

# PEDIATRICS

**Edited by**  
**Mohsen Ziai, M.D.**

With  
Charles A. Janeway, M.D.  
Robert E. Cooke, M.D.

Second Edition



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**Edited by**  
**Mohsen Ziai, M.D.**

Professor of Pediatrics, Tehran University; Director, Reza Pahlavi Medical Center, Tehran, Iran; Lecturer in Pediatrics, The Johns Hopkins University School of Medicine, Baltimore, Maryland

**With**  
**Charles A. Janeway, M.D.**  
Professor of Pediatrics, Harvard Medical School; Physician-in-Chief, Emeritus, Children's Hospital Medical Center, Boston, Massachusetts

**Robert E. Cooke, M.D.**  
Vice Chancellor for Health Sciences, University of Wisconsin Medical School; Pediatrician, University of Wisconsin Health Sciences Center, Madison, Wisconsin; Former Given Foundation Professor of Pediatrics and Director, Department of Pediatrics, The Johns Hopkins University School of Medicine; Former Pediatrician-in-Chief, The Johns Hopkins Hospital, Baltimore, Maryland

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This book is dedicated to the health of children throughout the world, particularly those who are the innocent victims of ignorance and superstition, hunger and poverty, disease and overpopulation

## Preface

The excellent reception accorded the first edition of *Pediatrics* by medical students, physicians, and nurses has given us the courage to embark upon the formidable task of thoroughly revising the text. The impressive body of knowledge in the fields of pediatrics and human biology acquired since the publication of the first edition has necessitated complete rewriting of several chapters and considerable changes in the others.

New material has been added, including comprehensive coverage of the management of conditions that are likely to present themselves as emergencies in the physician's office or in the emergency rooms of hospitals. The appendix on emergencies is based on current practices at the Children's Hospital Medical Center in Boston as presented in *Manual of Pediatric Therapeutics*, published by Little, Brown and Company in 1974.

As with the first edition, discussions of rare and poorly understood subjects and of those that could easily be referred to in the standard texts have been intentionally condensed except for material pertaining to pathophysiology and therapy. Certain important areas of pediatrics, such as metabolic and endocrine disorders, are discussed at greater length. Repetitions have been avoided whenever possible unless they facilitate comprehension, as for instance in the chapter on the newborn infant.

Appendix A, which deals with differential diagnosis, constitutes one of the most important parts of the book. It has not been possible to avoid a certain lack of uniformity in this particular section, as our aims have differed in the presentation of the various subjects: in some cases methodology and approach to diagnosis, indication of pitfalls, or discussion of pathophysiology was considered important; in others, the mere provision of a reminder list where this would be useful for the student seemed sufficient.

Even though numerous authors contributed to the present edition, the material has been integrated in such a way as to preserve the format of the first edition. It is hoped that the reader will find here the proper perspectives about the field of pediatrics and child health and that in this way we may have been of some help in promoting better care for children.

Many people who are not credited as contributors have assisted us in the preparation of this edition. The list includes Mrs. M. Raissiani, Harvey R. Colton, M.D., David Wells, M.D., and Hossein Sharif-Yazdi, M.D. Mrs. Joann C. Stang served as an outstanding executive secretary and editor during the preparation of the manuscript. Without her tireless efforts and unlimited support, as well as that of Mrs. Caroline Esfandiary, this work would not have been possible.

The efficiency of Mr. Fred Belliveau and his staff at Little, Brown and Company, particularly Mr. George D. McKinnon, Miss Judith L. Haigh, and Ms. Nancy H. Megley, made the thousands of miles separating the editors and contributors seem almost imperceptible. For this and many other sacrifices we express our gratitude.

