

Scientific principles in nursing

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To students of nursing

and

To our families

especially DICK, JEFF, and

KATHLEEN

who gave up so
many Saturdays

Preface

This eighth edition of *Scientific Principles in Nursing* emphasizes the application of the nursing process, based as it is on effective problem solving, to the care of the patient attempting adaptation.

This book assists the beginning student in a technical or professional nursing program to form a broad understanding of what nursing is and the place of nursing in the care of the person under stress, which alters his or her degree of wellness.

The order of presentation follows a logical pattern from preparation, to planning, to application. Much material has been added both in the body of the book and in the Appendix to assist the student in a thorough and accurate assessment of the patient.

It is our view that the nurse today accepts responsibility for independent thinking and action; this requires a high degree of skill in taking data obtained by careful observation and adding to that data from a body of acquired knowledge to achieve understanding of the patient's strengths so that planning can result in nursing care that truly supports the patient's adaptation. Our belief is that nurses require a high degree of proficiency in observation, basic motor skills, and the ability to evaluate the results of nursing actions. The skill to communicate, not just with patients but with all those involved in the patient's care, is of utmost importance in the nurse's effective implementation of skillful and humane nursing care.

We are aware of many kinds of manuals and texts available that deal with the basic skills and concepts needed by the beginning student. We believe that the student benefits from a text that provides some depth in material underlying these basic skills, and it is this depth that we believe is provided in this text.

In completely revising the text, we endeavored to keep the strengths that were there in scope and depth of content and readily understood basic principles, while making the sequence of content clearer and adding concepts current in nursing practice.

The use of identified scientific principles has been maintained in this edition, and new material has been added to this area in most chapters. Our belief is that, while one can always quarrel with the specific definition of "scientific principles," there is a firm, and growing, body of knowledge on which nursing bases its practice. It seems preferable to us to identify theories, laws, or patterns of cause and effect that are effective in explaining and predicting phenomena rather than to attempt to plan and evaluate knowledgeable nursing care without these aids to understanding. For our purposes, we are content to label these "scientific principles."

The first unit, while it contains many important concepts about the current state of nursing, is quite abstract. We recognize that the beginning student will probably need considerable support and

assistance with application of these concepts in order for them to have meaning.

The last unit of the book is essentially basic medical-surgical nursing content. This material is included in a beginning text because we believe that these conditions and treatments are ones the student will encounter frequently in most basic clinical settings and that they will provide good examples of the application of principles to nursing practice. A conscious effort has been made to avoid discussing those treatments and conditions of a more complex nature, which would be encountered in specialty or critical care units.

Many examples in this book are related to the hospital setting. We fully recognize the place of nursing in nonhospital settings; however, for many basic techniques and concepts it seems to us the hospital is the commonest and most available situation for most students.

The Appendix has been expanded to contain a glossary of words that might cause confusion for the student. We avoided words that would be in a standard medical dictionary, preferring to concentrate on words with particular meaning in nursing. This material is arranged in the glossary according to unit for easier identification as the student begins study of the particular concepts in that unit. A number of assessment guides are provided to offer the student a variety of approaches and to emphasize that there are many ways to gather essential information.

The diagnostic tests and measures table of previous editions has been extensively revised and updated and moved to the Appendix in order not to disrupt the flow of the text.

Some emergency procedures have been added to the Appendix along with the

classic techniques for bandaging—not commonly used now, but still valuable.

We have attempted to delete evidence of sexism in the language of the book. The use of the feminine pronoun has been maintained for the nurse, since some 97% of those practicing are still female. Except in the use of examples where a personal pronoun is used appropriately, we have avoided the generic use of the masculine pronoun. We have also chosen to use Ms. rather than Mrs. or Miss for the feminine designation in examples where names are used. We have not changed pronouns in quoted material of course.

There are several acknowledgements we wish to make for assistance we received in the preparation of this text. The staff and patients of University Hospital, University of Oregon Health Sciences Center, especially Ms. Joan Weaver and her staff, cooperated in allowing and assisting with necessary photographs. Susan Pogany was most skillful in understanding what we wanted and securing it in the photographs. Jean Rosendahl, R.T., was extremely helpful in preparing pictures and reviewing the chapter on oxygen therapy. The Reverend Floyd R. Whatley reviewed the material on spiritual needs of patients and offered suggestions. Shelley Young, R.N., Assistant Professor in Nursing, University of Oregon Health Sciences Center, reviewed the chapter on vital signs. Lucy Braak, R.N., Instructor in Nursing, reviewed the care study in Chapter 10. A number of nursing students from the University of Oregon Health Sciences Center were helpful in giving us their responses to portions of the manuscript. Special thanks go to Lois Seven, who did virtually all typing for us, and Alice Tricker, who provided valuable backup secretarial help.

