

Clinical Methods in **Pediatrics**

Fifth Edition

is the thoroughly revised and updated edition of the successful and popular book which comes with the premise to fulfill the requirements of students pursuing MBBS or postgraduate courses in pediatrics.

This edition carries a new chapter on evaluation of adolescents. With this we are also introducing the students to the HEADSSS and other popular screening tools needed for assessment of the adolescents. Other notable change in the book includes the new concepts of nutrient requirements released by the ICMR in 2020. We have for the first time included the concept of estimated average requirements (EAR) alongside RDAs. The coronavirus pandemic which originated in 2019 has disturbed our lives and has required a change and upscaling of a protection for the students and other healthcare workers, while examining the patient. Section on the universal precautions now include discussion on doffing and donning of personal protection equipment (PPE). Appropriate use of sanitizers is also highlighted. All other chapters have been thoroughly updated and revised.

This book retains its major charms and strengths in terms of a pleasing 4-color format, student-friendly presentation, logical concepts, easy language, and graphical representation for easy retention. Also includes a large number of figures and photographs to facilitate better visualization of clinical examination and diagnosis.

Piyush Gupta MD, FNNF, FIAP, FAMS

is Professor and Head, Department of Pediatrics, University College of Medical Sciences, Delhi, and National President, Indian Academy of Pediatrics, 2021.

A renowned academician, teacher, researcher, author and editor, he has published more than 250 papers and edited/authored 35 titles including *Textbook of Pediatrics (for undergraduates)*, *PG Textbook of Pediatrics*, *Textbook of Community Medicine*, *Essential Pediatric Nursing*, *Emergencies in Pediatrics*, *Principles of Medical Education*, *How to Write a Thesis*, *Severe Acute Malnutrition*, and *Ghai Essential Pediatrics*. He has served as Editor-in-Chief of *Indian Pediatrics*, official journal of the Indian Academy of Pediatrics, for 6 years.

He has been conferred fellowships by the Royal College of Paediatrics, UK; Indian Academy of Pediatrics; National Neonatology Forum, India; National Academy of Medical Sciences, India; and awarded by the American Academy of Pediatrics for his work on micronutrients. His major initiatives include workshops on research methodology and thesis and scientific paper writing; and increasing awareness for practicing rational management of diarrhea and pneumonia in children.

Prof Gupta has served as technical expert/advisor to Government of India, WHO, UNICEF, and ICMR. He has served as the Joint Secretary of South Asia Pediatric Association. He has been awarded more than 25 orations including the prestigious KL Wig Oration by the National Academy of Medical Sciences for his contribution to medical education in India. He has been bestowed with the 'Teacher of Excellence' award by the Vice President of India.



Piyush Gupta
Clinical Methods in
Pediatrics



Dedicated to Education



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Disclaimer

Science and technology are constantly changing fields. New research and experience broaden the scope of information and knowledge. The author has tried his best in giving information available to him while preparing the material for this book. Although all efforts have been made to ensure optimum accuracy of the material, yet it is quite possible some errors might have been left uncorrected. The publisher, the printer and the author will not be held responsible for any inadvertent errors, omissions or inaccuracies.

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to

*my students
who remain
my best teachers*

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Preface to the Fifth Edition

I am overwhelmed by the response received by the last four editions of this book, within 12 years of its first release in 2009, acclaimed by the students and teachers of pediatrics in India and other countries of South Asia. The book has now established itself as the leading text in its category.

Care of adolescents is recognized as a part of responsibility of the pediatricians the world over. The change is evident in pediatric practice in India also, where parents approach the pediatricians only issues related to their teenage children. Thus, the pediatricians must be prepared to tackle the adolescents and communicate with them to elicit a proper history and prepare for examination. This necessitates a dissimilar approach as the problems of adolescence are of a different nature. Considering these points and in keeping with the demand and need of undergraduate students, this edition carries a new chapter on Evaluation of Adolescents. With this we are also introducing the students to the HEADSSS and other popular screening tools needed for assessment of the adolescents.

Other notable change in the book includes the new concepts of energy requirements released by the ICMR in 2020. Nutrient requirements for Indians, for the first time include the concept of estimated average requirements (EAR) alongside RDAs. The coronavirus pandemic which originated in 2019 has disturbed our lives and has required a change and upscaling of a protection for the students and other healthcare workers, while examining the patient. To take care of this, the universal precautions now include a new section on personal protection equipment (PPE) that details the procedures of doffing and donning of gloves, caps, gowns, goggles, shoe covers and other protective gear. Hand washing and use of appropriate sanitizers is also discussed. All other chapters have been thoroughly updated and revised.

This edition, however, retains its major charms and strengths: A pleasing 4-color format, student-friendly structure, logical concepts, easy language, and graphical retention. The typesetting is pleasant with better space utilization. Number of figures and photographs has been increased to facilitate visualization of clinical examination and its findings.

