# The Psychosocial Aspects of Pediatrics

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Lea & Febiger 600 Washington Square Philadelphia, Pa. 19106

#### Library of Congress Cataloging in Publication Data

Prugh, Dane G.

The psychosocial aspects of pediatrics.

Bibliography: p. Includes index.

1. Pediatrics—Psychological aspects. 2. Sick children—Psychology. 3. Children—Diseases—Social aspects. I. Title. [DNLM: 1. Child development disorders. 2. Mental disorders—In adolescence.

3. Mental disorders—In infancy and childhood.

4. Child psychology. 5. Pediatrics. WS 350 P971]
RJ47.5.P75 1983 618.92'0001'9 81-8289
ISBN 0-8121-0614-8 AACR2

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PRINTED IN THE UNITED STATES OF AMERICA

Print Number 2 1

This book is dedicated to my father, Wallace E. Prugh, M.D., a practicing physician for more than forty years. His wise and dedicated example and his unrelenting concern for the welfare of his patients first gave me an understanding of the challenges and satisfactions of the art of medicine.

#### **Foreword**

This is a remarkable book both in scope and depth as well as in timeliness. It fills an important niche in the rich history of modern pediatrics. This requires some explanation.

Modern pediatrics has always been concerned with the study and care of the child in health and in disease. During the early decades of this century, there existed a fitting preoccupation with life-threatening, acute diseases that resulted in so much morbidity and mortality. The rapidity with which so many of these diseases have been controlled is one of the spectacular stories of modern medicine. The world-wide eradication of smallpox and the virtual elimination of measles, rubella, diphtheria, tetanus, pertussis, and poliomyelitis from the United States, along with the nutritional deficiency syndromes that consumed the pediatrician's time and energy in training and practice, are examples of this transformation. Striking reductions in the infant mortality rate and in the incidence of the diarrheal disorders were concomitant developments.

It is logical, therefore, for the historical concerns with the psychosocial aspects of the child's development and aberrations in this process to assume greater prominence now for pediatric health care workers. It is fortunate that this coincides with a rapid expansion of our knowledge of the psychosocial aspects of child development. The behavioral sciences have undergone unprecedented growth in recent decades;

thus, the fields of child psychiatry, psychology, sociology, cultural anthropology, social work, special education, and other related fields have contributed increasingly to our understanding of child and family development. New journals have appeared and new training programs developed. Efforts to improve the lot of families rearing children has been evident through new child care programs such as Head Start, Day Care, Early Periodic Screening, Diagnosis and Treatment, and others of the past two decades. These are efforts to respond to the changes in the sociology of the family as well as to meet, in a more sensitive way, the special needs of children and parents.

Pediatric training programs in psychosocial pediatrics have emerged in order to more adequately prepare tomorrow's practitioners. Other child health professionals have followed suit. The recent Report of the Task Force on Pediatric Education defined such training as an important need in pediatrics.

These trends bespeak the importance of this volume. The task for child health workers has been to integrate the knowledge of the physical, psychologic, social educational, and cultural aspects of the life of the family in order to meet the needs of the child more fully and effectively. This integrative task is not readily accomplished; hitherto, we have not had adequate teaching aids to help us achieve our goals.

We are fortunate that a person who has lived through these transitions has undertaken the task of integrating for the clinician our knowledge in child development. Dr. Prugh brings to this task a rich background, which is reflected throughout the text, in pediatrics and in child psychiatry. The bibliographies for the various chapters also reflect a respect for the rich history of the field, which helps the reader understand the roots of our knowledge while at the same time presenting recent advances.

The text has remarkable balance, being rich in theory without in any way lacking in practical applications for the clinician. It is encyclopedic without losing the forest for the trees. The focus is always on what is useful in the clinical setting. This is particularly evident in the case presentations that are scattered throughout the chapters to add to the lucidity of the text.

