THIRD CANADIAN EDITION

Fundamentals of Canadian Nursing
Concepts, Process, and Practice
THIRD CANADIAN EDITION

Fundamentals of Canadian Nursing
Concepts, Process, and Practice

Barbara Kozier, MN, RN

Glenora Erb, BScN, RN

Audrey Berman, PhD, RN
Professor
Dean, Nursing
Samuel Merritt University
Oakland, California

Shirlee J. Snyder, EdD, RN
Professor
Dean, Nursing
Nevada State College
Henderson, Nevada

Madeleine Buck, RN, BScN, MSc(A)
Assistant Professor
School of Nursing
McGill University
Clinical Associate
McGill University Health Centre

Lucia Yiu, RN, BSc, BA, MScN
Associate Professor
Faculty of Nursing
University of Windsor

Lynnette Leeseberg Stamler, PhD, RN, FAAN
Professor and Associate Dean Graduate Nursing
College of Nursing
South Dakota State University
(formerly of University of Saskatchewan)

PEARSON
Toronto
Contents

Preface xi

Special Features xxx

UNIT 1 THE FOUNDATION OF NURSING IN CANADA 1

Chapter 1 Historical and Contemporary Nursing Practice 2
- Historical Nursing Practice 3
- Contemporary Nursing Practice 8
- Roles and Functions of the Nurse 14
- Nursing as a Profession 15
- Factors Influencing Contemporary Nursing Practice 17
- Nursing Organizations 19

Chapter 2 Nursing Education in Canada 27
- Nursing Education 29
- Types of Educational Programs 29
- Nursing Associations and Their Influence on Education 32
- Issues Facing Nursing Education 33

Chapter 3 Nursing Research in Canada 40
- Nursing Research 41

UNIT 2 CONTEMPORARY HEALTH CARE IN CANADA 121

Chapter 7 Health, Wellness, and Illness 122
- Concepts of Health, Wellness, and Well-Being 123
- Models of Health and Wellness 125
- Health-Promotion Models 128
- Health Care Adherence 129
- Illness and Disease 129
- What Makes Canadians Healthy? 131
- Summary 133

Chapter 8 Health Promotion 138
- Development of Health-Promotion Initiatives in Canada 139
- Strategies for Population Health (1994) 141
- Defining Health Promotion 143
- Sites for Health-Promotion Activities 145
- Pender’s Health-Promotion Model 145
- The Transtheoretical Model: Stages of Health Behaviour Change 148

Chapter 9 The Canadian Health Care System 160
- History 161
- Rights and Health Care 163

Chapter 4 Nursing Philosophies, Theories, Concepts, Frameworks, and Models 58
- What Is Philosophy? 59
- Philosophy’s Three Primary Areas of Inquiry 59
- Paradigms or World Views 60
- Philosophy in Nursing 60
- Overview of Selected Nursing Philosophies 61
- Concepts and Theories 62
- Overview of Selected Nursing Theories 64

Chapter 5 Values, Ethics, and Advocacy 76
- Values 77
- Ethics 83
- Ethical Decision Making 86
- Selected Ethical Issues in Nursing 87
- Nursing and Advocacy 90
- Enhancing Ethical Practice 91

Chapter 6 Accountability and Legal Aspects of Nursing 96
- Relationship between Nurses and the Law 97
- Contractual Arrangements in Nursing 101
- Areas of Potential Tort Liability in Nursing 102
- Selected Legal Aspects of Nursing Practice 109
- Legal Protections in Nursing Practice 111
- Reporting Crimes, Torts, and Unsafe Practices 114
- Legal Responsibilities of Nursing Students 114
# Contents

Categories of Health Care 164
Types of Health Care Organizations and Care Settings 166
Providers of Health Care 172
Factors Impacting the Health Care System 172
Contemporary Frameworks for Care 176
Models for the Delivery of Nursing 177

Chapter 10
Environmental and Global Health Nursing 182
Environment and Health 183
Global Health versus International Health: What Is the Difference? 187
Theories of Development 189
Millennium Development Goals 189
Major Issues in Global Health 192
Nurses and Global Health 198

Chapter 11
Cultural Caring 206
Canada’s Cultural Mosaic 207
Definitions and Concepts Related to Culture 213
Considerations for Culturally Safe Nursing Practice 214
Providing Culturally Safe Care 220

Chapter 12
Individual Care 230
Individual Health 232
Applying Theoretical Frameworks to Individuals 237

Chapter 13
Nursing Care of Families 244
What Is “Family?” 245
Family Nursing 246
Development of Family Nursing 247
Shifting Focus to Family Involvement in Health Care 248
Canadian Families: A Demographic Snapshot 248
Understanding Families 251
How Does the Family Affect the Illness? 255
Nursing Care of Families 255
Evaluating Nursing Care of Families 261

Chapter 14
Community-Based Nursing 268
Shifts in the Canadian Health Care System 269
Community-Based Health Care 271
Community-Based Roles and Settings 274

Chapter 15
Rural and Remote Health Care 286
Definition of Rural 287
Rural Health: Place, Space, and Time 288
Elements of a Rural Health Framework 288
Health of Rural Residents 290
Special Concerns in Aboriginal Communities 294
Health Care Delivery 296

Chapter 16
Complementary and Alternative Health Modalities 305
Basic Concepts 306
Complementary and Alternative Health Modalities 307
Manipulative and Body-Based Therapies 311
Nursing Role in Complementary and Alternative Health Modalities 318

Chapter 17
Concepts of Growth and Development 324
Factors Influencing Growth and Development 326
Stages of Growth and Development 326
Growth and Development Theories 327
Ecological Systems Theory 334
Theories of Moral Development 335
Theories of Spiritual Development 336
Applying Growth and Development Concepts to Nursing Practice 337

Chapter 18
Development from Conception through Adolescence 342
Conception and Prenatal Development 343
Neonates and Infants (Birth to One Year) 344
Toddlers (1 to 3 Years) 350
Health Assessment and Promotion 352
Preschoolers (4 to 5 Years) 354
School-Age Children (6 to 12 Years) 357
Adolescence (12 to 18 Years) 359

Chapter 19
Young and Middle Adulthood 368
Young Adults (20–40 Years) 369
Middle-Aged Adults (40 to 65 Years) 374

Chapter 20
Older Adults 382
Characteristics of Older Adults in Canada 383
Attitudes toward Aging 384
Gerontological Nursing in Canada 384
Care Settings for Older Adults 385
Theories of Aging 386
Physiological Aging 386
Psychosocial Aging 392
Cognitive Abilities and Aging 394
Moral Development 394
Spirituality 395
Promoting Healthy Aging 395
Planning for Health Promotion 398

UNIT 3 LIFESPAN AND DEVELOPMENTAL STAGES 323
Chapter 32
Safety 836
Factors Affecting Safety 838
Assessing 841
Diagnosing 842
Planning 842
Implementing 843
Evaluating 861

Chapter 33
Medications 871
Key Concepts in Pharmacology 872
Effects of Drugs 875
Drug Misuse 876
Actions of Drugs in the Body 876
Factors Affecting Medication Action 878
Routes of Administration 879
Medication Order 881
Systems of Measurement 884
Methods of Calculating Dosages 886
Administering Medications Safely 889
System Factors Related to Medication Safety 890
Enteral Medications 896
Parenteral Medications 903
Topical Medications 935
Inhaled Medications 945

Chapter 34
Infection Prevention and Control 953
Health Care–Associated Infections 955
Types of Microorganisms Causing Infections 956
Body Defences against Infection 957
Pathophysiology of Infection 960
The Clinical Spectrum of Infection 961
Infection: An Imbalance between Microorganisms and Defences 961
The Chain of Infection 961
Breaking the Chain: Prevention and Control of Health Care–Associated Infections 966
Routine Practices and Additional Precautions 989
Practical Issues for Implementation of Precautions 992
Nursing Responsibility for Infection Prevention and Control 993
Occupational Health Issues Related to Infection 997
Roles of the Infection Control Practitioner 997

Chapter 35
Skin Integrity and Wound Care 1003
Skin Function and Integrity 1004
Types of Wounds 1004
Pressure Ulcers 1005
Lower Extremity Ulcers 1010
Wound Healing 1012
Assessing 1017
Diagnosing 1019
Planning 1023
Implementing 1024
Heat and Cold Applications 1045
Evaluating 1059

Chapter 36
Caring for Perioperative Clients 1056
Types of Surgery 1058
Preoperative Phase 1060
Intraoperative Phase 1072
Postoperative Phase 1075

UNIT 6 PROMOTING PHYSIOLOGICAL HEALTH 1097

Chapter 37
Sensory Perception 1098
Components of the Sensory-Perceptual Process 1099
Sensory Alterations 1100
Factors Affecting Sensory Function 1101
Assessing 1103
Diagnosing 1105
Planning 1105
Implementing 1106
Evaluating 1110

Chapter 38
Sleep 1118
Physiology of Sleep 1119
Normal Sleep Patterns and Requirements 1121
Factors Affecting Sleep 1123
Common Sleep Disorders 1125
Assessing 1127
Diagnosing 1129
Planning 1130
Implementing 1131
Evaluating 1135

