395
Umbilical Cord Prolapse 396
Uterine Rupture 397
Placental and Umbilical Cord Abnormalities 397
19 Postpartum Woman at Risk 403
Postpartum Hemorrhage 404
Early Postpartum Hemorrhage 404
Late Postpartum Hemorrhage 406
Nursing Process and Care Plan for the Woman With Postpartum Hemorrhage 406
Postpartum Infection 410
Endometritis 410
Wound Infection 412
Mastitis 413
Urinary Tract Infection 414
Nursing Process and Care Plan for the Woman With a Postpartum Infection 415
Venous Thromboembolism 418
Risk Factors 418
Deep Vein Thrombosis 418
Pulmonary Embolism 419
Postpartum Mental Health Disorders 420
Postpartum Depression 420
Postpartum Psychosis 421
Special Postpartum Situations 422
Grief in the Postpartal Period 422
Malattachment in the Postpartum Period 423
20 The Newborn at Risk: Gestational and Acquired Disorders 427
Variations in Size and Gestational Age 428
Gestational Age Assessment 428
The Small-for-Gestational Age (Growth-Restricted) Newborn 428
The Large-for-Gestational Age Newborn 432
The Preterm Newborn 432
Nursing Process and Care Plan for the Preterm Newborn 436
The Postterm Newborn 443
Acquired Disorders 444
Respiratory Disorders 444
Hemolytic Disease of the Newborn 446
Newborn of a Mother With Diabetes 448
Newborn of a Mother With Substance Abuse 449
Newborn With a Congenitally Acquired Infection 450
21 The Newborn at Risk: Congenital Disorders 455
Congenital Malformations 456
Central Nervous System Defects 456
Nursing Process and Care Plan for the Newborn With Myelomeningocele 457
Nursing Process and Care Plan for the Postoperative Newborn With Hydrocephalus 461
Cardiovascular System Defects: Congenital Heart Disease 463
Gastrointestinal System Defects 468
Nursing Process and Care Plan for the Newborn With Cleft Lip and Cleft Palate 469
Genitourinary Tract Defects 477
Skeletal System Defects 478
Nursing Process and Care Plan for the Infant in an Orthopedic Device or Cast 481
Inborn Errors of Metabolism 483
Phenylketonuria 483
Galactosemia 484
Congenital Hypothyroidism 484
Maple Syrup Urine Disease 484
Chromosomal Abnormalities 484
Down Syndrome 485
Turner Syndrome 485
Klinefelter Syndrome 486

UNIT 7

Health Promotion for Normal Growth and Development 491

22 Principles of Growth and Development 492
Foundations of Growth and Development 492
Patterns of Growth 493
Standards of Growth 493
Standards of Development 494
Influences on Growth and Development 494
Genetics 494

Nutrition 495
Environment 495
Theories of Child Development 499
Sigmund Freud 500
Erik Erikson 501
Jean Piaget 503
Lawrence Kohlberg 503
Other Theorists 504
Developmental Considerations for Communicating With Children and Family Caregivers 505
Principles of Communication 505
Communicating With Infants 505
Communicating With Young Children 506
Communicating With School-Aged Children 506
Communicating With Adolescents 507
Communicating With Family Caregivers 507
The Nurse's Role Related to Growth and Development 508
23 Growth and Development of the Infant: 28 Days to 1 Year 512
Physical Development 513
Weight and Height 513
Head and Skull 513
Skeletal Growth and Maturation 513
Eruption of Deciduous Teeth 514
Circulatory System 514
Body Temperature and Respiratory Rate 515
Neuromuscular Development 515
Psychosocial Development 515
Nutrition 518
Addition of Solid Foods 518
Weaning the Infant 522
Women, Infants, and Children Food Program 523
Health Promotion and Maintenance 523
Routine Checkups 523
Immunizations 523
Family Teaching 524
The Infant in the Healthcare Facility 527
24 Growth and Development of the Toddler: 1 to 3 Years 530
Physical Development 531
Psychosocial Development 531
Behavioral Characteristics 532
Play 533
Discipline 533
Sharing With a New Baby 534
Nutrition 535
Health Promotion and Maintenance 536
Routine Checkups 536
Reinforcing Family Teaching 536
Accident Prevention 539
The Toddler in the Healthcare Facility 541
Maintaining Routines 542
Special Considerations 542
25 Growth and Development of the Preschool-Aged Child: 3 to 6 Years 547
Physical Development 548
Growth Rate 548
Dentition 548
Visual Development 548
Skeletal Growth 548
Psychosocial Development 548
Language Development 548
Development of Imagination 550
Sexual Development 551
Social Development 551
Nutrition 553
Health Promotion and Maintenance 554
Routine Checkups 554
Family Teaching 555
Accident Prevention 555
Infection Prevention 556
The Preschool-Aged Child in the Health care Facility 557
26 Growth and Development of the School-Aged Child: 6 to 10 Years 561
Physical Development 562
Weight and Height 562
Dentition 562
Skeletal Growth 563
Psychosocial Development 563
Development From Ages 6 to 7 Years 564
Development From Ages 7 to 10 Years 565
Nutrition 566
Health Promotion and Maintenance 567
Routine Checkups 567
Family Teaching 567
Health Education 568
Accident Prevention 569
The School-Aged Child in the Healthcare Facility 570
27 Growth and Development of the Adolescent: 11 to 18 Years 574
Preadolescent Development 575
Physical Development 575
Preparation for Adolescence 575
Adolescent Development 576
Physical Development 576
Psychosocial Development 576
Nutrition 579
Health Promotion and Maintenance 580
Routine Checkups 580
Dental Checkups 581
Family Teaching 582
Health Education and Counseling 582
Mental Health 585
Accident Prevention 586
The Adolescent in the Healthcare Facility 587

UNIT 8

Foundations of Pediatric Nursing 591

28 Data Collection (Assessment) for the Child 592
Collecting Subjective Data 593
Conducting the Client Interview 593
Obtaining a Client History 594
Collecting Objective Data 598
Noting General Status 598
Measuring Weight, Height, and Length 598

Measuring Head Circumference 600
Taking Vital Signs 600
Conducting or Assisting With a Physical Examination 605
Assisting With Common Diagnostic Tests 607
29 Care of the Hospitalized Child 612
The Pediatric Hospital Setting 613
Early Childhood Education About Hospitals 613
The Pediatric Unit Atmosphere 614
Pediatric Intensive Care Units 614
Safety 615
Infection Control 615
Nursing Process and Care Plan for the Child Placed on Transmission-Based Precautions 616
Importance of Family Caregiver Participation 617
Admission and Discharge Planning 618
Planned Admissions 619
Emergency Admissions 619
The Admission Interview 619
The Admission Physical Examination 620
Discharge Planning 620
The Child Undergoing Surgery 620
Preoperative Care 621
Postoperative Care 622
The Hospital Play Program 624
The Hospital Play Environment 625
Therapeutic Play 625
Play Material 626
30 Procedures and Treatments 631
Nurse's Role in Preparation and Follow-Up 632
Preparation for Procedures 632
Follow-Up for Procedures 632
Performing Procedures Related to Position 633
Using Restraints 633
Holding 634
Transporting 635
Positioning for Sleep 635
Performing Procedures Related to Elevated Body Temperature 635
Control of Environmental Factors 636
Cooling Devices 636
Performing Procedures Related to Feeding and Nutrition 636
Intake and Output Measurements 636
Enteral Nutrition 636
Performing Procedures Related to Respiration 639
Oxygen Administration 639
Nasal/Oral Suctioning 640
Tracheostomy Care 641
Performing Procedures Related to Circulation 641
Heat Therapy 641
Cold Therapy 641
Performing Procedures Related to Elimination 642
Enema Administration 642
Ostomy Care 642
Performing Procedures for Specimen Collection 642
Nose and Throat Specimens 642
Urine Specimens 642
Stool Specimens 643
Assisting With Procedures Related to Collection of Blood and Spinal Fluid 643
Blood Collection 644
Lumbar Puncture 644
Assisting With Procedures Related to Diagnostic Tests and Studies 644
31 Medication Administration and Intravenous Therapy 649
Medication Administration 649
Rights and Guidelines 650
Pediatric Dosage Calculation 650
Oral Administration 654
Ophthalmic, Otic, Nasal, and Rectal Administration 655
Intramuscular Administration 656
Subcutaneous and Intradermal Administration 658
Intravenous Administration 659
Intravenous Therapy 659
Fundamentals of Fluid and Electrolyte Balance 659
IV Therapy Administration 661
Parenteral Nutrition Administration 663

UNIT 9

Special Concerns of Pediatric Nursing 667

32 The Child With a Chronic Health Problem 668
Causes of Chronic Conditions in Children 668
Effects of Chronic Conditions on the Family 669
Parents and Chronic Conditions 669
The Child and Chronic Conditions 670
Siblings and Chronic Conditions 671
The Role of the Nurse 671
Nursing Process and Care Plan for the Family and the Child With a Chronic Condition 671
33 Abuse in the Family and Community 679
Child Maltreatment 680
Types of Child Maltreatment 680
Effects on the Child and Family 683
Nursing Process and Care Plan for the Child Who is Abused 684
Human Trafficking 686
Domestic Violence in the Family 686
Effects on the Child and Family 686
Clinical Manifestations in the Child 687
Bullying 687
Effects on the Child 687
Clinical Manifestations in the Child 687
Parental Substance Abuse 687
Effects on the Child and Family 688
Clinical Manifestations in the Child 688
34 The Dying Child 692
The Nurse's Reaction to Death and Dying 693
The Child's Understanding of Death 693
Developmental Stage 693
Experience With Death and Loss 695
Awareness of Impending Death 696

The Family's Reaction to Dying and Death *696*
Family Caregiver Reactions *698*
The Child's Reaction *699*
Sibling Reactions *700*
Settings for Care of the Dying Child *700*
Hospice Care *700*
Home Care *701*
Hospital Care *701*
The Role of the Nurse *701*
Nursing Process and Care Plan for the Dying Child *702*

UNIT 10

The Child With a Health Disorder 707

35 The Child With a Sensory/Neurologic Disorder *708*
Growth and Development of the Eyes, Ears, and Nervous System *709*
The Nervous System *709*
Sensory Organs *709*
Vision Impairment *709*
Types of Vision Impairment *709*
Clinical Manifestations and Diagnosis *710*
Treatment and Education *712*
Nursing Care *712*
Eye Conditions *712*
Cataracts *712*
Glaucoma *712*
Strabismus *712*
Eye Injury and Foreign Objects in the Eye *713*
Eye Infections *713*
Nursing Care for the Child Undergoing Eye Surgery *714*
Hearing Impairment *714*
Types of Hearing Impairment *714*
Clinical Manifestations *715*
Diagnosis *715*
Treatment and Education *715*
Nursing Care *716*
Otitis Media *716*
Clinical Manifestations *716*
Diagnosis *716*
Treatment and Nursing Care *716*
Insertion of Foreign Bodies Into the Ear or Nose *717*
Reye Syndrome *717*
Clinical Manifestations *717*
Diagnosis *717*
Treatment *717*
Nursing Care *717*
Acute or Nonrecurrent Seizures *718*
Clinical Manifestations and Diagnosis *718*
Treatment *718*
Seizure Disorders *718*
Clinical Manifestations *718*
Diagnosis *720*
Treatment *720*
Nursing Care *720*
Nursing Process and Care Plan for the Child at Risk for Seizures *721*
Meningitis *723*
Clinical Manifestations *723*
Diagnosis *723*
Treatment *723*
Nursing Process and Care Plan for the Child With Meningitis *724*
Cerebral Palsy *726*
Causes *726*
Prevention *727*
Clinical Manifestations and Types *727*
Diagnosis *727*
Treatment and Special Aids *727*
Nursing Care *728*
Intellectual Disability *729*
Causes *729*
Clinical Manifestations and Diagnosis *729*
Treatment and Education *730*
Nursing Process and Care Plan for the Child With Intellectual Disability or Cognitive Impairment *730*
Brain Tumors *733*
Clinical Manifestations and Diagnosis *734*
Treatment and Nursing Care *734*
Head Trauma *734*
Drowning *735*
36 The Child With a Respiratory Disorder *742*
Growth and Development of the Respiratory System *743*
Acute Nasopharyngitis (Common Cold) *743*
Clinical Manifestations *744*
Diagnosis *744*
Treatment and Nursing Care *744*
Allergic Rhinitis (Hay Fever) *744*
Clinical Manifestations *744*
Treatment and Nursing Care *744*
Tonsillitis and Adenoiditis *744*
Clinical Manifestations and Diagnosis *744*
Treatment and Nursing Care *745*
Nursing Process and Care Plan for the Child Having a Tonsillectomy *745*
Croup Syndromes *747*
Spasmodic Laryngitis *747*
Acute Laryngotracheobronchitis *747*
Epiglottitis *747*
Acute Bronchiolitis/Respiratory Syncytial Virus Infection *748*
Clinical Manifestations *748*
Diagnosis *748*
Treatment and Nursing Care *748*
Asthma *749*
Clinical Manifestations *749*
Diagnosis *749*
Treatment *750*
Nursing Process and Care Plan for the Child With Asthma *751*
Pneumonia *755*
Clinical Manifestations *755*
Diagnosis *756*
Treatment *756*
Nursing Process and Care Plan for the Child With Pneumonia *756*

Cystic Fibrosis *759*
Clinical Manifestations *759*
Diagnosis *760*
Treatment *760*
Nursing Process and Care Plan for the Child With Cystic Fibrosis *761*
Pulmonary Tuberculosis *765*
Clinical Manifestations *766*
Diagnosis *766*
Treatment *766*
Prevention *766*

37 The Child With a Cardiovascular/Hematologic Disorder *770*
Growth and Development of the Cardiovascular and Hematologic Systems *771*
Differences Between the Child's and Adult's Cardiovascular and Hematologic Systems *771*
Congestive Heart Failure *771*
Clinical Manifestations *772*
Diagnosis *772*
Treatment *772*
Nursing Process and Care Plan for the Child With Congestive Heart Failure *772*
Acute Rheumatic Fever *774*
Clinical Manifestations *774*
Diagnosis *774*
Treatment *774*
Prevention *775*
Nursing Process and Care Plan for the Child With Acute Rheumatic Fever *775*
Kawasaki Disease *777*
Clinical Manifestations and Diagnosis *778*
Treatment and Nursing Care *778*
Iron-Deficiency Anemia *778*
Clinical Manifestations and Diagnosis *779*
Treatment and Nursing Care *779*
Sickle Cell Disease *779*
Clinical Manifestations *779*
Diagnosis *780*
Treatment *780*
Nursing Process and Care Plan for the Child With a Sickle Cell Crisis *780*
Thalassemia *783*
Clinical Manifestations *783*
Treatment and Nursing Care *783*
Hemophilia *783*
Mechanism of Clot Formation *783*
Common Types of Hemophilia *783*
Clinical Manifestations *784*
Diagnosis *784*
Treatment *784*
Nursing Process and Care Plan for the Child With Hemophilia *784*
Immune Thrombocytopenia *787*
Clinical Manifestations and Diagnosis *787*
Treatment and Nursing Care *787*
Acute Leukemia *787*
Pathophysiology *787*
Clinical Manifestations *788*
Diagnosis *788*
Treatment *788*
Nursing Process and Care Plan for the Child With Leukemia *788*

