

7th EDITION

FOUNDATIONS OF
**Maternal-Newborn
AND Women's Health
Nursing**

Sharon Murray | Emily McKinney | Karen Holub | Renee Jones

618.20231
F771
2019
c.1

ELSEVIER



EVOLVE STUDY RESOURCES
FREE WITH TEXTBOOK PURCHASE
EVOLVE.ELSEVIER.COM

PART I Foundations for Nursing Care of Childbearing Families

1 Maternity and Women's Health Care Today, 1

Kari Mau

- Historical Perspectives on Childbearing, 1
 - Granny Midwives, 1
 - Emergence of Medical Management, 1
 - Government Involvement in Maternal-Infant Care, 2
 - Effects of Consumer Demands on Health Care, 2
 - Development of Family-Centered Care, 2
- Choices in Childbirth, 2
 - Health Care Provider, 2
 - Birth Setting, 3
 - Support Person, 4
 - Siblings, 4
 - Education, 4
- Current Trends in Perinatal and Women's Health Care, 4
 - Healthy People 2020, 4
 - Safety and Quality, 4
 - Cost Containment, 5
 - Community-Based Perinatal and Women's Health Nursing, 5
 - Advances in Technology, 6
 - Complementary and Alternative Medicine, 6
 - Shortage of Nurses, 7
- Statistics on Maternal, Infant, and Women's Health, 8
 - Maternal and Infant Mortality, 8
 - Adolescent Pregnancy, 8
 - Women's Health, 8
- Standards of Practice for Perinatal and Women's Health Nursing, 8
 - Agency Standards, 8
 - Organizational Standards, 9
 - Legal Standards, 9
- The Nurse's Role, 9
 - Communicator, 9
 - Teacher, 9
 - Collaborator, 9
 - Researcher, 9
 - Advocate, 10
 - Manager, 10
 - Advanced Preparation for Maternal-Newborn and Women's Health Nurses, 10
- Nursing Research, 10
 - Evidence-Based Practice, 11

Critical Thinking, 11

Purpose, 12

Steps, 12

Application of the Nursing Process, 13

Assessment, 13

Identification of Patient Problems, 14

Planning, 14

Implementing Interventions, 15

Evaluation, 15

Individualized Nursing Care Plans, 15

The Nursing Process Related to Critical Thinking, 15

2 Social, Ethical, and Legal Issues, 19

Lynn Clark Callister, Cathy L. Miller,

Karen S. Holub

The Family, 19

Family Structures, 19

Family Demographics in the United States, 20

Culture and Childbearing Families, 20

Cultural Considerations, 20

Culture and Health Beliefs in Childbearing, 22

Culturally Competent Care, 24

Social Issues, 25

Socioeconomic Status, 25

Poverty, 26

Homelessness, 27

Disparity in Health Care, 27

Intimate Partner Violence, 29

Human Trafficking, 31

Application of the Nursing Process:

The Battered Woman, 32

Ethics and Bioethics, 34

Ethical Dilemmas, 34

Ethical Issues in Reproduction, 36

Legal Issues, 38

Safeguards for Health Care, 38

Malpractice: Limiting Loss, 39

Cost Containment and Downsizing, 41

Delegation to Unlicensed Assistive

Personnel, 41

Early Discharge, 42

Methods to Deal with Short Lengths of

Stay, 42

3 Reproductive Anatomy and Physiology, 45

Jennifer H. Rodriguez

Sexual Development, 45

Prenatal Development, 45

Childhood, 45

Sexual Maturation, 45

- Female Reproductive Anatomy, 48
 - External Female Reproductive Organs, 49
 - Internal Female Reproductive Organs, 49
 - Support Structures, 52

- Female Reproductive Cycle, 53
 - Ovarian Cycle, 53
 - Endometrial Cycle, 55
 - Changes in Cervical Mucus, 55

- The Female Breast, 55
 - Structure, 55
 - Function, 56

- Male Reproductive Anatomy and Physiology, 56
 - External Male Reproductive Organs, 56
 - Internal Male Reproductive Organs, 57

4 Hereditary and Environmental Influences on Childbearing, 60

Tania Lopez

- Hereditary Influences, 60
 - Structure of Genes and Chromosomes, 60
 - Transmission of Traits by Single Genes, 62
 - Patterns of Single Gene Inheritance, 64
 - Chromosomal Abnormalities, 66
 - Structural Abnormalities, 68
- Multifactorial Disorders, 69
 - Characteristics, 69
 - Risk for Occurrence, 69
- Environmental Influences, 69
 - Teratogens, 70
 - Mechanical Disruptions to Fetal Development, 72
- Genetic Counseling, 72
 - Availability, 72
 - Focus on the Family, 72
 - Process of Genetic Counseling, 72
 - Supplemental Services, 73
 - Nursing Care of Families Concerned About Birth Defects, 74
 - Nurses as Part of a Genetic Counseling Team, 74
 - Nurses in General Practice, 74