Most importantly, this volume sets a

conceptual tone for all of medicine that is much needed. It is an integrative view of biologic and psychosocial development important not only for child health professionals, but for all health professionals as well. Dr. Prugh, along with Dr. George Engel and others, has been one of the architects of a biopsychosocial approach to medicine, which is the conceptual basis for the future of medicine and pediatrics. We are much in his debt for having accomplished this monumental task of bringing to us an integrated, comprehensive view of the child and family on such an optimistic note. This is a source book that should not be permitted to become outdated.

> Julius B. Richmond, M.D. Professor of Health Policy Harvard University Cambridge, Massachusetts

#### **Preface**

As a child psychiatrist and psychoanalyst with training and experience in pediatrics, I have long felt the need for a comprehensive textbook that would relate modern concepts of dynamic psychology to the understanding, prevention, and treatment of illness in children. This volume is a step in that direction. It is a step taken in all humility, as I know that capable people have made somewhat similar offerings in the past. This book has been designed to provide broad insights into the psychosocial aspects of pediatrics; practical suggestions are included as to how these insights can be applied to the management of children and adolescents who have predominantly physical disorders with psychosocial components or who show milder forms of developmental or psychologic disorders. It is therefore addressed primarily to the student of medicine, the pediatrician, the internist, the family physician, the nurse, the child health associate, and other health professionals who work with such patients and their families. (Where the word "pediatrician" is used, it is often, though not always, interchangeable with "the physician" and sometimes with "the child health associate.") I hope the book will also be of value to child psychiatrists and other mental health professionals who work in pediatric settings or who may be called upon for consultation or collaboration by pediatricians or other health professionals, as is often the case today.

In selecting the topics discussed in each

chapter, I have limited myself to illnesses and disorders commonly encountered in pediatric practice, and I have restricted myself to discussing the basic principles of diagnosis and treatment, with suggestions as to the management of the psychosocial aspects of the problems that may be encountered. A number of case examples and summaries of interviews are included to clarify points of technique or management, and numerous references and an extensive bibliography are provided for those who wish to investigate certain subjects in greater detail.

Obviously, in preparing this manuscript, I have drawn upon the wisdom of many other professionals who, like myself, have experienced the joy of cooperating with parents in helping their children to grow and develop to maturity. I am particularly indebted to my former teachers, whose inspiration and example have influenced my professional development. These include Dr. Bronson Crothers (now deceased), former professor of neurology at Harvard Medical School and chief of the Neurology Division of the Children's Hospital in Boston; Dr. John Romano, distinguished professor of psychiatry and former chairman of the Department of Psychiatry at the University of Rochester School of Medicine; Dr. George L. Engel, professor emeritus of Psychiatry and Medicine and former head of the Medical Liaison Division of the University of Rochester; Dr. Reginald Lourie, former director of the Department of Psy-

chiatry at the Children's Hospital National Medical Center in Washington, D.C.; Dr. Charles A. Janeway (recently deceased), formerly Emeritus Thomas Morgan Rotch Professor of Pediatrics at Harvard Medical School and chairman of the Department of Medicine at the Children's Hospital in Boston; Dr. Grete Bibring, who was, at the time of her recent death, emeritus professor of psychiatry at Harvard Medical School and who had been head of the Department of Psychiatry at Beth Israel Hospital in Boston, and Dr. Milton J. E. Senn, Emeritus Sterling Professor of Pediatrics and Psychiatry at Yale University School of Medicine. I am particularly grateful to Dr. Senn, since it was he, as a pediatrician with training in child psychiatry, who helped me plan my training and gave generously of his vast knowledge as my mentor.