38 The Child With a Gastrointestinal/Endocrine Disorder *795*
Growth and Development of the Gastrointestinal and Endocrine Systems *796*
Gastrointestinal System *796*
Endocrine System and Hormonal Function *796*
Gastrointestinal Disorders *797*
Malnutrition and Nutritional Problems *797*
Nursing Process and Care Plan for the Child With Malnutrition and Nutritional Problems *799*
Celiac Disease *801*
Gastroesophageal Reflux Disease *801*
Colic *802*
Diarrhea and Gastroenteritis *803*
Nursing Process and Care Plan for the Child With Diarrhea and Gastroenteritis *804*
Pyloric Stenosis *807*
Nursing Process and Care Plan for the Infant With Pyloric Stenosis *808*
Congenital Aganglionic Megacolon *810*
Nursing Process and Care Plan for the Child Undergoing Surgery for Congenital Aganglionic Megacolon *811*
Intussusception *814*
Appendicitis *815*
Nursing Process and Care Plan for the Child With Appendicitis *815*
Intestinal Parasites *817*
Ingestion of Toxic Substances *818*
Lead Poisoning (Plumbism) *820*
Ingestion of Foreign Objects *821*
Endocrine Disorders *822*
Type 1 Diabetes Mellitus *823*
Nursing Process and Care Plan for the Child With Type 1 Diabetes Mellitus *826*
Type 2 Diabetes Mellitus *833*

39 The Child With a Genitourinary Disorder *837*
Growth and Development of the Genitourinary System *837*
Urinary Tract Infections *838*
Clinical Manifestations *838*
Diagnosis *839*
Treatment *839*
Nursing Process and Care Plan for the Child With a Urinary Tract Infection *839*
Enuresis *840*
Acute Poststreptococcal Glomerulonephritis *841*
Clinical Manifestations *841*
Treatment *841*
Nursing Care *842*
Nephrotic Syndrome *842*
Clinical Manifestations *842*
Diagnosis *843*
Treatment *843*
Nursing Process and Care Plan for the Child With Nephrotic Syndrome *843*

Wilms Tumor (Nephroblastoma) *846*
Hydrocele *846*
Cryptorchidism *846*
Menstrual Disorders *846*
Premenstrual Syndrome *846*
Dysmenorrhea *847*
Amenorrhea *847*
Vaginitis *847*
40 The Child With a Musculoskeletal Disorder *851*
Growth and Development of the Musculoskeletal System *851*
Fractures *852*
Treatment and Nursing Care *853*
Nursing Process and Care Plan for the Child in Traction *857*
Osteomyelitis *859*
Clinical Manifestations and Diagnosis *859*
Treatment *859*
Nursing Care *860*
Muscular Dystrophy *860*
Clinical Manifestations and Diagnosis *860*
Treatment and Nursing Care *861*
Slipped Capital Femoral Epiphysis *862*
Clinical Manifestations and Diagnosis *862*
Treatment and Nursing Care *862*
Legg–Calvé–Perthes Disease *862*
Clinical Manifestations and Diagnosis *862*
Treatment and Nursing Care *862*
Osteosarcoma *863*
Clinical Manifestations and Diagnosis *863*
Treatment and Nursing Care *863*
Ewing Sarcoma *863*
Clinical Manifestations and Diagnosis *863*
Treatment and Nursing Care *863*
Juvenile Idiopathic Arthritis *863*
Clinical Manifestations and Diagnosis *863*
Treatment and Nursing Care *863*
Scoliosis *864*
Diagnosis *865*
Treatment *865*
Nursing Process and Care Plan for the Child With Scoliosis Requiring a Brace *866*
41 The Child With an Integumentary Disorder/Communicable Disease *872*
Growth and Development of the Integumentary and Immune Systems *873*
Integumentary Disorders *873*
Seborrheic Dermatitis *873*
Miliaria Rubra *873*
Diaper Dermatitis *874*
Candidiasis *874*
Staphylococcal Infection *875*
Impetigo *875*
Acne Vulgaris *876*
Fungal Infections *876*
Tinea Capitis (Ringworm of the Scalp) *876*
Tinea Corporis (Ringworm of the Body) *877*
Tinea Pedis *877*
Tinea Cruris *877*
Parasitic Infections *877*
Pediculosis *877*
Scabies *878*
Allergic Disorders *878*
Atopic Dermatitis (Eczema) *879*
Nursing Process and Care Plan for the Child With Atopic Dermatitis (Eczema) *880*
Contact Dermatitis *882*
Bites *882*
Animal Bites *882*
Spider Bites *883*
Tick Bites *883*
Snake Bites *883*
Insect Stings or Bites *883*
Burns *883*
Types of Burns *884*
Emergency Treatment *885*
Treatment of Moderate-to-Severe Burns: First Phase—48 to 72 Hours *886*
Complications *888*
Long-Term Care *888*
Nursing Process and Care Plan for the Child With a Burn *888*
Sexually Transmitted Infections *891*
Human Papillomavirus *891*
Gonorrhea *891*
Chlamydia Infection *892*
Genital Herpes *893*
Syphilis *893*
Human Immunodeficiency Virus *893*
Nursing Process and Care Plan for the Child With HIV/AIDS *894*
Infectious Mononucleosis *897*
Clinical Manifestations *897*
Diagnosis *897*
Treatment and Nursing Care *897*
Communicable Diseases of Childhood *898*
Prevention *898*
Nursing Care *898*
42 The Child With a Cognitive, Behavioral, or Mental Health Disorder *907*
Autism Spectrum Disorder *908*
Clinical Manifestations *908*
Diagnosis *908*
Treatment *908*
Nursing Care *908*
Attention Deficit Hyperactivity Disorder *909*
Clinical Manifestations *909*
Diagnosis *909*
Treatment and Nursing Care *909*
Oppositional Defiant Disorder *910*
Clinical Manifestation *910*
Treatment *910*
Conduct Disorder *910*
Clinical Manifestation *910*
Treatment *910*
Bullying *910*
Enuresis and Encopresis *910*
Anxiety Disorders *910*
Generalized Anxiety Disorder *911*
Separation Anxiety Disorder *911*
Phobias *911*
Treatment *911*

Depression and Suicide *911*
Clinical Manifestations *911*
Treatment and Nursing Care *912*
Substance Abuse *912*
Prevention and Treatment *914*
Alcohol Abuse *914*
Tobacco Abuse *915*
Marijuana/Cannabis Abuse *915*
Cocaine Abuse *915*
Narcotic Abuse *916*
Other Abused Drugs *916*
Eating Disorders *917*
Nonorganic Failure to Thrive/Rumination Disorder *917*
Anorexia Nervosa *917*
Bulimia Nervosa *918*
Nursing Process and Care Plan for the Child With Anorexia Nervosa or Bulimia Nervosa *919*
Binge-Eating Disorder/Obesity *921*
Clinical Manifestations and Diagnosis *921*
Treatment *922*
Appendix A *Standard and Transmission-Based Precautions* *926*
Appendix B *Good Sources of Essential Nutrients* *928*
Appendix C *Breast-Feeding and Medication Use* *929*
Appendix D *Cervical Dilation Chart* *931*
Appendix E *Growth Charts* *932*
Appendix F *Pulse, Respiration, and Blood Pressure Values for Children* *938*
Appendix G *Temperature and Weight Conversion Charts* *939*
Glossary *941*
References and Selected Readings *953*
Index *971*

UNIT 5
Postpartum and Newborn

12 The Postpartum Woman 240

13 Nursing Care During Newborn Transition 266

14 Nursing Care of the Normal Newborn 286

15 Newborn Nutrition 307

12 The Postpartum Woman

Key Terms
afterpains
attachment
boggy uterus
bonding
breakthrough pain
colostrum
diastasis recti
en face position
grand multiparity
involution
lochia
postpartum blues
puerperium

Learning Objectives

At the conclusion of this chapter, you will:

1. Describe physiologic adaptations the woman's body goes through during the postpartum period.
2. Discuss psychological adaptation during the postpartum period regarding attachment, bonding, and postpartum blues.
3. Describe the 11 main areas that are covered in a postpartum examination.
4. Describe nursing interventions in the early postpartum period.
5. Compare and contrast the postpartum nursing care of the woman who delivers vaginally with that of the one who delivers by cesarean.
6. Outline the nurse's role in preparing the postpartum woman for discharge.

Mei Chu has just delivered her second child 4 hours ago. Her newborn weighs 9 lb (4,082 g), and she wants to breastfeed. You enter her room to do her postpartum examination. What findings would you expect to see, and what findings would you need to report to the registered nurse (RN)? What might be some of Mei's concerns?

The processes of pregnancy and birth cause the woman to adapt both psychologically and physiologically. During the postpartum period, sometimes referred to as the fourth trimester of pregnancy, the woman must adjust to the reality of her new role as mother while her body recovers from pregnancy and childbirth. The postpartum period, or **puerperium**, encompasses the 6 to 12 (Berens, 2020) weeks after birth. This is sometimes referred to as "the fourth trimester." For ease of discussion, the puerperium is subdivided into three categories: the immediate postpartum period, which covers the first 24 hours; the early postpartum period, or first week; and late postpartum period, which refers to weeks 2 to 12. This chapter discusses the adaptations a low-risk woman makes during the puerperium and the nursing care that promotes healing and wellness.

MATERNAL ADAPTATION DURING THE POSTPARTUM PERIOD

Physiologic Adaptation

The woman's body undergoes tremendous changes during pregnancy. Every body system and organ is affected. During the postpartum period, the body recovers from the changes that occurred and returns to its normal prepregnancy state.

Reproductive System

The organs and hormones of the reproductive system must gradually return to their nonpregnant size and function. **Involution** is the process through which the uterus, cervix, and vagina return to the nonpregnant size and function.

Uterus

Uterine Contraction and Involution. Immediately after the placenta delivers, the uterus contracts inward, a process that seals off the open blood vessels at the former site of the placenta. If the uterus does not contract effectively, the woman will hemorrhage. The clotting cascade is also initiated to help control bleeding. Gradually, the decidua sloughs off, new endometrial tissue forms, and the placental area heals without leaving fibrous scar tissue.

Uterine contraction also leads to uterine involution, which normally occurs at a predictable rate. Uterine involution is monitored by measuring fundal height. Immediately after delivery, the uterus should be contracted firmly with the fundus located midline and at about the level of the umbilicus. The day after delivery, the fundus is found one fingerbreadth (1 cm) below the umbilicus. The normal process of involution thereafter is for the uterus to descend approximately one fingerbreadth per day until it has descended below the level of the pubic bone and can no longer be palpated. This occurs by the 10th to 14th postpartum day (Fig. 12-1).

Several factors promote uterine contraction and involution. Breast-feeding stimulates oxytocin release from the woman's posterior pituitary gland, which stimulates the uterus to contract. Oxytocin given via the IM or IV route can also help the uterus contract. Early ambulation and proper nourishment also foster normal involution.

In addition, there are factors that can inhibit or delay uterine involution. A full bladder impedes uterine contraction by pushing upward on the uterus and displacing it away from the midline. Any condition that overdistends the uterus during pregnancy can lead to ineffective uterine contraction after delivery. Examples include multifetal pregnancy, polyhydramnios, maternal exhaustion, excessive analgesia, and oxytocin use during labor and delivery. Other factors that can hinder effective contraction of the uterus include retained placental fragments, infection, and **grand multiparity** (five or more pregnancies). When the uterus does not contract effectively, blood and clots collect in the uterus, which makes it even more difficult for the uterus to contract. This leads to a boggy uterus and hemorrhage if the condition is not corrected. A **boggy uterus** is a term used to describe a uterus in the postpartum period that is not contracted and feels soft and spongy, rather than firm and well contracted.

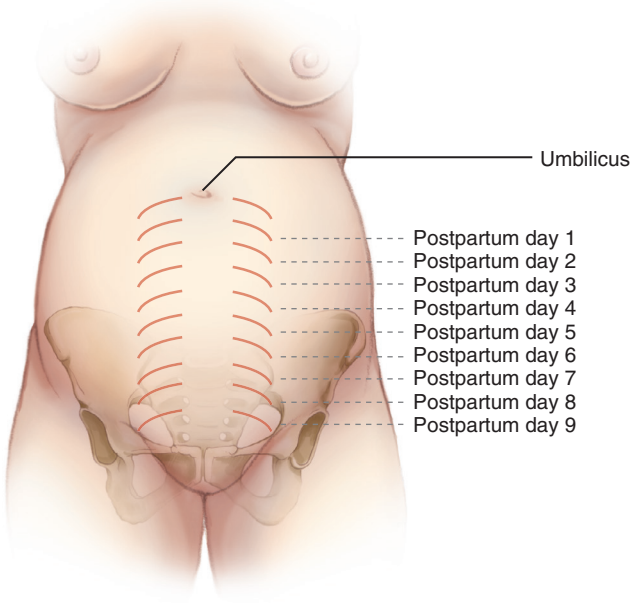


FIGURE 12-1 Uterine involution.

Afterpains. Uterine pain felt after delivery is referred to as **afterpains**. After a multipara delivers, the uterus contracts and relaxes at intervals. This leads to afterpains, which can be quite severe. For the primipara, the uterus normally remains contracted, and afterpains are less severe than that of the multipara. However, breast-feeding, because it causes the release of oxytocin, increases the duration and intensity of afterpains for both the primipara and multipara. For some women, afterpains are severe enough to require medication.

Lochia. The uterus must shed its lining that helped nourish the pregnancy. Blood, mucus, tissue, and white blood cells compose the uterine discharge known as **lochia** during the postpartum period. Lochia progresses through three stages:

- *Lochia rubra:* Occurs during the first 3 to 4 days; is of small to moderate amount; is composed mostly of blood; is dark red in color; has a fleshy odor.
- *Lochia serosa:* Occurs during days 4 to 10; decreases to a small amount; takes on a brownish or pinkish color.
- *Lochia alba:* Occurs after day 10; becomes white or pale yellow because the bleeding has stopped, and the discharge is now composed mostly of white blood cells.

Lochia may persist for the entire 6 weeks after delivery but often subsides by the end of the second or third week. Lochia should never contain large clots. Other abnormal findings include reversal of the pattern (e.g., the lochia has been serosa, then goes back to rubra), lochia that fails to decrease in amount or actually increases versus gradually decreasing, or is malodorous.

Warning!

Normal lochia has a fleshy, but not offensive, odor. If the lochia is malodorous or smells rotten, suspect infection. Report this finding immediately to the RN or health care provider.

Ovaries

Ovulation can occur as soon as 3 weeks after delivery. Menstrual periods usually begin within 6 to 8 weeks for the woman who is not breast-feeding. However, the lactating woman may not resume menses for as long as 18 months after giving birth. Although lactation may suppress

ovulation, it is not a dependable form of birth control. It is wise for the woman to use some type of birth control to prevent an unplanned pregnancy when she resumes sexual activity.

Did You Know?

The return of ovulation and menstrual bleeding do not always occur together. Explain to the woman that she may be able to conceive even before her menses resume.

Cervix

During labor, the cervix thins and dilates. This process does not occur without some trauma. Directly after delivery, the cervix is still partially open and contains soft, small tears. It may also appear bruised. The internal os closes after a few days. Gradually, the muscle cells regenerate, and the cervix recovers by the end of the 6-week puerperium. The external os, however, remains slightly open and has a slitlike appearance in comparison with the dimple-like appearance of the cervix of a nulliparous woman (Fig. 12-2).