Dorothy Elhart
Sharon Cannell Firsich

Contents

unit one

Introduction

1 Nursing—*an interpretation*, 3

- Nursing in this decade, 3
 - The dilemma of health care delivery, 3
 - What is nursing? 4
 - Nursing and the total health services concept, 5
 - Elements of the nursing process, 6
- Educational preparation for nursing, 8
- Major nursing organizations, 10
- The nurse and the law, 11
 - Consumer protection and quality assurance, 13
- Summary, 16

2 Orientation to health care, 19

- Nursing and health care, 19
- Need for health care, 20
 - Changing concepts of health care, 20
 - Social responsibility for health matters, 21
 - Socioeconomic factors affecting health, 22
 - Other environmental factors affecting health, 23
- Community and personal health, 23
 - Definition of health, 23
 - Health, illness, and sick-role behavior, 25
 - Adaptation and the adaptation syndrome, 26
 - Adaptation and the nursing process, 29
 - Personal health, 29
 - Community health, 30
- Agencies for health care, 32
 - Classification of health agencies, 32
 - Official agencies in the United States, 32
 - Voluntary agencies in the United States, 34
 - International agencies, 36
- Trends in organized health efforts, 37
 - Federal legislation, 37
 - Trends affecting health and health care, 38
- The hospital as a health agency, 40
 - Classifications, 40
 - Accreditation, 41
 - Functions and organization, 41

- Nursing department, 42
- Other hospital departments, 42
- Interrelationships of departments, 44
- Summary, 44

3 Scientific principles and the nursing process, 48

- Using scientific principles in nursing, 50
- Scientific principles defined, 50
- Scientific principles and problem solving, 51
 - Inductive and deductive problem solving, 51
 - The problem-solving process, 51
- Steps in problem solving, 53
 - Recognizing and defining a problem, 53
 - Collecting data from observation and experiment, 53
 - Formulating and implementing solutions, 54
 - Evaluating the solution, 55
- Summary, 56

unit two

Preparing to meet the patient's needs

4 Adaptation as a basis for patient care, 61

- Adaptation concept, 61
 - Concept of integrated wholeness, 61
 - Summary of the adaptation level theory, 62
 - Modes of adaptation, 64
- Adaptation concept in nursing, 65
 - The nursing process, 65
 - Assessment and intervention, 66
- Summary, 70

5 Biopsychosocial aspects of patient care, 72

- Basic human needs, 72
- Developmental needs, 74
- Cultural influences, 74
 - Subcultural group, 74
 - Health care setting, 75
 - Religious aspects, 76
- Nursing responsibilities, 80
- Summary, 80

6 Promoting a safe and therapeutic environment, 82

- The therapeutic environment, 82
- Achieving a therapeutic environment, 83
 - Basic characteristics, 83
 - Modifying the environment, 83

- Scientific principles and the patient's unit, 84
 - Principles selected from microbiology, 84
 - Application of principles, 85
 - The typical patient unit, 85
- Safety factors in the environment, 86
- Infection control in the hospital, 93
- Nursing responsibilities, 95
- Summary, 96
- 7 Principles of communication and patient teaching, 98
 - Communication, 98
 - Definition, 98
 - Forms of communication, 99
 - Listening in communication, 100
 - The communication process, 101
 - Avoiding communication failures through application of principles, 101
 - Nursing responsibilities in communication, 103
 - Communication within the health care agency, 103
 - Interviewing in nursing activities, 105
 - Therapeutically effective communication techniques, 105
 - Ineffective communication, 106
 - Teaching patients, 107
 - Learning needs, 107
 - Teaching-learning situation, 108
 - Principles and methodology, 108
 - Selection of teaching method, 111
 - Teaching techniques, 112
 - Evaluation of learning, 113
 - Summary, 113

unit three

Planning the patient's nursing care

- 8 Entering the patient into the health care system, 117
 - Entrance into the health care system, 117
 - Nursing responsibilities, 118
 - Nursing history, 122
 - Supporting adaptation of the hospitalized patient, 122
 - Summary, 126
- 9 Assessing health-illness status and needs, 129
 - Skills in patient assessment, 129
 - Observation—first step in nursing process, 131
 - Definition, 131
 - Developing skill in observation, 131
 - Methods of direct observation, 132
 - Plan for observation, 133
 - Observation checklist, 133