I thank Mr Satish K Jain, CMD CBS Publishers and Distributors, for his belief in this project and Mr YN Arjuna, Senior Vice-President—Publishing, Editorial and Publicity and Ms Ritu Chawla, General Manager for their painstaking efforts in bringing out this edition. This entire exercise would not have been possible without the contributing authors who are the backbone of this venture. I am also grateful to the University of Delhi to grant me a sabbatical so that I could bring out this edition timely, despite increase in my responsibilities and workload both within and outside the institution.

I welcome comments concerning omission and errors, healthy reviews regarding contents, critical thoughts and suggestions for further edition. Constructive criticism, reviews, comments and suggestions may please be mailed to prof.piyush.gupta@gmail.com

Piyush Gupta

Preface to the First Edition

A few years back, one of my brighter students asked me a simple question “... tell me of a book which I can refer to for my needs pertaining to history-taking in pediatrics, assessment of diet and feeding practices, obtaining and interpreting anthropometry, evaluating development, assessing a newborn infant and performing age-specific systemic examination tailored to children.” And I started searching for one. Finally, when the search proved futile, I made up my mind to write a book encompassing all these issues. I got a few experts together and with their help in respective sub-specialties of pediatrics, the ball started rolling. This book is the culmination of efforts of many people, the contributors being in the forefront. Only the readers will tell how it has shaped up.

The book is phased into 15 chapters, beginning with the art of communicating with the child and parents. There are plenty of tables, figures and boxes to highlight important information. An elaborate index is provided at the end to facilitate easy retrieval of information. I have endeavored to ensure a consistency in style and minimum of overlap—all eternal headaches for the editor of a multi-authored book. I believe that this book will make a useful contribution to the existing medical literature. The book comes with a promise—the perfect is yet to come!

I thank Mr Satish Jain, Managing Director, CBS Publishers & Distributors, for his overall support and belief in this book. I remain grateful to all the authors for their contributions. They remain the backbone of this venture. I would like to specifically name two of my dear colleagues, Pooja Dewan and Jaya Shankar Kaushik, who helped me at every stage of preparation of this book, in every possible manner. This volume would not have been possible without their dedicated efforts. A near error-free output was fashioned entirely by the efforts of Mr Rajesh Kumar and Sh SS Gehlot. No amount of words can express my gratitude to my wife (Anjali) and children (Payal and Aayush), who gave me unflinching support and allowed me ample time for completing this book.

I welcome comments concerning omissions and errors, healthy reviews regarding content, critical thoughts, and suggestions for further editions. Critics’ reviews, comments, and suggestions may please be mailed to prof.piyush.gupta@gmail.com.

Piyush Gupta

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Contents

<i>Contributing Authors</i>	<i>vii</i>
<i>Preface to the Fifth Edition</i>	<i>ix</i>
<i>Preface to the First Edition</i>	<i>xi</i>
1. Effective Communication with Child and Caretakers	1
1.1 Defining Communication	1
1.2 Importance of Communication Skills	1
1.3 Process of Communication	2
1.4 Giving Difficult News to Parents	8
2. History-taking in Pediatrics	10
2.1 Objectives, Process, and Sequence of History-taking	10
2.2 Components of History-taking	12
2.3 Analysis of History: Making a Broad Hypothesis	30
2.4 Presenting the History	32
3. Evaluation of Adolescents	33
3.1 Importance of Adolescence	33
3.2 History Taking in Adolescents	34
3.3 Psychosocial Screening	37
3.4 Mental Health Issues	39
3.5 Adolescents with Chronic Disorders	42
3.6 Physical Examination in Adolescents	42
4. Assessment of Diet and Feeding Practices	44
4.1 Importance and Objectives of the Dietary History	44
4.2 Assessment of Diet and Feeding Practices in Infants Less than 6 months	45
4.3 Assessment of Dietary Intake in Children More than 6 months	48
5. Anthropometry: Assessment of Growth	65
5.1 Introduction	65
5.2 Statistical Principles in Assessment of Growth	65
5.3 Anthropometric Parameters, Tools, and Procedures	68
5.4 Interpretation of Growth Measurements	79
5.5 Evaluation of Dental Growth	83
5.6 Assessment of Nutrition by Anthropometry	83
5.7 Recognizing Disorders of Physical Growth	91
5.8 Assessment of Sexual Maturity	94

