

**Textbook of Community
and
Social Pediatrics**

Textbook of Community and Social Pediatrics

Second Edition

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*to
the memories of
my parents
whose blessings guide me
all my life*

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Foreword

It is a pleasure, indeed, to write this Foreword for the second edition of A Textbook of Community and Social Pediatrics by Dr S R Banerjee. This new edition has some additional information compared to the earlier one. There are chapters on Newborn Health around the Globe by Dr P M Shah; a review of nutrition programmes by Dr RD Potdar; school health programme by Dr Rajiv Seth; child abuse and neglect by Dr Meenakshi Mehta; AIDS in children by Dr Chakrabarty; nutritional problems of the young by Dr Sachdev and Shah, among many other relevant and useful topics which every pediatrician and community health personnel must be aware of.

Almost half the young children in India are malnourished and there is no change from earlier studies. The third round of the National Family Health Survey does not show any improvement in vital areas of malnutrition, anemia, low incidence of breastfeeding, as well as timely complementary feeding. The knowledge of health workers as well as ICDS workers is practically non-existent and whatever little there is, is not put into practice. Because of poor sanitation and unsafe drinking water there is a high incidence of diarrheal diseases and worm infestation leading to further deterioration of nutritional status and resulting in high mortality. Two-thirds of infant mortality occurs in the first four weeks of life because of paucity of care during pregnancy and at delivery. The status of the girl child remains low and many are prevented from being born because of misuse of ultrasound technology for identifying the sex of the fetus rather than any developmental abnormality. Early childhood mortality is higher among girls compared to boys because of the poor status of the girl child and poorer access to health care.

The government has now launched the Rural Health Mission to improve access to health care in rural areas. There will be many demands on the workers, but prioritizing health care and nutrition services to young children will pay rich dividends.

Shanti Ghosh
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Preface to the Second Edition

With the advent and the proliferation of the Internet as a major knowledge repository it has become often the first point of access for users including academics seeking new information or updates, which may have a direct influence on practice. There are ever increasing Internet based journals, which have shortened greatly the lengthy process of editing, peer review and publication, as well as diffusion of this knowledge. Many international journals have opted for allowing economical or even free access to key manuscripts. Then we had the appearance of 'evidence based' journals, which published systematic reviews of current evidence and provide recommendations, which may influence an individuals practice. In this scenario, the traditional repository of assimilated 'classical evidence based learning' process based on textbooks has shown a downward trend.

Being a traditionalist, I believe that once an individual has the broad-based knowledge and the clinical experience to understand and critically appraise either new research appearing in scientific journals or in the form of clinical evidence reviews, then this may become a great resource for updating often small areas of new development or innovation. However, to the uninitiated, the prospect of digesting this rapidly expanding flood of 'new research' and filtering it down to the level of practicality, especially with a view to updating one's clinical practice is rather daunting.

Especially in developing countries, where research evidence mainly appearing from industrialized and wealthy nations, has to be viewed with caution as many of the assumptions of population distributions, health, socioeconomic status, availability of health services and diagnostic modalities may not be directly transferable to their local scenarios in a meaningful manner. There is a need for 'expert interpretation' of the current research and concentrating the information down to the vital aspects, which can then be presented in a manner that is both relevant and usable in a global and local sense.

This is where I see the need for the traditional form of the textbook. I am very privileged to be able to present to my readers the second edition of this book, which answers this vital need expressed to me in various national and international scientific meetings, in the area of social and community pediatrics.

I have drawn on a wealth of research and clinical experience both personal and through my many scientific colleagues and co-researchers who have shared the passion and vision for social and community aspects of childhood health and disease. I am specially privileged to be able to draw together a much more international perspective to the problem from my international contributors and to gain from the wealth of experience, which has often been gained by individuals in both developing and industrialized health systems. This, I believe, offers an insight with greater relevance and breadth than would be possible from a 'review' published in any scientific journal. Clinicians and researchers with a broad-based wealth of knowledge and experience in their respective fields have contributed each chapter presented in this textbook.

I envisage that my readers would range from students of social sciences, medicine and pediatrics to co-researchers, clinicians, and governmental and non-governmental organizations entrusted with the responsibility of understanding and changing the life and future of children. Where any textbook finds its weakness, is in the static finality of the publication process, where one has to stop the process of updating (until the next edition), while the 'playing field' keeps moving on at a rapid pace. I do not envisage the purpose of this book to be a provider of 'latest evidence' but to present an assimilated repository of the combined wisdom of clinical experience and research to date, which has a more timeless and meaningful quality.

I am ever-grateful to readers and contributors for sharing with me the vision of improving the state of childhood health, not in clinical isolation from the environment, but by a better understanding of the different social and community processes which contribute to health and disease.

Although now in my seventh decade of journey through life, I constantly keep growing and gaining from the wealth of experience shared by my co-contributors, while spending hours, days and weeks in editing and assimilating their knowledge into this repository. I hope that it will serve the need of my readers in providing guidance in their own research, clinical practice and also provide the basis for social projects for governmental and non-governmental social organizations.

Please do feel free to write to me with your thoughts, comments and suggestions for improving this text in future years.

S R Banerjee

Preface to the First Edition

As we are approaching the turn of the century, there has been an increasing attention on social and community parameters of every branch of medical sciences, more so of pediatrics. Specially in the developing countries where population explosion and lack of infrastructure due to economic constraints are perennial problems, the need for social and community pediatrics cannot be overemphasized. Health of children is singularly the most important indicator of the health status of a nation.

Today, doctors, medical students and the paramedical staff engaged in the medical treatment of children's diseases, have realized that their activity cannot end within the precincts of their hospital wards or private clinics. As a matter of fact clinical pediatrics may be considered as a starting point from where social pediatrics can take off.