- Recording observations, 134
- Observations related to changes resulting from illness, 135
- Specific observations, 136
 - Observation of the patient as a person, 136
 - Observation of signs and symptoms, 137
- Nursing role in the physical examination, 139
- Problem-oriented medical records, 142
 - Basic premise, 142
 - POMR elements, 143
 - Advantages of the POMR system, 144
 - Implications for nursing, 144
 - Problem-oriented charting, 146
- Summary, 147
- 10 Planning nursing care, 149
 - The nursing process, 149
 - The nursing care plan, 149
 - Nursing responsibilities, 157
 - Sample plan of nursing care, 159
 - Nursing care study, 161
 - Plan of nursing care, 166
 - Summary, 166
- 11 Utilizing principles of body mechanics in planning nursing care, 168
 - Utilizing principles in solving nursing problems, 168
 - Recognizing and defining the problem, 168
 - Collecting data from observation and research, 169
 - Formulating and implementing solutions, 169
 - Evaluating the solutions, 170
 - Principles of body mechanics in nursing, 171
 - Selected biologic principles, 171
 - Posture and body mechanics, 172
 - Proper body alignment, 173
 - Selected physical principles, 174
 - Nursing responsibilities, 181
 - Positioning in illness, 181
 - Psychosocial aspects, 184
 - Learning situations for the patient, 185
 - Summary, 186
- 12 Vital signs in assessing adaptive response, 187
 - What are vital signs? 187
 - Body temperature, 188
 - Principles from biologic and physical sciences, 188
 - Homeostasis, 191
 - Measurement, 195
 - Nursing responsibilities, 196
 - Pulse and blood pressure, 199
 - Principles from biologic and physical sciences, 199

- Physiology of the pulse, 201
- Physiology of blood pressure, 201
- Physical principles relating to blood pressure, 204
- Nursing responsibilities, 205
- Respiration, 206
 - Principles from biologic sciences, 206
 - Chemistry, 208
 - Physics, 209
 - Nursing responsibilities, 210
- Summary, 211
- 13 Diagnostic tests and measures in assessing adaptive response, 215
 - Current status, 215
 - Understanding of diagnostic measures, 216
 - Scientific rationale for diagnostic tests, 216
 - Scientific principles, 217
 - Secretions and excretions, 217
 - Needle biopsy, 227
 - Electrical impulses, 227
 - X-ray examinations, 228
 - Tests using radioactive drugs, 229
 - Nursing responsibilities, 229
 - Summary, 231
- 14 Discharging the patient from the health care system, 234
 - Process of dismissal, 235
 - Dismissal experience, 235
 - Postdismissal reaction, 237
 - Nursing responsibilities, 237
 - Follow-up programs, 238
 - Summary, 240

unit four

Nursing interventions to support adaptation

- 15 Comfort, rest, and sleep, 245
 - Circadian rhythms, 245
 - Sleep patterns, 246
 - Concept of comfort, 246
 - Selected biologic and behavioral principles, 247
 - Common causes of physical discomfort, 249
 - Nursing responsibilities, 250
 - Nursing assessment, 250
 - Nursing interventions for restoring comfort, 251
 - Summary, 253