Vagina and Perineum

The vagina may have small tears that will heal without intervention. Immediately after delivery, the walls of the vagina are smooth. Rugae begin to return to the vaginal walls after approximately 3 weeks. The diameter of the introitus gradually becomes smaller by contraction. Muscle tone in the perineum never fully returns to the pregravid state; however, Kegel exercises may help increase the tone and enhance sexual enjoyment. Because breast-feeding suppresses ovulation, estrogen levels remain lower in the lactating woman, which can lead to vaginal dryness and dyspareunia (painful intercourse).

The labia and perineum may be edematous after delivery and may appear bruised, particularly after a difficult delivery. If an episiotomy was done or perineal tears repaired, absorbable stitches will be in place. The edges of the episiotomy or repair should be approximated (intact). The episiotomy takes several weeks to heal fully. The labia tend to be flaccid after childbirth.

Breasts

Colostrum, the antibody-rich breast secretion that is the precursor to breast milk, is normally excreted by the breasts in the last weeks of pregnancy and continues to be excreted in the first few postpartum days. Prolactin levels rise when estrogen and progesterone levels fall after delivery of the placenta. Suckling at the breast also causes prolactin levels to rise. Prolactin stimulates milk production by the breasts, and the milk normally comes in on the third day. See Chapter 15 for a detailed discussion of breast physiology, milk production, and breast-feeding.

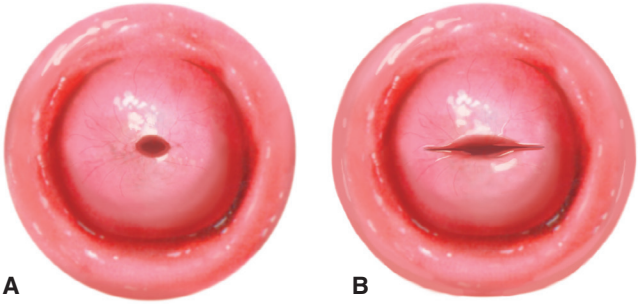


FIGURE 12-2 Appearance of the cervical os. **A.** Before the first pregnancy. **B.** After pregnancy.

TEST YOURSELF

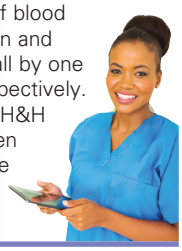
- ✔ Where is the fundus normally located on the first day after delivery?
- ✔ Name three factors that can inhibit or delay uterine involution.
- ✔ Name the three stages, in order, through which lochia progresses.

Cardiovascular System

In the early postpartum period, the woman eliminates the additional fluid volume that is present during the pregnancy. This fluid loss occurs via the skin, urinary tract, and through blood loss. The woman who experiences a normal vaginal delivery loses approximately 300 to 500 mL of blood during delivery. If she has a cesarean delivery, normal blood loss is between 500 and 1,000 mL. As the blood volume returns to normal, some hemoconcentration occurs that causes an increase in the hematocrit.

You Do the Math!

For every 250 mL of blood loss, the hemoglobin and hematocrit (H&H) fall by one and two points, respectively. So, if the woman's H&H were 12 and 34, then fall to 10 and 30, the approximate blood loss is 500 mL.



In the postpartum period, plasma fibrinogen levels are elevated, as are other coagulation factors. This helps to protect the woman against hemorrhage, but at the same time it predisposes the woman to the development of blood clots in the deep veins of the legs called deep vein thrombosis (DVT). Dehydration, immobility, and trauma can add to the risk for DVT. (See Chapter 19 for discussion of DVT in the postpartum period.)

The white blood cell count is elevated to approximately 15,000 to 20,000/mL and may reach as high as 30,000/mL. Leukocytosis, a high white blood cell count, helps protect the woman from infection, as there are multiple routes for infection to occur in the early postpartum period.

Immediately or very soon after delivery, the woman may experience shaking postpartum chills. Hormonal and physiologic changes are the likely cause of the shaking and chills. In any event, chills are not harmful, unless accompanied by fever greater than 100.4°F or other signs of infection. Chills normally resolve within minutes, especially if a prewarmed blanket is placed over the woman.

Vital Signs

The temperature may be elevated slightly during the first 24 hours because of the exertion and dehydration of labor. After the first 24 hours, a temperature of 100.4°F or greater is abnormal and may indicate infection.

The blood pressure should remain at the woman's baseline level. An elevated blood pressure could be a sign of developing preeclampsia (see Chapter 17) and should be promptly reported. A falling blood pressure, particularly in the presence of a rising pulse, is suggestive of hemorrhage. Monitor the woman carefully for a source of blood loss if her blood pressure drops.

Here's a Clinical Tip!

For accurate blood pressure readings, have the woman sit on the edge of the bed for several minutes before measuring her blood pressure. If you take the blood pressure immediately after she sits up from a lying position, the reading may be falsely low due to orthostatic hypotension.

It is normal for the pulse to be slow in the first week after delivery. The heart rate may be as low as 50 beats per minute. Occasionally, the woman may experience tachycardia. This is more likely to occur after a difficult labor and delivery, dehydration, or it may indicate excessive blood loss.

Musculoskeletal System

The most pronounced changes are evident in the abdominal muscles, although other muscles may be weak because of the exertion of labor. The abdomen is soft and sagging in the immediate postpartum period. Often the woman has to wear loose or maternity clothing for the first few weeks after delivery. The abdomen usually regains its tone with exercise. However, in some women, the abdomen remains slack. In this situation, if another pregnancy occurs, the woman will have more problems with backache. **Diastasis recti** (also referred to as rectus abdominis diastasis) is a condition in which the abdominal muscles separate during the pregnancy, leaving part of the abdominal wall without muscular support. Exercise can improve muscle tone when this condition occurs. A woman is predisposed to poor muscle tone and diastasis if she has weak muscles or is obese before the pregnancy, her abdomen is overdistended during the pregnancy, or if she is a grand multipara.

Gastrointestinal System

Immediately after delivery, the postpartum woman is often very hungry. The energy expended during labor uses up glucose stores, and food has generally been restricted. Restriction of fluids and loss of fluids in labor, in the urine, and via diaphoresis (sweating) often leads to increased thirst.

Constipation may be a problem. Intra-abdominal pressure decreases rapidly after childbirth, and peristalsis is diminished. These factors make it more difficult for feces to travel through the gastrointestinal tract. The woman may be afraid to defecate in the early postpartum period because of hemorrhoidal discomfort and/or perineal pain. Suppressing the urge to defecate complicates the problem of constipation and may actually cause increased pain when defecation finally occurs. Iron supplementation adds to the problem. However, by the end of the first postpartum week, bowel function has usually returned to normal.

Urinary System

The urinary system must handle an increased load in the early postpartum period as the body excretes excess plasma volume. Healthy kidneys are able to adjust to the increased demands. Urinary output exceeds intake. Transient glycosuria, proteinuria, and ketonuria are normal in the immediate postpartum period.

During the process of labor and delivery, trauma can occur to the lower urinary system. Pressure of the descending fetal head on the ureters, bladder, and urethra can lead to transient loss of bladder tone and urethral edema. Trauma, certain medications, and anesthesia given during labor can also lead to a temporary loss of bladder sensation. Prolonged pushing can cause the perineum to become edematous, which can cause pressure around the urethra preventing the woman from being able to adequately void. The result can be urinary retention. Sometimes, the woman voids small amounts but does not completely empty the bladder, or she may not be able to void at all. Voiding may be painful if the urethra was traumatized.

The urinary system is more susceptible to infection during the postpartum period. Hydronephrosis, dilation of the renal pelves of the kidneys and ureters, is a normal change that occurs during pregnancy because of hormonal influences and increased renal blood flow. This condition persists for approximately 4 weeks after delivery. Hydronephrosis and urinary stasis predispose the woman to urinary tract infection.

Check This Out!

If you palpate the fundus and find it above the umbilicus, deviated to the right side, and boggy, the most likely cause is a full bladder. Assist the woman to void, and then reevaluate the fundus. If it does not become firm after she voids, immediately notify the RN or health care provider.

Integumentary System

Diaphoresis occurs in the first few days after childbirth as the body rids itself of excess water and waste via the skin. The woman notices the perspiration particularly at night. She may wake up and be drenched in sweat. This is a normal finding and is not a cause for concern.

The woman will likely have striae (stretch marks) on the abdomen and sometimes on the breasts. Immediately after birth, striae appear red or purplish. Over time, they fade to a light silvery color and remain faintly visible.

The nipples and areolas often darken in color during pregnancy and this color tends to lighten during the postpartum period. In addition, a woman who has linea nigra (see

Chapter 6) may notice it darkening and then lightening in color during the postpartum period.

Weight Loss

Immediately after delivery, approximately 12 to 14 lb (5.5 to 6.4 kg) is lost with the delivery of the fetus, placenta, and amniotic fluid. The woman loses an additional 5 to 15 lb (2.3 to 6.8 kg) in the early postpartum period because of fluid loss from diaphoresis and urinary excretion (Berens, 2020). The average woman will have returned to her pre-pregnant weight 6 months after childbirth if she was within the recommended weight gain of 25 to 30 lb (11.4 to 13.6 kg) during pregnancy. Some women take longer to lose the additional pounds. In general, the breast-feeding woman tends to lose weight faster than the woman who does not breastfeed because of increased caloric demands.

TEST YOURSELF

- ✔ A falling blood pressure and rising pulse in the early postpartum period is suggestive of _____.
- ✔ Name two factors that contribute to constipation in the postpartum period.
- ✔ Name two conditions to which the postpartum woman's urinary system is susceptible.

Psychological Adaptation

Role change is the most significant psychological adaptation the woman must make. This process occurs with each new addition to the family, but tends to be most pronounced for the first-time mother. Each child is unique with their own temperament and needs, and they must be integrated into the existing family structure. Therefore, the whole family must adapt to the addition of a new member.

As the nurse, you can influence the development of positive family relationships in many ways. Careful monitoring of maternal psychological adaptation and anticipatory guidance regarding postpartum blues and expected psychological adjustments can go a long way toward fostering a positive transition for the woman and the new family.

Becoming a Mother

A woman begins the process of becoming a mother during pregnancy as she anticipates the birth of the baby. She fantasizes about and prepares for her newborn's arrival. After the birth, the woman must take on the role of mother to the newborn. The two critical elements of becoming a mother are development of love and attachment to the child and engagement with the child. Engagement includes all the activities of caregiving as the child grows and changes. This transition is a continuously evolving process throughout the woman's life.

Although each woman takes on the mother role in her own way, influenced by her culture, upbringing, and role models, there are patterns of behavior that are similar for all women. The woman adapts to her new role as mother through a series of four developmental stages:

1. Beginning attachment and preparation for the infant during pregnancy
2. Increasing attachment, learning to care for the infant, and physical restoration during the early postpartum period
3. Moving toward a new normal in the first several months
4. Achieving a maternal identity around 4 months

The stages overlap, and social and environmental variables influence their lengths.

In the early postpartum period, the new mother demonstrates dependent behaviors. She has difficulty making decisions and needs assistance with self-care. She tends to be inwardly focused and concerned about her own physical needs such as food, rest, and elimination. She relives the delivery experience and has a great need to talk about the details. This process is important for her to integrate the experience into her concept of self. She may remain in this dependent, reintegration phase for several hours or days. This is not an optimum time to give the woman detailed newborn care information because the new mother is not readily receptive to instruction. Listen with an attitude of acceptance. No feeling the woman expresses is "wrong." Help her interpret the events of her birth experience.

Most women move quickly from the dependent stage to increasing independence in self- and newborn care. After she has rested and recovered somewhat from the stress of the delivery, the new mother has more energy to concentrate on her infant. At this point, she becomes receptive to infant care instruction. The first-time mother in particular needs reassurance that she is capable of providing care for her newborn. She may feel that the nursing staff is more adept than she is at meeting the newborn's needs. Therefore, it is important to encourage her to perform care for her newborn while providing gentle guidance and support. She responds well to praise for her early attempts at childcare during this phase. This phase lasts anywhere from 2 days to several weeks.

Don't Take Over!

Assist the woman to take care of her newborn rather than do all the care yourself. The new mother needs guidance, practice, and praise to begin to feel confident in her new role.

Development of Positive Family Relationships

Attachment is the enduring emotional bond that develops between the parent and infant. However, this process does not happen automatically. Attachment occurs as parents interact with and respond to their infant. In the early postpartum period, the woman may have a wide range of emotions and responses to her newborn. Humans seem to respond to gains and losses in similar ways. Disbelief and shock are often the initial reactions. The mother may say repeatedly, "I can't

believe I just had a baby." Ambivalence is also a normal response. The new parents may communicate uncertainty over their readiness to take on the parent role. Frequently, the new mother may experience negative feelings about the newborn in the first few days after birth. However, she may not express these feelings because of the cultural expectation that "mothers always love their babies." If she does express negativity, such as, "I'm not sure that I like my baby," nurses or family members may reply in a way that denies or dismisses the emotion. "Oh, I'm sure you don't mean that," is one such dismissive response. It is important to remember that negative feelings are part of the process as the mother and newborn adjust to each other and become acquainted. Encourage the woman to express her feelings openly, and then show acceptance and let her know that her feelings are normal.

Concept Mastery Alert

It is natural for some women to appear to be tentative in handling their newborn. This behavior is not a "difficulty" accepting the role change, but rather a natural response to a dramatic event. The nurse should continue to assess the mother's interactions with the infant before becoming alarmed.

The initial component of healthy attachment is a process called **bonding**. This is the way the new mother and partner become acquainted with their newborn (Fig. 12-3). The bonding process begins with a predictable pattern of parental behavior (Box 12-1). As bonding continues, she begins to spend more time holding the newborn in the **en face position** (the newborn's face is in her direct line of vision and she makes full eye contact with the newborn). The new mother often talks to the newborn using high-pitched tones. She smiles and laughs while she continues the en face posture.

FIGURE 12-3 A mom and dad bond with their newborn immediately after birth.

BOX 12-1 Progression of Initial Attachment Behaviors

The new mother and her partner both begin their interaction with the newborn in a fairly predictable sequence. Note that this process may take anywhere from minutes to hours to days. The health of the newborn may prevent some of these from happening immediately after birth.

1. Seeing and making eye contact with the infant. This is often accompanied by statements claiming the child (such as "She has my lips.").
2. Exploration begins with light fingertip touching.
3. The new parent explores the newborn's extremities.
4. Fingertip touching progresses to touching with the palmar surface of the parent's hands.
5. Larger body surfaces are touched and caressed.
6. The infant is enfolded with the parent's hands and arms and held closely.
7. Progressively more time is spent in the en face position talking to and smiling at the newborn.

