

A Handbook of Medical, Educational, and Psychological Information for Teachers of Physically Handicapped Children

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This handbook will provide teachers with essential information on the diagnosis, treatment and prognosis of the major physically handicapping conditions which may confront them in the classroom. Using concise, easily understood language, the authors review in detail the various physical problems which may exist in school or at home, especially those conditions which affect learning, behavior and vocational adjustment.

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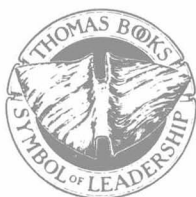
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**A Handbook of Medical,
Educational, and Psychological
Information for Teachers of
Physically Handicapped Children**

**Dedicated to the memory
of Christine Gary**

INTRODUCTION

IT is hoped that this book will alert readers to the possible existence of various physical problems which may be discovered in the classroom and the home, especially those physical conditions which affect learning, behavior, and vocational adjustment. A teacher, who is keenly aware of the importance of medical disorders in the overall development of the classroom students, can perform a vital role by helping to facilitate the delivery of a host of medical and paramedical services to the students who require such specialized attention. The teacher probably affects the child more than any other person besides the parents; therefore, the teachers have unparalleled opportunities to make a significant contribution to preventive medicine and also in assisting in the needed medical and non-educational therapeutic procedures.

This text is intended to be a handbook of medical, educational, and psychological information for teachers of physically handicapped children and for college educators responsible for the preparation of those teachers. The field of special education has lacked information dealing with orthopedic problems, special health problems, some sensory problems found in handicapped children, and vocational adjustment information of children with special health problems. This book is a response to this need, and it also includes special chapters on psychological evaluation of physically handicapped children and architectural barriers of the orthopedically handicapped child. All too often teachers have little or no exposure to the types of conditions in the children whom they would be expected to educate. This book attempts to present in concise lay language the essentials of diagnosis, treatment, and prognosis of the major physically handicapping conditions originating in childhood. Vocational adjustment is the topic of one chapter

because the authors believe that this is a very important goal of our educational process.

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H.D.L.
J.E.W.

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Part One
HISTORY

CHAPTER 1

THE PHYSICALLY HANDICAPPED — A HISTORY

WHO is the orthopedically handicapped child? According to an old but sensible working definition in the White House Conference report of 1931, the crippled child in the orthopedic sense is a child that has a defect which caused a deformity or an interference with normal functioning of the bones, muscles, or joints. His condition may be congenital, or it may be due to disease or accident. It may be aggravated by disease, by neglect, or by ignorance.

Impairment

The term *impairment*, when used in reference to the child with orthopedic problems, denotes a physiological lack which may be artificially restored to a certain extent. A child with a physical impairment is not necessarily a handicapped child.

Handicap

The extent to which an individual is able to adjust to his impairment will determine whether or not he is *handicapped*. An impairment or restriction becomes a handicap only when the person having the handicap is unable to give to society as much as he takes from it.

Disability

A child is *disabled* when his physical impairment interferes with his daily functioning.

HISTORY OF THE PHYSICALLY HANDICAPPED

The history of the care and treatment of the physically handicapped is greater than the aggregate of its separate areas and periods. It deals with the humanities of every age, for physically handicapped children and adults have been problems of all periods of cultural development. Different societies have dealt with them differently, and social treatment as such apparently preceded educational procedures.

There are three general periods of the work with the physically handicapped. These periods are approximately as follows:

PRIMITIVE AND ANCIENT TIMES. Dating from about 1550 BC to about 476 AD, this period may be analyzed principally for its philosophy of cruel social treatment and extermination of the handicapped as revealed through authentic records and accounts.

THE MIDDLE AGES. From approximately 500 to 600 AD to around 1500 AD, the interest of outstanding personalities, if roused at all, assumed a more philanthropic aspect, notably in the case of the blind and deaf.

THE MODERN PERIOD. In the period after 1400 to 1500 AD, most of the real progress in the care and education of all types of handicapping conditions, beginning with basic scientific investigations which pointed the way toward the solution of some of the more baffling problems, has been made. Modern special educational procedures had their beginnings during this era.

Medical Treatment

Primitive and Ancient Times

After examining skeletons of the primitive period, it was found that people of that time period were successful in joining bones together with the crude use of splints and braces.

In the fourth century BC Hippocrates gave his name to a scientific compilation known as the *Corpus Hippocraticus*. Two of these books, *On Fractures* and *On Articulations* are known as the earliest treatment for specific orthopedic problems.

It is believed that Galen (130-200 AD) was the first to use the

terms “kyphosis” (humpback), and “scoliosis” (lateral spinal curvature), and the first to attempt active correction of spinal deformities. Autyllus, during this same period, was the first to advocate tenotomy (cutting of tendons) for relief of contractions about the joints. There is considerable evidence that Caelius Aurelianus, in about 400 AD, advocated passive movements and splints in the treatment of paralysis.

During the period of 200 to 1050 AD little was done in the field of anatomy or orthopedics. Two major factors in the deterioration of study in these areas were:

1. The wide acceptance of the Christian doctrine that the body was of little or no importance when compared to the soul. The body, it was believed, was unworthy of study.
2. Man is an epitome of the Universe. This view easily allied itself with the body of astrological doctrine that first Greece and then Rome derived from Babylon. One of the most common products of these ages is what now seems a childish scheme in which the signs of the zodiac are written first around and ultimately upon the various parts of the body that they were thought to govern. Even today the universal faith in astrology is itself enough to explain the periodic decay of studies in anatomy and physiology throughout man's history.

The Middle Ages

For both of these earlier periods, the record we have is confused and easily misinterpreted. The physically handicapped were most likely to be viewed as a group, i.e. horizontally, rather than with emphasis upon any divisional areas. The Dark Ages, as mentioned previously, overlap and in fact consume a majority of this time period.

The Modern Period

Ambroise Paré (1510-1596) was the father of the art of brace-making. He made metal corsets, leather splints for deformed legs, walking splints for hip diseases, and specially formed