Chapter 39
Activity and Exercise 1139
Normal Movement 1141
Exercise 1147
Factors Affecting Body Alignment and Activity 1151
Effects of Immobility 1152
Assessing 1158
Diagnosing 1162
Planning 1163
Implementing 1163
Using Body Mechanics 1164
Evaluating 1197

Chapter 40
Nutrition 1203
Essential Nutrients: Macronutrients 1204
Essential Nutrients: Micronutrients 1208
Energy Balance 1208
Factors Affecting Nutrition 1210
Nutritional Variations throughout the Lifespan 1213
Standards for a Healthy Diet 1221
Vegetarian Diets 1224
Altered Nutrition 1225
Assessing 1226
Diagnosing 1236
Planning 1236
Implementing 1239
Evaluating 1257

Chapter 41
Fecal Elimination 1265
Physiology of Defecation 1266
Factors that Affect Defecation 1269
Fecal Elimination Problems 1272
Bowel Diversion Ostomies 1275
Assessing 1277
Diagnosing 1280
Planning 1280
Implementing 1284
Evaluating 1298

Chapter 42
Urinary Elimination 1303
Physiology of Urinary Elimination 1304
## UNIT 7 PROMOTING PSYCHOSOCIAL HEALTH 1473

### Chapter 45
#### Self-Concept 1474
- Self-Concept 1475
- Formation of Self-Concept 1475
- Components of Self-Concept 1477
- Factors that Affect Self-Concept 1480
- Nursing Management 1481

### Chapter 46
#### Sexuality 1489
- Development of Sexuality 1490
- Sexual Health 1494
- Variations in Sexuality 1496
- Factors Influencing Sexuality 1498
- Sexual Response Cycle 1499
- Alternative Sexual Function 1500
- Effects of Medications on Sexual Function 1502
- Nursing Management 1503

### Chapter 47
#### Spirituality 1516
- Spirituality and Related Concepts 1517
- Spiritual, Religious, and Faith Development 1518
- Spiritual and Religious Care in Contemporary Context 1520
- Spiritual and Religious Practices Affecting Nursing Care 1522
- Spiritual Health and the Nursing Process 1525

### Chapter 48
#### Stress and Coping 1536
- Concept of Stress 1537
- Models of Stress 1538
- Indicators of Stress 1541
- Coping 1544

---

### Glossary 1585

### Appendix A
- Laboratory Values 1625

### Appendix B
- Formulae 1632

### Appendix C
- Vital Signs 1633

### Index 1634

### Photo Credits 1675
About the Canadian Editors

Madeleine Buck

Madeleine Buck is an Assistant Professor and Assistant Director at the McGill University Ingram School of Nursing and a clinical associate at the McGill University Health Centre. Her 35-year career in nursing has provided her with opportunities to work in acute and critical care, community health, and educational settings. She is currently the Program Director of the Bachelor of Science (Nursing) Program at McGill and teaches in the undergraduate and graduate programs, principally in the areas of acute care and illness management. She is active in the Canadian Association of Schools of Nursing (CASN)—as past Chair of the CASN Accreditation Bureau she now sits as co-chair of the CASN Advisory Committee on Accreditation Policies. She is involved in international work and leads McGill Nurses for Highlands Hope, which works with a group of Tanzanian nurses and peer health educators in dealing with the HIV/AIDS pandemic in the Highlands of Tanzania. With her nursing students in the McGill Global Health Masters stream, she works to foster collaboration and development of nursing education and practice relationships, including implementing nursing best practices in low resourced settings in Tanzania. As with previous editions, half of her royalties from the publication of this book will go toward supporting sustainable nursing projects originating from the Tanzanian Highlands Hope Nurse network.

Lucia Yiu

Lucia Yiu, RN, BScN, BA (Psychology, Windsor), BSc (Physiology, Toronto), MScN (Administration, Western Ontario), is an Associate Professor in the Faculty of Nursing, University of Windsor, and an Educational and Training Consultant in community nursing. She has published on family and public health nursing. Her practice and research interests include multicultural health, international health, experiential learning, community development, breast health, and program planning and evaluation. She has worked overseas and served on various community and social services committees involving local and district health planning. Currently, Lucia is board member and committee member with various community organizations related to children’s mental health; community health centres; quality assurance; status of women, equity, and diversity; occupational health and employment equity. She is currently president of the World Breast Cancer Organization.

Lynnette Leeseberg Stamler

Lynnette Leeseberg Stamler began her nursing career with a BSN from St. Olaf College, Northfield, MN. Her interest in patient teaching began within that program, and inspired her to complete a MEd degree from the University of Manitoba. Although she has worked in many areas of nursing, she has always gravitated to clinical areas where the relationship with patients and families is essential—such as rehabilitation, long-term care, diabetes, and VON (visiting nursing). After teaching in a diploma program at Red River College in Winnipeg, she completed a PhD in nursing from the University of Cincinnati, where she was their third graduate. She has since taught at the University of Windsor, Nipissing University/Canadore College Collaborative BSN program, and the University of Saskatchewan. She has been very active in the Canadian Association of Schools of Nursing (CASN), serving as Treasurer and the first elected President who was not a Dean or Director. She is also active in Sigma Theta Tau International. Her research and international work have focused on aspects of education, from patient to health to nursing. In this spirit, she began work on Canadian nursing textbooks, recognizing that this is one way to influence the next generation of nurses. She has served as an accreditation site visitor. In 2011, her work was recognized when she was inducted as an International Fellow in the American Academy of Nursing, one of eight Canadian nurses to hold that distinction at that time. In the fall of 2012, she embarked on a new adventure, moving to South Dakota to take the position of Associate Dean, Graduate Studies, College of Nursing, South Dakota State University.
Dedication

Madeleine Buck dedicates this edition to the Highlands Hope Umbrella, an organization that brings together community, professional, and volunteer networks to address the challenge of HIV-AIDS and related social problems in the Njombe region of the Southern Highlands of Tanzania. The knowledge, skill, creativity, and dedication of nurses, nursing students, and other members within the “Umbrella” is truly commendable.

Lucia Yiu dedicates this edition to her family and especially to her students and nursing colleagues who have inspired her to strive for excellence in nursing.

Lynnette Leeseberg Stamler dedicates this edition to her biological sisters, Karen and Marilyn, to her many nonbiological sisters through marriage and friendship, and to her many students and colleagues. Each has contributed to her learning and joy in nursing and teaching. All have supported her in many ways along the journey.

Audrey Berman dedicates this edition to Bo-Gunnar Edvard Dahlström, without whom it would not have been possible. There are few people on earth who can simultaneously challenge and support Audrey—even with all my sharp edges—and he is one. Audrey is grateful for his intellect and English skills, which exceed her own. He loves three nurses unconditionally: his sister, his daughter, and Audrey.

Shirlee Snyder dedicates this edition in loving memory of her late mother, Jean Snyder, and to her husband, Terry J. Schnitter, for his unconditional love and support.
We carefully prepared a variety of special features to facilitate learning and to highlight the 5 major themes that form the framework for this edition—namely, **Primary Health Care, Critical Thinking, Clinical Reasoning, Nursing Process, and Lifespan Considerations.**

### Chapter Features: Walk-Through

#### LEARNING OUTCOMES

- Outline the essential concepts addressed in the chapter.

#### LEARNING OUTCOMES

**After studying this chapter, you will be able to:**

1. Explain the relationship of individuality and holism to nursing practice.
2. Compare and contrast the elements of physiological and psychological homeostasis.
3. Identify six common factors that can make an individual more vulnerable to some health problems and describe a nursing implication for each.
4. Identify Maslow’s five categories in the hierarchy of human needs.
5. Discuss how a nurse might use the three selected types of theories to begin to assess an individual’s health needs.

#### EVIDENCE-INFORMED PRACTICE

- Boxes highlight relevant Canadian research; systematic reviews and meta-analyses are cited within each box and clinical relevance is carefully described.

**EVIDENCE-INFORMED PRACTICE**

**What Causes Temper Tantrums?**

The purpose of the study was to determine how emotional reactivity and emotional competence of the children contributed to temper tantrums, and 127 families with 3- to 5-year-old children in British Columbia took part in the study. Results showed that children who were more emotionally competent were less likely to display anger and distress. But more importantly, emotionally competent children, while they may be just as emotionally reactive as other children, were less likely to display the full-blown temper tantrum.

**NURSING IMPLICATIONS:** A child’s level of emotional competence, not the tendency to be emotionally reactive, was the key to understanding why some reactive children have tantrums and others do not. Nurses need to understand that two children with similar thresholds for emotional reactivity may display widely different frequencies of temper tantrums and that maturity (i.e., age) and verbal ability had little effect on temper tantrums.


#### CASE STUDIES

- Present scenarios applicable to Canadian nursing and relevant to the chapter topic at hand.