A Personal Glimpse

I delivered my first child after 14 hours of intense labor. I went through my labor naturally without an epidural with the help of my doula. I pushed for 2 hours, so I was pretty exhausted after delivery. The midwife had to cut an episiotomy because she said it was a tight fit. My baby weighed 9 lb (4,082 g)! The next day while the baby was in the room, I remember that everything felt so unreal. I kept telling myself that I should feel happy. But all I really wanted to do was to cry. The nurse came in and told me what a beautiful baby I had and asked me her name. I started to cry and said that I wasn't sure that I could be a good mother. I felt scared and confused and unready to take care of a baby. The nurse told me that the feelings I was having were very normal. She said that this was a huge change for me and that it takes time to get adjusted to the new mother role. She asked me if I had someone to help me at home. I told her that my sister was going to stay with me for several weeks. The nurse gave me a card with the phone number for the hospital. She wrote her name on it and told me that she would be happy to answer any questions I had after I went home. She said that I could talk to any of the nurses, if she wasn't on duty when I called. I felt relieved. The nurse then stayed with me a while and watched while I changed the baby's diaper. She told me that I was a quick learner and that I was very gentle with the baby. I felt so much better. I knew that it was going to be OK.

Holly

Learning Opportunity: *Why do you think this new mother felt better after her interaction with the nurse? In what ways can you in your role as a nurse support the new mother when she expresses negative feelings about her newborn or her abilities as a mother?*

One important component in the development of healthy attachment between the new parents and their newborn is the amount and type of social support available to them. Access to supportive friends and relatives enhances attachment. When a new mother is isolated and without adequate social support, attachment is threatened. In this situation, it is important to assist the woman in finding sources of support. Perhaps there is someone in her neighborhood or community who might be willing to provide support. Discuss the situation with the RN in charge. A referral for home health care visits or social services may be in order.

You Can Do It!

If the new mother makes a negative comment regarding her ability to care for the newborn, make your response accepting and supportive. You might reply, "It is natural to have feelings of uncertainty as you adjust to having a new baby." Be creative, and come up with sincere, supportive phrases.

Cultural Snapshot

In many non-Western cultures, women relatives provide much of the social support and assist the mother at home. It is important to include these relatives in the care of the mother and infant in the hospital. Often this support lasts for 30 to 40 days and may include confining the new mother to her home to protect her and ensure that she rests. This is common in Chinese, Indian, and Middle Eastern cultures.

Healthy bonding behaviors include naming the newborn and calling the newborn by name. Making eye contact and talking to the newborn are other indicators that healthy attachment is occurring. It is important to differentiate between a new parent who is nervous and anxious about her new role and one who is rejecting her parenting role. Warning signals of poor attachment include turning away from the newborn, refusing or neglecting to provide care, and disengagement from the newborn.

Traditional thinking assumed that the mother was the first and most important person to bond with the newborn. We now know that the newborn can make many bonds. The mother's partner benefits from early contact with the newborn immediately after delivery. It is common for the partner to describe strong emotions of pride, joy, and other positive emotions when first holding the newborn and may be engrossed with the newborn. The partner also progresses through a pattern of touching similar to that of the mother.

Cultural Snapshot

Some cultures do not name the newborn until after a naming or presentation ceremony or until the infant is of certain age. The mother and family may refer to the infant as "baby" or "child." This is not a lack of bonding. In addition, some cultures may make limited eye contact or avoid touching the infant's head as a way to protect the infant from unwanted attention from spirits they feel will harm the infant.

Siblings also bond with the newborn (Fig. 12-4). There are special considerations that the parents need to make for older siblings. The birth of a new baby requires a role change for the sibling. Sometimes the newborn does not meet the sibling's expectations. For instance, the baby might be a boy, but the sibling wanted a sister. It is common for the sibling to regress for a few days after the birth or use acting-out behaviors.

Postpartum Blues

Approximately 50% or more of postpartum women experience postpartum blues (Viguera, 2019), sometimes called the "baby blues." **Postpartum blues** is a temporary condition that usually begins about the third day after delivery, lasts for 2 or 3 days, and usually has resolved by 2 weeks postpartum. Women who have had postpartum blues reported having one or more of the following: sadness or tearfulness for no apparent reason, irritability, anxiety, difficulty sleeping or eating, or may have decreased concentration. Women who have a history of premenstrual mood changes, antepartum depressive symptoms, cesarean section, not breast-feeding, family history of depression, or

FIGURE 12-4 While the father bonds with his new son, the big sister takes a first peek at her new baby brother.

stress around child care are at risk for the postpartum blues (Viguera, 2019).

Other factors that can contribute to postpartum blues include too much activity, fatigue, disturbed sleep patterns, and discomfort. It is important for the woman and her family to know that this is a normal reaction. Support by the woman's family and friends, help with child care activities, and infant care during the night are beneficial to the woman. The condition resolves in about 2 weeks after delivery.

If the condition lasts for more than 2 weeks, or if the symptoms become severe or interfere with her daily activities (e.g., the woman does not want to feed her infant or refuses to perform activities of daily living), the woman should contact her health care provider or seek medical attention at the emergency department immediately. (See Chapter 19 for a discussion of postpartum depression.)

Cultural Snapshot

The reported rates of postpartum depression vary among cultures. Reasons for this include the following: terms used to describe depression may not translate across different languages; commonly used postpartum depression screening tools were developed based upon primarily Western populations and may not adequately screen non-Western cultures for the presence of postpartum depression due to terms used; and some cultures consider sadness during the postpartum period as "shameful" and the woman may not be willing to disclose these feelings for fear of discrimination. It is important to screen all women for postpartum depression and provide information on symptoms that require follow-up.

TEST YOURSELF

- ✔ Describe behaviors that indicate positive attachment.
- ✔ List the normal progression of interaction that occurs during the initial bonding experience between a new parent and the newborn.
- ✔ Describe symptoms and risk factors for postpartum blues.

Remember **Mei Chu** from the beginning of the chapter. Since this is her second child and the child was greater than 4,000 g, what findings might indicate a problem with uterine involution? What information would you want to give her about afterpains that might be different than if this was her first delivery?

POSTPARTUM ASSESSMENT AND NURSING CARE

Most women who deliver vaginally go home within 24 to 48 hours after delivery and the woman who has a cesarean birth at about 72 hours after delivery. Therefore, when caring for the woman in the early postpartum period, it is essential to do thorough data collection to detect any complications that might be developing and to use every available opportunity to tell the woman about self- and newborn care.

After the initial recovery period, the woman may be transferred to a postpartum room. If she delivered in a labor, delivery, recovery, and postpartum setting, she will stay in the room in which she delivered. Whatever the setting, it is important to do a thorough initial examination and data collection when you are providing postpartum care.

Much of the data collection is done before the woman delivers and can be found on the initial admission assessment done by the RN upon admission to the labor and delivery unit. It is important to check both the initial assessment and the prenatal record as part of the initial data collection. The labor and delivery nurse gives report to the postpartum nurse upon transfer. The report should include pregnancy history (including significant medical history), labor and birth history, initial postpartum recovery, and general newborn data. If the postpartum nurse will also be caring for the newborn in addition to the mother (i.e., couplet or mother–baby care), then more detailed newborn information will be given to the postpartum nurse.

The medical and pregnancy histories are important because they alert the postpartum nurse to risk factors that might lead to postpartum hemorrhage or other complications and give clues as to bonding potential and nursing interventions. Box 12-2 identifies important information to include in the postpartum report.

At least once per shift, perform a complete head-to-toe examination. A quick visual survey and speaking to the woman reveals her level of consciousness and affect. Assist her in emptying her bladder, if necessary, before beginning the examination. First, take the vital signs. Respirations should be even and unlabored. Be sure to rule out shortness of breath and chest pain. The heart rate should be regular without murmurs and may be as slow as 50 beats per minute. The lungs should be clear in all five lobes (Fig. 12-5).

In addition to the general assessment, there are 11 main areas that must be monitored in the postpartum period: These are breasts, uterus, lochia, bladder, bowel, perineum, lower extremities, pain, laboratory studies, bonding, and maternal emotional status.

Initial Physical Findings in the First Hour Following Delivery

If the woman is going to hemorrhage, she is most likely to do so within the first postpartum hour. For this reason, monitor her closely during this period. Measure her vital signs every 15 minutes during the first hour. With each vital sign check, determine the position and firmness of the uterine

BOX 12-2 Labor and Delivery Nursing Report to Postpartum Nurse

Maternal Pregnancy History
- Maternal age
- Gravida and para (should now reflect the current birth)
- Gestational weeks
- Maternal blood type, Rh, and rubella status
- Complications experienced during the pregnancy
- Group B streptococcus culture status
- Any medical problems, including sexually transmitted infections and any preexisting medical conditions

Labor and Birth History
- The length of labor
- Type and time of membrane rupture including color and amount of fluid
- Any events during labor that needed intervention (such as late decelerations)
- Duration of pushing
- Type and time of birth
- Type and timing of analgesia or anesthesia administered
- Type and timing of any medications given (e.g., antibiotics or oxytocin)
- Any assisted birth techniques used (e.g., vacuum extraction, or episiotomy)
- Complications experienced during labor (including lacerations and if they needed repair)

Postpartum Recovery Information
- Status of the fundus, lochia, and perineum
- Last set of vital signs, time and values
- Type of pain, if any, and success of analgesics and comfort measures to control the pain
- Whether the woman ambulated after delivery and how she tolerated it
- Type and amount of IV fluids infusing, if any
- Voiding times and amounts since delivery
- Response of the woman and her partner to the newborn
- Support person(s) for the mother, their names, and relation to the mother
- If woman had a cesarean birth, include type of anesthesia, incisional dressing and incision, pain status, and if foley catheter present or not

Newborn Information
- Gender of infant
- Any significant details related to the infant postdelivery (e.g., low Apgar scores, resuscitation efforts needed after delivery, or congenital anomalies)
- The mother's plans for feeding, times infant fed, and duration of breast-feeding

fundus, the amount and character of lochia, and the status of the perineum and monitor for signs of bladder distention. If the woman had a cesarean delivery, also check the incisional dressing for intactness, and determine if there is any incisional bleeding. Some institutions continue monitoring every 30 minutes for the second hour, then every 4 hours during the first 24 hours after delivery.

FIGURE 12-5 The nurse auscultates the lungs as part of a complete postpartum examination.

Breasts

Inspect the breasts and nipples for signs of engorgement, redness, or cracks. Palpate the breasts gently to determine if they are soft, filling, or engorged with milk. Note if there are any painful areas. Notice the nipples to determine if they are erect or inverted. The breasts should be soft during the first postpartum day and begin filling on the second and third days. Engorgement may occur on the third day. There should be no reddened areas on the breasts, and the nipples should be intact without cracks or fissures.

Uterus

Assess the uterus of the woman regardless of whether she had a vaginal or cesarean delivery. Make sure the woman has voided prior to checking the fundus. With the woman lying supine, palpate the fundus (Nursing Procedure 12-1). Note the tone (firm vs. boggy), position (midline vs. side-lying), and height of the fundus in relation to the umbilicus. It should be firm, midline, and at the appropriate height in relation to the umbilicus, depending on what hour or day it is after delivery. Some women find this uncomfortable, especially multiparas. It is best to start the palpation gently and then add pressure as needed to palpate the fundus.

If the fundus feels boggy, apply slight pressure as you massage the fundus in a circular motion with the fingertips of your hand that is at the top of the fundus. This should cause it to become firm and the woman may notice a slight gush of locia. Reassure the woman this is a normal occurrence when the uterus contracts. Avoid vigorous fundal massage as this can overstimulate the uterus and cause it to become flaccid. Notify the RN if the woman required fundal massage and recheck the fundus within 15 to 30 minutes. If she is breast-feeding, encourage her to feed her infant as this will cause her body to release oxytocin, which will stimulate the uterus to contract as well.

For the woman who has had a cesarean birth, remember to check the fundus. It is not necessary to massage the fundus unless it is soft and the woman is bleeding vaginally. Any manipulation of the fundus increases pain. However, it is important to note fundal tone, position, and height. If the

NURSING PROCEDURE 12-1 Fundal Palpation and Massage

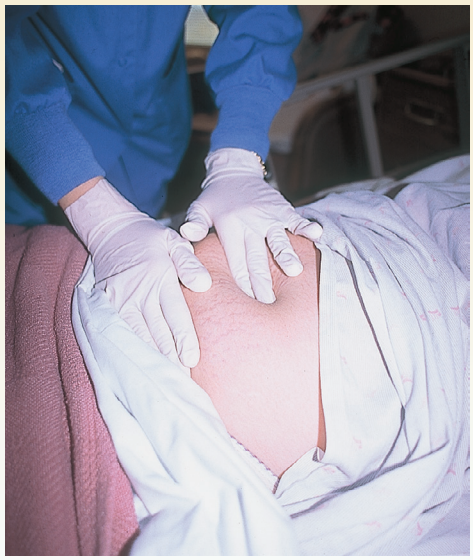
EQUIPMENT

Warm, clean hands

Clean gloves

PROCEDURE

1. Explain the procedure to the woman.
2. Instruct her to empty her bladder if necessary.
3. Wash hands thoroughly.
4. Position her supine with the head of the bed flat.
5. Locate and place one hand on the uterine fundus. It should feel hard and rounded—something like a melon.
6. Place the other hand in a cupped position just above the symphysis pubis, as in the picture. Use this hand to gently support the base of the uterus.
7. Gently palpate the fundus using the hand at the top of the fundus. Note if it is soft or boggy.
8. Notice the height, position and tone of the uterus.
9. If the fundus feels boggy (spongelike) or soft (instead of firm), then use your fingertips at the top of the fundus, apply some pressure, and massage in small circular motions without lifting your hand off the top of the fundus. This should cause the fundus to become firm and you are massaging.
   a. Vigorous fundal massage or overstimulation can cause the uterus to become flaccid rather than helping it contract. Take measures to avoid overmassaging the fundus.
10. Wash hands.
11. Notify the RN of the findings.
12. Document the findings and if fundal massage was needed, and outcome of the massage. The location of the fundus is documented as fingerbreadths above (+) or below (–) the umbilicus or at the level of the umbilicus. Document whether the fundus was midline or deviated to one side.



woman has had a cesarean birth, she may find it helpful to place her hand on top of yours as you palpate the fundus. Be mindful of her incision with your supporting hand.

Lochia

Determine the amount and color of the lochia. The amount is documented as scant, small, moderate, or heavy. In the first few days postpartum, the color will be rubra or serosa. Lochia should not have a foul smell. Be sure to check under the woman's buttocks for pooling. Ask her how many times she has changed her peripads (sanitary napkins) since the previous fundal check, and determine if she is saturating pads. The lochia should be rubra of small to moderate amount without large clots and no foul odor. Notify the RN if the postpartum woman is saturating more than one peripad in an hour.

Notice This Difference!

Expect less lochia after a cesarean delivery than after a vaginal delivery. This is because the surgeon cleans out the uterine cavity with surgical sponges before suturing it closed, which removes much of the blood and debris. Report moderate amounts of lochia after a cesarean, as this may signal postpartum hemorrhage.

Bladder

The woman should be voiding adequate amounts (more than 100 mL per each voiding) regularly. Voiding frequently in amounts smaller than 100 mL with associated suprapubic distention (a rounded area just above the symphysis pubis) is indicative of urinary retention. A full bladder prevents the uterus from contracting and can lead to extra bleeding. Also, the full bladder will cause the uterus to deviate to the side, away from the midline of the umbilicus.

If the woman pushed for a long time or had a large infant, she may have some edema around the urethra, which can prevent her from completely emptying her bladder, leading to some urinary retention. Regardless of her pushing or infant size, all women should be assessed for urinary retention.