M. Z.  
C. A. J.  
R. E. C.

# Contributing Authors

## **PHILIP ADLER, M.D.**

Clinical Assistant Professor of Pediatrics, University of South Florida College of Medicine; Senior Attending Physician, Tampa General Hospital and St. Joseph's Hospital, Tampa, Florida

Chapter 27; Appendix A, Section 11

## **GHOLAM-HOSSEIN AMIRHAKIMI, M.D.**

Associate Professor of Pediatrics, Pahlavi University Medical School; Pediatrician, Nemazee Hospital, Shiraz, Iran

Chapter 7; Appendixes C, D

## **HARRY BAKWIN, M.D.**

Late Professor of Clinical Pediatrics, New York University School of Medicine; Visiting Physician, Bellevue Hospital, New York, New York

Chapter 31

## **HENRY H. BANKS, M.D.**

Professor and Chairman, Department of Orthopedic Surgery, Tufts University School of Medicine; Orthopedic Surgeon-in-Chief, New England Medical Center Hospitals, Boston, Massachusetts

Chapter 17

## **BLAIR E. BATSON, M.D., M.P.H.**

Professor and Chairman, Department of Pediatrics, University of Mississippi School of Medicine; Chief of Pediatrics and Attending Pediatrician, University of Mississippi Medical Center, Jackson, Mississippi

Chapter 21

## **ALFRED M. BONGIOVANNI, M.D.**

Professor of Pediatrics, The University of Pennsylvania School of Medicine; Director, Division of Pediatric Endocrinology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Appendix A, Section 25

## **JOHN W. CHAMBERLAIN, M.D.**

Late Instructor in Surgery, Emeritus, Harvard Medical School; Associate in Surgery, Emeritus, Children's Hospital Medical Center, Boston, Massachusetts

Appendix B

## **J. JULIAN CHISOLM, Jr., M.D.**

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine; Associate Chief Pediatrician, Baltimore City Hospitals, Baltimore, Maryland

Appendix A, Section 1; Appendix B



**SOLOMON J. COHEN, M.D.**

Associate Clinical Professor of Pediatrics, Columbia University College of Physicians and Surgeons, New York, New York; Chief of Pediatrics, Overlook Hospital, Summit, New Jersey

Chapters 17, 23–25; Appendix A, Sections 2, 10, 12

**THOMAS E. CONE, Jr., M.D.**

Clinical Professor of Pediatrics, Harvard Medical School; Senior Associate in Clinical Genetics and Medicine, Children's Hospital Medical Center, Boston, Massachusetts

*Associate Editor*; Chapter 7; Appendixes B, E

**ROBERT E. COOKE, M.D.**

Vice Chancellor for Health Sciences, University of Wisconsin Medical School; Pediatrician, University of Wisconsin Health Sciences Center, Madison, Wisconsin; Former Given Foundation Professor of Pediatrics and Director, Department of Pediatrics, The Johns Hopkins University School of Medicine; Former Pediatrician-in-Chief, The Johns Hopkins Hospital, Baltimore, Maryland

Chapter 7

**DONALD A. CORNELLY, M.D., M.P.H.**

Professor and Chairman, Department of Maternal and Child Health, The Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland

Chapter 12

**C. WILLIAM DAESCHNER, Jr., M.D.**

Professor and Chairman, Department of Pediatrics, The University of Texas Medical Branch at Galveston, Galveston, Texas

Chapter 15; Appendix A, Section 28

**MATTHEW B. DEBUSKEY, M.D.**

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine; Pediatrician, The Johns Hopkins Hospital, Baltimore, Maryland

Chapters 1, 2, 17, 31

**WARREN F. DODGE, M.D.**

Professor of Pediatrics, The University of Texas Medical Branch at Galveston, Galveston, Texas

Chapter 15

**IHSAN DOGRAMACI, M.D., F.R.C.P. (Lond.)**

Professor and Chairman, Department of Pediatrics, Hacettepe University Faculty of Medicine; Director, Institute of Child Health, Hacettepe University, Ankara, Turkey

Chapters 9, 14, 15

**MILTON H. DONALDSON, M.D.**

Associate Professor of Pediatrics, The University of Pennsylvania School of Medicine; Senior Physician and Associate Director, Division of Oncology, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania

Chapter 19

**JOHN C. DOWER, M.D.**

Professor of Pediatrics, University of California, San Francisco, School of Medicine;  
Director of Pediatric Ambulatory Services, University of California Hospitals and  
Clinics, San Francisco, California

Chapter 14

**SPYROS A. DOXIADIS, M.D.**

President, Institute of Child Health; Director, Pediatric Unit, Aghia Sophia Children's  
Hospital, Athens, Greece; Visiting Professor of Pediatrics, George Washington University  
School of Medicine, Washington, D.C.