**Case Study 18**

Billy is a 6-year-old boy entering Grade 1. He is scared and hesitant to let go of his mother’s hand. As the nursing student working in this setting, you have the opportunity to work with Billy and other young children as they start school.

1. How would you help Billy’s mother reassure him?
2. On the basis of his age, what strategies might you use to teach Billy and his classmates about health promotion?

After working through these questions, visit [www.pearsoncanada.ca/mynursinglab](http://www.pearsoncanada.ca/mynursinglab) to check your answers.

**Critical Thinking Questions**

- **Case Study Questions**
  - Critical thinking questions that accompany each Case Study guide students to reflect about the case from different points of view to ensure comprehensive analysis.
  - Suggested answers to the case-based critical thinking questions can be found in the Instructor’s Manual and on the Study on the Go feature.
NURSING AND CANADIAN SOCIETY

Boxes summarize relevant facts about issues in Canadian society and their implications for nursing.

REFLECT ON PRIMARY HEALTH CARE

Nurses apply critical thinking skills as they use a primary health care approach to care for their clients. This activity involves knowing what are the health-promotion needs of their clients; how, where, and when to engage their clients and the members of the multidisciplinary team for input regarding their clients’ needs, strengths, and barriers; and what and how to adapt the resources or appropriate technology in order to design services and care that will meet the clients’ socioeconomic and cultural needs.

SKILL BOXES

Provide clear step-by-step directions and feature the following:
- Clear purpose statement
- Clinical reasoning questions (for many of the skill instructions)
- Steps to consider during implementation of the skill
- A complete list of equipment required to ensure success
- Patient identification procedures and “infection prevention and control reminders” to promote patient safety
- Easily identified rationales throughout the skill instructions to ensure complete understanding of each step
- Coloured photos and illustrations provide the visual cues needed to ensure accurate completion of the skill

An evaluation focus at the end of each skill ensures that the relevant assessment and follow-up occurs.

LIFESPAN CONSIDERATIONS

Boxes identify clearly when and how nursing care should be adapted for the needs of infants, children, adolescents, and/or older adults.

REFLECT ON PRIMARY HEALTH CARE

Boxes ask readers to reflect about the clinical application of one or more of the five principles of primary health care (i.e., health promotion, accessibility, public participation, appropriate use of technology, and intersectoral collaboration) in relation to chapter-specific topics.

Nursing and Canadian Society

Fact

Most older Canadian adults live independently in the community and desire to remain in their homes (PHAC, 2009). In 2008-09, about 0.7% of the Canadian population lived in an institution; of this, about 75% were 65 years and older (Organization for Economic Co-operation and Development, 2011).

Canada has a shortage of health care professionals, including nurses, who specialize in the care of older persons. Numerous Canadian organizations and professional associations actively engage in and disseminate research to better meet the needs of older Canadians (PHAC, 2009).

Although cancer death rate is falling in Canada, cancer incidence and mortality rates continue to be highest among the older adults (Canadian Cancer Society’s Steering Committee on Cancer Statistics, 2012).

Nurses need to be aware of the resources and community services available to their older clients. “Aging in place” interventions can assist older adults to maintain their independence.

All nurses need to acquire the requisite knowledge, skills, and expertise to care for the rapidly growing numbers of older adults in Canada—to understand trends that impact health care delivery, plan for evidence-based interventions, and advocate for safe and ethical care.

Nurses are challenged to successfully implement cancer prevention strategies to promote healthy lifestyle changes into the daily lives of older persons (e.g., promoting cancer screening, healthy diet, and active living).

SKILL 39.5 TRANSFERRING BETWEEN BED AND CHAIR

PURPOSE

A client may need to be transferred between the bed and a wheelchair or chair, the bed and the commode, or a wheelchair and the toilet. This technique has numerous variations. Which variation the nurse selects depends on factors related to the client, the environment, and the health care provider, which are assessed before beginning the transfer.

ASSESSMENT

Before transferring a client, assess the following:
- Client’s body size
- Client’s ability to follow instructions
- Client’s activity tolerance
- Client’s muscle strength and ability to bear weight
- Client’s joint mobility
- Presence of paralysis or paresis
- Client’s level of comfort

Wheelchair

Client

Bed

H mnemonic

1. The wheelchair is placed parallel to the bed as close to the bed as possible. Note that placement of the nurse’s feet mirrors that of the client’s feet.

LIFESPAN CONSIDERATIONS

Positioning, Moving, and Turning Clients

INFANTS
- Position infants on their back for sleep, even after feeding.
- They have little risk of regurgitation and choking, and the rate of sudden infant death syndrome (SIDS) is significantly lower in infants who sleep on their backs.
- The skin of newborns can be fragile and may be abrased or torn (sheared) if the infant is pulled across a bed.

CHILDREN
- Carefully inspect at least three times in each 24-hour period the dependent skin surfaces of all infants and children confined to bed.

OLDER ADULTS
- Clients who have had cerebrovascular accidents (CVAs, strokes) have a risk of shoulder displacement on the paralyzed side from improper moving or repositioning techniques.
- Use care when moving, positioning in bed, and transferring.
- Pillows or foam devices are helpful to support the affected arm and shoulder and prevent injury.
- Decreased subcutaneous fat and thinking of the skin place older adults at risk for skin breakdown. Repositioning approximately every 2 hours more or less, depending on the unique needs of the individual client helps reduce pressure on bony prominences and avoid tissue trauma.
**CLINICAL ALERTS**

focus on patient safety and highlight the potential risks that nurses must watch out for.

**CLINICAL ALERT**

Take safety measures before faxing confidential information. Consent is needed from the client to fax information. Make sure that personally identifiable information (e.g., client name, social insurance number) has been removed. If needed, confirm that the material is being sent to a confidential fax number or call ahead to ensure the person is present to receive the fax. Check that the fax number is correct before pressing the send button.

**HOME CARE CONSIDERATIONS**

boxes guide readers to consider the issues that could affect the client’s successful home recovery and living.

**HOME CARE CONSIDERATIONS**

Positioning, Moving, and Turning Clients
- Assess the height of the bed and the person’s leg length to ensure that self-movement in and out of the bed are smooth.
- Inspect the client’s mattress for support.
- Assess the caregivers’ knowledge and application of body mechanics to prevent injury.
- Demonstrate how to turn and position the client in bed. Observe the caregiver performing a return demonstration. Re-evaluate this technique periodically to reinforce correct application of body mechanics.
- Teach caregivers the basic principles of body alignment and how to check for proper alignment after the client has been changed to a new position.
- Warn caregivers of the dangers of lifting and repositioning and encourage the use of assistive devices and a “no solo lift” policy.
- Teach the caregiver to check the client’s skin for redness and integrity after repositioning the client. Stress the importance of informing the nurse about the length of time skin redness remains over pressure areas after the person has been repositioned. Emphasize that reddened areas should not be massaged as it may lead to tissue trauma.

**CLINICAL MANIFESTATIONS**

boxes feature bulleted lists of common signs and symptoms to provide a quick and easy reference to key manifestations of illness situations.

**CLINICAL MANIFESTATIONS**

Hypothermia

Hypothermia typically manifests in the following ways:
- Decreased body temperature
- Severe shivering (initially)
- Feelings of cold and chills
- Pale, cool, waxy skin
- Hypotension
- Decreased urinary output
- Lack of muscle coordination
- Disorientation
- Drowsiness progressing to coma

**PRACTICE GUIDELINES**

Applying Restraints

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>Rationales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that all alternative measures other than restraints have been exhausted and that the least restraint option is being used.</td>
<td>Underlying reasons for restraints must be addressed and corrected, if possible, as their use is associated with psychological (guilt, anger, shame, feeling punished) and physiological (triangulation, skin breakdown, constipation) risks.</td>
</tr>
<tr>
<td>Obtain consent from the client or guardian and ensure that necessary collective or physician prescriptions are in order.</td>
<td>Legal and ethical considerations require informed consent, unless in an emergency situation. Health agencies generally have specific protocols and lines of authority to ensure practices are consistent and safe.</td>
</tr>
<tr>
<td>If restraints are applied, ensure the following:</td>
<td></td>
</tr>
<tr>
<td>• Apply the restraint so that the client can move as freely as possible without defeating the purpose of the restraint.</td>
<td>Inability to move can cause anxiety and agitation, and enhance the risk of physiological complications, such as aspiration if vomiting.</td>
</tr>
<tr>
<td>• Apply a restraint using quick-release buckles or a half-bow (quick-release) knot that does not tighten when pulled and supports the normal anatomy of the body part.</td>
<td>Time is of the essence in emergency situations and tight physical restraints can impede blood circulation and are uncomfortable; contractures and discomfort can arise from poor body alignment.</td>
</tr>
</tbody>
</table>
Goals/Desired Outcomes
- Inhaling normal volume of air
- Respirations 12–22/min, pulse <100 beats/min
- Symmetric chest expansion of at least 4 cm
- Auscultate lungs q4h.