The best way to assist the woman with emptying her bladder is to help her up to the restroom to void. However, sometimes this is not possible because of incomplete recovery from regional anesthesia. In this instance, assist the woman to sit up on the bedpan, a position that may promote emptying of the bladder. Be certain that the woman has privacy. If she is having difficulty voiding, running water in the sink or using the peribottle to run warm water over the perineum may help. It also helps to give her plenty of time in which to void. If she feels rushed, this may contribute to urinary retention. If the woman cannot void on her first trip to the bathroom after delivery, it may be appropriate to allow her to wait for a while longer. If she is still unable to void and it has been longer than 6 hours or there are signs of bladder distention, you may need to perform an in-and-out urinary catheterization to empty her bladder. Likewise, catheterization may be necessary if she is voiding small amounts (less than 100 mL) in frequent intervals. Notify the RN if signs of urinary retention are noted.

Bowel

Next, visually inspect the abdomen and auscultate for bowel sounds. Bowel sounds should be present in all four quadrants. Ask the woman if she has had a bowel movement since delivery. Many women are very concerned about if they will have a lot of pain with their first bowel movement, especially if they had an episiotomy or lacerations. Encourage them not to avoid the urge to defecate as this can lead to constipation.

All of the normal measures that help prevent constipation are also helpful in the postpartum period. Adequate fluid intake keeps the feces soft, facilitating passage. Early ambulation stimulates normal bowel peristalsis. Adding plenty of fruits, vegetables, and fiber to the diet also helps to prevent constipation. A bulk-forming agent, such as psyllium, may also be helpful. Sometimes the health care provider orders a stool softener for the first few days after birth.

Perineum

Assist the woman into the Sims position. Lift the top buttock, and with a good light source (such as a penlight or flashlight) inspect the perineum for redness, edema, and ecchymosis (Fig. 12-6). If the woman had an episiotomy or a laceration (tear), check the sutures, and be certain the edges are well approximated. Determine if there is any drainage from the stitches. Palpate gently with a gloved hand to determine if there are any hematomas forming in the area. Note any hemorrhoids. The perineum should be intact with only minimal swelling and no hematomas.

Lower Extremities

Inspect the extremities for edema (Fig. 12-7), equality of pulses, and capillary refill. Check for potential DVT by inspecting the woman's calves. There should be no pain in the calves when the woman is walking. Feel along the calf area for any warmth or redness. The calves should be of equal size and warmth bilaterally. There should be no reddened, painful areas, and there should be no pain in the calves when she walks. Pain and/or one calf with redness, warmth, and greater size than the other could indicate DVT (see Chapter 19) and must be reported to the RN.

FIGURE 12-6 Postpartum perineal observation. Notice that the woman is in the Sims position. The nurse lifts the upper buttock and inspects the perineum.

FIGURE 12-7 Monitoring of the lower extremities. The nurse checks the calf for edema, redness, and excess warmth and compares the diameter of both calves.

Assist the woman in ambulating as soon as possible after delivery. Early ambulation decreases the chance of thrombus formation by promoting venous return. Encourage liberal fluid intake as dehydration contributes to the risk of thrombus formation. After a cesarean delivery, some health care providers will order compression devices until the woman is ambulating.

Preventing Injury From Falls

The first time the woman gets up, she is at risk for fainting and falling because of postural hypotension. When the woman is going to get out of bed for the first time after delivery, assist her in dangling her legs at the side of the bed for 5 minutes. If she is not feeling dizzy, assist her to the bathroom. Remain with her until she returns to bed. If she begins to feel dizzy at any time, help her sit down with her head forward for a few minutes. If she begins to black out, gently support her to the floor until she comes to. Another time she is at increased risk for fainting is the first time she is in the shower. The warm water may cause peripheral dilation of blood vessels, which leads to hypotension and fainting. Stay in the woman's room while she is showering for the first time. Have a shower chair available for her to sit on if she begins to feel faint.

Pain

Determine if the woman is experiencing any pain. If so, investigate the source (e.g., afterpains, episiotomy, painful urination, pain in the calves). Determine the characteristics, quality, and timing of the pain. Provide comfort and pharmacologic pain measures as appropriate. Note status of pain after pain relief measures are implemented. Some nursing care can cause pain. Fundal palpation can cause afterpains. Exhaustion can exacerbate pain; therefore make sure to cluster care, encourage the woman to rest, and limit visitors as appropriate.

NURSING PROCEDURE 12-2 Application of Perineal Ice Packs

EQUIPMENT

A commercial ice pack or a clean glove and ice
Clean gloves

PROCEDURE

1. Explain procedure to the woman.
2. Wash hands thoroughly.
3. Position her in dorsal recumbent position.
4. Activate the commercial pack as instructed in the directions for use, or fill a clean glove with crushed ice, and tie a knot at the opening at the top of the glove.
5. Cover the pack or the glove with a thin covering, such as a towel.
6. Place the pack on the perineum.
7. Assist her to a position of comfort.
8. Wash hands.
9. Leave in place for 10 to 20 minutes then remove for 10 to 20 minutes. Repeat as necessary for comfort during the first 24 hours postpartum.
   a. If the ice pack is allowed to stay next to the perineum continuously for prolonged periods, tissue damage could result.

Breast Pain

Investigate breast pain to determine if it is unilateral and associated with increased warmth and redness. This could be a sign of mastitis, a postpartum complication discussed in Chapter 19. If the breasts are painful bilaterally because of engorgement, interventions will be chosen based on whether or not the woman is breast-feeding.

If she is breast-feeding, warmth seems to help the most. Have her run warm water over her breasts in the shower, or place a warm washcloth as a compress on the breasts. If the engorgement is preventing the newborn from latching on, advise the woman to express some milk before attempting to breastfeed. Caution her to only express enough to soften the breast to enable the infant to latch. Overexpressing the breast can cause further engorgement.

If the breasts are engorged and the woman is bottle-feeding her newborn, instruct her to keep a close-fitting support bra on 24 hours per day. This will provide comfort by supporting the extra weight in the breasts from the engorgement. It will also help to prevent leaking of milk from the breasts. Cool compresses or an ice pack wrapped in a towel will usually be soothing and help suppress milk production. She should refrain from any type of milk expression including allowing warm water to run over the breasts in the shower. The breasts will replenish any milk that is expressed or released.

If the nipples are painful during breast-feeding attempts, examine the nipples for cracks or fissures. Observe the woman when she puts her newborn to the breast, and ensure that she is positioning the newborn properly to prevent sore, cracked nipples. Encourage the use of a lanolin-based cream to keep the nipples soft and promote healing. A mild analgesic may be helpful. (See Chapter 15 for additional breast-feeding interventions.)

Afterpains

Ibuprofen or other nonsteroidal anti-inflammatory drugs (NSAIDs) are usually helpful if the source of pain is afterpains. The health care provider often will order 600 to 800 mg of ibuprofen every 6 to 8 hours as needed (PRN) for pain. For multiparas, it may be appropriate to schedule the medication around the clock, rather than waiting for the woman to ask for it. Timing administration of the drug so that the woman takes it 30 to 45 minutes before breast-feeding is also helpful because breast-feeding intensifies uterine cramping and associated afterpains. Nonpharmacologic methods that might be helpful include warm compresses to the abdomen, positioning for comfort, adequate rest and nutrition, and early ambulation.

Perineal Pain

If the pain is arising from the perineum, visually inspect the perineum before taking measures to control the pain. Check that the episiotomy is well approximated and that there are no signs of a hematoma. Early intervention within the first 24 hours include ice packs to the perineum (Nursing Procedure 12-2). Ice helps reduce swelling and ease painful sensations. Most institutions use special perineal ice packs that incorporate the cold source into the perineal pad. The ice pack should be on for 10 to 20 minutes, then off for 10 to 20 minutes to be most effective. Be careful not to apply an ice pack without a cloth cover next to the perineum. The cloth cover will help to protect the perineal tissues from trauma caused by the ice pack adhering to the tissue.

Cultural Snapshot

In many cultures of Asian Americans, African Americans, and Americans of Hispanic or Latinx ethnicities, maintaining a hot–cold balance is important, especially in the postpartum and newborn period. Hot–cold balance impacts postpartum bathing/hygiene, room temperature, and dietary practices. The woman's culture may avoid bathing during the postpartum time. The nurse suggesting that the woman take a shower may cause her internal conflict. On one hand she may not want to take the shower but on the other hand may want to respect the authority of the nurse. If the woman believes that she should be as warm as possible, she may be reluctant to use the perineal ice pack and she may want to keep the room very warm and avoid air conditioning. The woman may avoid drinking the ice water that the nurse provides. Inquire about the woman's cultural customs and desires and use her answers to provide individualized, culturally appropriate care.

NURSING PROCEDURE 12-3 Assisting the Postpartum Woman With a Sitz Bath

EQUIPMENT

New sitz bath in manufacturer's packaging with directions
Clean gloves

PROCEDURE

1. Explain the procedure to the woman.
2. Instruct her to empty her bladder, if necessary.
3. Wash hands thoroughly.
4. Place the sitz bath in the toilet as per the manufacturer's instructions.
5. Place the tubing in the allotted slot, and clamp the tubing.
6. Fill the bag with warm (102°F to 105°F) water and hang it at a level of a few feet above the toilet.
   a. Some women may prefer cooler water temperatures, which is an acceptable practice.
7. Unclamp the tubing, and allow the warm water to fill the basin.
8. Reclamp the tubing, and refill the bag with warm water. Seal the bag with the locking mechanism provided.
9. Assist the woman to sit on the basin so that her perineum is submerged in the water.
10. Ensure that she can reach the emergency call bell.
11. Instruct her to unclamp the tubing periodically to allow water to run over the perineum and into the toilet.
12. Encourage the woman to stay on the sitz bath for at least 20 minutes.
    a. Encourage the woman to use the sitz bath three times per day, or as needed for comfort.
13. Provide a clean towel with which to pat dry and clean sanitary napkins to apply when she is finished.
14. With clean-gloved hands, assist her to rinse out the basin, dry it, and store it for the next use.
15. Wash hands.

After the first 24 hours, warm sitz baths can be especially comforting for a woman with a sore perineum (Nursing Procedure 12-3). Throughout the first few postpartum days, mild analgesics combined with a narcotic are usually most helpful for perineal pain. Examples of combination products include acetaminophen with codeine or hydrocodone. Local anesthetics, such as witch hazel pads or benzocaine sprays, may be helpful in relieving perineal pain. Sitz baths, witch hazel pads, and/or products that contain hydrocortisone can also help reduce the pain associated with hemorrhoids.

Be Careful!

When administering combination products for pain, be certain you know the dose of each product in the combination. Be particularly watchful that you do not exceed the maximum daily recommended dosage of acetaminophen when giving products that contain this medication.

Pain After Cesarean Birth

Pain management for the woman after cesarean birth is a priority when providing postpartum care. During the first 24 hours, the anesthesiologist usually manages the pain. Generally, if the woman had a spinal narcotic administered, she will have orders for a PRN medication for breakthrough pain. **Breakthrough pain** occurs when the basal dose of analgesia does not control the pain adequately.

Another form of pain control that may be ordered is patient-controlled analgesia (PCA). This type of analgesia allows the woman to control how often she receives pain medication. The PCA pump delivers an opioid (usually morphine) into the IV line. The pump locks to prevent tampering. The health care provider's orders describe how much narcotic the woman receives when she pushes the button. The orders include a lockout interval so that the woman cannot accidentally overdose herself. Many women require reassurance that they cannot self-administer too much medication when using PCA.

Infrequently, the anesthetist orders narcotics only at PRN intervals after cesarean birth. In this instance, consult with the RN about administering the narcotic around the clock for the first 24 hours. It is easier to control pain before it becomes severe, and adequate pain control in the first 24 hours after surgery reduces the total amount of pain medication required. It is important to always assess the woman's pain prior to administering any pain medication and to reassess after the medication has been given.

A Word of Caution!

Do not push the PCA button yourself, even if the woman does not push the button. Pushing the PCA button for the woman is called analgesia by proxy. This practice is dangerous because you or a family member could inadvertently cause respiratory arrest.

The woman who is breast-feeding may be reluctant to take pain medication out of concern that the newborn may receive the medication. Inform her that adequate pain control is necessary so that she can ambulate well and provide self- and newborn care. Pain medications administered just prior to breast-feeding minimize the amount that the newborn will receive at that feeding.

Pruritus is a common side effect of narcotics given by the spinal or epidural routes. This side effect can become quite uncomfortable and can lead to scratching and excoriation. An antipruritic, usually diphenhydramine, may help control this side effect even though the cause of the pruritus is not from histamine release. Small doses of naloxone, nalbuphine, or naltrexone have been shown to help with the pruritus (Grant, 2020). If nothing is ordered, notify the anesthetist. Other comfort measures include applying lotion, administering a back rub, and using cool compresses or diversion to help control the itching.

Another common source of pain for the woman who delivers by cesarean is gas pain. The woman is at increased risk for gas formation after a cesarean because

of decreased peristalsis, the lingering effects of anesthesia and analgesia, and manipulation of the intestines during surgery.

Gas pain is usually not relieved by analgesics. Many surgeons order simethicone around the clock or PRN. Frequent and early ambulation stimulates peristalsis and passing of flatus. Instruct the woman to avoid very hot or very cold beverages, carbonated beverages, chewing gum, and drinking through straws. All of these things can increase the formation and discomfort of gas. Other medical interventions may become necessary, such as rectal suppositories or enemas. Encourage the woman to lie on her left side. This position facilitates the release of gas. Having the woman rock in a rocking chair may also provide comfort from gas pains.

Laboratory Studies

Monitor the hemoglobin and hematocrit (H&H). Note the H&H before delivery. Most health care providers order a postpartum H&H on the morning after delivery. If the values drop significantly, the woman may have experienced postpartum hemorrhage. Note the blood type and Rh. If the woman is Rh-negative, she will need laboratory studies to determine if she is a candidate for a Rho(D) immune globulin injection before discharge. Determine the woman's rubella status. If she is nonimmune, she will need a rubella immunization before she is discharged home. If the woman needs both the Rho(D) immune globulin and rubella vaccine, notify the health care provider. The woman may need to have serum titers 6 to 8 weeks after the vaccination to see if she developed immunity to rubella as the Rho(D) immune globulin may prevent her body from making adequate antibodies. A revaccination may be necessary if she remains nonimmune.

Bonding

Any time the newborn is in the room, note maternal–newborn interactions. Observe the interaction during the infant's feedings. Be aware of the woman's culture and how that impacts her interactions with the newborn. Notice the quantity and quality of social support available to the woman. Inquire about preparations she made for the infant while pregnant and her plans for caring for the newborn after discharge. Box 12-3 lists warning signs of poor attachment.

BOX 12-3 Warning Signs of Poor Attachment

- Making negative statements about the newborn
- Turning away from the newborn
- Refusing to care for the newborn
- Withdrawing
- Verbalizing disappointment with the sex of the newborn
- Failing to touch the newborn
- Limited handling of the newborn

Maternal Emotional Status

Monitor her mood and affect. Reinforce information given to her about postpartum blues. Reassure her that this is a common occurrence. Inquire about help she will have after discharge and how she feels about that help. Reinforce information given to her about postpartum depression. Emphasize that if she notices these symptoms that she should seek help immediately and that having these symptoms does not mean she is not a good mother. Many women are afraid to report symptoms of postpartum depression for fear of stigma.