PART II The Family Before Birth

5 Conception and Prenatal Development, 78

Jennifer H. Rodriguez

- The Family Before Birth, 78
- Gametogenesis, 78
 - Oogenesis, 78
 - Spermatogenesis, 80
- Conception, 80
 - Preparation for Conception in the Female, 80
 - Preparation for Conception in the Male, 81
 - Fertilization, 81

- Pree embryonic Period, 82
 - Initiation of Cell Division, 82
 - Entry of the Zygote into the Uterus, 82
 - Implantation in the Decidua, 83
 - Maintaining the Decidua, 83
 - Location of Implantation, 83
 - Mechanism of Implantation, 83

- Embryonic Period, 83
 - Differentiation of Cells, 83
 - Weekly Developments, 83

- Fetal Period, 88
 - Weeks 9 through 12, 88
 - Weeks 13 through 16, 89
 - Weeks 17 through 20, 89
 - Weeks 21 through 24, 89
 - Weeks 25 through 28, 90
 - Weeks 29 through 32, 90
 - Weeks 33 through 38, 90

- Auxiliary Structures, 90
 - Placenta, 90
 - Fetal Membranes and Amniotic Fluid, 94

- Fetal Circulation, 94
 - Umbilical Cord, 94
 - Fetal Circulatory Circuit, 94

- Ductus Venosus, 94
- Foramen Ovale, 95
- Pulmonary Blood Vessels, 95
- Ductus Arteriosus, 96
- Changes in Blood Circulation After Birth, 96

- Multifetal Pregnancy, 96
 - Monozygotic Twinning, 97
 - Dizygotic Twinning, 97
 - High Multifetal Gestations, 98

6 Maternal Adaptations to Pregnancy, 100

Dawn Piacenza

- Physiologic Adaptations to Pregnancy, 100
- Changes in Body Systems, 100

- Reproductive System, 100
- Cardiovascular System, 103
- Respiratory System, 105
- Gastrointestinal System, 105
- Urinary System, 106
- Integumentary System, 107
- Musculoskeletal System, 108
- Endocrine System, 108
- Sensory Organs, 110
- Immune System, 111

- Confirmation of Pregnancy, 111
 - Presumptive Indications of Pregnancy, 111
 - Probable Indications of Pregnancy, 111
 - Positive Indications of Pregnancy, 114

- Psychosocial Adaptations to Pregnancy, 114
 Maternal Psychological Responses, 114
 First Trimester, 115
 Second Trimester, 115
 Third Trimester, 117
 Maternal Role Transition, 118
 Transitions Experienced Throughout
 Pregnancy, 118
 Steps in Maternal Role Taking, 118
 Maternal Tasks of Pregnancy, 119
 Paternal Adaptation, 120
 Variations in Paternal Adaptation, 120
 Developmental Processes, 120
 Adaptation of Grandparents, 122
 Age, 122
 Number and Spacing of Other
 Grandchildren, 122
 Perceptions of the Role of Grandparents, 122
 Adaptation of Siblings, 122
 Toddlers, 122
 Older Children, 122
 Adolescents, 123
 Factors Influencing Psychosocial
 Adaptations, 123
 Age, 123
 Multiparity, 123
 Social Support, 124
 Absence of a Partner, 124
 Abnormal Situations, 124
- 7 Antepartum Assessment, Care, and Education, 127**
Tania Lopez
 Antepartum Assessment and Care, 127
 Preconception and Interconception
 Care, 127
 Initial Prenatal Visit, 128
 Subsequent Visits, 132
 Multifetal Pregnancy, 135
 Common Discomforts of Pregnancy, 137
 Application of the Nursing Process: Family
 Responses to Physical Changes of
 Pregnancy, 140
 Application of the Nursing Process: Psychosocial
 Concerns, 144
 Perinatal Education Classes, 145
 Preconception Classes, 146
 Education in First Trimester, 146
 Education in Second Trimester, 146
 Education in Third Trimester, 147
 Breastfeeding Classes, 149
 Classes for Partners, 149
 Classes for Siblings, 149
 Parenting and Infant Care Classes, 152
 Postpartum Classes, 152
- 8 Nutrition for Childbearing, 154**
Kari Mau
 Weight Gain During Pregnancy, 154
 Recommendations for Total Weight
 Gain, 154
 Pattern of Weight Gain, 155
 Maternal and Fetal Weight Distribution, 155
 Factors That Influence Weight Gain, 156
 Nutritional Requirements, 156
 Dietary Reference Intakes, 156
 Energy, 156
 Protein, 160
 Vitamins, 160
 Minerals, 161
 Nutritional Supplementation, 163
 Water, 163
 MyPlate, 163
 Food Precautions, 164
 Factors That Influence Nutrition, 164
 Age, 164
 Nutritional Knowledge, 164
 Exercise, 164
 Culture, 164
 Nutritional Risk Factors, 166
 Socioeconomic Status, 166
 Vegetarianism, 166
 Lactose Intolerance, 167
 Nausea and Vomiting of Pregnancy, 167
 Anemia, 167
 Abnormal Prepregnancy Weight, 167
 Eating Disorders, 168
 Food Cravings and Aversions, 168
 Multiparity and Multifetal Pregnancy, 168
 Substance Abuse, 169
 Adolescence, 169
 Other Risk Factors, 170
 Nutrition After Birth, 171
 Nutrition for the Lactating Mother, 171
 Nutrition for the Nonlactating
 Mother, 172
 Application of the Nursing Process: Nutrition
 for Childbearing, 172
- 9 Assessing the Fetus, 178**
Becky Cypher
 Prenatal Screening and Diagnosis, 178
 Screening versus Diagnostic Testing, 178
 Ultrasound, 179
 Nonmedical Obstetric Ultrasound, 180
 Patient Reactions to Obstetric
 Ultrasound, 181
 First-Trimester Ultrasonography, 181
 Second-Trimester and Third-Trimester
 Ultrasonography, 181

