REHABILITATING THE TUBERCULOUS

by
F. R. G. HEAF
and
J. B. McDOUGALL

with a foreword by
HER GRACE THE DUCHESS OF PORTLAND
Chairman of the National Association for the Prevention of Tuberculosis

FABER AND FABER LTD
24 Russell Square
London

First published in Mcmxlv
by Faber and Faber Limited
24 *Russell Square London W.C.*1
Printed in Great Britain by
Western Printing Services Ltd. Bristol

This book is produced in complete conformity
with the authorized economy standards

F. R. G. HEAF

M.A., M.D., M.R.C.P.

Senior Medical Officer, London County Council, Consulting Physician, Papworth Village Settlement, Cambridgeshire, and to the British Legion Village Sanatoria

J. B. McDOUGALL

C.B.E., M.D., F.R.C.P.(ED.), F.R.S.E.

Medical Director, British Legion Village Sanatoria, Preston Hall, Maidstone, Kent; Nayland, Colchester, Essex; and Douglas House, Bournemouth, Hampshire

FOREWORD

by Her Grace the Duchess of Portland

Chairman of the National Association for the Prevention of Tuberculosis

Preventing tuberculosis has always seemed to me one of the most worth-while activities in which anyone could be interested. I say 'anyone' because I believe that laymen have a very useful part to play.

This is not to disparage the wonderful zeal of doctors, health visitors, nurses and social workers—the real *General Staff* of our anti-tuberculosis services.

The actual treatment of the disease is always sure of attention, but it has not always been easy to find sound information on after-care and rehabilitation. We know that unless this phase of preventive work is fully carried out, the magnificent efforts made to arrest the disease in our sanatoria and hospitals will not be crowned by full success.

The tuberculous patient needs much sympathy, and he needs to feel confident that schemes are worked by those who understand his point of view. In the future, social workers will have a larger part to play in seeing that the after-care schemes of the Health Authorities and Ministry of Labour are fully used.

For this reason I take pleasure in recommending this book by Dr. J. B. McDougall and Dr. Frederick Heaf, two valued members of the Council of the NAPT. The tuberculosis world knows them to be experts in the handling and training of the tuberculous patient. This book embodies the principles of their lifetime's experience, and I am sure that everyone interested in the welfare of tuberculous patients will find in its chapters an enthralling story.

IVY PORTLAND

AUTHORS' PREFACE

The realization of the value of restoring disabled members of the community to a life of usefulness has, after many years of original and pioneer work, at last dawned upon the medical profession and lay public. The British Parliament has now acknowledged the need for constructive action which will safeguard the future health and economic security of the individual who has, through no fault of his own, become the victim of disablement. No dividing line exists between the treatment and rehabilitation of the tuberculous. Though rehabilitation is our main theme, we have deemed it advisable, even necessary, to describe briefly some of the diagnostic and treatment procedures normally adopted as preludes to the more active measures employed in rehabilitation.

In the pages which follow we have confined ourselves to the origin, growth, and development of the art of rehabilitation as it affects the tuberculous. As is often the case, the pioneers have not lived to see public and State recognition of their early endeavours. We have attempted to apportion to each the role he played in the building of the edifice; nevertheless, we are deeply conscious of the inadequacy of our appreciation of their work. It is comparatively easy to describe what men did, and to cull from their writings the principles which guided them; but to convey to readers anything but a dim outline of the great personalities who transformed theories into successful practice is a much more difficult task. In the treatment of pulmonary tuberculosis, and in the accomplishment of successful rehabilitation of patients, personalities count for even more than theories or principles; Philip, Paterson, and Varrier-Jones, the three names so intimately associated with this subject, all contributed nobly to the best that has ever been accomplished in the realm of social medicine.

This account of rehabilitation is intended primarily for the layman, and for this reason we have eliminated most of the technical phraseology and terms which are so familiar to medical readers.

It is nevertheless hoped that medical readers will find the tuber-

culosis problem presented in a new way which will stimulate them to pursue the subject in greater detail through the bibliography which we have appended.

Throughout we have quoted liberally from the literature, especially from Dr. H. A. Pattison's *Rehabilitation of the Tuberculous*, published in the United States of America in 1942. For many years Dr. Pattison has brought so much clinical acumen and outstanding administrative ability to bear on this most difficult problem that his views may be taken as completely authoritative.

We extend our thanks to Air Commodore R. R. Trail, M.A., M.D., F.R.C.P., Hon. Medical Director, Papworth Village Settlement, and Miss Bradshaw, Secretary of the Spero Industries, who have kindly sent photographs which we gladly incorporate, and which help to convey some idea of the essentially practical nature of the subject; and to Vivian's of Hereford for permission to reproduce the photograph of the late Sir Pendrill Varrier-Jones, founder of the Papworth Industrial Settlement.