16 Hygienic care, 255

Physical and psychologic homeostasis, 255

Nursing role in hygienic care, 256

Application of scientific principles, 257

Behavioral sciences, 257

Biologic sciences, 258

Nursing responsibilities, 259

The patient's bath, 260

Perineal care, 264

Oral care, 264

Care of the hair, 266

Teaching opportunities, 267

Summary, 267

17 Nutrients and fluids, 270

Scientific principles, 271

Principles from biologic sciences, 271

Principles from behavioral sciences, 273

The pathway of digestion, 275

Fluid and electrolyte balance, 275

Chemistry of digestion, 277

Nursing responsibilities, 278

Assessing the patient's nutritional needs, 278

Preparing the patient and the environment, 278

Preventing food-produced disease, 279

Prescribed diets, 280

Serving food, 281

Gavage, 282

Cultural influences, 282

Interpreting diet prescriptions for the patient, 283

Evaluating patient's food and fluid intake, 285

Summary, 285

18 Elimination, 288

Elimination from the urinary system, 290

Principles from biologic sciences, 290

Principles from behavioral sciences, 291

Terms and definitions, 291

Normal urine, 291

Elimination through the gastrointestinal tract, 292

Principles from biologic sciences, 292

Principles from behavioral sciences, 293

Terms and definitions, 294

The process of elimination from the bowel, 294

Nursing responsibilities in maintaining normal elimination, 296

Observation, 296

Recording fluid intake and output, 298

Measures for assisting the patient to maintain optimal excretory function, 299

Summary, 300

19 Preventive rehabilitative processes, 302

- Concept of rehabilitation, 302
 - Definition, 304
 - Rehabilitative process, 305
 - Team approach to rehabilitation, 305
 - The nurse's role as a member of the rehabilitation team, 306
- Scientific principles, 306
 - Concept of activity, 306
 - Principles from biologic sciences, 306
 - Principles from behavioral sciences, 307
- Application to planning nursing care, 308
 - Maintaining integrity of movement, 308
 - Maintaining integrity of cardiovascular function, 309
 - Maintaining integrity of urinary function, 310
 - Maintaining integrity of respiratory function, 311
 - Maintaining integrity of gastrointestinal function, 312
 - Maintaining integrity of the skin, 314
 - Maintaining psychologic integrity, 314
- Nursing responsibilities, 315
 - Maintaining integrity of the skin, 315
 - Coping with musculoskeletal deterioration, 316
 - Preventing respiratory complications, 331
 - Maintaining nutrition, 331
 - Preventing bowel problems, 333
 - Preventing problems related to the urinary tract, 334
 - Dealing with the psychologic impact, 335
- Summary, 343

20 Long-term illness, 345

- Factors influencing the patient's needs, 346
 - Medical diagnosis, 346
 - Age, 346
 - Support systems, 346
 - Prognosis, 346
- Application of scientific principles, 347
- Nursing responsibilities, 348
- Summary, 351

21 The dying patient, 354

- Scientific principles, 354
 - Physiologic process of dying, 354
 - Psychology of dying, 356
 - The nurse's perception of death, 357
 - The patient's perception of death, 359
- Nursing responsibilities, 360
 - Nursing care of the terminally ill patient, 360
 - Guiding principles in planning nursing care, 361
 - Sociolegal responsibilities, 362
 - Physical responsibilities, 363
- Summary, 364

unit five

Administration of medications and therapeutic agents

22 Preparation and administration of therapeutic agents, 371

- Varying roles of the nurse, 371
 - Dependent versus independent functioning, 371
 - Legal aspects related to nursing roles, 372
- Administering therapeutic agents, 373
 - General considerations, 373
 - The physician's order, 376
- General nursing responsibilities, 377
 - Preparing and administering medications, 378
 - Accuracy of dosage, 380
 - The five rights to ensure safety in giving drugs, 380
 - Medication given by rectum, 383
 - Recording of medications administered, 383
 - Provision for narcotics and other special drugs, 383
 - Psychosocial aspects of drug administration, 385
 - Teaching opportunities, 386
- Summary, 387

23 Oral and parenteral medications, 389

- Scientific principles related to oral medications, 389
 - Selected biologic concepts, 389
 - Application of principles, 389
- Parenteral medication administration, 392
 - Equipment, 393
 - Ampules and vials, 395
- Nursing responsibilities, 398
 - Prevention of infection, 398
 - Depth and angle of injection, 399
 - Site of injection, 400
 - Psychosocial aspects, 407
 - Intravenous route of administration, 407
 - Hypodermoclysis, 414
 - Teaching opportunities, 414
- Summary, 414

24 Therapeutic agents that support respiration, 417

- Administration of therapeutic agents by inhalation, 417
 - Principles from the biologic sciences, 417
 - Principles from the social sciences, 420
- Nursing responsibilities, 420
 - Mechanics of oxygen administration, 420
 - Bronchial drainage, 425
 - Assessment and support measures, 428
- Summary, 430