- Prenatal Screening Tests, 182
 - First-Trimester Screening, 182
 - Second-Trimester Multiple-Marker Screening, 183
- Prenatal Diagnostic Tests, 183
 - Chorionic Villus Sampling, 183
 - Amniocentesis, 185
 - Percutaneous Umbilical Blood Sampling, 187
 - Preimplantation Genetic Diagnosis, 187
- Who Should Be Offered Prenatal Screening and Diagnosis?, 188
 - Nursing Role in Prenatal Screening and Diagnosis, 188
- Antepartum Fetal Testing, 188
 - Risk Identification, 189
 - Gestational Age and Frequency of Assessment, 189
 - Fetal Movement Counting, 190
 - Nonstress Test, 190
 - Contraction Stress Test, 191
 - Biophysical Profile, 194
 - Modified Biophysical Profile, 195
 - Fetal Doppler Flow Ultrasound, 196
- 10 Complications of Pregnancy, 200**
 - Kristin L. Scheffler, Renee Jones, Karen S. Holub, Jessica L. McNeil*
 - Pregnancy Complications, 200
 - Hemorrhagic Conditions of Early Pregnancy, 200
 - Abortion, 200
 - Ectopic Pregnancy, 203
 - Gestational Trophoblastic Disease (Hydatidiform Mole), 205
 - Application of the Nursing Process: Hemorrhagic Conditions of Early Pregnancy, 206
 - Hemorrhagic Conditions of Late Pregnancy, 208
 - Placenta Previa, 208
 - Abruptio Placentae, 210
 - Application of the Nursing Process: Hemorrhagic Conditions of Late Pregnancy, 211
 - Disseminated Intravascular Coagulation, 213
 - Nursing Considerations, 214
 - Hyperemesis Gravidarum, 214
 - Etiology, 214
 - Therapeutic Management, 214
 - Nursing Considerations, 214
 - Hypertensive Disorders of Pregnancy, 215
 - Preeclampsia, 216
 - Application of the Nursing Process: Preeclampsia, 225
 - Hemolysis, Elevated Liver Enzymes, and Low Platelets Syndrome, 228
 - Chronic Hypertension, 229
 - Incompatibility Between Maternal and Fetal Blood, 230
 - Rh Incompatibility, 230
 - ABO Incompatibility, 232
 - Concurrent Conditions, 232
 - Diabetes Mellitus, 232
 - Etiology and Pathophysiology, 232
 - Classification, 233
 - Incidence, 233
 - Preexisting Diabetes Mellitus, 233
 - Gestational Diabetes Mellitus, 238
 - Application of the Nursing Process: The Pregnant Woman with Diabetes Mellitus, 240
 - Cardiac Disease, 242
 - Incidence and Classification, 243
 - Acquired Heart Disease, 243
 - Congenital Heart Disease, 244
 - Diagnosis and Classification, 245
 - Therapeutic Management, 246
 - Application of the Nursing Process: The Pregnant Woman with Heart Disease, 248
 - Obesity, 249
 - Risk, 250
 - Antenatal Care, 250
 - Intrapartum Care, 250
 - Postpartum, 250
 - Pregnancy After Bariatric Surgery, 250
 - Nursing Considerations, 250
 - Anemias, 251
 - Iron-Deficiency Anemia, 251
 - Folic Acid-Deficiency (Megaloblastic) Anemia, 251
 - Sickle Cell Disease, 252
 - Thalassemia, 253
 - Other Medical Conditions, 253
 - Immune-Complex Diseases, 253
 - Neurologic Disorders, 255
 - Infections During Pregnancy, 256
 - Viral Infections, 258
 - Nonviral Infections, 263
- 11 The Childbearing Family with Special Needs, 271**
 - Jessica L. McNeil, Karen S. Holub*
 - Adolescent Pregnancy, 271
 - Factors Associated with Teenage Pregnancy, 271
 - Sex Education, 271
 - Socioeconomic Implications, 272
 - Implications for Maternal Health, 272
 - The Teenage Expectant Father, 272
 - Impact of Teenage Pregnancy on Parenting, 274