Cultural Snapshot

In Asian cultures, in-law conflict between the woman and her mother-in-law can be a significant cause of stress and depression in the postpartum woman. The woman may regard the conflict as a family secret and therefore be unwilling to share this information with the medical staff. However, if the woman and her mother-in-law have a positive relationship and the mother-in-law provides strong postpartum support, this may help protect the woman against postpartum depression.

Promoting Restful Sleep

Sleep and fatigue are contributing factors to the woman's emotional status. To help the woman emotionally during the postpartum period, the nurse should encourage rest for the woman. Monitor the woman's sleep–wake cycle. Encourage her to continue presleep routines that she normally uses at home. Promote a relaxing, low-stress environment before sleep. Dim the lights and monitor noise and traffic near the woman's room during sleep time. Medicate for pain if needed at bedtime. Plan care activities (i.e., cluster care) so that she can sleep undisturbed for several hours at a time. For instance, if the postpartum recovery is going well and vital signs have been stable, consult with the RN about waiting until the morning laboratory draw to obtain vital signs, rather than awaking the client at 2 AM. Or instruct the woman to call you if she awakens in the night to use the restroom; you can perform the vital signs at this time.

Of course, it is challenging for a new mother to get enough sleep because newborns feed every 2 to 3 hours. Encourage the woman to rest when the newborn is sleeping. She may also wish to get in the habit of maintaining a quiet atmosphere and

This is Illuminating!

The woman should always have adequate lighting when feeding the newborn during the night. This is so she can observe the infant's facial color for any signs of cyanosis and also observe the newborn for any signs of choking or respiratory distress while they are feeding.

keeping the lights low when feeding the newborn during the night. This practice helps develop their sleep–wake pattern so that it coincides with light and dark periods of the day. If the lights are on and the parents talk loudly and play with the infant in the middle of the night, they will think it is playtime and stay awake longer.

TEST YOURSELF

- ✔ List five major components of the woman's history that are important to know when assuming care of the woman after delivery.
- ✔ Describe the appropriate way to examine an episiotomy after delivery.
- ✔ Name three important laboratory studies the nurse needs to know the results of after delivery.

Nursing Process and Care Plan *for the Postpartum Woman*

Nursing care in the postpartum period focuses on the woman's safety, comfort, assisting her with caring for herself and the newborn, and providing information. While childbirth is a common experience, it is unique for each woman, regardless if this is her first birth or if she has had more than one child. No labor and delivery experience is identical.

Because of this, it is important to monitor the woman for any potential postpartum complication and to assess her level of knowledge. For example, a woman who has delivered her second child and had an episiotomy with this birth but not her first will need information on caring for the incision—information she did not have with her first birth experience. Additionally, emotions and discomforts experienced by the woman are unique to her. Be attentive to her needs. Nothing she is experiencing is routine for her, even though the nurse may have seen the symptoms many times before.

Since complications can arise during the postpartum period, the woman needs frequent monitoring. As postpartum stays are typically short, it is also important to give the woman information on signs to watch for at home that indicate a need for her to call her health care provider.

The nurse is in an important position to help promote bonding between the woman and her newborn. The nurse is also one of the first individuals to notice if the woman is having difficulty with the bonding process.

Assessment (Data Collection)

Assessment of the postpartum woman should focus on both the general assessment and the postpartum assessment. The postpartum assessment focuses on the 11 areas: breasts, uterus, lochia, bladder, bowel, perineum, lower extremities, pain, laboratory studies, bonding, and maternal emotional status.

Nursing Care Focus

When selecting nursing care focuses for the postpartum woman, consideration should be given to risks to the woman's safety. For the woman, safety includes not only protecting her from falls and monitoring for potential DVT but also monitoring for hemorrhage and infection. The postpartum woman is at risk for infection in the immediate postpartum and also during the 6 weeks after delivery. The nursing care plan should reflect these safety risks. The focus of nursing care should also reflect that the woman has a newborn and that bonding is an important event to monitor.

Outcome Identification and Planning

Major goals for the postpartum woman include remaining free from potential injury and infection as well as exhibiting positive bonding behaviors that indicate the beginning of a healthy attachment with the newborn. Other goals and interventions are planned according to the individual needs of the woman and her partner.

Nursing Care Focus

- Bleeding risk related to uterine atony, undetected lacerations, or hematoma formation

Goal

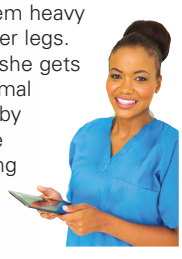
- The client will not exhibit signs or symptoms of unexpected bleeding.

Implementations for Bleeding Risk

The postpartum woman is at risk for hemorrhage from several different sources. Uterine atony is the most common cause of postpartum hemorrhage. If the uterus feels boggy or soft to palpation, massage it until it firms up beneath your fingers. Notify the RN of the condition. Oxytocin may be ordered to correct uterine atony. Instruct the woman to perform periodic self-fundal massage. Breast-feeding releases oxytocin naturally into the woman's bloodstream and can help prevent uterine atony.

Be Prepared!

When the woman gets up for the first time after delivery, it is normal for the lochia to seem heavy and to flow down her legs. Prepare her before she gets up that this is a normal occurrence caused by lochia pooling in the vagina while reclining and does not signify that she is hemorrhaging.



Monitor the blood loss and source of bleeding. If bright red bleeding occurs in a steady stream in the presence of a firm fundus, the most likely cause is a vaginal or cervical laceration that was not repaired. Report this finding to the RN or the health care provider immediately. Report bleeding from, or separation of the edges of, the episiotomy or laceration. Monitor for and report any painful, soft, and possibly

pulsing masses palpable in the perineal area. These are signs of hematoma formation. Monitor vital signs and be alert to subtle changes in the woman's vital signs that might indicate bleeding such as a decreasing blood pressure and increasing heart rate.

Lack of Pain is Not Always Good

It is important to inspect the perineum and not just ask the woman if her perineum is sore or not. If the woman had an epidural, she may have a hematoma and be unaware of it. Perineal hematomas can be a source of postpartum hemorrhage.

The incision site from a cesarean birth can also be a site for bleeding. Monitor the dressing for drainage. Mark any areas of drainage so that you can tell if the area is increasing during subsequent checks. If the dressing becomes saturated, reinforce it, and apply pressure to the site. Notify the RN or health care provider for further orders.

Evaluation of Goal/Desired Outcome

- The fundus is firm and in the midline.
- The lochia flow is rubra (dark red in color) and small to moderate in amount.
- Incisions are approximated and without bleeding.
- Vital signs remain stable.

Nursing Care Focus

- Acute pain related to sore nipples, afterpains, or episiotomy discomfort

Goal

- The woman will verbalize or demonstrate relief of pain.

Implementations for Acute Pain

Assess the woman's pain (characteristics, severity, location, onset, type, precipitating factors, and duration). When monitoring the woman's pain, use an appropriate, standardized pain assessment tool. Interventions for postpartum pain are based upon the pain source. Inform the woman on what causes the pain and how long the pain can be expected to last. Encourage the woman to take medication early on, to prevent instances of severe pain. Administer medications to reduce pain, as prescribed, and monitor for effect. Monitor vital signs and respiratory status frequently for clients receiving sedative or narcotic pain medications.

If the woman reports breast pain, check her breasts for any reddened areas or excess heat. Report any signs of infection to the health care provider. Palpate the breasts to see if they are filling with milk. Instruct the woman to wear a well-fitting bra. If the woman is breast-feeding, observe the infant's latch to make sure it is properly positioned. If the woman is breast-feeding and engorged, encourage to only express a minimal amount of milk as the breasts will replenish any milk that is removed. If the woman chooses not to breastfeed at all, reinforce teaching about not expressing any milk from the breasts and to wear a tight bra and that acetaminophen or ibuprofen will help the discomfort.

Inform the woman about causes of afterpains, including multiparity and breast-feeding. Instruct the woman about prescribed medications. Taking medications 30 minutes prior to breast-feeding can help lessen the severity of afterpains associated with breast-feeding. Nonpharmacologic relief measures such as warm heat to the abdomen may help provide relief. Assist the woman into a comfortable position.

If the woman reports perineal pain, check her perineum. Observe for hematomas. Inspect episiotomy or laceration repairs for signs of separation or bleeding. Provide medications as ordered. Nonpharmacologic relief includes ice packs in the first 24 hours after delivery and sitz baths as ordered. Instruct the woman on using the peribottle with warm water after every use of the toilet. Assist the woman into a comfortable position. The woman may find comfort from an inflatable ring to sit on or by placing a slight wedge under one hip while sitting to relive perineal pressure.

Evaluation of Goal/Desired Outcome

- The woman reports pain before it becomes severe.
- The woman verbalizes a tolerable pain level and a decrease in pain after interventions.

Nursing Care Focus

- Infection risk related to multiple portals of entry for pathogens, including the former site of the placenta, episiotomy, bladder, breasts, intravenous access sites, and bladder catheterization

Goal

- The woman remains free from infection.

Implementations for Infection risk

There are multiple portals of entry for infection for the postpartum woman. The number one way of preventing infection continues to be handwashing. Wash your hands before and after caring for the client, even if you will be wearing gloves. It is also important to tell the woman to wash her hands before touching her breasts or feeding the newborn, before and after using the restroom or performing perineal care, and before eating. Early ambulation, adequate fluid intake, and good nutrition strengthen the immune system and help prevent infection.

The best way to prevent mastitis (infection in the breast), in addition to frequent handwashing, is to avoid cracked nipples. Assist the woman to position the infant properly at the breast to prevent this complication. Other measures that help prevent cracked nipples are to rub the nipples with a few drops of expressed milk after breast-feeding and allow the nipples to air dry. Lanolin cream may also be a helpful measure. The woman should breastfeed at regular,

frequent intervals. Milk stasis can lead to obstruction of a duct, which can lead to inflammation and then infection. If the woman is using breast pads in her bra, she should change them when they become damp to help prevent maceration of the nipples.

Endometritis, or infection of the uterine lining, is another type of infection that can occur in the postpartum period. Inform the woman that the best way to prevent this type of infection is to wash her hands before and after using the bathroom and/or performing perineal care. In addition, the woman should use a peribottle to perform perineal care and change her sanitary napkins/pads at least every 4 hours. Instruct her to fill the peribottle with warm water (she may add a gentle soap, if desired). After using the restroom, she should squeeze the bottle while aiming at the perineum so that the water flows from front to back. She can then use a washcloth or tissue to gently pat and dry the perineum from front to back. Instruct the woman to avoid touching the center part of the peripads (sanitary napkins); she should handle the pads only by the ends. The part of the peripad that touches her perineum should be sterile. These measures can also help prevent infections of the episiotomy.

The postpartum woman is prone to bladder infections because of urethral trauma and perhaps from stasis related to incomplete bladder emptying. Urinary catheterization may be necessary to treat urinary retention; however, this invasive procedure increases the risk for urinary tract infection. Taking steps to avoid urinary catheterization, when possible, is helpful in decreasing the risk for urinary tract infection. Adequate fluid intake and measures to prevent urinary retention are also helpful.

Evaluation of Goal/Desired Outcome

- The woman remains afebrile (temperature less than 100.4°F).
- There is no redness or heat in localized areas of the breast.
- Lochia is without a foul odor.
- Episiotomy remains well approximated without purulent discharge.
- The woman does not report severe pain when voiding.

Nursing Care Focus

- Risk for impaired bonding

Goal

- The woman and her partner demonstrate signs of healthy bonding with the newborn.

Implementations for Impaired Bonding

It is important to allow as much parent–newborn contact as possible during the early postpartum period. Encourage the parents to cuddle the newborn closely. Encourage role model attachment behavior by talking to the newborn and calling the them by name, if appropriate. Point out positive features of the newborn. Encourage the parents to participate in the care of the newborn. Provide privacy for the family to interact with the newborn. Assist the parents with learning the newborn's cues that they are ready for interaction, overstimulated, hungry, or ready for sleep. Show the parents that a good time to interact with the newborn is during the alert state. Meet the woman's needs for pain relief, rest, and self-care so that she will have the energy to care for and interact with her newborn.

Evaluation of Goal/Desired Outcome

- The woman and her partner interact with the newborn in the en face position.
- The woman and her partner make positive comments about and/or interact positively with the newborn.
- The woman and her partner participate in the newborn's feedings and care.

TEST YOURSELF

- ✔ Name two ways to promote hemostasis for the postpartum woman.
- ✔ List three nursing actions that can help a new mother avoid endometritis.
- ✔ What are the three things you can do to help promote rest and sleep for a new mother?

Nursing Process and Care Plan *for Postpartum Care After Cesarean Birth*

The woman who has a cesarean birth faces the major postpartum challenges; however, she has also undergone major surgery. This section discusses how postpartum nursing care differs for the woman who has had a cesarean birth. Remember that most of the nursing considerations discussed above for the postpartum woman also apply to the woman who delivers by cesarean section.

Assessment (Data Collection)

The woman who has a cesarean birth has a significantly increased risk for complications than does the woman who delivers vaginally. These include complications of anesthesia, postpartum infection, hemorrhage, and thromboembolism. In addition to the normal postpartum data collection, the woman who has experienced a cesarean delivery requires close monitoring. Auscultate lung sounds at least every 4 hours in the first 24 hours and at least every 8 hours thereafter. The lungs should be clear without adventitious sounds and not be diminished in any lobe.

Monitor the woman closely for signs of respiratory depression if a narcotic, such as morphine sulfate, was

used in conjunction with the spinal or epidural anesthesia. Many anesthesiologists have preprinted orders that include how often the nurse should monitor respirations after this type of anesthesia. The orders may be to count the respiratory rate every 1 to 2 hours for the first 24 hours. Report respiratory rates of 12 breaths per minute or less to the RN. Pulse oximetry, either continuous or intermittent, is often ordered. The oxygen saturation should remain above 95%.

Monitor the IV for rate of flow and correct solution. Check the IV site at least every 2 hours for redness, swelling, and pain. The IV usually remains in place for the first 24 hours after delivery. At that time, the health care provider usually gives an order to remove the device or to convert the IV to a saline lock.

The sources of pain and discomfort for the woman who delivers by cesarean are similar to those of a woman who has delivered vaginally. Some women who have had a cesarean birth pushed for several hours prior to the decision being made for the cesarean and therefore may have perineal pain and edema. The abdominal incision is an additional source of pain. The buildup of intestinal gas and referred shoulder pain are other sources of pain. Pruritus (itching) is a common side effect of narcotic administration during regional anesthesia. This can be a source of discomfort for the woman who had a cesarean birth.

The abdominal incision is a site for possible hemorrhage and infection. Monitor for drainage on the dressing in the first 24 hours. Check the incision at least once every 8 hours after removing the dressing. The incision should remain well approximated with sutures or staples. A small amount of redness is normal. Drainage from the incisional site, an increase in the amount of redness, or edema is an abnormal finding and should be reported to the RN.

Monitor bowel sounds at least every 4 hours. Check closely for abdominal distention and pain associated with gas formation. It may be difficult for the woman to pass flatus after cesarean delivery because of decreased peristalsis. Ask the woman if she is passing gas. Instruct her to report bowel movements.

Observe the indwelling catheter for urinary output. The catheter usually remains in place for the first 24 hours after cesarean birth. Output should be at least 30 mL/hr. The urine should be clear yellow or a light straw color. Cloudy urine is associated with infection. After removing the urinary catheter, observe the woman for the first few voids to make certain she is voiding adequately without retention.