To Dr. E. C. Warner, M.D., F.R.C.P., Physician to Charing Cross Hospital, Dr. J. Crawford, M.D., Deputy Medical Director, British Legion Village, Dr. Harley Williams, M.D., D.P.H., Secretary General of the National Association for the Prevention of Tuberculosis, and Dr. W. E. Roper Saunders, B.Sc., D.P.H., M.R.C.S., Divisional Medical Officer, L.C.C., we owe a debt of gratitude for their help in the reading of the proofs and making many valuable suggestions which have been incorporated in the text; to the publishers we are greatly indebted for their closest co-operation and assistance in the final production.

F.R.G.H.
J.B.McD.

London, 1945

The views expressed in this book are the personal opinions of the authors and do not necessarily coincide with those of the Councils which they have the honour to serve.

CONTENTS

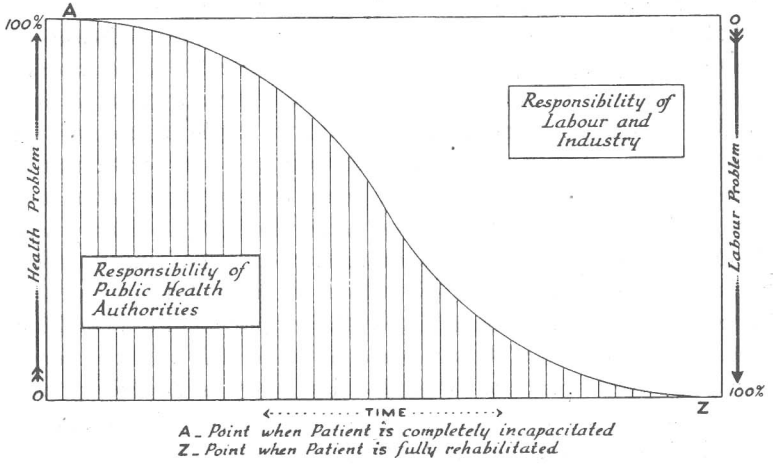
ILLUSTRATIONS

INTRODUCTION

TUBERCULOSIS: A GENERAL REVIEW OF ITS SOCIAL AND MEDICAL IMPLICATIONS

The Beveridge Report on Social Insurance and Allied Services (1943) visualized three main provisions in the scheme for establishing social security. The second of these, usually referred to as 'Assumption B', demands 'a comprehensive health and rehabilitation service for the prevention and cure of disease and restoration of capacity for work where available for all members of the community'. It would be difficult to overestimate the importance of this statement. It embraces all kinds of medical practice, and bridges that wide gulf which has hitherto existed between the patient in hospital or home, and the worker in the factory; it merges the beds and trolleys of the hospital ward with the wheels of machinery in the industrial workshop. The responsibility for organizing a service which takes charge of the patient from the day of diagnosis to the time when he can re-enter remunerative employment is a combined one. The restoration of the sick person to full health is a medical concern, with the Ministry of Health in this country as the chief sponsor. The reabsorption of the patient into industry is a problem for labour and the industrial market, and is the special function of the Ministry of Labour and National Service. In practice, however, it is not always possible to subdivide the duties of one authority and those of another into watertight compartments; in fact, they may have to operate concurrently over a considerable period in the solution of any individual problem. The relationship between health and labour may be represented diagrammatically by a curve (see Fig. 1) showing the progress of the patient under the influence of the two factors working concurrently for his complete recovery. Of course, the diagram will vary for each individual; some will take longer than others to pass from total medical care to complete employment, and others may never reach that final ideal stage in which medical care and supervision disappear and when employment becomes the sole problem. The curve may be regular in contour or it may show depressions here and there

as a result of medical complications. Temperamental factors may influence it; the standard of medical guidance may affect it, and in the case of tuberculous persons the curve may be subject to many variations in form. It has to be admitted that in cases of tuberculosis the smooth ascendancy from ill-health to complete recovery is the exception rather than the rule. As we shall point out repeatedly in this work, the relapsing nature of this disease is probably the most important single factor operating against the attainment of a successful economic result.



If 'good laws make hard cases' it is equally true that 'hard cases require good laws', particularly when the hardship is the result of a sickness which has fallen on the patient without warning, and through no obvious fault of his own. Chronic ill health, so characteristic of many cases of pulmonary tuberculosis, often brings in its train poverty, want, and anxiety to the sufferer and his dependants and demands a measure of national assistance on a liberal scale. Financial compensation has long been recognized as the just reward of the injured when the disability has resulted during the course of employment. A number of chronic medical conditions due to dust and poisons are allowed to rank for compensation in the form of pensions and grants, but there are many diseases which are more crippling

and which are closely associated with industrial conditions, but where the sufferer has little help and has to make the best of the dire circumstances in which he finds himself. The unfortunate patients in this group may make partial recoveries, but as a general rule they find themselves unable to return to their former status of usefulness as productive citizens. Efforts which are made to assist all such patients to return to normal or near-normal life and work come under the term 'rehabilitation'.