Nursing Interventions
- Monitor respiratory status, q4h: rate, depth, effort, skin colour, mucous membranes, amount and colour of sputum.
- Monitor results of blood gases, chest x-ray studies, and incentive spirometer volume, as available.
- Monitor level of consciousness.
- Instruct in breathing and coughing techniques. Remind to perform, and assist q3h.
- Administer prescribed expectorant; schedule for maximum effectiveness.

Rationales
- The client is more likely to cough up secretions if he or she is able to breathe comfortably.
- The patient who is becoming more comfortable with breathing may notice an improvement in the amount of secretions coughed up.

Health-Promotion Guidelines for Neonates and Infants

HEALTH EXAMINATIONS
- At birth, screening for hearing, congenital hypothyroidism, and phenylketonuria (PKU).
- Physical examination at birth, 2 weeks, and at 2, 4, 6, 9, and 12 months

PROTECTIVE MEASURES
- Routine immunizations: 5-in-1 DTaP-IPV and Hib vaccines protect against diphtheria, tetanus, pertussis, polio, and Haemophilus influenzae type B (Hib) vaccine, hepatitis B vaccine (HepB), varicella vaccine, pneumococcal conjugate vaccine, and meningococcal C conjugate vaccine; influenza vaccine and other vaccines, as recommended. Schedules may vary across provinces and territories. See Table 34.9: Routine Immunization Schedules for Infants and Children (page 988).
- Fluoride supplements. If inadequate water fluoridation (less than 0.7 parts per million [ppm])
- Screening for congenital hypothyroidism, PKU, and other metabolic and congenital disorders, according to jurisdictions
- Prompt attention for illnesses or fever
- Appropriate skin hygiene and clothing
- Assessment of caregiver-infant relationship quality

INFANT SAFETY
- Supervision at all times
- Car seat, crib, playpen, bath, sleeping arrangement, and home environment safety measures
- Feeding measures (e.g., avoid propping the bottle during feeding)

NUTRITION
- Exclusive breast-feeding to 6 months
- Introduction of solid foods
- Use of smoke and carbon monoxide (CO) detectors in home
- Need for iron supplements at 4 to 6 months; iron-fortified formulas to infants who are not breastfed or for infants receiving formula as well as breast milk; by age 6 months, iron-rich foods
- Continued breast-feeding to age 12 months

ELIMINATION
- Diarrhea and dehydration signs

REST AND SLEEP
- Established routine for sleep and rest patterns

SENSORY STIMULATION
- Touch: holding, cuddling, rocking
- Vision: colourful, moving toys
- Hearing: soothing voice tones, music, singing
- Play: toys appropriate for development

Sample Care Plan for Amanda Aquilini

GUIDELINES
- He helps identify progress toward or deviations from goal. Ineffective Airway Clearance leads to poor oxygenation, evidenced by pallor, cyanosis, lethargy, and drowsiness.
- Ineffective Gastrointestinal Peristalsis results in poor nutrient absorption and inadequate calories for energy needs.

Health-Promotion Guidelines for Children (page 988).

Table 34.9: Routine Immunization Schedules for Infants

Schedules may vary across provinces and territories. See in-fluenza vaccine and other vaccines, as recommended.

NUTRITION
- Exclusive breast-feeding to 6 months
- Introduction of solid foods
- Use of smoke and carbon monoxide (CO) detectors in home
- Need for iron supplements at 4 to 6 months; iron-fortified formulas to infants who are not breastfed or for infants receiving formula as well as breast milk; by age 6 months, iron-rich foods
- Continued breast-feeding to age 12 months

ELIMINATION
- Diarrhea and dehydration signs

REST AND SLEEP
- Established routine for sleep and rest patterns

SENSORY STIMULATION
- Touch: holding, cuddling, rocking
- Vision: colourful, moving toys
- Hearing: soothing voice tones, music, singing
- Play: toys appropriate for development

TEACHING CLINICAL

Client Self-Management of Pain by Using a Patient-Controlled Analgesia Pump

Choose a time to teach the client about pain management when the pain is controlled so that the client is able to focus on the teaching.

Teaching the client about self-management of pain can include the following:
- Demonstrate the operation of the patient-controlled analgesia (PCA) pump and explain that the client can safely push the button without fear of overmedicating. Sometimes, it helps clients who are reluctant to push regularly push the button to know that they must dose themselves (i.e., push the button) 5 to 10 times to receive the same amount of medication (10 mg morphine equivalent) they would receive in a standard injection.
- Describe the use of the pain scale and encourage the client to respond to demonstrate understanding.
- Explain a variety of nonopioid pain relief techniques that the client is willing to learn and use to promote pain relief and optimize functioning.
- Explain to the client the need to notify staff when ambulation is desired (e.g., for bathroom use), if applicable.

TEACHING: CLINICAL

Boxes discuss teaching with regard to the learning needs of the individual client.
TEACHING: HOME CARE

Hygiene
Suggest the client or family do the following:
- Consider purchasing a bath seat that fits in the tub or shower.
- Install a hand shower for use with a bath seat and shampooing.
- Use a nonskid surface on the tub or shower floor.
- Install hand bars on both sides of the tub or shower to facilitate transfers in and out of the tub or shower.
- Carefully monitor the temperature of the bathwater. See Chapter 32 for hot water tank setting recommendations.
- Apply lotion after the client is out of the tub or shower since lotions may make the tub surface or shower floor slippery.

TEACHING: WELLNESS

boxes offer teaching methods directed at providing wellness or health-promotion information to help clients live healthier lives.

Reducing Electrical Hazards
Take the following steps to reduce electrical hazards:
- Check cords for fraying or other signs of damage before using an appliance. Do not use it if the cord is damaged.
- Avoid overloading outlets and fuse boxes with too many appliances; use grounded outlets and plugs.
- Always pull a plug from the wall outlet by firmly grasping the plug and pulling it straight out. Pulling a plug by its cord can damage the cord and plug unit.
- Ensure that ground fault circuit interrupters (GFCIs) have been installed wherever electrical appliances or equipment can inadvertently come in contact with water, such as near sinks, bathtubs, or showers, or outdoors.
- Keep electric cords and appliances out of the reach of children, and place protective covers over wall outlets to protect young children.
- Carefully read instructions before operating electric equipment.
- Always disconnect appliances before cleaning or repairing them.
- Unplug any appliance that has given a tingling sensation or shock and have an electrician evaluate it.
- Keep electric cords coiled or taped to the ground away from areas of traffic to prevent people from damaging the cords or tripping over them.

ASSESSMENT: HOME CARE

boxes provide guidelines to assess the needs of clients or families or caregivers and explain how to assess the available community resources for discharge and home care planning.

- Monitor respiratory rate following the administration of respiratory depressants, such as morphine.
- Assess the home setting for factors that could interfere with breathing, such as exhaust, gas, or cigarette smoke.
- If the client has just come in from another room, allow the client to rest a minute or two before counting respirations,
Hygiene Practices

The following questions can help the nurse learn about the client’s hygiene practices:

**SKIN CARE PRACTICES**
- What is your usual time to shower or bathe?
- What products, such as soap, shampoo, deodorant, do you prefer to use?
- What products, if any, do you use on your face?
- How frequently do you clean or discard applicators or puffs that you use on your face?
- Are there any products or practices that you avoid because of how they affect your skin?

**SELF-CARE ABILITIES**
- Do you have any problems managing your own hygiene?
- What assistance can the nurse give you to help you meet your need for hygiene?

**SKIN PROBLEMS**
- Do you have any tendency toward dry skin, acne, itchiness, rashes, bruising, excessive perspiration, or lack of perspiration?
- Do you have any allergies? If so, to what?

**ASSESSMENT: DEVELOPMENTAL GUIDELINES**

boxes feature critical assessment questions relevant to the growth and developmental needs of the client.

**The Young Adult**

In these three developmental areas, does the young adult do the following?

1. **PHYSICAL DEVELOPMENT**
   - Exhibit weight and BMI within normal range for age and gender
   - Manifest vital signs (e.g., blood pressure) within normal range for age and gender
   - Demonstrate visual and hearing abilities within normal range
   - Exhibit appropriate knowledge (e.g., STIs) and attitudes about sexuality

2. **PSYCHOSOCIAL DEVELOPMENT**
   - Feel independent from parents
   - Have a realistic self-concept
   - Like self and direction of life
   - Interact well with family
   - Cope with the stressors of change and growth
   - Have well-established bonds with significant others and intimacy with a partner or close friends
   - Have a meaningful social life
   - Demonstrate emotional, social, and economic responsibility for own life

3. **ACTIVITIES OF DAILY LIVING**
   - Have a healthy lifestyle
   - Have a set of values that guide behavior

---

**CONCEPT MAP**

*Ineffective Airway Clearance (Gas Exchange)*

**Assessment**

- 28-year-old female
- Possible pneumonia

**Nursing Diagnosis**

- Ineffective Airway Clearance r/t viscous secretions, & shallow chest expansion, secondary to deficient fluid volume, pain, and fatigue

**Outcome**

- Within 48–72h

**Nursing Intervention**

- Instruct in breathing & coughing techniques.
- Remind and assist q3h
- Administer expectorants
- Administer analgesics
- Administer antibiotics
- Respiratory Monitoring
- Assist with postural drainage @ 0930 h
- Monitor level of consciousness
- Monitor results of blood gases, X-rays, and incentive spirometry
- Monitor rate, depth, effort of respirations, skin color, mucus membranes, amount and color of sputum q4h
- Auscultate breath sounds q4h
- Instruct in breathing & coughing techniques: Rumin and assist q4h

**Concept Maps**

show the schematic relationships of various concepts and elements of both the nursing process and nursing care plans.
KEY TERMS
summarize, in alphabetical order, the essential vocabulary associated with each chapter; the key term is defined and highlighted in boldface upon first mention in the chapter, and then both the term and the definition appear again in the end-of-book Glossary.