- Application of the Nursing Process: The Pregnant Teenager, 274
- Delayed Pregnancy, 277
 - Maternal and Fetal Implications, 277
 - Advantages of Delayed Childbirth, 277
 - Nursing Considerations, 278
- Substance Abuse, 279
 - Incidence, 279
 - Maternal and Fetal Effects, 279
 - Diagnosis and Management of Substance Abuse, 281
- Application of the Nursing Process:
 - Maternal Substance Abuse, 282
- Antepartum Period, 282
- Intrapartum Period, 284
- Postpartum Period, 285
- Birth of an Infant with Congenital Anomalies, 285
 - Factors Influencing Emotional Responses of Parents, 285
 - Grief and Mourning, 286
 - Nursing Considerations, 286
- Perinatal Loss, 288
 - Early Pregnancy Loss, 288
 - Concurrent Death and Survival in Multifetal Pregnancy, 288
 - Perinatal Palliative or Hospice Care Services, 288
 - Previous Pregnancy Loss, 288
- Application of the Nursing Process: Pregnancy Loss, 289
- Adoption, 291
- Perinatal Psychological Complications, 292
 - Perinatal Mood Disorder, 292
 - Postpartum Psychosis, 293
 - Bipolar II Disorder, 294
 - Postpartum Anxiety Disorders, 294
- Application of the Nursing Process:
 - Perinatal Psychological Complications, 294

PART III The Family During Birth

12 Processes of Birth, 298

Kristine DeButy, Kristin L. Scheffer

- Physiologic Effects of the Labor Process, 298
 - Maternal Response, 298
 - Fetal Response, 301
- Components of the Birth Process, 302
 - Powers, 302
 - Passage, 302
 - Passenger, 302
 - Psyche, 307
 - Interrelationships of Components, 309

- Normal Labor, 309
 - Theories of Onset, 309
 - Premonitory Signs, 309
 - True Labor and False Labor, 310
 - Labor Mechanisms, 310
 - Stages and Phases of Labor, 313
 - Duration of Labor, 317
 - The Impact of Technology, 317

13 Pain Management During Childbirth, 320

- Grace Mood*
 - Unique Nature of Pain During Birth, 320
 - Adverse Effects of Excessive Pain, 320
 - Physiologic Effects, 320
 - Psychological Effects, 321
 - Variables in Childbirth Pain, 321
 - Physical Factors, 321
 - Psychosocial Factors, 322
 - Preparation for Childbirth, 323
 - Standards for Pain Management, 323
 - Nonpharmacologic Pain Management, 323
 - Advantages, 323
 - Limitations, 324
 - Gate-Control Theory, 324
 - Preparation for Pain Management, 324
 - Application of Nonpharmacologic Techniques, 324
 - Pharmacologic Pain Management, 329
 - Special Considerations for Medicating a Pregnant Woman, 329
 - Regional Pain Management Techniques, 330
 - Systemic Drugs for Labor, 334
 - Vaginal Birth Anesthesia, 337
 - Application of the Nursing Process: Pain Management, 338
 - Pain, 338
 - Epidural Analgesia, 341
 - Application of the Nursing Process: Respiratory Compromise, 344

14 Intrapartum Fetal Surveillance, 347

Becky Cypher

- Fetal Oxygenation, 347
 - Uteroplacental Circulation, 348
 - Fetal Placental Circulation, 348
 - Fetal Heart Rate Regulation, 348
- Electronic Fetal Monitoring
 - Instrumentation, 350
 - Intermittent Auscultation and Palpation, 350
 - Beside Fetal Monitor and Transducers, 352
 - Fetal Monitoring Tracing, 354
 - Fetal Heart Rate Interpretation, 355
 - Baseline Fetal Heart Rate, 355
 - Baseline Fetal Heart Rate Variability, 356