Monitor for signs of thrombus formation. The calves should be of equal size without redness, warmth, or pain. Remember, the woman who delivers by cesarean is at even higher risk for thrombus formation than is the woman who delivers vaginally.

Nursing Care Focus

When selecting nursing care focuses for the woman who has just had a cesarean birth, consideration should be given to risks to the woman's safety including her respiratory status, infection, and potential thrombus formation. In addition, the woman has undergone major abdominal surgery and she will have pain from the incision and may have pruritus and gas pains as well. The nursing care plan should reflect these safety risks and discomforts.

Outcome Identification and Planning

After a cesarean birth, major goals for the postpartum woman are the same as after a vaginal birth; however, safety goals focused on the risks associated with the surgical event are also included. Safety goals are focused on the woman maintaining an adequate respiratory rate and oxygen saturation level, and remaining free from injury from either hemorrhage, infection, or thrombus formation.

Nursing Care Focus

- Ineffective airway clearance risk related to respiratory depression from narcotics

Goal

- The woman will maintain effective airway clearance.

Implementations for Ineffective Airway Clearance Risk

If the woman has had narcotics administered via the spinal or epidural routes, monitor her closely for respiratory depression. Monitor her lung sounds frequently during the first 24 hours after she delivers and at least once per shift thereafter. Monitor the respirations at least every 2 hours for the first 24 hours following spinal narcotic administration. Have naloxone readily available. The anesthesiologist will order when the naloxone should be administered, usually if the respiratory rate falls below 10 to 12 per minute. Monitor oxygen saturation as ordered. Report continuous oxygen saturation levels below 95%.

Encourage the use of incentive spirometry as ordered. Encourage the woman to cough and deep breathe. Assist her with turning every 2 hours. Assist her with ambulation as soon as ordered. Encourage her to use nonnarcotic pain relief methods as soon as her pain tolerates.

Evaluation of Goal/Desired Outcome

- The woman maintains an adequate respiratory pattern (16 to 20 breaths per minute).
- Oxygen saturation remains above 95%.
- Lung sounds remain free from adventitious sounds.

Nursing Care Focus

- Acute pain related to incision, discomfort from pruritus, or inability to pass flatus

Goal

- The woman will verbalize or demonstrate relief of pain.

Implementations for Acute Pain

Assess the woman's pain (characteristics, severity, location, onset, type, precipitating factors, and duration). When monitoring the woman's pain, use an appropriate, standardized pain assessment tool. Inform the woman on what causes the pain and how long the pain can be expected to last. Encourage the woman to take medication early on, to prevent instances of severe pain. If the woman has PCA, encourage her to use it as needed. Administer PRN medications, as prescribed, to reduce pain and monitor for effect. Monitor vital signs and respiratory status frequently for clients receiving sedative or narcotic pain medications.

Assist the woman with ambulation as soon as ordered. Walking and sitting up in a chair will help her recovery. Provide pain medication prior to these events. Laying or sitting in bed for prolonged periods will increase her pain when she moves and increases her risk for a DVT. Walking will help relieve gas pains if she has them.

Monitor the woman for pruritus. Provide medication as ordered. Inform the woman the cause of the discomfort and how long she can expect it to last. Provide nonpharmacologic relief measures such as a back rub and applying lotion to the site.

Evaluation of Goal/Desired Outcome

- The woman reports pain before it becomes severe.
- The woman uses PCA as ordered.
- The woman verbalizes a tolerable pain level and a decrease in pain after interventions.
- The woman states pruritus is at a tolerable level.
- The woman reports a relief from gas pain.

Nursing Care Focus

- Infection risk related to stasis of secretions in the lungs, abdominal incision, and presence of the indwelling urinary catheter

Goal

- The woman remains free from infection.

Implementations for Infection risk

One major difference between care of the woman who has delivered vaginally and one who has had a cesarean is that of lung status. Auscultate the lungs of a woman who has experienced cesarean birth carefully at least every 4 hours during the first 24 hours. Also assist the woman to turn, cough, and deep breathe at least every 2 hours. It will not be easy for her to take deep breaths or to cough. Assist her in splinting her incision with a pillow while she coughs. This stabilizes the area and reduces pain. The health care provider usually orders an incentive spirometer. Assist the woman to use it hourly for the first 24 hours when she is awake.

The cesarean birth incision site is another possible site for infection. During the first 24 hours, the original dressing usually covers the incision. After the health care provider removes the dressing, monitor the incision for increasing redness, edema, or drainage. Proper incision care includes washing the hands thoroughly before touching the incision for any reason. Instruct the woman to wash the incision with soap and water, and then thoroughly pat it dry. Nothing wet should remain against the incision.

The indwelling urinary catheter that is in place during the first 24 hours after a cesarean birth is another potential source of infection. Provide frequent perineal and urinary catheter care. Monitor IV fluids to ensure adequate infusion of fluids. As long as the woman remains well hydrated and has a stable blood pressure, her kidneys will produce enough urine to keep a steady flow. The flow helps wash out bacteria. When you discontinue the catheter, assist the woman to void within 6 hours of removal. Continue to monitor the intake and output of the woman.

Evaluation of Goal/Desired Outcome

- The woman's temperature remains below 100.4°F.
- The woman's lungs remain clear to auscultation.
- The woman's incision is clean, dry, and well approximated without redness or drainage.
- The woman's urine remains clear.

Nursing Care Focus

- Venous thromboembolism (VTE) risk related to postpartum status and decreased activity levels

Goal

- The woman will remain free from VTE.

Implementations for VTE Risk

Many women come back from surgery with compression stockings already in place. If not, check for an order to apply them. Pneumatic compression devices also may be ordered during the first 24 hours. These devices stimulate venous return to the heart, an action that helps prevent pooling and thrombus formation. Once the woman can get out of bed and ambulate, advise frequent ambulation. This is the best way to prevent a thrombus from forming. Encourage the client to move her legs while in bed to increase blood flow. Another important nursing action is to ensure adequate fluid intake.

Assess the woman's calves for color, warmth, symmetry, and edema. Assess her for calf pain as she ambulates or moves her legs in bed. Report any of these signs to the RN or the health care provider.

Evaluation of Goal/Desired Outcome

- The woman is without unilateral swelling, redness, or warmth in the lower extremities.
- The woman is without calf pain.
- The woman does not experience shortness of breath or chest pain.

PREPARING THE POSTPARTUM WOMAN FOR DISCHARGE

Discharge planning for the new mother begins upon admission and continues until she leaves the facility. Most interventions related to discharge focus on informing the woman how to care for herself and the newborn when she goes home. Observe how the woman and her partner are adapting to their new roles as parents and support healthy adaptation behaviors.

Bearing a child is a life-changing event. Observe how the parents interact with each other and with the newborn. Watch for interactions between other members of the family, such as grandparents and siblings of the newborn. Determine what behaviors are helping the new family adjust, and note if any actions are getting in the way of positive adjustment.

Because providing information is the focus of most nursing interventions when planning for discharge, it is important to determine the woman's knowledge base. Do not assume that a woman knows how to take care of herself and the newborn based on her educational level, or if she is a nurse, or if she has other children, etc. The only way to know what a woman knows about self-care and newborn care is to ask questions and to observe her behaviors. This section focuses on maternal self-care at home. Newborn care is discussed in Chapter 14.

SUPPORTING HEALTH-SEEKING BEHAVIORS

Reinforce positive family behaviors. Take particular care to acknowledge positive parenting skills exhibited by either the mother and/or her partner. When the parents require assistance as they learn new skills, provide positive verbal support. It is not supportive to tell the mother, "No. That's not the way to do it. Do it like this instead of that way." Remember that there are different ways to swaddle, hold, and bathe a newborn, and while her way may be different than the nurse's, it is not necessarily incorrect. Safety is most important when caring for the newborn. The nurse should instead, focus on the things the mother is doing well, and use positive language to guide her when she is having difficulty with the task. Use words that avoid criticism. Instead say, "Some women find it helpful to do it this way." Or, "the baby might find this to be soothing."

Anticipatory guidance is helpful when siblings are involved. Explain to the parents that it is normal for a young sibling to regress in the first few days after the birth of the newborn. Tell them it helps if they do not focus undue attention on regressive behaviors, such as a return to bedwetting, sucking the thumb, or clinging to a favorite toy or blanket. It is particularly important for the parents not to criticize or belittle the child for regressive behaviors. Explain that the regression is temporary and will pass as the child adjusts to his new role in the family. Suggest that the parents set aside time every day that is just "big brother or sister" time. The sibling will find it easier to adjust if they feel that their parents still care for and value them. Another helpful suggestion is to provide the older child with a doll, and allow the child to take care of the doll as the parent is caring for the newborn. This activity helps the older child feel included and can help develop nurturing skills. Parents can also read books that are age-specific to the child about becoming a "big brother or sister."

Cultural Snapshot

The woman's culture impacts her postpartum period, including the types of food she will want to consume, her hygiene and physical activities, who will assist her, and her interaction with her partner and the newborn. Some cultures will request foods based upon the hot and cold theory. Some cultures dictate the woman stay inside for 30 to 40 days after birth and may restrict the woman's physical activity. Some cultures discourage the woman from bathing during the immediate postpartum period. It is important to learn what cultural practices the woman will be following and be supportive of her cultural practices.

Preventing Injury From Rh-Negative Blood Type or Nonimmunity to Rubella

Before the woman leaves the hospital, it is important to check to see if the woman who is Rh-negative is a candidate for Rho(D) immune globulin. If the woman is Rh-negative and the newborn is Rh-positive, the woman will need an injection of Rho(D) immune globulin to prevent the development of antibodies to Rh-positive blood. The woman must receive the Rho(D) immune globulin within 72 hours of delivery to be most effective. If the newborn is Rh-negative, the woman does not need Rho(D) immune globulin. Box 12-4 outlines nursing considerations for administering Rho(D) immune globulin.

You must also identify the woman's rubella status. If she is nonimmune to rubella or the rubella titer is less than 1:8, she will need to receive the rubella vaccine before she is discharged. It is important for her to know that she should not get pregnant for at least 3 months after receiving the vaccine. Box 12-5 outlines nursing considerations for giving the rubella vaccine.

One Can Block the Other!

Rho(D) immune globulin can prevent the woman's body from making antibodies to the rubella vaccine. If a mother is both Rh-negative and rubella nonimmune, it is important to inform the health care provider before administering both Rho(D) immune globulin and the rubella vaccine.

PROVIDING CLIENT INFORMATION

Because the postpartum stay is very short, it is important to utilize every available opportunity for providing the woman with information. It is better to give her small sections of

BOX 12-4 Prevention of Antibody Development

Medication: Rho(D) immune globulin
Method of action: Prevents development of antibodies to Rho(D)-positive blood if given to the Rho(D)-negative woman within 72 hours of abortion, invasive procedure such as amniocentesis, or delivery of a Rho(D)-positive infant.
Usual dosage and administration: 1,500 Units given via the intramuscular route, can be given intravenous
Antidote: None
Nursing interventions:
1. Ensure that the woman is a candidate for Rho(D) immune globulin. She is a candidate if she meets all of the following criteria. She:
   a. Is Rho(D)-negative
   b. Has never been sensitized to Rho(D)-positive blood
   c. Has had an abortion, ectopic pregnancy, invasive procedure, or delivered a Rho(D)-positive infant within the past 72 hours
2. Explain that the woman is receiving Rho(D) immune globulin to prevent her from becoming sensitized to Rho(D)-positive blood. This will prevent hemolytic disease of the newborn in subsequent pregnancies.
3. Inform the woman that Rho(D) immune globulin is a blood product. Although it is screened, tested, and treated to reduce the risk of disease transmission, there is still a slight possibility that she could get an infection from the product.
4. Obtain informed consent before administering the Rho(D) immune globulin.
5. Explain that there may be soreness at the site.
6. Ask the woman which site she prefers for the intramuscular injection. The deltoid and gluteal muscles are both acceptable sites.
7. Instruct the woman to call her health care provider immediately if she has fever, chills, shaking, back pain, a change in the color or amount of her urine, sudden weight gain, or swelling in her extremities.
8. She should not take any vaccines for 3 months after treatment with Rho(D) immune globulin because Rho(D) immune globulin may prevent the woman from developing immunity from the vaccine. If the woman receives a vaccine during the 3 months after Rho(D) immune globulin, she should have blood titers drawn at 6 to 8 weeks after the vaccine to see if she developed immunity. If not, a revaccination is necessary.
9. Give the woman a card indicating her Rh status and the date of Rho(D) immune globulin administration. Instruct her to carry the card with her at all times.

information throughout her stay instead of one very lengthy session just prior to discharge. It is best to ask her questions regarding how she plans to care for her breasts, perineum, pain, etc. to determine how much information she has retained and to reinforce areas she may not remember or fully understand. Instruct the woman that she needs to make an appointment with her health care provider for a 6-week postpartum checkup. It is important for the woman to know danger signs that she should report to the health care provider. Box 12-6 lists these danger signs.

BOX 12-5 Development of Immunity to Rubella

Medication: Rubella virus vaccine
Method of action: Causes the body to produce antibodies against the rubella virus, thereby stimulating the development of immunity to rubella.
Usual dosage and administration: 0.5 mL given subcutaneously in the upper, outer aspect of the arm.
Antidote: None
Nursing interventions:
1. Determine whether there are any contraindications for administering the vaccine. Contraindications include that the woman:
   a. Is sensitive to neomycin
   b. Is immunosuppressed
   c. Has received a blood product (including Rho(D) immune globulin) within the past 3 months. If the woman receives the rubella vaccine during the 3 months after Rho(D) immune globulin, she should have blood titers drawn at 6 to 8 weeks after the rubella vaccine to see if she developed immunity. If not, a revaccination is necessary.
2. Explain possible adverse reactions:
   a. Discomfort at the injection site.
   b. Development of rash, sore throat, headache, and general malaise within 2 to 4 weeks of the injection.
3. Obtain informed consent before administering the vaccine.
4. As a precaution, the woman should not get pregnant for 28 days after MMR vaccination. Because the rubella vaccine is a live virus, it could be teratogenic to the fetus.
5. Inform the breast-feeding woman that the rubella vaccine crosses over into the breast milk. The newborn benefits from short-term immunity but may become flushed, fussy, or develop a slight rash. Suggest that the woman speak to the infant's health care provider if she has concerns.

BOX 12-6 Postpartum Danger Signs

- Fever of 100.4°F or higher
- Shaking chills
- Localized reddened, painful area on one breast
- Frequency, urgency, and painful urination
- Sudden onset of shortness of breath and/or chest pain
- Severe unremitting abdominal or back pain that is unrelieved by normal pain measures
- Foul-smelling lochia
- Increased or heavy lochia flow or passage of clots
- Return to lochia rubra after it has been serosa or alba
- Severe pain, redness, or swelling in the episiotomy or cesarean incision
- Swollen, reddened, painful area on the calf
- Prolonged or severe symptoms of depression (extreme sadness, lethargy, loss of interest in activities, feelings of worthlessness, difficulty concentrating)
- Thoughts of harming the infant or self (suicidal thoughts)

Breast Care

Inform the woman about breast care as you are assisting her with breast-feeding or when she is preparing to take a

shower. Explain that plain water is sufficient to clean the nipples because soap is drying and can contribute to sore, cracked nipples. Encourage the use of lanolin cream on the nipples. After a feeding, have the woman express a drop of breast milk, rub it into each nipple, and allow the nipples to air dry. She should wear a good support bra at all times.