ASSESS YOUR LEARNING
1. On the basis of a community needs assessment, a public health nurse develops a program to prevent childhood obesity. Which strategy is most appropriate for successful implementation?
   a. Providing information to the teacher for classroom use
   b. Involving parents, teachers, and children in program development
   c. Asking the school administration to remove all vending machines
   d. Saskatchewan, which describes the expectations of the referral?
2. In contrast to a home health nurse, the practice of public health nurses is characterized by a focus on
   a. Illness and injury prevention
   b. Accessibility, health promotion, and public participation
   c. Social justice and equity
   d. Appropriate use of technology and community organization
3. Planning for discharge from an institutional setting, such as a hospital, can include a referral to a home health nurse. What BEST describes the expectations of the referral?
   a. The home health nurse will deliver all care herself
   b. The discharge assessment of service needs will be followed exactly
   c. The home health nurse will coordinate the health care service needs of the client
   d. The discharge plan is developed solely by the discharge planner and the client.

WEBSITES
lists offer readers an annotated list of relevant web-based resources

WEB LINKS
Canadian Interdisciplinary Network for CAM Research (IN-CAM)
http://www.incamresearch.ca
Launched in January 2004, IN-CAM’s two primary objectives are to build research capacity and facilitate interdisciplinary CAM research in Canada, particularly from the perspectives of health services and social science. It offers a searchable members database, a searchable members database, including a list of potential collaborators, news articles, research opportunities, and an annual research competition. Membership is free.

Canadian Holistic Nurses Association
http://www.chna.ca
This site presents the philosophy and objectives of the Canadian Holistic Nurses Association (CHNA) and information on the levels of training for a holistic nursing specialty.

REFERENCES
sections cite the relevant evidence-based sources that appear in each chapter. Readers are encouraged to consult these to further enhance their comprehension of the chapter topics.

REFERENCES

SPECIAL FEATURES IN THE CHAPTERS
sections present 10 multiple-choice questions to help reinforce concepts and clinical application. Answers can be found in the Instructor’s Manual and in the Study on the Go feature.

STUDY ON THE GO—QUICK RESPONSE CODES
align text and mobile learning by providing access to practice assessments, glossary flashcards, and more.
Preface

As the scope and pace of nursing and allied health knowledge continues to grow exponentially, one must ask what is truly “fundamental” for a nurse to know and understand in order to practice knowledgeably, morally, ethically, accurately, sensitively, and compassionately in both today’s and tomorrow’s health care delivery system. Within the context of the current and future health-care system, the third Canadian edition of Fundamentals of Canadian Nursing: Concept, Process, and Practice provides undergraduate nursing students with the fundamentals they will require as they embark on their nursing careers. This textbook aims to provide students with a broad and solid foundation of knowledge about the health of individuals, families, communities, and populations. Also included are the issues that client populations face at varying points in time, as well as the nursing care that is possible in health and illness situations, whether clients are situated at home, in the community, at a clinic, at an extended or palliative care facility, or in an acute care setting. We hope that this text will serve as a “go to” resource for students and practicing nurses working in a wide range of settings.

With the goal of providing a fundamental understanding of what is required for contemporary professional nursing practice in Canada, we built on the first and second editions to ensure that we thoroughly addressed needed skills, such as communication, critical thinking, clinical reasoning, decision making, use of the nursing process, development of interpersonal and interprofessional relationships, teaching, leading and managing change, use of technology, and application of primary health-care principles. We placed high importance on such concepts as caring, wellness, health promotion, disease prevention, complementary and alternative health modalities, rural health, environmental and global health, multiculturalism, growth and development, nursing theories, nursing informatics, nursing research and education, ethics, accountability, and advocacy. Furthermore, we highlighted basic nursing care for clients across the lifespan from hospital to community settings in the culturally diverse Canadian health-care system throughout. In all areas, we integrated the most recent literature and clinical best-practice guidelines.

To ensure that our text reflects “pan-Canadian” issues and practices, we enlisted reviewers and contributors from across the country, representing different geographical perspectives. We expended every effort to ensure that the level of specificity and readability is appropriate for beginning nursing students. We believe that this text will also provide a strong foundation for advanced nursing studies. Enjoy!

Organization

For this third Canadian edition, we present 7 units for a total of 49 chapters—one more than our last edition, as we added a new chapter entitled Environmental and Global Health Nursing (see page v for a complete list of chapters). The material presented in this publication addresses foundational and fundamental knowledge and skills required for a person entering the nursing profession. Building on the strengths of our first and second editions, we enhanced many features to ensure that our textbook is relevant and informative to nurses across the country.

UNIT 1—THE FOUNDATION OF NURSING IN CANADA
(Chapters 1–6) introduces the nature of the nursing profession, from the history of nursing to its current practice, education, and research. Each chapter has been updated since our last edition to reflect evolving trends and emerging issues such as changes to nursing practice standards, the increasing role of nurses as research consumers, the influx of internationally educated nurses, moral distress in the work of nurses, and the role of social media in nursing and health care, among many other topics.

UNIT 2—CONTEMPORARY HEALTH CARE IN CANADA
(Chapters 7–16) describes health-care practice in today’s multicultural environments. Concepts of health, illness, and wellness are addressed as well as the role nurses can play in health promotion from an individual, family, community and global perspective. This unit addresses foundational concepts related to Canada’s health-care system and specific issues related to rural and remote health care, including Northern nursing. Chapter 10: Environmental and Global Health Nursing is a NEW chapter. Topics addressed include: how the environment influences health; theories related to global development; and major issues in global health such as migration, poverty, inequality, gender, and infectious diseases (to name a few).

UNIT 3—LIFESPAN AND DEVELOPMENTAL STAGES
(Chapters 17–20) describes concepts of growth and development and outlines the various developmental stages and their specific health needs throughout the lifespan. Particular attention has been given to the issues facing the very young and older adults.

UNIT 4—INTEGRAL ASPECTS OF NURSING
(Chapters 21–27) describes the fundamental nursing tools required for practice, including critical thinking, clinical reasoning and decision making, caring and communicating, the nursing process, documenting and reporting, teaching
and learning, and leading and managing change. These tools provide a foundation for competent nursing care.

**UNIT 5—NURSING ASSESSMENT AND CLINICAL SKILLS** (Chapters 28–36) provides fundamental knowledge to guide comprehensive health assessment, including vital signs, and addresses integral components of care in relation to pain assessment and management, hygiene, safety, medications, infection prevention and control, skin integrity and wound care, and caring for perioperative clients.

**UNIT 6—PROMOTING PHYSIOLOGICAL HEALTH** (Chapters 37–44) discusses such physiologic concepts as sensory perception; sleep; activity and exercise; nutrition; fecal elimination; urinary elimination; fluid, electrolytes, and acid-base balance; and oxygenation and circulation.

**UNIT 7—PROMOTING PSYCHOSOCIAL HEALTH** (Chapters 45–49) covers a wide range of areas that affect one’s health. Self-concept, sexuality, spirituality, stress and coping, and loss, grieving, and death are all areas that a nurse should consider to care effectively for a client.

Following the book chapters is a **Glossary** in which key terms are defined. Three **Appendices** are provided near the end of the book. They summarize important information about laboratory values, formulae, and vital signs.