I am also grateful for the assistance of my colleagues in Denver, Dr. Kent Jordan (now in California), Dr. Anthony Kisley, and Dr. Lloyd Eckhardt, and others elsewhere who have collaborated with me in the writing of other publications that have been drawn upon in this book, and to Drs. Barkley Clark, Alan Levine, William Loomis, and Douglas Robbins, and to Mrs. Erlyne Cooper, for permission to publish, in several chapters, summaries of cases they evaluated or treated. I am grateful to Dr. Jay Tarnow, assistant professor of psychiatry and pediatrics in the Department of Psychiatry at Baylor University School

of Medicine, who kindly reviewed the discussion of diabetes in Chapter 2, and to Dr. John Sadler, former director of the Children's Behavioral Sciences Division at the National Jewish Hospital in Denver, who was kind enough to review the discussion of asthma in Chapter 21. Dr. Charles Spezzano, assistant clinical professor of psychiatry (psychology) at the University of Colorado School of Medicine, offered valuable suggestions after reading the section on behavior therapy.

Additionally, I wish to acknowledge the invaluable contributions of Mrs. Corinne Copeland, Mrs. Tilli Urban, and Mrs. Rita Taylor, my secretaries during the years this book was in preparation, who gave unstintingly of their time and energy, typing and retyping the manuscript through its many revisions and offering helpful suggestions as to its format. The use of masculine pronouns thoughout the text was prompted by a desire for conciseness on my part and not by a disregard of the substantial contribution of women in pediatrics, child psychiatry, and other fields.

I am boundlessly grateful to my wife, Anne Davison Prugh, whose faith in my work and compassionate support have bolstered me in many trying hours; I also appreciate the tolerance of my children, Joan and Wallace, with my preoccupation during the preparation of this book.

Denver, Colorado

Dane G. Prugh

## **Contents**

Part I	Background Concepts				
Chapter 1	Modern Trends in Pediatrics				
Chapter 2	Current Concepts of Health and Disease				
Chapter 3	Toward a New Physiology				
Chapter 4	Psychosomatic Concepts: Clinical and Therapeutic				
_	Considerations	40			
Chapter 5	The Development of the Child's Personality	73			
Chapter 6	The Child in the Family				
Part II	General Clinical Considerations				
Chapter 7	General Principles of Clinical Examination	115			
Chapter 8	Special Methods of Evaluation	137			
Chapter 9	Diagnostic Formulation and Treatment Planning	149			
Chapter 10	Implementing the Results of the Clinical Evaluation	160			
Chapter 11	Types of Treatment for Emotional and Mental Disorders	177			
Chapter 12	The Psychotherapeutic Aspects of the Role of the Pediatrician.	207			
Chapter 13	Psychopharmacologic Treatment	235			
Chapter 14	Principles of Diagnosis and Classification	250			
Chapter 15	Healthy Responses	260			
Part III	Specific Clinical Considerations: The Diagnosis, Treatment,				
	and Management of Disorders of Development and				
	Adaptation in Children and Adolescents				
Chapter 16	Reactive Disorders	267			
Chapter 17	Developmental Deviations	272			
Chapter 18	Psychoneurotic Disorders	277			
Chapter 19	Personality Disorders	296			
Chapter 20	Psychotic Disorders	314			
Chapter 21	Psychophysiological Disorders	336			
Chapter 22	Brain Syndromes	377			
Chapter 23	Mental Retardation	395			
Chapter 24	Acute Illness and Injury: Psychosocial Aspects of Management.	417			
Chapter 25	Chronic Illness and Handicap in Children	433			
Chapter 26	Psychosocial Aspects of the Management of Fatal Illness	483			
Chapter 27	Reactions of Children and Families to Hospitalization and	400			
Cl	Medical and Surgical Procedures	499			
Chapter 28	Family and Developmental Problems	553			

2/11	0
X11	Contents

Part IV Chapter 29	Considerations for Planning Trends of the Future	647
Appendix		
A.	Form for History and Physical Examination	663
B.	Identifying High-Risk Parent-Infant Relationships:	
	The "Five Questions" Approach	669
Index		675

## I Background Concepts

Art is long, life short, judgment difficult, occasion transient. (Goethe)

### 1 Modern Trends in Pediatrics

The practice of medicine affords scope for the exercise of the best faculties of the mind and heart. (Osler)

Over the past 30 years, pediatrics has changed greatly. Chemotherapy and antibiotics have brought many infectious diseases under control although some bacterial infections still resist treatment. The work of obstetricians and pediatricians has lowered infant mortality and morbidity. The refinement of prophylactic measures has virtually eliminated smallpox, diphtheria, pertussis, poliomyelitis and tetanus in urban areas. However, immunity acquired to those diseases is limited, and the antibodies provided by immunization must be stimulated throughout one's life. Preventive medicine has eradicated many communicable diseases. It has become possible to detect and prevent deleterious effects of inborn errors of metabolism.