- Periodic and Episodic Fetal Heart Rate Patterns*, 356
- Uterine Activity*, 360
- Categorization of Fetal Heart Rate Patterns*, 362
- Standardized Intrapartum Interpretation and Management**, 363
- Assessment Frequency and Documentation**, 367
- Health Information Technology in Obstetrics**, 368
- Fetal Monitoring Education and Competency**, 368
- Role of Intrapartum Fetal Surveillance**, 368
- Application of the Nursing Process: Patient Teaching with Lack of Knowledge**, 368
- Application of the Nursing Process: Oxygenation**, 370
- 15 Nursing Care During Labor and Birth**, 373
Kristin L. Scheffler, Kristine DeButy
- Admission to the Birth Facility**, 373
- The Decision to Go to the Birth Facility*, 373
- Nursing Responsibilities During Admission*, 374
- Maternal Assessments*, 385
- Support Person's Response*, 387
- Fetal Assessments*, 387
- Application of the Nursing Process: False or Early Labor**, 389
- Application of the Nursing Process: True Labor**, 390
- Fetal Oxygenation**, 390
- Discomfort**, 390
- Prevent Injury**, 398
- Alterations in Normal Labor**, 402
- Version*, 402
- Induction and Augmentation of Labor*, 404
- Nursing Care: Preparation and Birth**, 410
- Responsibilities During Birth*, 410
- Operative Vaginal Birth*, 410
- Episiotomy*, 412
- Cesarean Birth*, 414
- Nursing Care After Birth**, 420
- Care of the Infant*, 420
- Care of the Mother*, 421
- Promote Early Family Attachment*, 423
- 16 Intrapartum Complications**, 426
Cheryl Roth
- Dysfunctional Labor**, 426
- Problems of the Powers*, 426
- Problems with the Passenger*, 428
- Problems with the Passage*, 431
- Problems of the Psyche*, 432
- Abnormal Labor Duration*, 433
- Application of the Nursing Process: During Dysfunctional Labor**, 434
- Possible Intrauterine Infection**, 434
- Maternal Exhaustion**, 435
- Premature Rupture of the Membranes**, 436
- Etiology*, 436
- Complications*, 436
- Therapeutic Management*, 436
- Nursing Considerations*, 437
- Preterm Labor**, 437
- Associated Factors*, 438
- Signs and Symptoms*, 439
- Preventing Preterm Birth*, 439
- Therapeutic Management*, 440
- Application of the Nursing Process: Preterm Labor**, 446
- Psychosocial Concerns**, 446
- Management of Home Care**, 447
- Boredom**, 448
- Postterm Pregnancy**, 449
- Complications*, 449
- Therapeutic Management*, 449
- Nursing Considerations*, 450
- Intrapartum Emergencies**, 450
- Placental Abnormalities*, 450
- Prolapsed Umbilical Cord*, 450
- Uterine Rupture*, 452
- Uterine Inversion*, 453
- Anaphylactoid Syndrome*, 454
- Trauma**, 454
- Management*, 454
- Nursing Considerations*, 455
- Application of the Nursing Process: Intrapartum Emergencies**, 455

PART IV The Family Following Birth

17 Postpartum Adaptations and Nursing Care, 458

Emily Drake, Mary Suzanne White

- Physiologic Changes**, 458
- Reproductive System*, 458
- Cardiovascular System*, 461
- Hematologic System*, 461
- Gastrointestinal System*, 462
- Urinary System*, 462
- Musculoskeletal System*, 463
- Integumentary System*, 463
- Neurologic System*, 464
- Endocrine System*, 464
- Weight Loss*, 464
- Nursing Care of the Postpartum Family**, 464
- Postpartum Assessments*, 464
- Interventions in the Immediate Postpartum Period*, 469
- Nursing Care After Cesarean Birth*, 471
- Application of the Nursing Process: Knowledge of Self-Care**, 472
- Postpartum Discharge and Community-Based Care**, 477
- Criteria for Discharge*, 477
- Community-Based Care*, 477