**What’s New in the 3rd Canadian Edition**

- **NEW** approach with adoption of a broader, less prescriptive approach to nursing diagnoses. This new edition encourages students and nurses to use their knowledge, experience, and critical thinking skills to generate diagnoses or analysis.
- **NEW** focus on “Environmental and Global Health Nursing”—A whole new chapter is devoted to this important and fascinating topic.
- **NEW** Patient Safety—All national patient safety consensus recommendations from Safer HealthCare NOW!, the Canadian Patient Safety Institute, and Accreditation Canada have been integrated into relevant chapters.
- **NEW** Community Health Assessment focus—In addition to individual and family assessment features, we have added a community health assessment focus.
- **NEW** emphasis on Clinical Reasoning—A discussion about the importance of clinical reasoning and the similarities and differences between, and among, clinical reasoning and critical thinking now appear. Clinical Reasoning questions appear in several chapters to encourage readers to consider the clinical context as a major factor in determining the specific priorities and approach to nursing care.
- **REINSTATED** Glossary of Key Terms—Previously, our glossary of key terms was available on-line; based on feedback from users, we have reinstated the glossary as part of the text so that users have ready access to such an important feature.
- **UPDATED** Reflects the Latest Evidence—A thorough review of the literature was conducted for each chapter. Emphasis was placed on including the results of systematic reviews and meta analyses to ensure the highest level of evidence.
- **UPDATED** All relevant national consensus guidelines related to nursing care are included in the relevant chapters.
- **ENHANCED** Rationales for Nursing Care—All Skill instructions and Clinical Guidelines were reviewed and revised to ensure that a rationale is provided for each recommendation to promote clarity and understanding.
- **ENHANCED** Pan-Canadian Perspective—Reviewers and contributors were selected from across Canada to ensure that the textbook provides a relevant and comprehensive perspective on nursing care and issues facing nurses across the country.
- **ENHANCED** Level of Foundational Knowledge—We took care to sustain the broad knowledge base provided by this foundational “fundamentals” text; however, the depth and specificity of certain topics were updated and augmented where required throughout the text.
- **ENHANCED** Images and Photos—Over 50 new colour photos have been added, mostly in the Skill Boxes, to enhance clarity and that the most up-to-date equipment appears.
Resources and Supplements

Student Resources
Clinical Reference Cards
Each copy of the book is accompanied by a series of Clinical Reference Cards, which are intended to serve as a handy reference when engaged in clinical work. The contents include brief summaries of such topics as the normal ranges of vital signs for various age groups, common laboratory values, the Glasgow Coma Scale, and the “10 Rights” of medication administration.

Online Resources
At the end of every chapter, students will find a QR code (also known as a quick response code) that aligns text and mobile learning. Students can access practice quizzes, glossary flashcards, and more text-specific resources through their smartphones, allowing them to study whenever and wherever they wish!

Students can visit one of the sites below to download a free app to their smartphone to gain access to these resources. Once the app is installed, the phone scans the code and links to a website that features Fundamentals of Canadian Nursing’s Study on the Go content.

ScanLife
http://getscanlife.com
NeoReader
http://get.neoreader.com
QuickMark
http://www.quickmark.com.tw

Instructor Resources
An Instructor’s Manual includes answers to all the questions in the book, along with other material to help instructors to design effective classes.

Powerpoint Slides illuminate and build upon key concepts in the text.

An Image Library provides electronic files of all the figures, photos, and tables in the book.

Pearson’s TestGen computerized Testbank is a powerful program that enables professors to view and edit existing questions, create new questions, and generate quizzes, tests, exams, or homework. TestGen also allows for the administration of tests on a local area network, have the tests graded electronically, and have the results prepared in electronic or printed reports.

Acknowledgments
We wish to extend our sincere thanks to the many talented and committed people involved in the development of this third Canadian edition. We are especially grateful to

- The students and colleagues who provided valuable suggestions for developing this edition, in particular users who alerted us to new practices or region-specific variations in practice.
- The Canadian contributors, who worked diligently to provide content in their areas of expertise (listed on pages xxv–xxvii).
- The Canadian reviewers, who provided critical appraisal to strengthen this text (listed on pages xxviii).
- The editors and contributors of the U.S. ninth edition for setting high standards for the book (listed on page xxix).
- The two people who revised the end-of-chapter test questions: Sandy Kostashuk, Grant MacEwan University, and Barbara Thompson, Sault College.
- The expert guidance and ongoing support from the editorial and production teams at Pearson Canada: Lisa Rahn, Lise Dupont, Trish Ciardullo, Rachel Thompson, Avinash Chandra, Lila Campbell, Rohini Herbert, Ben Zaporozan, and many others who worked scrupulously behind the scenes to help realize this project.

Madeleine Buck
Lucia Yiu
Lynnette Leeseberg Stamler
Thank You:
Canadian Contributors

We would like to extend our heartfelt thanks to the following instructors, who contributed their knowledge and expertise to the Third Canadian Edition:

Mary-Anne Andrusyszyn, RN, BScN, MScN, EdD
Professor and Director
Arthur Labatt Family School of Nursing
Faculty of Health Sciences
Western University

Yolanda Babenko-Mould, RN, BScN, MScN, PhD
Assistant Professor
Arthur Labatt Family School of Nursing
Faculty of Health Sciences
Western University

Judith Bailey, RN, MN
Associate Professor
Department of Nursing
Cape Breton University

Cynthia Baker, RN, PhD
Executive Director
Canadian Association of Schools of Nursing

Lois E. Berry, RN, PhD
Associate Dean
North & North Western Campus and Rural & Remote Engagement
College of Nursing
University of Saskatchewan
Northern Campus

Richard Booth, RN, MScN
Doctoral Candidate
Arthur Labatt Family School of Nursing
Faculty of Health Sciences
Western University
Adjunct Professor
Institute of Health Policy, Management, and Evaluation
University of Toronto

Margaret B. Clark, D. Min.
CASC/ACSS Teaching Supervisor, CPE
Associate Faculty
St. Stephen’s College

Mary Jane Comiskey, RN, BScN, BEd, MScN
Professor of Nursing
University of Windsor/Lambton Collaborative BScN Program

Jamie Crawley, BA, MBA/HCM, PhD, RN
Assistant Professor
Faculty of Nursing
University of Windsor

Lorie Donelle, RN, PhD
Assistant Professor
Arthur Labatt Family School of Nursing and School of Health Studies
Faculty of Health Sciences
Western University

Elaine Doucette, RN, BScN, MScN
School of Nursing
McGill University

Karen Eisler, RN, BScN, MScN, PhD
Executive Director
Saskatchewan Registered Nurses Association

Linda Ferguson, RN, PhD
Professor
College of Nursing
Director, Centre for the Advancement of the Study of Nursing Education & Interprofessional Education
University of Saskatchewan

Bernie Garrett, PhD, BA (Hons), PGCE, RN
Associate Professor
School of Nursing
University of British Columbia

Céline Gélinas, N, BSc(N), MSc(N), PhD, Post Doc
Assistant Professor
School of Nursing
McGill University
Nurse Scientist, Centre for Nursing Research, Jewish General Hospital
Associate Researcher
McGill University Health Centre

Donna Goodridge, RN, BA, BN, MN, PhD., CHPCN(c)
Professor
College of Nursing
University of Saskatchewan

Holly Graham-Marrs, RN, BA, BScN, MN, PhD, R.D.
Psych. (Provisional)
Assistant Professor
College of Nursing
University of Saskatchewan

Jean Hughes, RN, PhD
Professor, School of Nursing
Dalhousie University
and Research Scientist
IWK Health Centre
and Senior Editor-Publications
Canadian Journal of Community Mental Health
Canadian Contributors

Michelle Hughes, RN, BScN, MEd
Professor Nursing
Ryerson, Centennial, George Brown Collaborative Nursing Degree Program
School of Community & Health Studies
Centennial College

Katharine A. Hungerford, RN, BScN, MEd
Professor of Nursing
University of Windsor/Lambton Collaborative BScN Program

Joanne Jones, RN, BSN, MSN
School of Nursing
Thompson Rivers University

Oxana Kapoustina, BSc (Physiology), MSc (Biochemistry), MSc(A) (N)
School of Nursing
McGill University

Kristen Knibbs, RN, MN
Lecturer
College of Nursing
University of Saskatchewan

Michael G. Ladouceur, RN, BScN, MPH
Assistant Professor and Co-Chair
Global Health Education Committee
School of Nursing
McMaster University

Sandie Larouche, RN, BSc(N), MSc
School of Nursing
McGill University

Kristen Lethbridge, RN, BScN, MScN, PhD
Research Assistant
Arthur Labatt Family School of Nursing
Faculty of Health Sciences
Western University

Nicole Letourneau, PhD, RN
Norlien/ACHF Chair in Parent-Infant Mental Health
Alberta Children's Hospital Research Institute for Child & Maternal Health
Professor
Faculties of Nursing & Medicine (Pediatrics)
University of Calgary
Adjunct Professor
Faculty of Nursing
University of New Brunswick

Caroline Marchioni, N, MSc Admin, MSc A
Knowledge Broker
McGill University Health Centre
Faculty Lecturer
School of Nursing
McGill University

Carol McDonald, PhD, RN
Associate Professor
School of Nursing
University of Victoria

Marjorie McIntyre, RN, PhD
Associate Professor
School of Nursing
University of Victoria

Mitzi G. Mitchell, RN, GNC(C); BScN, BA (Soc), MHSc, MN, DNS, PhD
Professor
Faculty of Applied Health & Community Studies
Sheridan Institute of Technology and Advanced Learning

Donna Moralejo, BA, BSc, MSc(A), PhD
Professor
School of Nursing
Memorial University of Newfoundland

Glenys Moran, RN, BN, MN
Nurse Educator
Centre for Nursing Studies
St. John’s, NL

Nancy Moules, RN, PhD
Professor
Faculty of Nursing
University of Calgary

Iris Mujica, RN, MSc, PhD(s)
Assistant Professor and Co-Chair
Global Health Education Committee
School of Nursing
McMaster University