Appendix A, Sections 3, 9, 20

**ALLAN L. DRASH, M.D.**

Associate Professor of Pediatrics, The University of Pittsburgh School of Medicine;  
Director, Clinical Research Unit, Children's Hospital of Pittsburgh, Pittsburgh,  
Pennsylvania

Chapters 8, 9

**NANCY B. ESTERLY, M.D.**

Associate Professor of Pediatrics, The University of Chicago Pritzker School of  
Medicine; Attending Physician and Director, Division of Dermatology, Department  
of Pediatrics, Michael Reese Hospital, Chicago, Illinois

Chapter 30; Appendix A, Section 27

**LAURENCE FINBERG, M.D.**

Professor and Chairman, Department of Pediatrics, Albert Einstein College of  
Medicine of Yeshiva University; Chairman, Department of Pediatrics, Montefiore  
Hospital and Medical Center, Bronx, New York

Chapter 9

**CARL C. FISCHER, M.D.**

Professor Emeritus of Pediatrics, Hahnemann Medical College and Hospital;  
Pediatrician-in-Chief Emeritus, Hahnemann Hospital, Philadelphia, Pennsylvania

Chapter 1; Appendix A, Section 9; Appendix B

**IRWIN M. FREEDBERG, M.D.**

Professor of Dermatology, Harvard Medical School; Chief of Dermatology, Beth  
Israel Hospital and Children's Hospital Medical Center, Boston, Massachusetts

Chapter 30

**BENT FRIIS-HANSEN, M.D.**

Professor of Pediatrics and Neonatology, University of Copenhagen; Head, Department  
of Neonatology, University Hospital, Copenhagen, Denmark

Appendix A, Section 17

**DONALD C. FYLER, M.D.**

Associate Professor of Pediatrics, Harvard Medical School; Associate Chief,  
Cardiology Department, Children's Hospital Medical Center, Boston, Massachusetts

Chapter 13

**HOSSEIN GHADIMI, M.D.**

Professor of Pediatrics, State University of New York Downstate Medical Center, Brooklyn; Consultant in Pediatrics, South Nassau Hospital, Oceanside, New York

Chapter 7

**MOHAMMAD GHARIB, M.D.**

Late Professor and Chairman, Department of Pediatrics, Tehran University; Pediatrician-in-Chief, Ahari Children's Hospital Medical Center, Tehran, Iran

Appendix A, Section 5

**MOHSEN GHARIB, M.D.**

Former Teaching Fellow in Pediatrics, Harvard Medical School; Former Fellow in Infectious Diseases, Children's Hospital Medical Center, Boston, Massachusetts

Chapter 22

**GEORGE G. GRAHAM, M.D.**

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine; Professor of Human Nutrition, Department of International Health, The Johns Hopkins University School of Hygiene and Public Health, Baltimore, Maryland

Chapter 10; Appendix A, Section 4

**RICHARD J. GRAND, M.D.**

Assistant Professor of Pediatrics, Harvard Medical School; Associate in Medicine, Children's Hospital Medical Center, Boston, Massachusetts

Chapter 14

**NIILO HALLMAN, M.D.**

Professor of Pediatrics, University of Helsinki School of Medicine; Director, Children's Hospital, Helsinki University Central Hospital, Helsinki, Finland

Appendix A, Section 18

**JAMES W. HANSON, M.D.**

Fellow, Department of Pediatrics, The Johns Hopkins University School of Medicine; Senior Resident, Department of Pediatrics, The Johns Hopkins Hospital, Baltimore, Maryland

Appendixes C, D

**LEONARD C. HARRIS, M.D.**

Professor of Pediatrics, The University of Texas Medical Branch at Galveston; Director of Pediatric Cardiology, The Medical Branch Hospitals, Galveston, Texas

Chapter 12; Appendix A, Sections 6, 8

**DORIS A. HOWELL, M.D.**

Professor and Chairman, Department of Community Medicine, University of California, San Diego, School of Medicine; Pediatrician, University Hospital, San Diego, California

Appendix A, Section 22

HEINZ HUNGERLAND, M.D.

