

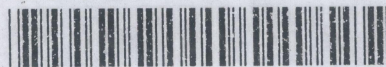
HARDING • KWONG
HAGLER • REINISCH

Lewis's Medical-Surgical Nursing

ASSESSMENT AND MANAGEMENT
OF CLINICAL PROBLEMS

12TH EDITION

Lewis's medical-surgica
WY150 H263L 2023



B0026464
bib:13399117322



Evolve[®]

Student Resources on Evolve
Access Code Inside

3251 Riverport Lane
St. Louis, Missouri 63043

LEWIS'S MEDICAL-SURGICAL NURSING,
TWELFTH EDITION
Copyright © 2023 by Elsevier Inc. All rights reserved.

Single-volume ISBN: 978-0-323-78961-5
Two-volume ISBNs: 978-0-323-79236-3 (volume 1)
978-0-323-79237-0 (volume 2)

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher. Details on how to seek permission, further information about the Publisher's permissions policies, and our arrangements with organizations such as the Copyright Clearance Center and the Copyright Licensing Agency can be found at our website: www.elsevier.com/permissions.

This book and the individual contributions contained in it are protected under copyright by the Publisher (other than as may be noted herein).

Notice

Practitioners and researchers must always rely on their own experience and knowledge in evaluating and using any information, methods, compounds or experiments described herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made. To the fullest extent of the law, no responsibility is assumed by Elsevier, authors, editors or contributors for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions, or ideas contained in the material herein.

Previous editions copyrighted 2020, 2017, 2014, 2011, 2007, 2004, 2000, 1996, 1992, 1987, and 1983.

เลขเรียกหนังสือ..... WY150
..... H263L 2023
เลขทะเบียนหนังสือ..... B0026464
วันที่ลงทะเบียน..... 22 ก.พ. 2566
ได้จาก..... งบประมาณ 2566

Executive Content Strategist: Lee Henderson
Senior Content Development Specialist: Rebecca Leenhouts
Publishing Services Manager: Julie Eddy
Book Production Specialist: Clay S. Broeker
Design Direction: Brian Salisbury

Printed in Canada

Last digit is the print number: 9 8 7 6 5 4 3 2 1



Working together
to grow libraries in
developing countries

www.elsevier.com • www.bookaid.org

SECTION 1 Concepts in Nursing Practice

- 1 Professional Nursing, 1
- 2 Social Determinants of Health, 19
- 3 Health History and Physical Examination, 36
- 4 Patient and Caregiver Teaching, 49
- 5 Chronic Illness and Older Adults, 63
- 6 Caring for Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, and Gender Diverse Patients, 81

SECTION 2 Problems Related to Comfort and Coping

- 7 Stress Management, 93
- 8 Sleep and Sleep Disorders, 105
- 9 Pain, 119
- 10 Palliative and End-of-Life Care, 146
- 11 Substance Use Disorders in Acute Care, 162

SECTION 3 Problems Related to Homeostasis and Protection

- 12 Inflammation and Healing, 179
- 13 Genetics, 199
- 14 Immune Responses and Transplantation, 213
- 15 Infection, 237
- 16 Cancer, 265
- 17 Fluid, Electrolyte, and Acid-Base Imbalances, 302

SECTION 4 Perioperative and Emergency Care

- 18 Preoperative Care, 335
- 19 Intraoperative Care, 350
- 20 Postoperative Care, 365
- 21 Emergency and Disaster Nursing, 385

SECTION 5 Problems Related to Altered Sensory Input

- 22 Assessment and Management: Visual Problems, 407
- 23 Assessment and Management: Auditory Problems, 436
- 24 Assessment: Integumentary System, 456
- 25 Integumentary Problems, 471
- 26 Burns, 494