6. Developmental Assessment	119
6.1 Importance of Developmental Assessment	119
6.2 Normal Development	121
6.3 History of Development	132
6.4 Developmental Examination	135
6.5 Process of Assessment	138
6.6 Interpretation of Developmental Assessment	146
7. General Physical Examination	149
7.1 Preparing for Examination	149
7.2 The First Impression	150
7.3 Vital Parameters	151
7.4 General Markers of Disease	162
7.5 Head to Toe Examination	171
7.6 Peripheral Signs of Micronutrient Deficiency	189
7.7 Looking for Dysmorphism and Congenital Abnormalities	192
8. Examination of the Respiratory System	202
8.1 Introduction	202
8.2 Common Symptoms Related to the Respiratory System	202
8.3 Relevant Anatomy and Surface Landmarks	208
8.4 General Examination Relevant to the Respiratory System	210
8.5 Examination of the Chest	214
8.6 Physical Findings in Common Respiratory Conditions	223
8.7 Investigations Related to the Respiratory System	225
8.8 Special Considerations Related to the COVID-19 Pandemic	233
9. Evaluation of the Cardiovascular System	235
9.1 Approaching a Child with Possible Cardiovascular Disorder	235
9.2 History-taking	236
9.3 Physical Examination	245
9.4 Pulse and Blood Pressure	260
9.5 Examination of the Precordium	269
9.6 Heart Sounds	280
9.7 Heart Murmurs	287
9.8 Specific Valvular Lesions	292
9.9 Cardiac Diagnosis	296
10. Examination of the Abdomen	302
10.1 Aim and Scheme of Abdominal Examination	302
10.2 Common Symptoms Related to the Abdomen	302
10.3 Relevant Anatomy and the Landmarks	309
10.4 General Examination Relevant to Abdominal Examination	311
10.5 Examination of the Abdomen	313
10.6 Relevant Systemic Examination	327
11. Examination of the Nervous System	330
11.1 Aim and Scheme of Neurological Examination	330
11.2 Common Symptoms Related to Central Nervous System	331

- 11.3 Key Concepts in Anatomy and Physiology 339
- 11.4 Examination in Neurological Disorders 348
- 11.5 Consciousness and Higher Mental Function 350
- 11.6 Cranial Nerve Examination 361
- 11.7 Motor System 386
- 11.8 Involuntary Movements 406
- 11.9 The Sensory System 407
- 11.10 Cerebellar Signs 410
- 11.11 Autonomic Nervous System 413
- 11.12 Meningeal Signs 415
- 11.13 Head and Spine 416
- 11.14 Localization of Neurological Lesion 418
- 11.15 The Final Diagnosis 423

12. Examination of the Eye**425**

- 12.1 Aim and Scheme of Eye Examination 425
- 12.2 Common Symptoms Related to the Eye 425
- 12.3 Examination of the Eye 430
- 12.4 Examination of the Fundus Oculi 441
- 12.5 Assessment of Intraocular Pressure 447
- 12.6 Assessment of Color Vision 447
- 12.7 Assessment of Visual Fields 447
- 12.8 Ocular Manifestations of Systemic Disorders 448

13. Evaluation of the Ear, Nose, and Throat**451**

- 13.1 Aim and Scheme of Ear, Nose, Throat Examination 451
- 13.2 Common Symptoms Related to the Ear 451
- 13.3 Examination of the Ear 453
- 13.4 Common Symptoms Related to the Nose 458
- 13.5 Examination of the Nose 460
- 13.6 Symptoms Related to the Oral Cavity and Oropharynx 462
- 13.7 Examination of the Oral Cavity and Oropharynx 463
- 13.8 Symptoms of Laryngeal Involvement 463
- 13.9 Examination of the Larynx 464

14. Examination of the Skin**466**

- 14.1 Aim, Importance, and Scheme of Skin Examination 466
- 14.2 History and Examination of Cutaneous Lesions 466
- 14.3 Morphology of Skin Lesions 467
- 14.4 Skin Hemorrhages and Vascular Lesions 484
- 14.5 Hair and Nails 486

15. Evaluation of the Newborn**491**

- 15.1 Definitions 491
- 15.2 When to Evaluate? 492
- 15.3 History-taking 496
- 15.4 Physical Examination 498
- 15.5 Examination of the Neurological System 530
- 15.6 Gestational Age Assessment 536
- 15.7 The 7-Point Rapid Newborn Assessment 544

16. Evaluation of Locomotor System	547
16.1 Introduction	547
16.2 Common Symptoms Related to Locomotion	547
16.3 Screening Evaluation	550
16.4 Examination of the Spine	553
16.5 Examination of the Sacroiliac Joints	555
16.6 Examination of the Hip Joint	556
16.7 Examination of the Knee Joint	557
16.8 Examination of the Ankle and the Foot	561
16.9 Examination of the Shoulder Joint	563
16.10 Examination of the Elbow Joint	565
17. Clinical Approach to Common Cases	567
17.1 Child with Fever	567
17.2 Child with Loose Stools	577
17.3 Child with Edema	580
17.4 Child with Pallor	583
17.5 Child with Congenital Heart Disease (CHD)	589
17.6 Child with Seizures	592
17.7 Child with Hemiplegia	596
18. Practical Procedures	601
18.1 Informed Consent	601
18.2 Universal Precaution and Asepsis Routines	603
18.3 Intravascular Access	611
18.4 Intraosseous Access	617
18.5 Sampling Procedures	619
18.6 Administration of Medications	621
18.7 Fluid Therapy	625
18.8 Oxygen Therapy	633
18.9 Nasogastric Tube Insertion	636
18.10 Neonatal Resuscitation	637
18.11 Pediatric Basic Life Support (BLS)	647
18.12 Removal of Foreign Body	649
18.13 Urinary Procedures	651
18.14 Lumbar Puncture	653
18.15 Ascitic Tap (Paracentesis)	655
18.16 Pleural Aspiration (Thoracocentesis)	656
18.17 Bone Marrow Aspiration and Biopsy	658
18.18 Liver Biopsy	660
18.19 Kidney Biopsy	661