Senior Professor of Pediatrics and Director, University Children's Hospital, Bonn,  
West German Federal Republic

*Associate Editor*

RONALD S. ILLINGWORTH, M.D., D.P.H., D.C.H., F.R.C.P.

Professor of Child Health, University of Sheffield; Paediatrician, Children's Hospital  
and Jessop Maternity Hospital, Sheffield, Yorkshire, England

Chapters 4, 6

CHARLES A. JANEWAY, M.D.

Professor of Pediatrics, Harvard Medical School; Physician-in-Chief, Emeritus,  
Children's Hospital Medical Center, Boston, Massachusetts

Chapters 20–22

J. H. P. JONXIS, M.D.

Professor of Pediatrics, University of Groningen; Head, Department of Pediatrics,  
University Hospital, Groningen, The Netherlands

Chapter 18

FREDERIC M. KENNY, M.D.

Professor of Pediatrics, The University of Pittsburgh School of Medicine; Director,  
Department of Pediatric Endocrinology, Children's Hospital, Pittsburgh, Pennsylvania

Appendix A, Section 26

SHAHRAM KHOSHBIN, M.D.

Clinical Fellow in Neurology, Harvard Medical School; Junior Assistant Resident in  
Neurology, Children's Hospital Medical Center, Boston, Massachusetts

*Associate Editor*

MAURICE E. LAMY, M.D.

Honorary Professor of Medical Genetics, University of Paris Faculty of Medicine;  
Director, Department of Medical Genetics, Hospital for Sick Children, Paris, France

*Associate Editor*

MELVIN D. LEVINE, M.D.

Instructor in Pediatrics, Harvard Medical School; Assistant in Medicine and Director,  
Medical Out-Patient Department, Children's Hospital Medical Center, Boston,  
Massachusetts

Appendix B

EDITH M. LINCOLN, M.D.

Adjunct Professor of Pediatrics, New York University School of Medicine;  
Consultant, Pediatric Service, Bellevue Hospital, New York, New York

Chapter 22

xviii Contributing Authors

PAUL K. LOSCH, D.D.S.

Associate Professor of Pediatric Medicine, Emeritus, Harvard School of Dental Medicine; Chief of Dental Service, Emeritus, Children's Hospital Medical Center, Boston, Massachusetts

Chapter 28

FREDERICK H. LOVEJOY, Jr., M.D.

Assistant Professor of Pediatrics, Harvard Medical School; Associate in Clinical Pharmacology and Medicine, Children's Hospital Medical Center, Boston, Massachusetts

*Associate Editor*; Chapter 1

WILLIAM B. MACDONALD, M.D., F.R.A.C.P.

Professor of Child Health, University of Western Australia; Senior Physician, Princess Margaret Hospital for Children, Perth, Western Australia

Chapter 23

MOHSEN MAHLOUDJI, M.D.

Associate Professor of Neurology, Pahlavi University School of Medicine; Attending Neurologist, Nemazee Hospital, Shiraz, Iran

Chapters 7, 16

WILLIAM T. McLEAN, Jr., M.D.

Associate Professor of Neurology, The Bowman Gray School of Medicine of Wake Forest University, Winston-Salem, North Carolina

Chapter 16; Appendix A, Section 3

FERNANDO MÖNCKEBERG, M.D.

Professor of Pediatrics, Department of Nutrition, University of Chile School of Medicine, Santiago, Chile

Chapter 9

H. DAVID MOSIER, Jr., M.D.

Professor of Pediatrics, University of California, Irvine, College of Medicine, Irvine; Attending Pediatrician and Head, Division of Endocrinology and Metabolism, Children's Hospital Medical Center, Long Beach, California

Chapter 8

FE DEL MUNDO, M.D.

Professor and Chairman, Far Eastern University Institute of Medicine, Manila; Medical Director and Project Director, Children's Medical Center and Institute of Maternal and Child Health, Quezon City, Republic of the Philippines

Appendix A, Section 21

CATHERINE A. NEILL, M.D., F.R.C.P. (Lond.)

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine; Pediatrician and Cardiologist, The Johns Hopkins Hospital, Baltimore, Maryland

Chapter 13; Appendix A, Section 7

GERARD B. ODELL, M.D.