Ted Naylor, BA (Hons), GDPA, MA
Research Coordinator
School of Social Work
Dalhousie University

Joanne K. Olson, PhD, RN
Professor
Faculty of Nursing
University of Alberta

Kathryn A. Pfaff, RN, MSc, PhD(c)
Level One Coordinator and Lecturer
Faculty of Nursing
University of Windsor

Em M. Pijl Zieber, BScN, MEd, RN
University of Lethbridge

Viola Polomeno, RN, BSc, MSc(A), PhD
Assistant Professor
School of Nursing
University of Ottawa

Joanne Profetto-McGrath, PhD, RN
Professor and Vice Dean
President, Canadian Association of Nursing Research
Faculty of Nursing
University of Alberta

Shelley Raffin Bouchal, RN, PhD
Associate Dean, Graduate Programs
Faculty of Nursing
University of Calgary
Noelle Rohatinsky, RN BSN, MN, PhD(c)
Assistant Professor
College of Nursing
University of Saskatchewan

Robyn Stremler, RN, PhD
Assistant Professor
Lawrence S. Bloomberg Faculty of Nursing
University of Toronto
Adjunct Scientist
The Hospital for Sick Children (SickKids), Toronto

Beth Swart, BScN, MES
School of Nursing
Ryerson University

Olive Wahoush, RN, MSc, PhD
Assistant Professor
School of Nursing,
McMaster University

Donna M. Wilson, RN, PhD
Professor
Faculty of Nursing
University of Alberta
Canadian Reviewers

Gail Bremer
Langara College
Nursing

Krista Cordell
St. Lawrence College–Cornwall Campus
Health Sciences: Practical Nurse Program

Edward V. Cruz
Centennial College
School of Community and Health Studies

Joanne Folstad
SAIT
Nursing Education Program of Saskatchewan

Sharon Hamilton
University of New Brunswick
Faculty of Nursing

Paul Jeffrey
Sheridan College
School of Community & Liberal Studies

Tracey Jewiss
McMaster University
School of Nursing

Paula Kelly
Memorial University of Newfoundland
School of Nursing

Tania Killian
Seneca College
Health Sciences: Nursing

Sandra Kostashuk
Grant MacEwan
Bachelor of Science in Nursing Program
Faculty of Health and Community Studies

Marion Lougas
Professor of Nursing and Program Coordinator
Georgian College
Health and Wellness Department

Lindsay MacFarlane
Confederation College
Health and Community Services
Practical Nursing Program

Ann MacLeod
Trent/Fleming School of Nursing
Nursing

Joan Martin Saarinen
Northern College
Nursing Department

Carrie Mines
Mohawk College
Nursing Department

Jennifer Miron
Humber College
Health Sciences (Nursing)
Humber College Collaborative Bachelor of Nursing Program

Julie Novakovic
British Columbia Institute of Technology
School of Health Sciences

Andrea Phillips
York University
Nursing Department

Joanna Pierazzo
McMaster University
School of Nursing

Wanda Pierson
Langara College
Nursing

Dawn Prentice
Brock University
Nursing Department

Debbie Rickeard
University of Windsor
Nursing Department

Carolyn Rivard
Fanshawe College
Nursing

Sandra Secord
Sheridan College
Faculty of Health and Community Studies

Lynne Theriault
MacEwan University
Psychiatric Nursing

Margaret Verkuyl
Centennial College
Nursing
US Contributors

We would like to extend our heartfelt thanks to more than 90 of our colleagues from schools of nursing across the United States of America who have given their time generously during the past few years. Kozier & Erb's Fundamentals of Nursing, Ninth Edition, benefited immeasurably from their efforts, as well as from their vast experience as teachers and nurses.
Clinical Manifestations
Fever 701
Hypothermia 701
Common Pain Syndromes 740
Sensory Deprivation 1100
Sensory Overload 1101
Physiological Indicators of Stress 1542

Concept Map
Overview of Growth and Development Theories and Theorists 332
Ineffective Airway Clearance (Gas Exchange) 487

Evidence-Informed Practice
What Has Influenced Our Care of Older Adults? 18
How Can Students Overcome Barriers During Their Nursing Programs? 35
How Can Employers Promote Empowerment for New Graduate Nurses? 44
How Do Health Care Providers Respond to and Empower Adolescent Women’s Reproductive Health Concerns through Health Literacy? 45
How Important Is Patient Involvement in Planning Complex Medication Regimes? 64
Encountering Situations of Moral Conflict and Distress in Practice 88
What Are the Clinical Ethical Conflicts that Hospital Nurses and Physicians Experience in Their Practice Today? 108
How Can Nurses Help Improve the Physical Activity of Older Adults? 131
How Many Canadians Will Be Diagnosed with Diabetes over the Next Decade? 146
What Are the Concerns of Rural Persons with Advanced Cancer and of Their Families? 171
Is the Provision of Essential Newborn Care (ENC) Training to Midwives a Cost-Effective Intervention to Reduce Neonatal Mortality in Zambia? 197
How Do Contemporary néhiyawak (Plains Cree) Describe miyo-mahcihoyán (Well-Being)? 214
What Needs Do Men with Advanced Prostate Cancer Identify? 236
What Are the Consequences for Nurse-Daughters Who Are Caring for Elderly Parents? 254
Demographic Profile of Community Health Nurses in Canada and the Organizational Attributes That Support Their Unique Practice 273
“And Then You’ll See Her in the Grocery Store:” The Working Relationships of Public Health Nurses and High Priority Families in Northern Canadian Communities 297
What Is the State of Research on Complementary and Alternative Medicine in Pediatric Rheumatology? 313
Does Masculinity Have Anything to Do with Men’s Depression? 331
What Causes Temper Tantrums? 351
Prevalence of and Factors Associated with Colorectal Cancer Screening in Canadian Women 373
Is Caring for a Family Member with Dementia a Burden? 397
How to Mobilize Nursing Students to Employ the Critical Thinking Process in Practice Situations 417
What Is the Relationship between Patient-Centred Care and Patient Outcomes? 440
What Enhances the Self-Efficacy of First-Time Mothers Who Are Breast-Feeding? 492
Can Incident Reports Enhance Client Health Outcomes? 521
Do Online Communities of Practice Facilitate Knowledge Exchange? 545
Assessing Postcardiac Surgery Patient Learning Needs 564
What Motivates Nurses to Improve Their Performance? 581
What Are the Best Screening Guidelines for Breast Cancer? 595
How the Canadian Hypertension Education Program (CHEP) Provides Current Information to Canadian Health Care Professionals 724
Does Administering Analgesia to People with Acute Pain Interfere with the Diagnosis of the Pain? 741
Preventing Ventilator Acquired Pneumonia through Mouth Care 812
What Interventions Are Most Effective in Preventing Falls Among Older People? 850
Work Interruptions During Medication Administration 897
How Well Do Health Care Workers Wash Their Hands? 955
What Types of Dressings Protect against the Development of Pressure Ulcers? 1038
Does the Use of a Surgical Safety Checklist Make a Difference in Patient Safety? 1070
Who Is at Risk for Developing Subsyndromal Delirium? 1110
What Is the Effectiveness and Safety of Chinese Herbs for Insomnia? 1135
Health-Promotion Guidelines

Health-Promotion Guidelines for Neonates and Infants 350
Health-Promotion Guidelines for Toddlers 353
Health-Promotion Guidelines for Preschoolers 356
Health-Promotion Guidelines for School-Age Children 359
Health-Promotion Guidelines for Adolescents 363
Health-Promotion Guidelines for Young Adults 374
Health-Promotion Guidelines for Middle-Aged Adults 378
Health-Promotion Guidelines for Older Adults 399

Home Care Considerations

Pulse Oximetry 732
Hearing Aids 822
Using a Bed or Chair Exit Safety Monitoring Device 855
Implementing Seizure Precautions 856
Applying Restraints 865
Administering Medication 901
Subcutaneous Injections 918
Administering IV Antibiotics 934
Metered-Dose Inhalers 947
Sterile Field 979
Wound Care 1039
Applying Bandages and Binders 1045
Antiembolism Stockings 1072
Removing Sutures or Staples 1093
Positioning, Moving, and Turning Clients 1180
Administering an Enema 1292
Changing an Ostomy Appliance 1298
Collecting Urine 1317
Catheterization 1336
Oxygen Equipment 1385

