

Contents

Preface	v
1. Paleopathology and Paleomedicine	1
Introduction	1
Paleopathology: Methods and Problems	4
Mummies and Signs of Disease	10
Iceman	12
Paleomedicine and Surgery	12
Healing Rituals, Traditions, and Magic	15
Suggested Readings	22
2. Medicine in Ancient Civilizations: Mesopotamia and Egypt	25
Introduction	25
Mesopotamia	26
Hammurabi's Code of Laws	29
Egypt	32
The Medical Papyri	44
Suggested Readings	50
3. The Medical Traditions of India and China	53
India	53
Ayurvedic Medicine, the Science of Life	57
Surgery, Anatomy, and Dissection	62
Chinese Medicine: Classical, Traditional, and Modern	66
The Three Celestial Emperors: Fu Hsi, Shen Nung, and Huang Ti	68
Classical Chinese Concepts of Anatomy	70
Sages, Physicians, Healers, and Quacks	73
Acupuncture and Moxibustion	76
Drug Lore and Dietetics	78
Surgery	81
The Chinese Cultural Sphere	82
Medical Practice in Modern China	84
Suggested Readings	85

4. Greco-Roman Medicine	89
Philosophy and Medicine	91
Hippocrates and the Hippocratic Tradition	93
The Nature of Disease and the Doctrine of the Four Humors	98
The Cult of Asclepius, God of Medicine	103
Alexandrian Science and Medicine	106
Medicine in the Roman World	114
On Galen and Galenism	121
Galen on Anatomical Procedures	123
Galen on Physiology: Blood, Breath, Pneuma, and Spirits	125
Galen on Therapeutics and the Causes of Disease	127
Suggested Readings	132
5. The Middle Ages	135
Monasteries and Universities	141
Medical Education and Practice	143
Surgery in the Middle Ages	147
Women and Medicine	149
Epidemic Diseases of the Middle Ages	156
Bubonic Plague	156
From Leprosy to Hansen's Disease	170
Islamic Medicine	178
Prophetic Medicine	179
Hospitals and Clinical Medicine	182
The Great Sages of Islamic Medicine	184
The Strange Case of Ibn an-Nafis	190
The Survival of Greco-Islamic Medicine	192
Suggested Readings	194
6. The Renaissance and the Scientific Revolution	197
Inventions That Changed the World	198
The Medical Humanists	200
Autopsies, Art, and Anatomy	203
Andreas Vesalius on the Fabric of the Human Body	206
Medicine and Surgery	213
Ambroise Paré and the Art of Surgery	215
The Occult Sciences: Astrology and Alchemy	219
Syphilis, the Scourge of the Renaissance	226
Syphilis and Human Experimentation	238
The Discovery of the Circulation of the Blood	240
William Harvey and the Circulation of the Blood	247
Harvey's Paradoxical Influence: Therapy by Leech and Lancet	254

Blood Transfusion	258
New Hearts for Old	262
Santorio Santorio and the Quantitative Method	263
Suggested Readings	266
7. Native Civilizations and Cultures of the Americas	271
Native Civilizations of Latin America	277
Aztec Civilization	278
Mayan Civilization	286
Incan Civilization	289
Diseases in the Americas	293
Suggested Readings	296
8. The Americanization of Old World Medicine	299
The Revolutionary War and New Republic	304
The Medical Profession	313
Regional Distinctiveness	318
The Civil War	320
Suggested Readings	331
9. Clinical and Preventive Medicine	335
Thomas Sydenham, the “English Hippocrates”	337
On the Miseries of Gout and the Virtues of Colchicine	340
Quinine and Malaria	342
The Eighteenth-Century Foundations of Modern Medicine	345
Enlightenment Philosophy and Medical Reform	348
Nutrition, Malnutrition, Health, and Disease	351
Smallpox: Inoculation, Vaccination, and Eradication	362
Edward Jenner, Cowpox, and Vaccination	370
The Global Eradication of Smallpox	375
Suggested Readings	380
10. The Medical Counterculture: Unorthodox and Alternative Medicine	383
The Medical Marketplace	383
Health Reform Movements	384
Domestic Medicine	397
Medical Sects	398
Osteopaths and Chiropractors	406
Alternative, Complementary, and Integrative Medicine	412
Suggested Readings	415
11. Women and Medicine	419
Puerperal or Childbed Fever	419
Oliver Wendell Holmes	421

Ignaz Philipp Semmelweis	423
Midwives and Medical Men	432
The Evolution of the Nurse	446
“Woman’s Nature” and Women Doctors	448
Suggested Readings	457
12. The Art and Science of Surgery	461
Anesthesia	462
Laughing Gas, Ether, and Surgical Anesthesia	466
Postsurgical Infections	480
Joseph Lister and the Antiseptic System	484
Antisepsis and Asepsis	487
From Hospitalism to Nosocomial Infections	490
Suggested Readings	491
13. Medical Microbiology and Public Health	495
Louis Pasteur	498
Robert Koch	507
Invisible Microbes and Virology	529
Suggested Readings	538
14. Diagnostics and Therapeutics	541
The Art and Science of Diagnosis	543
Serum Therapy	550
Antibiotics and Immunology	554
Natural Defenses: Humoral or Cellular?	567
Genetics, Genomics, and Medicine	578
Paradoxical Progress	580
Suggested Readings	589
Index	591