Psychosocial Adaptations, 478*The Process of Becoming Acquainted, 478**The Process of Maternal Adaptation, 479**The Process of Family Adaptation, 483**Factors That Affect Family**Adaptation, 485**Cultural Influences on Adaptation, 487**Home and Community-Based Care, 488***Application of the Nursing Process: Maternal Adaptation, 488****Application of the Nursing Process: Family Adaptation, 490****18 Postpartum Maternal Complications, 495***Karen S. Holub***Postpartum Hemorrhage, 495***Early Postpartum Hemorrhage, 495**Late Postpartum Hemorrhage, 499**Hypovolemic Shock, 500***Application of the Nursing Process: The Woman with Excessive Bleeding, 501****Thromboembolic Disorders, 504***Incidence and Etiology, 504**Superficial Venous Thrombosis, 505**Deep Vein Thrombosis, 505***Application of the Nursing Process:***The Mother with Deep Venous**Thrombosis, 506**Pulmonary Embolism, 507***Puerperal Infection, 508***Definition, 508**Effect of Normal Anatomy and Physiology on Infection, 508**Other Risk Factors, 508**Specific Infections, 509***Application of the Nursing Process:***Infection, 513***19 Normal Newborn: Processes of Adaptation, 517***Vanessa Flannery***Initiation of Respirations, 517***Development of the Lungs, 517**Causes of Respirations, 517**Continuation of Respirations, 518***Cardiovascular Adaptation: Transition from Fetal to Neonatal Circulation, 519****Neurologic Adaptation:***Thermoregulation, 520**Newborn Characteristics That Lead to Heat Loss, 520**Methods of Heat Loss, 520**Nonshivering Thermogenesis, 521**Effects of Cold Stress, 522**Neutral Thermal Environment, 523**Hyperthermia, 523***Hematologic Adaptation, 523***Factors That Affect the Blood, 523**Blood Values, 524**Risk for Clotting Deficiency, 524***Gastrointestinal System, 524***Stomach, 525**Intestines, 525**Digestive Enzymes, 525**Stools, 525***Hepatic System, 525***Blood Glucose Maintenance, 525**Conjugation of Bilirubin, 526**Hyperbilirubinemia, 528**Blood Coagulation, 528**Iron Storage, 528**Metabolism of Drugs, 528***Urinary System, 529***Kidney Development, 529**Kidney Function, 529**Fluid Balance, 529**Acid-Base and Electrolyte Balance, 529***Immune System, 530***Immunoglobulin G, 530**Immunoglobulin M, 530**Immunoglobulin A, 530***Psychosocial Adaptation, 530***Periods of Reactivity, 530**Behavioral States, 530***20 Assessment of the Normal Newborn, 534***Vanessa Flannery***Early Focused Assessments, 534***History, 534**Assessment of Cardiorespiratory Status, 534**Assessment of Thermoregulation, 537**General Assessment, 538**Measurements, 542***Assessment of Body Systems, 544***Neurologic System, 544**Hepatic System, 548**Blood Glucose, 548**Gastrointestinal System, 549**Genitourinary System, 551**Integumentary System, 552***Assessment of Gestational Age, 554***Assessment Tools, 560**Neuromuscular Characteristics, 560**Physical Characteristics, 563**Scoring, 564**Gestational Age and Infant Size, 564**Further Assessments, 566***Assessment of Behavior, 566***Periods of Reactivity, 566**Behavioral Changes, 566***21 Care of the Normal Newborn, 569***Vanessa Flannery***Inpatient Care, 569****Early Care, 569***Administering Vitamin K, 569**Providing Eye Treatment, 571***Application of the Nursing Process:***Cardiorespiratory Status, 571*