SECTION 6 Problems of Oxygenation: Ventilation

- 27 Assessment: Respiratory System, 515
- 28 Supporting Ventilation, 539
- 29 Upper Respiratory Problems, 577
- 30 Lower Respiratory Problems, 596
- 31 Obstructive Pulmonary Diseases, 632
- 32 Acute Respiratory Failure and Acute Respiratory Distress Syndrome, 672

SECTION 7 Problems of Oxygenation: Transport

- 33 Assessment: Hematologic System, 693
- 34 Hematologic Problems, 715

SECTION 8 Problems of Oxygenation: Perfusion

- 35 Assessment: Cardiovascular System, 767
- 36 Hypertension, 797
- 37 Coronary Artery Disease and Acute Coronary Syndrome, 819
- 38 Heart Failure, 859
- 39 Dysrhythmias, 884
- 40 Inflammatory and Structural Heart Disorders, 909
- 41 Vascular Disorders, 932
- 42 Shock, Sepsis, and Multiple Organ Dysfunction Syndrome, 961

SECTION 9 Problems of Ingestion, Digestion, Absorption, and Elimination

- 43 Assessment: Gastrointestinal System, 987
- 44 Nutrition Problems, 1009
- 45 Obesity, 1030
- 46 Upper Gastrointestinal Problems, 1050
- 47 Lower Gastrointestinal Problems, 1088
- 48 Liver, Biliary Tract, and Pancreas Problems, 1135

SECTION 10 Problems of Urinary Function

- 49 Assessment: Urinary System, 1177
- 50 Renal and Urologic Problems, 1195
- 51 Acute Kidney Injury and Chronic Kidney Disease, 1232

SECTION 11 Problems Related to Regulatory and Reproductive Mechanisms

- 52 Assessment: Endocrine System, 1265
- 53 Diabetes, 1285
- 54 Endocrine Problems, 1322
- 55 Assessment: Reproductive System, 1352
- 56 Breast Problems, 1371
- 57 Sexually Transmitted Infections, 1395
- 58 Female Reproductive Problems, 1412
- 59 Male Reproductive Problems, 1434

SECTION 12 Problems Related to Movement and Coordination

- 60 Assessment: Nervous System, 1461
- 61 Acute Intracranial Problems, 1483

- 62 Stroke, 1515
- 63 Chronic Neurologic Problems, 1538
- 64 Dementia and Delirium, 1573
- 65 Spinal Cord and Peripheral Nerve Problems, 1594
- 66 Assessment: Musculoskeletal System, 1622
- 67 Musculoskeletal Trauma and Orthopedic Surgery, 1638
- 68 Musculoskeletal Problems, 1674
- 69 Arthritis and Connective Tissue Diseases, 1696

APPENDIXES

- A Basic Life Support for Health Care Providers, 1732
- B Clinical Problems With Definitions, 1735
- C Laboratory Reference Intervals, 1737

Index, I-1

ASSESSMENT ABNORMALITIES TABLES

Auditory System, 23, p. 443
 Breast, 55, p. 1365
 Cardiovascular System, 35, p. 776
 Endocrine System, 52, p. 1277
 Female Reproductive System, 55, p. 1365
 Fluid and Electrolyte Imbalances, 17, p. 325
 GI System, 43, p. 1000
 Hematologic System, 33, p. 703
 Integumentary System, 24, p. 466
 Male Reproductive System, 55, p. 1366
 Musculoskeletal System, 66, p. 1632
 Nervous System, 60, p. 1477
 Respiratory System, 27, p. 528
 Urinary System, 49, p. 1187
 Vascular Skin Lesions, 33, p. 706
 Visual System, 22, p. 416