Despite new knowledge, however, many problems have not been solved, especially problems related to viral diseases, mental retardation, neoplastic disease, congenital anomalies, collagen diseases, and other chronic disorders. When one problem is

solved, another may appear, such as the handicaps of some surviving premature infants, sensitivity to antibiotics and other drugs, adverse reactions to smallpox vaccination, and the increased susceptibility to infection caused by steroids.

Of even greater concern is the fact that new knowledge cannot immediately help millions of children (e.g., those suffering from kwashiorkor, a distressing phenomenon in many underdeveloped parts of the world).

Many people do not benefit from preventive or therapeutic treatment because they do not know how to obtain treatment, because they cannot reach a medical facility, or because they mistrust or dislike impersonal, crowded public medical facilities. About 25% of the children in the United States (and a larger percentage of black children in the South) have until recently received little or no health care, and so the infant mortality in the United States is higher than in a number of other countries.

#### 4 Background Concepts

Tuberculosis is still a widespread problem, even in urban areas, despite new methods of detection and early treatment. If the advances of medical science are to benefit children and adolescents fully, the distribution of health care must be wider and public education about health must be more effective. Public education must be directed particularly toward people who live in ghettos, because the rate of infant morbidity and mortality among them is significantly higher than among the general population.

The problems of the children and adolescents who are seen by pediatricians have been categorized (most of the children are from middle-class families). Many pediatricians estimate that they see 95% of their patients on an ambulatory basis. They see most of their patients in the office; they see perhaps 2% to 3% at home and no more than 3% to 4% in the hospital. About 40% to 45% of the pediatrician's patients have physical illnesses. About 30% of the physical illnesses are infections of the throat and the respiratory tract. Other illnesses (e.g., contagious diseases, allergies, and skin diseases) make up the other 70%. Only about 5% (at the most) of the physical illnesses are serious. At least 20% to 25% of the pediatrician's patients have emotional or behavioral problems and learning difficulties, without any related physical illnesses. Well infants and children, mostly newborns and very young children, make up about 35% (or even 50%) of some pediatricians' practices. Many of the patients who have physical illnesses, particularly those who have chronic illnesses or handicaps, have psychologic problems as well. Also, the health supervision of well children has psychosocial implications. So the estimate of the number of problems that involve significant psychosocial factors increases to 60% or 70% or even more—a figure comparable to similar estimates made by physicians who treat adults.

For various reasons, the patients now seen in teaching hospitals by medical students and residents have many more difficult diagnostic and therapeutic problems than did patients seen in the past. One estimate shows that 50% of the children and adolescents on a pediatric ward are there for diagnostic study of inborn errors of metabolism or for evaluation or reevaluation of other chronic illnesses or handicaps rather than for treatment of acute illness. A large percentage of patients who have chronic illnesses may be seriously ill. The illnesses of many of them have psychologic components, and the illnesses of all of them have psychosocial effects on their families.

At least 75% of pediatric residents go into private practice. Unfortunately, most of the residents leave the hospital expecting to encounter rare and exotic syndromes quite often in their practices. They have relatively little interest in children's health and development and in the psychosocial issues pertinent to children's health. Since residents are not well trained in the continuing care of ambulatory patients (only one recent textbook concerning ambulatory pediatrics exists), many young pediatricians have, as several recent publications attest, experienced surprise and disillusionment when they began to practice. They often wish that they had had more training in the treatment of emotional and developmental problems, parent counseling, and work with adolescents and their families and that they had greater knowledge of resources in their communities which could help them treat such problems—as well as more experience in treating allergic, dermatologic, and orthopedic problems.