As a social pediatrician for the last twenty years, I have felt the necessity of compiling a book on some of the inter-related aspects of social and community pediatrics with contributions of eminent authors. This volume is the outcome of that necessity and is mainly intended for medical students, social scientists and residents for information and documentation on the related subjects and for serving as a window to look beyond their hospital wards. This volume will also be a useful guide for consultants who might find interest in this important, ever expanding aspect of pediatrics. The text is replete with generous bibliographical references and is also aimed to serve as a foundation and resource book of research in different areas of pediatrics.

This book is the first of its kind written in the Indian context and has contributors spread over a number of disciplines and specialities highlighting the recent trends in their respective subjects. The list of contributors includes pediatricians, virologists, hematologists, psychiatrists, orthopedicians, geneticists, dermatologists, otorhinolaryngologists and others, most of whom have dominated the national and international scenes of their own specialities, making significant contributions to the advancement of scientific knowledge.

I am aware of the limitations of the volume in covering all the aspects of such a wide spectrum of subjects. Due to unforeseen circumstances and the ubiquitous time constraints, the social aspects of all sub-branches of pediatric diseases could not be covered. The chapters which could not be incorporated in this volume, will hopefully be included in the next edition of the work. Suggestions from the readers for further improvement will be gratefully acknowledged.

My thanks and gratitude are to the distinguished authors and co-authors who have willingly devoted a large amount of their valuable time to share their knowledge by means of their written words. I offer my special thanks to Dr Shanti Ghosh for consenting to write the foreword. No amount of gratitude is enough for Jaypee Brothers Medical Publishers (P) Ltd, specially Mr Y N Arjuna, Publishing Director, for putting up with all the inevitable delays on my side and still bringing out the book on the schedule date. I am indebted to Dr

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Above all, I must express my gratitude to my wife Purnima for standing by my side in times of stress while I was editing this volume.

And finally my labor will be amply rewarded if students and young pediatricians, for whom this volume is originally planned, find some interest in community and social pediatrics, a discipline which I am sure will be extremely challenging to them.

S R Banerjee

Editor's Philosophy

'It takes a village to raise a child'

Social Pediatrics is an approach to child health that focuses on the child, in illness and in health, within the context of their society, environment, school, and family. Social pediatrics started to come of age in 1969 with the formation of the Club International de Pediatrie Sociale (see <http://www.pediatre-sociale.org>). The European Society for Social Pediatrics (see <http://www.essop.org>) was formed in 1977. The coming together of pediatricians with an interest in social context of child health and illness formalized a strand of thought within pediatrics stretching back to Abraham Jacobi (1830—1919), the first professor in the diseases of children in the USA and president of the American Medical Association.

Nowhere is the role of Social Pediatric values more relevant than in a developing mammoth country such as India, where there is a constant battle between the forces of industrialization, rapid economic growth and burden of poverty, a burgeoning population, poor education and health. Where the whole population remains at risk and over 80% remains in the rural areas with hardly any social infrastructure, the fate of the disadvantaged child becomes almost untenable. It is however, within the cities that the state of urban disadvantaged children have been most distressing. Not only are these children subject to the ravages of poverty, lack of education and nutrition but also to the curse of parental neglect and abuse, both physical and mental. Yet this age-group of silent humanity have no champions and lobbyists among them. Thus the burden of responsibility must lie on all our shoulders.

Looking back at my life as a Pediatrician, I realized very early in my career that however, caring I was to my little patients and whatever excellence I might have achieved in my professional approach and scientific understanding, I could do very little to touch the lives; leave alone change the fate of the millions of disadvantaged children, whose paths would never cross mine. It is then that I decided to dedicate my life in understanding, researching and thus exposing the factors that affect their little lives, yet hold the key to the nation's future. I have been blessed with the opportunity to love and understand children in disadvantaged communities and try to lead others over the last three decades to help their cause through my involvement with organizations such as Indian Academy of Pediatrics Child Abuse Neglect Child Labour (CANCL) Group, Rotary International .

The first edition of this book was a dream come true, where I had the pleasure of compiling and editing seminal work from a whole spectrum of international professionals and colleagues who had similarly dedicated their professional lives to the cause of disadvantaged children and shared in my vision. The textbook was designed to help spread the knowledge of community and social pediatrics both among budding pediatricians, colleagues and to a large cohort of organization dedicated to the cause of children

The world has changed rapidly over the last decade in many ways. Some good with the pace of scientific knowledge, our unearthing of the human genome and our ability to ease disease and suffering through genetic and molecular modulation; and some not so good forces of destabilization. Where countries such as India and China have forged ahead with a great pace of infrastructure development and economic progress, there have been newer areas of war, strife, breakdown of basic communities and the spread of disease in Africa, Eastern Europe and the Middle-East.

It is thus time for an update of this book where I have again had the pleasure of inviting seminal contributions from a comprehensive list of leading authorities in the field. As I work many long hours in perfecting this book I am reminded of our own Rabindranath Tagore who wrote, *'I slept and dreamt that life was joy. I awoke and saw that life was service. I acted and behold, service was joy'*.

Knowledge is power and with this collection of scientific work, I hope to further the cause of disadvantaged children. I hope co-professionals internationally; students and both governmental and non-governmental organizations would find the information vital in their work and study of Social Pediatrics.

'For every child that is born, it brings with it the hope that God is not yet disappointed with man'.

— Rabindranath Tagore (1861—1941)

S R Banerjee

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My thanks and gratitude to all distinguished authors and co-authors who have willingly devoted a large amount of time from their busy schedule to share their knowledge on various topics in a short period of time.

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- Lastly, my unending gratitude to my wife Mrs Purnima Banerjee for standing by my side while I spent countless hours for the last eight months editing this volume.

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