The woman who chooses to exclusively formula-feed her infant will need information on how to care for her breasts as well. Inform her that her breasts will produce milk even without the infant nursing. The breasts produce milk in the postpartum period based upon a supply-and-demand system. The amount of milk that is removed will be produced again. As long as the milk is not expressed, the woman's body will make less and less each day until it eventually stops producing milk. After the woman's body stops making milk, it will not restart again until after she delivers another child. The lay term for this is that the breasts "dry up." To help this process, the woman should wear a well-fitting slightly tight bra that provides support, avoid letting shower water directly touch the breasts, and not pump her breasts even if they are painful. Cold compresses and an analgesic such as acetaminophen or ibuprofen can help alleviate some discomfort.

Fundal Massage

Show the woman how to do self-fundal massage when you are checking the fundus. Assist her with touching the top of the uterus and massaging it gently as she makes certain it stays firmly contracted. Explain to her that the uterus should no longer be palpable by the 10th day.

Perineum and Vaginal Care

Instruct the woman on proper perineal care the first time she gets up to use the bathroom. As described earlier, advise her on how to clean the perineum using a peribottle and to handle peripads (sanitary napkins) to avoid contaminating the center of the pad. Explain the importance of these instructions to help prevent bladder and episiotomy infections. Explain that she will need to continue to use peripads until the lochia stops. She should not use tampons or douche because these can contribute to uterine infection until the placental site has completely healed. Reinforce that she should continue perineal care after every voiding and defecation until the lochia stops. Encourage handwashing before and after performing perineal care.

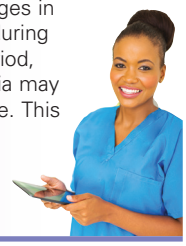
Remind the woman that lochia flow should become progressively lighter. Lochia rubra generally lasts for approximately 2 to 3 days. This is followed by lochia serosa for the remainder of the first week after delivery. After the first week, the flow should be lochia alba. She should not saturate peripads, and there should not be any large clots.

To prevent additional trauma and infection, inform the woman to avoid sexual intercourse, tampons, or putting any substance into the vagina until the placental site and episiotomy (or tear) have healed. Healing is indicated when the lochia flow stops and there is no discomfort when two fingers are placed inside the vaginal opening. Hormonal changes associated with breast-feeding sometimes contribute to vaginal dryness and associated dyspareunia. For this reason, breast-feeding mothers may find it helpful to use a water-soluble jelly for lubrication during sexual intercourse.

Advise the woman to use birth control even if she is breast-feeding or if her menses have not yet returned. Women can ovulate without a menses in the postpartum period. Women who are breast-feeding should be encouraged to use a nonhormonal method of birth control to avoid a decrease (or in some cases a complete cease) in their milk supply. If the woman desires a hormonal birth control method, the health care provider may suggest a progestin-only method as it does not seem to interfere with lactation.

Here's an Education Tip!

If the woman engages in vigorous exercise during the postpartum period, the amount of lochia may temporarily increase. This is a normal finding.



Pain Management

Inform the woman about pain management. Explain that it is more effective to control pain before it becomes severe. Many women are afraid to take pain medication when they are breast-feeding. Reassure her that the analgesics the health care provider has ordered will not harm the newborn. Clarify that it is easier to breastfeed when she is comfortable and pain-free. Tell her the name of the medication that you are giving her, and briefly describe its benefit. For instance, when the woman complains of afterpains, administer the ordered ibuprofen, and explain that ibuprofen is usually effective in controlling the pain of cramping. If she complains that her stitches hurt, administer the ordered analgesic–narcotic combination, and make clear that this medication is most effective at controlling episiotomy or incisional pain. Tell her how frequently she can have each medication and why it is important not to take pain medication more frequently or at higher dosages than what is ordered.

Explain the benefits of using nonmedicinal ways of easing pain, such as applying warmth to the abdomen to help soothe afterpains. When you assist her with the sitz bath, encourage her to continue using it at home until the episiotomy has healed. Some women worry that the stitches will have to be removed and anticipate that this will be painful. Reassure her that the body absorbs the stitches, and they do not need to be removed.

Nutrition

Nutrition is an important aspect of self-care. Meal times are a good time to discuss nutrition with the woman. Determine what her prepregnancy dietary intake was. Give her brochures that explain the recommended amounts of food group intake each person should get. Instruct the woman who is not breast-feeding to resume her prepregnancy calorie

intake levels. The lactating woman will need approximately 500 kcal above her prepregnancy calorie requirements to meet the demands of lactation. Instruct the lactating woman to consume a minimum of 8 glasses of water a day and to avoid caffeinated beverages. Dehydration can decrease the lactating woman's milk supply.

Constipation

As you are caring for the woman, explain how different activities contribute to or prevent constipation. Describe how activity helps the bowel regain its tone, which helps prevent constipation. When you fill her water pitcher, explain that she needs to liberally drink noncaffeinated fluids to help keep the stool soft. Explain that caffeine is a diuretic, so it is best to limit or avoid caffeinated fluids. Encourage her to drink fluids that she enjoys. If she does not like water, or uses hot–cold dietary practices, explore alternatives with her, such as noncaffeinated herbal tea, juice, and sugar-free gelatin. Explain to her the importance of not ignoring the urge to defecate as this can contribute to constipation. Inform her about high-fiber foods when you serve her a meal or bring her a snack. If the health care provider has prescribed a stool softener, tell her the name of the medication and its intended effect when you administer it. Offer her a large glass of water when she takes the stool softener, and emphasize the importance of adequate hydration when taking a stool softener.

Some women develop hemorrhoids during pregnancy. If the woman has hemorrhoids, inform her about the importance of adequate fluids, ambulation, preventing and avoiding constipation, and high-fiber foods. These measures will help the woman avoid straining during defecation, which can aggravate hemorrhoids. Sitz baths and topical hemorrhoid creams may help with any itching or discomfort she may have with hemorrhoids.

Proper Rest

It is important for the woman to know that it is easy to overdo it in the first few days after giving birth. Explore the possibility of asking a friend or relative to help out for the first few days. Reassure her that her health and that of her newborn are the most important concerns while she is recovering from childbirth. Give her information such as, "When you are tired, rest. If you are exhausted, you will not have the energy to care for your baby." It might be helpful to suggest that she rest with her feet up when the newborn is napping during the day. Reassure her that house-cleaning chores can wait if she is too tired to do them. The woman should not do heavy lifting. A good rule of thumb is the woman should not lift anything heavier than the infant for the first 6 weeks after delivery. If the woman overtires herself and does not consume enough food or fluids, it may affect her breast milk volume.

When the partner is present, explain how much energy it takes for the woman's body to repair itself after childbirth. This concept is probably easier for the partner to understand if they were present at the birth. If appropriate, encourage the partner to help with household chores and older sibling care while the woman recuperates.

TEST YOURSELF

- ✔ Describe four major ways that the examination of the woman after cesarean delivery differs from that for a woman who delivers vaginally.
- ✔ Explain the proper way to perform perineal care.
- ✔ List four signs of infection that the new mother should report.

Remember **Mei Chu**. What information would you want to cover in her discharge instructions? How would this information be different if this was her first delivery and not her second? What signs would you want her to report to the health care provider immediately?

KEY POINTS

- The reproductive system organs gradually return to the nonpregnant size and function during the process of involution.
- Fundal height decreases at a rate of one fingerbreadth (1 cm) per day until the uterus is no longer palpable on the 10th to 14th postpartum day.
- Multiparas more frequently experience afterpains than do primiparas.
- Lochia progresses from rubra, to serosa, to alba as the uterine lining and other cells are cast away from the uterus.
- Kegel exercises can help the postpartum woman regain tone in the perineal area, although the size and tone of the introitus never fully return to the prepregnant state.
- The extra fluid volume that builds up during pregnancy is eliminated in the early postpartum period, leading to increased urinary output and diaphoresis.
- The woman's temperature may be slightly elevated during the first 24 hours after delivery because of dehydration and exhaustion. After the first 24 hours, temperature should be under 100.4°F. Blood pressure should remain at the level it was during labor. Mild bradycardia (50 to 60 bpm) in the early postpartum period is normal.
- The woman is at risk for a DVT, and her legs should be monitored for edema and excess heat or redness.
- The woman is often very hungry and thirsty after giving birth. Allow her to eat and drink unless medically contraindicated.
- Trauma to the lower urinary tract can lead to urinary retention in the postpartum period.
- The most significant psychological adaptation a woman must make is role change as she becomes a mother. She

usually does this in four overlapping stages: beginning attachment and preparation for the baby; increasing attachment, learning to care for the newborn, and physical restoration; moving toward a new normal; and achieving maternal identity.

- Bonding is the initial component of healthy attachment between a parent and the newborn. It generally occurs in a predictable sequence.
- Postpartum blues is a temporary mood disorder that manifests itself through tearfulness and other signs of mild depression. Postpartum blues is different than postpartum depression (see Chapter 19 for information on postpartum depression).
- The postpartum examination focuses on 11 areas: breasts, uterus, lochia, bladder, bowel, perineum, lower extremities, pain, laboratory studies, maternal–newborn bonding, and maternal emotional status.
- Nursing interventions in the early postpartum period focus on preventing and detecting hemorrhage, treating pain, preventing infection, preventing falls, detecting and treating urinary retention, preventing constipation, preventing and detecting thrombus formation, promoting sleep, and promoting healthy parental–newborn attachment.
- The woman who has a cesarean birth requires additional nursing considerations because she has undergone surgery. Possible complications include respiratory compromise and pain, infection, and separation of the abdominal incision.
- Helping the woman turn, cough, and deep breath and encouraging early and frequent ambulation after cesarean delivery are necessary measures to help prevent respiratory compromise and thrombus formation.
- Prepare the woman for discharge by giving her information on performing self- and infant care and on danger signs that she should report to her health care provider. Self-care includes breast care, fundal massage, monitoring of lochia, perineal care, pain management, prevention of constipation, and prevention of fatigue. Danger signs she should report include fever, pain, dysuria, foul-smelling lochia, increased lochia, calf pain, or feelings of persisting sadness.

INTERNET RESOURCES

Postpartum Resources

https://www.babycenter.com/baby/postpartum-health
https://www.mayoclinic.org/healthy-lifestyle/labor-and-delivery/in-depth/postpartum-care/art-20047233

Resources for New Fathers

https://dadsadventure.com/

Cultural Differences

https://www.mikvah.org/article/jewish_perspectives_on_the_birthing_experience
https://womenshealthtoday.blog/2017/07/30/how-cultures-protect-the-new-mother/

Workbook

NCLEX-STYLE REVIEW QUESTIONS

1. An 18-year-old primipara is getting ready to go home. She had a third-degree episiotomy with repair. She confides in the nurse that she is afraid to go to her postpartum checkup because she is afraid to have the stitches removed. Which reply by the nurse is best?
   a. "It doesn't hurt when the midwife takes out the stitches. You will only feel a little tugging and pulling sensation."
   b. "It is very important for you to go to your checkup visit. Besides, the stitches do not have to be removed."
   c. "Many women have that fear after having an episiotomy. The stitches do not need to be removed because the suture will be gradually absorbed."
   d. "You cannot miss your follow-up appointment. Don't worry. Your midwife will be very gentle."
2. A woman has just delivered her third child 15 minutes ago. Everything has progressed normally up to this point. When the nurse tries to take the woman's blood pressure, she notices that the woman is shaking and that her teeth are chattering. Which action should the nurse take first?
   a. Finish taking the vital signs, and then decide what to do
   b. Notify the RN immediately
   c. Place two prewarmed blankets on the woman
   d. Put on the call bell to summon for help
3. The night shift LPN is checking on a woman who had a cesarean delivery with spinal anesthesia several hours earlier. The nurse counts a respiratory rate of 8 breaths in one minute. What should the nurse do first?
   a. Administer naloxone, per the preprinted orders.
   b. Awaken the woman and instruct her to breathe more rapidly.
   c. Call the anesthesiologist from the room for orders.
   d. Perform bag-to-mouth rescue breathing at a rate of 12 per minute.
4. Which of the following signs should be reported to the RN immediately? Select all that apply.
   a. Chills and shaking 15 minutes after delivery
   b. A void of 200 mL 3 hours after delivery
   c. Diaphoresis during the first day after delivery
   d. A boggy uterus that does not firm up with massage
   e. Complaints of uterine cramps during breast-feeding
   f. One calf that measures larger than the other
   g. A firm and painful lump on the perineum
5. A woman who has chosen to bottle-feed says that her breasts are painful and engorged. Which nursing intervention is appropriate?
   a. Assist the woman into the shower, and have her run warm water over her breasts.
   b. Assist the woman to place ice packs on her breasts.
   c. Encourage the woman to breastfeed because she is producing so much milk.
   d. Provide a breast pump, and assist the woman in emptying her breasts.

STUDY ACTIVITIES

1. With your clinical group, develop a one-page postpartum instruction sheet to send home with the new mother that covers all of the essential information she needs for self-care at home.
2. Explain how nursing care of a woman after cesarean birth differs from that of a woman who delivers vaginally. What additional risk factors does the woman have after cesarean?
3. Do an internet search on cultural differences of postpartum care. Discuss with your classmates how different cultures view the postpartum period.
4. Using the table below, compare the different sources of postpartum pain.

Pain Source	Possible Causes	Nursing Care to Prevent and Treat
Breast		
Afterpains		
Perineal pain		
Gas pain and distention after cesarean		
Cesarean incision		

CRITICAL THINKING: WHAT WOULD YOU DO?

1. You enter the room of Heather, a 22-year-old primipara, and find her on the floor looking a little dazed. When you ask her what happened, she tells you that she remembers trying to get up to go to the restroom and that she started feeling a bit dizzy and faint. The next thing she knew she was on the floor.
   a. What is the likely cause of Heather's fall? What nursing actions could have prevented this occurrence?
   b. Later that day, Heather reports that she feels like she just "dribbles" when she tries to urinate, and she feels like she is bleeding too much. What data collection should you do first? What do you expect to find?
   c. What measures can the nurse take to help relieve Heather's urinary retention?
   d. On the third postpartum day, Heather says that she is experiencing chills and thinks she is coming down with a fever. In addition to taking the temperature, what other data collection should you make? Why?

2. Marla delivered her fifth child yesterday after a difficult labor that lasted almost 24 hours. The newborn weighed 7 lb 6 oz (3,345 g), and she is breast-feeding.

a. What factors put Marla at risk for postpartum hemorrhage?
b. While you are checking Marla's lochia, you notice that her lochia has saturated through two sanitary napkins/pads since you last checked on her an hour ago. What do you think is causing the bleeding? What is your first action and why? What would you do next? Justify your answer.

3. Mindy had a cesarean delivery. This is her second postoperative day. She is in her bed when you come in to take vital signs. She looks miserable, and she says that she just cannot get comfortable.

a. What data collection should you do first?
b. You determine that Mindy is suffering from incisional pain and gas pain. What remedies should you offer for these two sources of pain?
c. You perform a complete postpartum examination and discover that Mindy has a painful right calf that is warm to the touch. What action should you take?