Professor of Pediatrics, The Johns Hopkins University School of Medicine; Director, Hepato-biliary Unit, The Johns Hopkins Hospital, Baltimore, Maryland

Appendix A, Section 14

THOMAS E. OPPE, M.B., F.R.C.P. (Lond.)

Professor of Paediatrics, St. Mary's Hospital Medical School; Consultant Paediatrician, St. Mary's Hospital, London, England

Appendix A, Sections 13, 16

F. STANLEY PORTER, M.D.

Professor of Pediatrics, Duke University School of Medicine, Durham, North Carolina

Chapter 18

NICOLA PRINCIPI, M.D.

Associate Professor of Child Health, University of Milan Medical School, Milan, Italy

Chapters 5, 7

CHARLES V. PRYLES, M.D.

Former Professor of Pediatrics, State University of New York Downstate Medical Center; Former Chairman, Department of Pediatrics, The Jewish Hospital and Medical Center, Brooklyn, New York

Chapters 12, 14, 15, 22; Appendix A, Section 27

V. BALAGOPAL RAJU, M.D., D.C.H.

Professor of Pediatrics and Director, Institute of Child Health, Madras Medical College of Madras University; Superintendent, Hospital for Children, Madras, India

Chapter 14; Appendix A, Section 15

MARK M. RAVITCH, M.D.

Professor of Surgery, The University of Pittsburgh School of Medicine; Surgeon-in-Chief, Montefiore Hospital, Pittsburgh, Pennsylvania

Chapters 11, 12, 14, 15, 28

THOMAS E. REICHELDERFER, M.D., M.P.H.

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine, Baltimore, Maryland

Chapters 12, 15

JON E. ROHDE, M.D.

Instructor in Pediatrics, Harvard Medical School; Senior Assistant Resident in Medicine, Children's Hospital Medical Center, Boston, Massachusetts; Visiting Pediatrician, University of Gadjah Mada Faculty of Medicine, Yogyakarta, Indonesia; Field Staff, Health Sciences, Rockefeller Foundation, New York

Chapter 14

**PIERRE ROYER, M.D.**

Professor of Pediatrics, René Descartes University; Director, Pediatric Nephrology Clinic, Hospital for Sick Children, Paris, France

Chapter 15

**ALEXANDER J. SCHAFFER, M.D.**

Professor of Pediatrics, University of Maryland School of Medicine; Associate Professor of Pediatrics Emeritus, The Johns Hopkins University School of Medicine, Baltimore, Maryland

Chapter 11

**HENRY M. SEIDEL, M.D.**

Associate Professor of Pediatrics, The Johns Hopkins University School of Medicine; Pediatrician, The Johns Hopkins Hospital, Baltimore, Maryland

Chapters 3, 31

**FABIO SERENI, M.D.**

Professor and Chairman, Department of Child Health, University of Milan Medical School, Milan, Italy

Chapters 5, 7

**NASROLLAH T. SHAHIDI, M.D.**

Professor of Pediatrics, The University of Wisconsin Medical School; Attending Physician and Director of Pediatric Hematology-Oncology, University Hospitals, Madison, Wisconsin

Chapter 18

**EDWARD A. SWEENEY, D.M.D.**

Associate Professor and Head, Department of Pediatric Dentistry, Harvard School of Dental Medicine; Senior Associate in Pedodontics, Children's Hospital Medical Center, Boston, Massachusetts

Chapter 28

**PRAN N. TANEJA, M.D., M.R.C.P. (Lond.)**

Consultant Paediatrician, Holy Family Hospital and Sir Ganga Ram Hospital, New Delhi, India

Chapter 24

**LUTHER B. TRAVIS, M.D.**

Professor of Pediatrics, The University of Texas Medical Branch at Galveston; Director, Division of Pediatric Nephrology, The Medical Branch Hospitals, Galveston, Texas

Chapter 15

**JOHN T. TRUMAN, M.D.**

Assistant Professor of Pediatrics, Harvard Medical School; Chief, Pediatric Hematology Unit, Massachusetts General Hospital, Boston, Massachusetts