BIOLOGIC SEX CONSIDERATIONS BOXES

AD, 64, p. 1576
 Asthma, 31, p. 639
 Cancer, 16, p. 266
 Cholelithiasis, 48, p. 1167
 COPD, 31, p. 657
 Coronary Artery Disease and Acute Coronary Syndrome, 37, p. 822
 Effects of Aging on Sexual Function, 55, p. 1359
 Endocrine Problems, 54, p. 1330
 Headaches, 63, p. 1541
 Heart Failure, 38, p. 862
 Hernia, 47, p. 1126
 Hypertension, 36, p. 798
 Lung Cancer, 30, p. 624
 OA, 69, p. 1697
 Older Adults, 5, p. 66
 Osteoporosis, 68, p. 1689
 STIs, 57, p. 1399
 Urinary Incontinence, 50, p. 1218
 Urinary Tract Stones, 50, p. 1207
 Vascular Disorders, 41, p. 933

CASE STUDIES

End-of-Chapter Case Studies

Acute Respiratory Distress Syndrome, 32, p. 688
 Alzheimer Disease, 64, p. 1592
 Anal Cancer, 6, p. 90
 Anaphylaxis, 14, p. 235
 Ankylosing Spondylitis, 69, p. 1728
 Benign Prostatic Hyperplasia With Acute Urinary Retention, 59, p. 1457
 Breast Cancer, 56, p. 1393
 Burn Injury, 26, p. 511
 Chronic Kidney Disease, 51, p. 1260
 Cirrhosis, 48, p. 1172

Colorectal Cancer, 47, p. 1132
 COPD, 31, p. 669
 DKA, 53, p. 1319
 Dysrhythmia: Ventricular Tachycardia, 39, p. 907
 Fluid and Electrolyte Imbalance, 17, p. 331
 Glaucoma and Diabetic Retinopathy, 22, p. 434
 Gonococcal Infection, 57, p. 1410
 Graves Disease, 54, p. 1350
 Health Disparities, 2, p. 33
 Heart Failure, 38, p. 881
 Hip Fracture and Revision Arthroplasty, 67, p. 1671
 HIV Infection, 15, p. 262
 Insomnia, 8, p. 117
 Intraoperative Patient, 19, p. 363
 Laryngeal Cancer, 29, p. 593
 Leukemia, 34, p. 762
 Mechanical Ventilation, 28, p. 574
 Melanoma and Dysplastic Nevi, 25, p. 492
 Ménière Disease, 23, p. 454
 Myocardial Infarction, 37, p. 856
 Obesity, 45, p. 1048
 Older Adults, 5, p. 79
 Osteoporosis/Hip Fracture, 68, p. 1693
 Pain, 9, p. 144
 Painful Bladder and Frequent Urination, 50, p. 1229
 Patient and Caregiver Teaching, 4, p. 60
 PCOS, 58, p. 1432
 Peptic Ulcer Disease, 46, p. 1085
 Peripheral Artery Disease, 41, p. 958
 Pneumonia and Lung Cancer, 30, p. 629
 Postoperative Patient, 20, p. 383
 Preoperative Patient, 18, p. 348
 Pressure Injury, 12, p. 196
 Primary Hypertension, 36, p. 816
 SCI, 65, p. 1619
 Seizure Disorder With Headache, 63, p. 1570
 Shock, 42, p. 982
 Spiritual Distress at End of Life, 10, p. 159
 Stress-Induced Illness, 7, p. 103
 Stroke, 62, p. 1536
 Substance Use Disorder, 11, p. 174
 Trauma, 21, p. 403
 Traumatic Brain Injury, 61, p. 1512
 Undernutrition, 44, p. 1028
 Valvular Heart Disease, 40, p. 929

Applying Clinical Judgment With Multiple Patients Case Studies

Perioperative and Emergency Care, Section 4, p. 405
 Problems of Ingestion, Digestion, Absorption, and Elimination, Section 9, p. 1174
 Problems of Oxygenation: Perfusion, Section 8, p. 984
 Problems of Oxygenation: Transport, Section 7, p. 764
 Problems of Oxygenation: Ventilation, Section 6, p. 690
 Problems of Urinary Function, Section 10, p. 1263
 Problems Related to Altered Sensory Input, Section 5, p. 513