- Application of the Nursing Process:
 - Thermoregulation, 572
- Application of the Nursing Process: Hepatic Function, 574
- Blood Glucose, 575
- Bilirubin, 575
- Ongoing Assessments and Care, 576
 - Providing Skin Care, 576
 - Bathing, 576
 - Providing Cord Care, 576
 - Cleansing the Diaper Area, 577
 - Assisting with Feedings, 577
 - Positioning for Sleep, 577
 - Positioning and Head Shape, 577
 - Protecting the Infant, 577
 - Circumcision, 579
- Application of the Nursing Process: Parents' Knowledge of Newborn Care, 582
 - Immunization, 587
 - Newborn Screening Tests, 587
- Discharge and Newborn Follow-Up Care, 589
 - Discharge, 589
 - Follow-Up Care, 589
- Home Care of the Infant, 589
- Care After Discharge, 589
 - Home Visits, 589
 - Outpatient Visits, 591
 - Telephone Counseling, 591
- Infant Equipment, 592
 - Safety Considerations, 592
 - Car Safety Seats, 592
- Early Problems, 594
 - Crying, 594
 - Colic, 595
 - Sleep, 596
 - Concerns of Working Mothers, 597
 - Concerns of Adoptive Parents, 597
- Common Questions and Concerns, 597
 - Dressing and Warmth, 597
 - Stool and Voiding Patterns, 597
 - Smoking, 598
 - Eyes, 598
 - Baths, 598
 - Nails, 598
 - Sucking Needs, 598
 - Common Rashes, 599
 - Feeding Concerns, 599
 - Growth and Development, 600
 - Well-Baby Care, 600
 - Illness, 601
- 22 Infant Feeding, 606**
 - Karen Stanzo*
 - Nutritional Needs of the Newborn, 606
 - Calories, 606
 - Nutrients, 606
 - Water, 606
 - Breast Milk and Formula Composition, 607
 - Breast Milk, 607
 - Formulas, 608
 - Considerations in Choosing a Feeding Method, 609
 - Breastfeeding, 609
 - Formula Feeding, 609
 - Combination Feeding, 610
 - Factors Influencing Choice, 610
 - Normal Breastfeeding, 611
 - Breast Changes During Pregnancy, 611
 - Milk Production, 611
 - Hormonal Changes at Birth, 611
 - Continued Milk Production, 611
 - Preparation of Breasts for Breastfeeding, 611
 - Application of the Nursing Process: Breastfeeding, 612
 - Common Breastfeeding Concerns, 619
 - Infant Problems, 619
 - Maternal Concerns, 621
 - Formula Feeding, 627
 - Application of the Nursing Process: Formula Feeding, 628
- 23 High-Risk Newborn: Complications Associated with Gestational Age and Development, 633**
 - Della Wrightson*
 - Care of High-Risk Newborns, 633
 - Multidisciplinary Approach, 633
 - Late Preterm Infants, 633
 - Incidence and Etiology, 633
 - Characteristics of Late Preterm Infants, 634
 - Therapeutic Management, 634
 - Nursing Considerations, 634
 - Preterm Infants, 634
 - Incidence and Etiology, 635
 - Characteristics of Preterm Infants, 635
 - Assessment and Care of Common Problems, 635
 - Application of the Nursing Process: Environmentally Caused Stress, 642
 - Application of the Nursing Process: Nutrition, 644
 - Application of the Nursing Process: Parenting, 649
 - Common Complications of Preterm Infants, 656
 - Respiratory Distress Syndrome, 656
 - Bronchopulmonary Dysplasia (Chronic Lung Disease), 657
 - Intraventricular Hemorrhage, 657
 - Retinopathy of Prematurity, 658
 - Necrotizing Enterocolitis, 658
 - Short Bowel Syndrome, 659
 - Postterm Infants, 659
 - Scope of the Problem, 659
 - Assessment, 660
 - Therapeutic Management, 660
 - Nursing Considerations, 660

Small-for-Gestational-Age Infants, 660

- Causes, 660*
- Scope of the Problem, 660*
- Characteristics of Small-for-Gestational-Age Infants, 661*

- Therapeutic Management, 661*
- Nursing Considerations, 661*

Large-for-Gestational-Age Infants, 661

- Causes, 661*
- Scope of the Problem, 661*
- Therapeutic Management, 662*
- Nursing Considerations, 662*

24 High-Risk Newborn: Acquired and Congenital Conditions, 666*Della Wrightson***Respiratory Complications, 666**

- Asphyxia, 666*
- Transient Tachypnea of the Newborn (Retained Lung Fluid), 667*
- Meconium Aspiration Syndrome, 668*
- Persistent Pulmonary Hypertension of the Newborn, 669*

- Hyperbilirubinemia (Pathologic Jaundice), 670*

Application of the Nursing Process:**Hyperbilirubinemia, 672****Infection, 673**

- Transmission of Infection, 673*
- Sepsis Neonatorum, 673*

Infant of a Diabetic Mother, 677

- Scope of the Problem, 677*
- Characteristics of Infants of Diabetic Mothers, 678*
- Therapeutic Management, 678*
- Nursing Considerations, 678*

Polycythemia, 679

- Causes, 679*
- Manifestations, 679*
- Therapeutic Management, 679*
- Nursing Considerations, 679*

Hypocalcemia, 679

- Causes, 679*
- Manifestations, 679*
- Therapeutic Management, 679*
- Nursing Considerations, 679*

Prenatal Drug Exposure, 679

- Identification of Drug-Exposed Infants, 679*
- Therapeutic Management, 681*
- Nursing Considerations, 682*

Phenylketonuria, 683

- Causes, 683*
- Manifestations, 684*
- Therapeutic Management, 684*
- Nursing Considerations, 684*

Congenital Anomalies, 684**Congenital Cardiac Defects, 687**

- Classification of Cardiac Defects, 687*
- Manifestations, 689*
- Therapeutic Management, 690*
- Nursing Considerations, 690*

PART V Women's Health Care**25 Family Planning, 693***Susan Peck***Information About Contraception, 693**