Other studies show that parents emerge from their pediatricians' offices with many unanswered questions about their children's behavior and development. They have not asked questions because they are unwilling to take the time needed to talk to the pediatrician or because they feel that the pediatrician may not be interested. In one study, physicians were shown to re-

cord complaints about bodily dysfunctions more often than they recorded complaints about behavior. A recent survey made in California showed that 28% of a large group of parents were "seriously concerned" about their children's behavior even though the behavior problems were often not objectively serious ones. (A survey made recently by the Joint Commission on Mental Health of Children shows that at least 8% to 12% of the children in the United States have problems that require mental health services; therefore, some of the parent's concerns are probably valid.) The public has expressed dissatisfaction with methods of hospital care and other aspects of medical treatment. People apparently want a comprehensive approach to medical treatment, an approach that includes, in addition to the technical advances made in medical science, a lasting personal relationship between the patient and the physician. Such relationships spring up only rarely because of the current approach to medical treatment. Technologic advances are not enough, and inpatient pediatric practice is no longer the "real" pediatrics. The effects of the current approach to medical treatment are apparent in the emergency rooms of public hospitals; the poor and minority groups use public hospitals as their main medical resource, but public hospitals are set up to give care only in a crisis, not to maintain patients' health continuously.

The pediatrician must develop a balanced, comprehensive approach to treatment, an approach that includes the evaluation of the psychologic as well as the physical factors in both acute and chronic illnesses, and he must promote the psychologic as well as the physical health of the child and his family. A "new" idea of the role of the pediatrician that is now presented in some training programs can help pediatricians to find challenge and satisfaction in their practices.\*

The functions of the pediatrician, as adapted from Romano's concepts of the functions of the general (or family) practitioner, are:

1. Diagnostic. The pediatrician identifies illness patterns, considers the relative importance of the physical and the psychologic factors in illnesses, and makes initial decisions about the appropriate type of care.

2. Preventive. The pediatrician employs all the available methods of science to prevent physical or psychologic illness and to promote actively the child's physical and psychologic

growth and development.

3. Therapeutic. The pediatrician provides intensive treatment for the acutely ill child and continuous care and rehabilitation for the chronically ill child. The pediatrician considers the child's psychologic and social needs and the feelings and reactions of his parents.

4. Integrative. The pediatrician correlates and coordinates the care given the child by other professionals, such as specialists, health associates, hospital workers, and the personnel of

community agencies.

5. Investigative. The pediatrician pursues clinical and epidemiologic studies, formally or informally, on his own or in collaboration with others. He also studies the effect of illness on each child and his family.

6. Educational. The pediatrician gives parents and older children information about a child's illness and corrects any misconceptions they have about the illness. He shares his knowledge of the nature and course of the particular illness and its impact on family life with students and residents as a part-time teacher in hospitals or clinics, and serves as an educational source for the community at large, including organizations and legislative bodies.

Much has been made recently of the "new pediatrics," which provides for a comprehensive approach to pediatric care. The new pediatrics is not new, but its value has been recognized only recently in many academic centers. The core of pediatric practice (like that of general medicine) has always been the relationship between the pediatrician and the child he treats, together with the child's parents. It is within the framework of this relationship, with its human, humanistic, and humanitarian qualities, that any therapeutic, preventive, or rehabilitative measures must be taken if

<sup>\*</sup>The recent Report of the Task Force on Pediatric Education, under the leadership of C. Henry Kempe, has called for more teaching in the biosocial aspects of pediatrics, among other recommendations.

they are to succeed. The new pediatrics is so called because it uses new knowledge of children's behavior and personality development and of the psychosocial factors that affect behavior and development. New techniques of treatment accompany the new knowledge. Now pediatrics can be considered "unscientific" if it fails to consider the effect of the emotions on the body's functioning.