- Problems Related to Comfort and Coping, Section 2, p. 176
 Problems Related to Homeostasis and Protection, Section 3, p. 333
 Problems Related to Movement and Coordination, Section 12,
 p. 1730
 Problems Related to Regulatory and Reproductive Mecha-
 nisms, Section 11, p. 1459

Assessment Case Studies

- Auditory System, 23, p. 438
 Cardiovascular System, 35, p. 773
 Endocrine System, 52, p. 1272
 Gastrointestinal System, 43, p. 994
 Hematologic System, 33, p. 700
 Integumentary System, 24, p. 460
 Musculoskeletal System, 66, p. 1627
 Nervous System, 60, p. 1470
 Reproductive System, 55, p. 1360
 Respiratory System, 27, p. 520
 Urinary System, 49, p. 1183
 Visual System, 22, p. 411

DIAGNOSTIC STUDIES TABLES

- Auditory System, 23, p. 443
 Blood Studies: Urinary System, 49, p. 1189
 Cardiovascular System, 35, p. 788
 CBC Studies, 33, p. 708
 Clotting Studies, 33, p. 708
 Common Preoperative Diagnostic Studies, 18, p. 342
 Electrographic Studies: Nervous System, 60, p. 1481
 Fertility Studies, 55, p. 1369
 GI System, 43, p. 1002
 Hematologic System, 33, p. 711
 Integumentary System, 24, p. 468
 Interventional Studies, 55, p. 1368
 Interventional Studies: Cardiovascular System, 35, p. 793
 Interventional Studies: Musculoskeletal System, 66, p. 1636
 Laboratory Studies: GI System, 43, p. 1005
 Liver Function Tests, 43, p. 1006
 Miscellaneous Blood Studies, 33, p. 710
 Musculoskeletal System, 66, p. 1634
 Oxygenation, 27, p. 530
 Respiratory System, 27, p. 534
 Radiologic Studies: Endocrine System, 52, p. 1283
 Radiologic Studies: Male and Female Reproductive Systems,
 55, p. 1367
 Radiologic Studies: Nervous System, 60, p. 1479
 Respiratory System, 27, p. 534
 Serology Studies: Cardiovascular System, 35, p. 786
 Serology Studies: Male and Female Reproductive Systems, 55,
 p. 1367
 Serology Studies: Musculoskeletal System, 66, p. 1634
 Serology and Urine Studies: Endocrine System, 52, p. 1279
 Shock, 42, p. 964
 Sputum Studies, 27, p. 533
 Stroke, 62, p. 1523
 Urinary System, 49, p. 1190
 Urine, 49, p. 1188
 VTE, 41, p. 949
 Viral Hepatitis, 48, p. 1140
 Visual System, 22, p. 418