- Common Sources, 693*
- Role of the Nurse, 694*

Considerations When Choosing a Contraceptive Method, 694

- Safety, 694*
- Protection from Sexually Transmitted Diseases, 694*
- Effectiveness, 696*
- Acceptability, 697*
- Convenience, 697*
- Education Needed, 697*
- Benefits, 698*
- Side Effects, 698*
- Effect on Spontaneity, 698*
- Availability, 698*
- Expense, 698*
- Preference, 698*
- Religious and Personal Beliefs, 698*
- Culture, 698*
- Other Considerations, 698*
- Informed Consent, 699*

Adolescents and Contraception, 699

- Adolescent Knowledge, 699*
- Counseling Adolescents, 699*

Contraception Use in Perimenopausal Women, 701**Methods of Contraception, 701**

- Sterilization, 701*
- Long-Acting Reversible Contraceptives, 702*
- Oral Contraceptives, 704*
- Emergency Contraception, 707*
- Transdermal Contraceptive Patch, 708*
- Contraceptive Vaginal Ring, 708*
- Barrier Methods, 709*
- Natural Family Planning Methods, 712*
- Abstinence, 712*
- Least Reliable Methods of Contraception, 714*

Application of the Nursing Process: Choosing a Contraceptive Method, 714**26 Infertility, 718***Susan Peck***Extent of Infertility, 718****Factors Contributing to Infertility, 718**

- Male Infertility Factors, 719*
- Female Infertility Factors, 721*
- Recurrent Pregnancy Loss, 722*

Evaluation of Infertility, 724

- Preconception Counseling, 724*
- History and Physical Examination, 724*

Therapies to Facilitate Pregnancy, 725

- Pharmacologic Management, 725*
- Surgical Procedures, 726*
- Therapeutic Insemination, 727*

- Egg Donation*, 728
- Surrogate Parenting*, 728
- Assisted Reproductive Technologies*, 728
- Emotional Responses to Infertility**, 730
 - Assumption of Fertility*, 730
 - Growing Awareness of a Problem*, 731
 - Seeking Help for Infertility*, 731
 - Reactions During Evaluation and Treatment*, 731
- Outcomes After Infertility Therapy**, 733
 - Pregnancy Loss After Infertility Therapy*, 733
 - Parenthood After Infertility Therapy*, 733
 - Choosing Adoption*, 733
 - Menopause After Infertility*, 733
- Application of the Nursing Process: Care of the Infertile Couple**, 734
- 27 Women's Health, 737**
 - Mary Suzanne White*
 - Preventive Health Care**, 737
 - National Emphasis on Women's Health**, 737
 - Healthy People 2020 Goals*, 737
 - Health Maintenance**, 738
 - Health History*, 738
 - Physical Assessment*, 739
 - Preventive Counseling*, 739
 - Immunizations*, 739
 - Screening and Self-Examinations**, 740
 - Screening for Breast Cancer*, 741
 - Vulvar Self-Examination*, 742
 - Pelvic Examination*, 742
 - Cervical Cytology or Papanicolaou Test*, 743
 - Rectal Examination*, 744
 - Women's Health Problems**, 745
 - Cardiovascular Disease**, 745
 - Risk Factors*, 745
 - Hypertension*, 746
 - Disorders of the Breast**, 746
 - Benign Disorders of the Breast*, 746
 - Diagnostic Procedures*, 747
 - Malignant Tumors of the Breast*, 748
 - Menstrual Cycle Disorders**, 751
 - Amenorrhea*, 751
 - Abnormal Uterine Bleeding*, 752
 - Cyclic Pelvic Pain*, 753
 - Endometriosis*, 753
 - Premenstrual Syndrome*, 754
 - Elective Termination of Pregnancy**, 756
 - Methods of Elective Termination of Pregnancy*, 756
 - Nursing Considerations*, 757
 - Menopause**, 757
 - Age of Menopause*, 757
 - Physiologic Changes*, 758
 - Psychological Responses*, 758
 - Therapy for Menopause*, 758
 - Nursing Considerations*, 759
 - Osteoporosis**, 760
 - Risk Factors*, 760
 - Signs and Symptoms*, 761
 - Prevention and Medical Management*, 761
 - Pelvic Floor Dysfunction**, 762
 - Vaginal Wall Prolapse*, 762
 - Uterine Prolapse*, 763
 - Nursing Considerations*, 764
 - Disorders of the Reproductive Tract**, 765
 - Benign Disorders*, 765
 - Malignant Disorders*, 765
 - Infectious Disorders of the Reproductive Tract**, 767
 - Candidiasis*, 767
 - Sexually Transmitted Diseases*, 768
 - Pelvic Inflammatory Disease*, 771
 - Toxic Shock Syndrome*, 772
 - Application of the Nursing Process: Promoting Women's Health**, 772
 - Appendix A: Answers to Knowledge Check, 777
 - Appendix B: Answers to Critical Thinking Exercises, 809
 - Glossary, 816