With training and experience, the pediatrician can refine and develop his intuitive perceptions of the emotional forces within a family and their effect on a child's illness. He can make his perceptions more accurate by studying human coping or adaptive behavior and the psychosocial aspects of children's development. He can learn to employ his intuitive emotional responses to the behavior of sick or troubled children (and to their parents) to achieve a constructive and controlled empathy with the children's feelings. The pediatrician's empathy enables children and parents to reveal their feelings to him and to themselves; such revelation helps them cope with their problems. The pediatrician can learn to offer supportive psychologic help to children and families who are undergoing acute emotional crises. The pediatrician's help may prevent psychosocial decompensation or disorder in the family's members.

Recognizing the signs and symptoms of depression (as they appear differently in children of different ages), perceiving the intensification of a child's asthma during his parents' marital crisis, and recognizing the need for satisfying educational and social experience of a child who has chronic rheumatoid arthritis all require that the pediatrician understand specific phenomena and techniques. Such measures as the referral of a severely disturbed child for psychiatric treatment or the use of psychiatric or psychologic consultations require from the pediatrician both diagnostic skill and a recognition of his own limitations. In order to make referrals and arrange for consultations, the pediatrician must understand

thoroughly the functions of various facilities in the community and be able to collaborate with many specialized professionals.

Whether the pediatrician should become a consultant able to deal with the physical, behavioral, and developmental problems of children (as in Britain and some other countries) or should remain a "general practitioner of medicine in childhood" remains to be determined in the United States. In either case, the pediatrician must learn about the development of and adaptation by the child who lives in a multiple-person field. The pediatrician should learn about the family and about the psychology, sociology, and epidemiology of illnesses of all kinds; he should be able to use effectively his relationship with the child and the child's parents. He must also increase his capacity for critical observation in order to collect the verbal and behavioral data which he requires, in addition to laboratory tests, to reach his diagnoses and to take the appropriate therapeutic or preventive measures.

The psychosocial or behavioral aspects of pediatrics are now vitally important because child psychiatrists and other mental health professionals cannot possibly treat all the psychosocial disorders of children and adolescents. The pediatrician need not-indeed, should not-become a child psychiatrist. His practice should center on his specialized knowledge of the physical aspects of the illnesses and of the growth and development of the child. Nevertheless, he must broaden his skills and understanding in order to practice "comprepediatrics" effectively hensive satisfyingly.

Since about 60% of the children seen by physicians in the United States are treated by primary care practitioners, such as internists, general practitioners, or family physicians, rather than by pediatricians, knowledge of comprehensive pediatrics must be available to the undergraduate student of medicine so that he can treat chil-

dren in his future practice, whether or not he specializes in pediatrics.

The remainder of the book discusses the various topics that are related to the achievement of the above-mentioned goals for pediatricians. The book presents a conceptual framework and goes on to discuss the essential features of diagnosis, treatment, and prevention in a psychosocial approach to pediatrics. It relates the psychosocial aspects of illness to the physical aspects. The book discusses the principles underlying successful psychiatric referral and collaboration with child psychiatrists, psychologists, social workers, educators, courts, and other community workers and agencies. It also discusses direct work with adolescents, habilitative and rehabilitative techniques used to help the mentally retarded and other handicapped children, the pediatrician's role in dealing with juvenile delinguency and his role as a consultant to camps, schools, and community agencies, and other recent developments in pediatric practice.

No written work, however, can do justice to the complexities of the psychosocial aspects of pediatrics. Supervised experience during undergraduate medical education and in pediatric residency, involvement in postgraduate courses offered by the Academy of Pediatrics or other groups (such as the Academy of Family Practice) and by university centers, and day-to-day collaboration with psychiatrists and other mental health professionals are necessary for the pediatrician to assimilate the knowledge available and to apply it confidently and satisfyingly for the benefit of his patients. The book supports the idea that the physician can assimilate and use well all the knowledge available to him.

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