Chapter 18; Appendix A, Section 23

**S. M. K. WASTI, M.B.B.S., D.P.H., D.C.H., F.R.C.P. (Ireland)**  
Professor Emeritus of Child Health, King Edward Medical College; Visiting Physician,  
Mayo Hospital, Lahore, Pakistan

Chapter 26

**JERRY A. WINKELSTEIN, M.D.**  
Assistant Professor of Pediatrics and Microbiology, The Johns Hopkins University  
School of Medicine; Pediatrician, The Johns Hopkins Hospital, Baltimore, Maryland  
Appendixes C, D

**OTTO H. WOLFF, M.D., F.R.C.P. (Lond.)**  
Nuffield Professor of Child Health, University of London Institute of Child Health;  
Physician, Hospital for Sick Children, London, England

Appendix A, Section 24

**STEWART MacKAY WOLFF, M.D.**  
Assistant Professor of Ophthalmology, The Johns Hopkins University School of  
Medicine, Baltimore, Maryland

Chapter 29

**LAMAN AMIN ZAKI, M.B., Ch.B., D.C.H.**  
Professor and Chairman, Department of Pediatrics, University of Baghdad Faculty  
of Medicine; Consultant Pediatrician, Medical City Hospital Centre, Baghdad, Iraq

Chapter 25

**MOHSEN ZIAI, M.D.**  
Professor of Pediatrics, Tehran University; Director, Reza Pahlavi Medical Center,  
Tehran, Iran; Lecturer in Pediatrics, The Johns Hopkins University School of  
Medicine, Baltimore, Maryland

Chapters 1–4, 8, 12–27, 31; Appendix A, Sections 1, 4, 7, 8, 10, 11, 15, 19–23,  
27; Appendix B



# Children of the World: An Introduction

Approximately 450 million children live in nations in which the annual per capita income is less than U.S. \$100. The mean figure does not reflect the meager resources available to children because this income is not evenly distributed. Furthermore the average income per family member is lower in larger families, most of whom live in rural areas and have a reduced income to begin with.

Asia is the home of half the world's children. This vast continent, extending from the Middle East to the Far East, houses people of different ethnic, religious, and cultural backgrounds. Nevertheless, these people have certain features in common which affect their health. One finds traditional societies in which, despite huge and apparently modern cities, the overwhelming majority of people live in rural areas and lead the same type of life their ancestors did centuries ago. Most of the people are occupied with agriculture, more or less according to rules and customs of feudal societies. The family unit is large and provides social and economic security for its members, thus, commanding the primary loyalty of the individual. The countries of Asia have been influenced by Western nations, which have introduced systems of government as well as cultures completely alien to the inhabitants. The result has been a progressive disintegration of the existing culture and the traditional society. The extended family is being broken up but not replaced by social institutions. Various degrees of industrialization and urbanization have attracted many families from rural areas to rapidly growing cities without the provision of adequate living circumstances. Terrible slums, inadequate nutrition, and lack of protection by the traditional extended family unit have had their bad influence on the health of individuals, especially during the early months and years of life when more protection is needed. Western medicine has been well accepted, but since the provision of enough health workers has been an impossibility and most people no longer use the traditional ways of treating illness, the great majority of the population is left without any health protection.

Another vast continent is Africa, into which the British Isles, Japan, India, and Australia might be fitted and still leave room for twice the area of the United States. Of the estimated 330 million people, about 40% are children under the age of 15 years. An important feature of Africa is the heterogeneous population representing various ethnic backgrounds, religions, customs, and ways of life. The geographic boundaries of African nations are very often artificial ones imposed by Western colonial circumstances. Vital statistics are virtually nonexistent in many areas, but judging from available data it appears that in the sub-Saharan part of Africa infant mortality is 5 to 10 times higher than in Western countries, while the mortality of the under-5 age group is 20 to 50 times as high. Population growth is greater than economic growth in most African nations. With this trend, the appallingly low living standards may deteriorate even further in years to come. Without adequate birth control and economic development, more control and reduction of death rates will do little to improve the health of the population. Africa is the land where a pioneer pediatrician, Cecilie Williams, described kwashiorkor. She wrote: "But there is one condition that has until recently been ignored, the condition that affects every single member of the population, which in some regions is associated with the mortality of over 50 per cent. This condition is childhood."