DRUG THERAPY TABLES

- Acute and Chronic Glaucoma, 22, p. 432
 Acute and Chronic Pancreatitis, 48, p. 1162
 Adjuncts to General Anesthesia, 19, p. 361
 Adjuvant Drugs Used for Pain, 9, p. 133
 AD, 64, p. 1584
 Androgen Deprivation Therapy for Prostate Cancer, 59, p. 1447
 Antibiotics, 15, p. 242
 Anticoagulant Therapy, 41, p. 950
 Antidiarrheal Drugs, 47, p. 1091
 Antidysrhythmic Drugs, 39, p. 900
 Antihypertensive Agents, 36, p. 806
 Antithrombotic Therapy for Atrial Fibrillation and Atrial
 Flutter, 39, p. 895
 Antivirals for Herpes and Cytomegalovirus Infections, 15, p. 243
 Asthma, 31, p. 647
 Asthma and COPD, 31, p. 648
 Bacterial Community-Acquired Pneumonia, 30, p. 602
 Breast Cancer, 56, p. 1385
 Burns, 26, p. 504
 Causes of Medication Errors by Older Adults, 5, p. 77
 Chemotherapy, 16, p. 278
 Chronic Stable Angina and Acute Coronary Syndrome, 37, p.
 834
 Cirrhosis, 48, p. 1154
 Combination Therapy for Hypertension, 36, p. 809
 Common Bases for Topical Medications, 25, p. 488
 Common Preoperative Agents, 18, p. 345
 Constipation, 47, p. 1096
 Diseases/Disorders Treated With Corticosteroids, 54, p. 1348
 Disease-Modifying Drugs for Multiple Sclerosis, 63, p. 1559
 Diuretic Agents, 36, p. 808
 Drugs That May Cause Photosensitivity, 25, p. 472
 Effects and Side Effects of Corticosteroids, 54, p. 1348
 GERD and Peptic Ulcer Disease, 46, p. 1060
 General Anesthesia, 19, p. 360
H. pylori Infection, 46, p. 1071
 Heart Failure, 38, p. 869
 Hematopoietic Growth Factors Used in Cancer Treatment, 16,
 p. 292
 HIV Infection, 15, p. 254
 Hormone Therapy, 16, p. 291
 Hyperlipidemia, 37, p. 828
 Immunosuppressive Therapy, 14, p. 233
 Infertility, 58, p. 1413
 Inflammation and Healing, 12, p. 184
 Inflammatory Bowel Disease, 47, p. 1108
 Insomnia, 8, p. 110
 Insulin Plans, 53, p. 1292
 Leukemia, 34, p. 748
 LTBI Regimens, 30, p. 608
 Managing Side Effects of Pain Medications, 9, p. 128
 Methods of Chemotherapy Administration, 16, p. 278
 Nausea and Vomiting, 46, p. 1052
 OA, 69, p. 1700
 Obesity, 45, p. 1041
 Opioid Analgesics, 9, p. 131
 Oral Agents and Noninsulin Injectable Agents, 53, p. 1297
 Osteoporosis, 68, p. 1692
 Parkinson Disease, 63, p. 1564

Pulmonary Hypertension, 30, p. 621
 RA, 69, p. 1706
 Replacement Factors for Hemophilia, 34, p. 737
 Rhinitis and Sinusitis, 29, p. 582
 Safe Medication Use by Older Adults, 5, p. 77
 Select Antiepileptic Agents, 63, p. 1549
 Select Immunotherapies and Targeted Therapies, 16, p. 289
 Select Nonopioid Analgesics, 9, p. 129
 Shock, 42, p. 973
 Smoking Cessation, 11, p. 166
 Suggested Options for COPD Treatment, 31, p. 663
 Tuberculosis, 30, p. 607
 Tuberculosis Treatment Regimens, 30, p. 608
 Types of Insulin, 53, p. 1291
 Viral HBV and HCV, 48, p. 1142
 Voiding Dysfunction, 50, p. 1222

EMERGENCY MANAGEMENT TABLES

Abdominal Trauma, 47, p. 1101
 Acute Abdominal Pain, 47, p. 1099
 Acute GI Bleeding, 46, p. 1083
 Acute Soft Tissue Injury, 67, p. 1641
 Acute Thyrotoxicosis, 54, p. 1334
 Anaphylactic Shock, 14, p. 225
 Chest Injuries, 30, p. 614
 Chest Pain, 37, p. 847
 Chest Trauma, 30, p. 614
 Depressant Toxicity, 11, p. 170
 DKA, 53, p. 1311
 Dysrhythmias, 39, p. 890
 Emergency Management Tables Throughout the Book, 21, p. 386
 Eye Injury, 22, p. 421
 Fractured Extremity, 67, p. 1650
 Head Injury, 61, p. 1500
 Hypertensive Crisis, 36, p. 815
 Hyperthermia, 21, p. 394
 Hypoglycemia, 53, p. 1313
 Hypothermia, 21, p. 395
 Inhalation Injury, 26, p. 500
 SCI, 65, p. 1600
 Shock, 42, p. 971
 Stimulant Toxicity, 11, p. 169
 Stroke, 62, p. 1526
 Submersion Injuries, 21, p. 397
 Tonic-Clonic Seizures, 63, p. 1548