Lifespan Considerations

Physical Activity and Health 128
Health-Promotion Topics 146
Factors Affecting Health Promotion and Illness Prevention 156
Examples of the Uses of Massage 313
Health Care Decisions for Children and Older Adults 413
Communication with Older Adults 444
Youth and Adults 542
Special Teaching Considerations 559
General Survey 602
Assessing Skin 610
Assessing Hair 611
Assessing Nails 613
Assessing the Skull and Face 615
Assessing Eye Structures and Visual Acuity 621
Assessing Ears and Hearing 626
Assessing the Nose and Sinuses 628
Assessing the Mouth and Oropharynx 633
Assessing the Neck 638
Assessing the Thorax and Lungs 648
Assessing the Heart and Central Vessels 654
Assessing the Peripheral Vascular System 657
Assessing the Breasts and Axillae 661
Assessing the Abdomen 669
Assessing the Musculoskeletal System 672
Assessing the Neurological System 684
Assessing Female Genitals and Inguinal Lymph Nodes 686
Assessing Male Genitals and Inguinal Area 691
Assessing the Anus 692
Assessing Body Temperature 707
Assessing an Apical–Radial Pulse 717
Assessing Respiration 720
Assessing Blood Pressure 729
Pulse Oximetry 732
Pain Management 772
Bathing 784
Restraints 864
Administering Oral Medications 901
Intramuscular Injections 925
Administering Ophthalmic Medications 939
Administering Otic Medications 942
Administering Metered-Dose Inhalers and Nebulizers 947
Infections 965
Pressure Ulcer and Wound Care 1039
Applying Bandages and Binders 1045
Preoperative Teaching 1067
Antiembolism Stockings 1072
Postoperative Care 1076
### Special Features

**Positioning, Moving, and Turning Clients** 1180  
**Assisting the Client to Ambulate** 1190  
**Inserting a Nasogastric Tube** 1247  
**Administering a Tube Feeding** 1256  
**Administering an Enema** 1299  
**Factors Affecting Voiding** 1307  
**Catheterization** 1337  
**Sputum and Throat Specimens** 1368  
**Oxygen Delivery Equipment** 1384  
**Fluid and Electrolyte Balance** 1420  
**Enhancing Self-Esteem** 1485  
**Stress and Coping** 1538  

### Nursing and Canadian Society

1. **Principles of Primary Health Care** 20  
2. **Nursing Education in Canada** 34  
3. **Nursing Research in Canada** 43  
4. **Nursing Philosophies, Theories, Concepts, Frameworks, and Models** 61  
5. **Top 10 Health Care Ethics Challenges Facing the Canadian Public** 78  
6. **Accountability and Legal Aspects of Nursing** 98  
7. **Health, Wellness, and Illness** 124  
8. **Health Promotion** 144  
9. **The Canadian Health Care System** 176  
10. **Culture Care** 212  
11. **Individual Care** 231  
12. **Nursing Care of Families** 249  
13. **Community-Based Nursing** 276  
14. **Rural and Remote Health Care** 289  
15. **Complementary and Alternative Health Modalities** 308  
16. **Development from Conception through Adolescence** 362  
17. **Older Adults** 393  
18. **Critical Thinking** 416  
19. **Caring and Communicating** 446  
20. **The Nursing Process** 488  
21. **Documenting and Reporting** 510  
22. **Nursing Informatics and Technology** 540  
23. **Teaching and Learning** 568  
24. **Leading, Managing, and Delegating** 575  
25. **Pain Assessment and Management** 742  
26. **Hygiene** 788  
27. **Safety** 840  
28. **Medications** 935  
29. **Infection Prevention and Control** 993  
30. **Skin Integrity and Wound Care** 1033  
31. **Caring for Perioperative Clients** 1057  
32. **Sensory Perception** 1107  
33. **Activity and Exercise** 1140  
34. **Fecal Elimination** 1280  
35. **Oxygenation and Circulation** 1379  
36. **Self-Concept** 1478  
37. **Sexuality** 1506  
38. **Spirituality** 1525  
39. **Stress and Coping** 1546  

### Practice Guidelines

- **Bathing People with Dementia** 789  
- **Bed Making and Disposal of Linens** 826  
- **Preventing Falls in Health Care Agencies** 852  
- **Applying Restraints** 861  
- **Medication Safety** 891  
- **Administering Medications by Nasogastric or Gastrostomy Tube** 902  
- **Reducing the Pain of Childhood Vaccination** 922  
- **Applying Skin Preparations** 936  
- **Nail and Hand Care for Nurses** 970  
- **Assessing Common Pressure Sites** 1018  
- **Cleansing Wounds** 1036  
- **Bandaging** 1042  
- **Providing Passive Range-of-Motion Exercises** 1187  
- **Giving and Removing a Bedpan** 1286  
- **Maintaining Normal Voiding Habits** 1325  
- **Bladder Training** 1326  
- **Preventing Catheter-Associated Urinary Tract Infections** 1337  
- **Facilitating Fluid Intake** 1439  
- **Helping Clients Restrict Fluid Intake** 1439  
- **Vein Selection** 1443  
- **Caring for Clients with a Venous Access Device (VAD)** 1445  

### Reflect on Primary Health Care

1. **Principles of Primary Health Care** 12  
2. **Nursing Education in Canada** 32  
3. **Values, Ethics, and Advocacy** 90  
4. **Health, Wellness, and Illness** 123  
5. **Health Promotion** 144  
6. **Individual Care** 231  
7. **Complementary and Alternative Health Modalities** 318  
8. **Concepts of Growth and Development** 337  
9. **Development from Conception through Adolescence** 344  
10. **Young and Middle Adulthood** 372  
11. **Older Adults** 398  
12. **Critical Thinking** 416  
13. **Caring and Communicating** 446  
14. **The Nursing Process** 488  
15. **Documenting and Reporting** 510  
16. **Nursing Informatics and Technology** 540  
17. **Teaching and Learning** 568  
18. **Leading, Managing, and Delegating** 575  
19. **Pain Assessment and Management** 742  
20. **Hygiene** 788  
21. **Safety** 840  
22. **Medications** 935  
23. **Infection Prevention and Control** 993  
24. **Skin Integrity and Wound Care** 1033  
25. **Caring for Perioperative Clients** 1057  
26. **Sensory Perception** 1107  
27. **Activity and Exercise** 1140  
28. **Fecal Elimination** 1280  
29. **Oxygenation and Circulation** 1379  
30. **Self-Concept** 1478  
31. **Sexuality** 1506  
32. **Spirituality** 1525  
33. **Stress and Coping** 1546  

### Sample Care Plan

**Sample Care Plan for Amanda Aquilini** 493  
**Sample Care Plan for Amanda Aquilini: Modified Following Implementation and Evaluation** 498
Sample Care Plan for Acute Pain 757
Sample Care Plan for Sensory-Perceptual Alteration 1112
Sample Care Plan for Sleep 1130
Sample Care Plan for Nutrition 1237
Sample Care Plan for Altered Bowel Elimination 1281
Sample Care Plan for Urinary Elimination 1321
Sample Care Plan for Ineffective Airway Clearance 1372
Sample Care Plan for Clients with Self-Concept and Role Problems 1483
Sample Care Plan for Spiritual Distress 1530
Sample Care Plan to Promote Coping 1548

Teaching: Clinical
Developing Written Teaching Aids 560
Teaching Clients with Low Literacy Levels 561
Sample Teaching Plan: Wound Care 563
Teaching Tools for Children 567
Client Self-Management of Pain by Using a Patient-Controlled Analgesia Pump 769
Using a Metered-Dose Inhaler 946
Skin Integrity 1023
Preoperative Instructions 1063
Preventing Back Injuries 1168
Active Range-of-Motion Exercises 1186
Controlling Orthostatic Hypotension 1190
Using Canes 1191
Using Walkers 1192
Using Crutches 1193
Assessing Stool for Occult Blood Using Guaiac Method 1279
Managing Diarrhea 1283
Pelvic Floor Muscle Exercises (Kegels) 1328
Clean Intermittent Self-Catheterization 1339
Abdominal (Diaphragmatic) and Pursed-Lip Breathing 1375
Forced Expiratory Technique (Huff Coughing) 1375
Using Cough Medications 1376
Using an Incentive Spirometer 1377

Teaching: Home Care
Temperature 705
Pulse 717
Blood Pressure 730
Monitoring Pain and Pain Control 760
Hygiene 796
Environmental Management 996
Postoperative Instructions 1067
Gastrointestinal Suction 1086
Cleaning a Closed Wound 1089
Activity and Exercise 1164
Tube Feedings 1256
Fecal Elimination 1283
Urinary Elimination 1323
Fluid, Electrolyte, and Acid–Base Balance 1438

Teaching: Wellness
Maintaining Healthy Blood Pressure 723
Foot Care 802
Measures to Prevent Tooth Decay 806
Safety Measures throughout the Lifespan 843
Preventing Poisoning 857
Reducing Electrical Hazards 858
Preventing Sensory Impairments 1106
Promoting Sleep 1132
Nutrition for Older Adults 1220
Nutrition Recommendations for Canadians 1223
Healthy Nutrition 1239
Healthy Defecation 1283
Promoting Healthy Breathing 1374
Promoting a Healthy Heart 1374
Promoting Healthy Fluid and Electrolyte Balance 1441
Phosphodiesterase Type 5 (PDE5) Inhibitor (sildenafil citrate [Viagra]; tadalafil [Cialis]; vardenafil [Levitra]) 1502
Breast Awareness and Mammography 1507
Testicular Self Examination 1508
Preventing Transmission of Sexually Transmitted Infections 1509