25 Physical agents—*heat, cold, and radiation*, 432

Heat and cold, 432

Agents for application and withdrawal of heat, 432

Scientific principles, 434

Nursing responsibilities in the application of principles, 435

Teaching opportunities, 440

Radiation, 441

Radiotherapy, 441

Nursing responsibilities in the application of principles, 444

Radiation sickness, 447

Techniques of care, 450

Teaching opportunities, 452

Summary, 452

unit six

Common situations that threaten adaptation

26 Communicable disease, 457

Communicable disease control, 457

Prevention, 458

Definitions and terms, 460

Scientific principles, 461

Principles from the biologic sciences, 461

Principles from the behavioral sciences, 465

Application of principles, 466

Nursing responsibilities, 473

Summary, 474

27 Pain, 477

The problem of pain, 477

Definition, 477

Principles from the biologic sciences, 478

Pain stimuli, 478

Pain threshold, 479

Types of pain, 479

Principles from the behavioral sciences, 479

Application of principles, 480

Nursing responsibilities, 480

Assessment of the problem, 481

Planning and intervention, 481

Summary, 483

28 Surgical intervention, 485

Scientific principles, 486

Stress and the adaptation response to surgical trauma, 487

Nursing responsibilities for preoperative care, 489

Nursing assessment and general preoperative measures, 489

- Immediate presurgery preparation, 493
- Nursing responsibilities for postoperative care, 496
 - Immediate postoperative care, 499
 - Immediate postoperative complications, 500
 - Delayed postoperative complications, 502
- Summary, 504

29 Wounds and wound healing, 508

- Classification of wounds, 508
- Bacterial invasion and wound infection, 510
 - Microbial properties, 510
 - Body defenses against microbial invasion, 510
 - Other factors in the progress of wound infection, 512
 - Symptoms of wound infection, 512
- Wound healing, 513
- Scientific principles, 514
- Nursing responsibilities, 515
- Summary, 520

unit seven

Common medical-surgical conditions

30 Eye, ear, nose, and throat disorders, 525

- Scientific principles, 526
 - Principles relevant to the eye, 526
 - Principles relevant to the ear, 527
 - Principles relevant to the nose and throat, 527
- Application of principles to nursing care in eye disorders, 528
 - Structure and functions of the eye, 528
 - Local treatments of the eye, 532
 - Examination of the eye, 533
 - Psychosocial aspects, 534
- Application of principles to nursing care in ear disorders, 535
 - Structure and functions of the ear, 536
 - Common diagnostic measures, 539
 - Local treatments of the ear, 539
 - Psychosocial aspects, 541
- Application of principles to nursing care in nose and throat disorders, 542
 - Structure and functions of the nose and throat, 542
 - Common treatments of the nose and throat, 544
 - Psychosocial aspects, 545
- Teaching opportunities, 545
 - Patients with therapeutic measures of the eye, 545
 - Patients with therapeutic measures of the ear, 546
 - Patients with therapeutic measures of the nose and throat, 547
- Summary, 547

31 Gastrointestinal disorders, 550

- Review of anatomy and physiology, 550
- Scientific principles, 551
- Nursing responsibilities in upper gastrointestinal tract disorders, 552
 - Nausea and vomiting, 553
 - Gastric intubation, 554
 - Application of principles, 555
- Nursing responsibilities in lower gastrointestinal tract disorders, 558
 - Diarrhea, 558
 - Constipation, 559
 - Treatments and equipment, 561
 - Application of principles, 563
- Teaching opportunities, 565
- Summary, 565

32 Genitourinary disorders, 568

- Review of anatomy and physiology, 568
- Principles from the behavioral sciences, 571
- Application of scientific principles in nursing care of urinary tract disorders, 571
 - Dysfunctions of the urinary tract, 571
 - Urinary catheterization, 573
 - Problem of incontinence, 580
- Application of principles in nursing care of reproductive tract disorders, 581
 - Vaginal treatments, 581
- Teaching opportunities, 585
- Summary, 585

Appendix, 587

- Glossary, 587
- Common abbreviations, 592
- Common prefixes and suffixes, 594
- Symbols used in charting and laboratory reports, 597
- Approximate equivalents for liquids, 597
- Apothecary-metric equivalents in common use, 598
- Approximate equivalents for weights, 598
- Approximate equivalents for linear measures, 598
- Formulas for conversion, 598
- Assessment guides, 599
- Diagnostic tests table, 602
- Emergency procedures for basic life support, 646
- Common bandaging techniques, 649