ETHICAL/LEGAL DILEMMAS BOXES

Advance Directives, 31, p. 669
 Allocation of Resources, 51, p. 1256
 Board of Nursing Disciplinary Action, 11, p. 173
 Brain Death, 61, p. 1496
 Competence, 38, p. 875
 Confidentiality and HIPAA, 57, p. 1409
 Do Not Resuscitate, 40, p. 923
 Durable Power of Attorney for Health Care, 6, p. 86
 Entitlement to Treatment, 67, p. 1658
 Genetic Testing, 13, p. 210
 Good Samaritan, 21, p. 402
 Health Disparities, 2, p. 22

Individual vs. Public Health Protection, 15, p. 255
 Informed Consent, 18, p. 344
 Medical Futility, 16, p. 298
 Pain Management, 34, p. 728
 Pain Management at End of Life, 10, p. 152
 Patient Adherence, 30, p. 608
 Rationing, 48, p. 1157
 Religious Beliefs, 34, p. 757
 Right to Refuse Treatment, 65, p. 1611
 Scope and Standards of Practice, 39, p. 899
 Social Networking: HIPAA Violation, 1, p. 15
 Withdrawing Treatment, 51, p. 1260
 Withholding Treatment, 61, p. 508

EVIDENCE-BASED PRACTICE BOXES

Adherence to TB Treatment Program, 30, p. 610
 Breast Cancer Treatment, 56, p. 1388
 Condom Use and HIV, 15, p. 258
 Decreasing Readmissions for Heart Failure, 38, p. 875
 Depression in Patients With Hemophilia, 34, p. 738
 Effect of a Sexual Health Discharge Program, 59, p. 1443
 Enteral Nutrition and Stroke Rehabilitation, 62, p. 1532
 Health-Related Quality of Life in Patients With Cushing Syndrome, 54, p. 1345
 Hearing Aid Rehabilitation, 23, p. 452
 HPV Vaccine and Young Males, 57, p. 1403
 Interactive Self-Management and DM, 53, p. 1306
 Managing Pain in the Patient With Communication Problems, 9, p. 142
 The Mechanically Ventilated Patient and Early Mobilization, 28, p. 563
 Medication Adherence in Hypertension, 36, p. 814
 Nurse-Driven Protocol for Catheter Removal, 50, p. 1199
 Nutrition and FMS, 69, p. 1727
 Oral Health and CKD, 51, p. 1245
 Participating in Cardiac Rehabilitation, 37, p. 854
 Participating in Post-Fall Huddles, 1, p. 10
 Physical Activity and Chronic Obstructive Pulmonary Disease, 31, p. 667
 Postoperative Delirium, 64, p. 1591
 Preoperative Ostomy Education, 47, p. 1121
 Screening and Testing of Hepatitis C Virus, 48, p. 1145
 Self-Management Education for Ulcerative Colitis, 47, p. 1111
 Tanning Booths and Skin Cancer, 25, p. 472
 Technology-Based Devices and Preoperative Anxiety, 18, p. 337
 Use of Negative Pressure Wound Therapy (NPWT), 12, p. 191

FOCUSED ASSESSMENT BOXES

Auditory System, 23, p. 441
 Cardiovascular System, 35, p. 779
 Endocrine System, 52, p. 1278
 GI System, 43, p. 1002
 Hematologic System, 33, p. 707
 Integumentary System, 24, p. 465
 Musculoskeletal System, 66, p. 1634
 Nervous System, 60, p. 1476
 Reproductive System, 55, p. 1366
 Respiratory System, 27, p. 529
 Urinary System, 49, p. 1187
 Visual System, 22, p. 417