To 'rehabilitate' a person originally meant 'to restore him to his former social position'. Jeanne d'Arc, whose status was posthumously rehabilitated by a special order in the year 1456, was probably one of the first to benefit in this manner. In 1580 the Privy Council established a Court to rehabilitate persons in order to 're-establish characters or reputations', and for a long time the word was associated with moral issues only. The word continued for the most part to have this meaning throughout the sixteenth, seventeenth, and eighteenth centuries, and the Oxford Dictionary in 1910 gives the verb 'to rehabilitate' the meaning, 'to restore by formal Act or Declaration (one degraded or attainted) to former privileges, rank, and possessions; to re-establish one's good name or memory by authoritative pronouncement'.

In more recent times the word 'rehabilitation' has assumed a medical significance, and is becoming more and more applied to the methods which enable the crippled or disabled to undertake productive work with the object of attaining once more their place in industry alongside healthy colleagues and fellow-workers. So far as tuberculosis is concerned, a subdivision of rehabilitation into 'medical' and 'post-medical' is impossible, though the distinction has been made by recent writers on the subject. The term 'post-medical rehabilitation' may be applicable to certain cases of injury or accident in which, after treatment in hospital, there is no residual physical condition requiring medical attention, though even in such cases it is always wise to ensure that strain is not being incurred during the period of convalescence and recovery. In chronic systemic disease like tuberculosis, on the other hand, medical care and supervision must proceed throughout the entire course of convalescence, and never be neglected even when the patient has resumed work. This is an inexorable rule which applies to all diseases in

which it is difficult to establish a condition of complete clinical stability.

The rehabilitation of patients recovering from injuries or accidents (the so-called 'traumatic' cases) is essentially a re-education of the body and the limb to new limitations; the patient is healthy, as a rule, and suffers only from the loss of function due to a damaged part.

A course of remedial exercises followed by a period of training with special machinery, possibly to overcome the loss of movement, may be all that is necessary for successful rehabilitation. The patient is likely taught a new trade, or he may learn a new way of performing his former occupation, and this Vocational Training forms an important aspect in the rehabilitation of the more severe types of physical injury.

But in tuberculosis and other chronic diseases, the limbs may function normally and muscular movement be unimpeded; the real difficulty lies in the actual effect of a disease which restricts the working capacity of the patient. Between these two types of cases—the surgical injury and the chronic systemic disease—there comes the patient suffering from non-pulmonary tuberculosis (tuberculosis of the bones and joints), where limitation in muscular or joint movement is usually associated with some degree of constitutional disturbance.

Clearly then, the rehabilitation of patients suffering from chronic illness demands a technique of its own. A study of the environmental background of the patient, the conditions under which he has to work, and his economic status have all to be linked closely with his medical condition. In no group of patients is the need for special and separate consideration greater than in the tuberculous, and it is the object of this book to consider their problem in the light of past and present-day knowledge, and in relation to more recent legislation.

As will be shown in detail in subsequent chapters, rehabilitation so far as it concerns the tuberculous should begin from the time the patient is diagnosed. The majority of patients are admitted to a sanatorium for the first few months of treatment, and it is here that consideration is best given to the problem of the patient's medical and economic future. What course is he to follow when he leaves the sanatorium and how capable of earning his livelihood in whole or in

part? Is he to return home and seek employment at a special workshop where the task would be suited to his physical capacity, or is he to return to his previous occupation, or to some modified branch of his former work, or has he alternative work waiting for him? Or have his capabilities in a physical direction become so impaired that he may require prolonged residence and constant supervision in one of the industrial settlements which have been set up specially for the tuberculous? Admission to a village settlement or colony does not necessarily imply residence there for the remainder of the patient's life. Permanent residence in a village settlement does not appeal to many patients however desirable it may be, and in our opinion adolescents, especially, much prefer to undergo a period of treatment and training which has as its object the return of the patient to ordinary industry even if they have to stay in a village settlement for a period of from four to five years. This important question is discussed more fully in Chapter V.

But rehabilitation does not apply only to adults. There are many children who are suffering from chronic illness, and many more who are, as a result of faulty genetic and environmental backgrounds, in the class of the 'debilitated'. Such children, left to their own physical resources, are likely to become the adolescent and adult patients of the future. These debilitated children have to be restored to normal social and educational activities as well as to health. Not infrequently a child recovers completely from a physical debility only to find itself seriously handicapped in later life by a low mental age and intelligence quotient. The residential open-air school conception provides for many children the ideal set of conditions which lead to the restoration of health, an educated mind, and a disciplined mode of life.

In consideration of the problem of rehabilitation, we must remind ourselves that the average adult spends no more than eight hours a day at work; sixteen hours have to be spent in sleep and in leisure. We may provide ideal industrial rehabilitation measures and still find our efforts thwarted by adverse housing conditions, ill-spent leisure, and lack of sleep. The housing problem has been made more acute in recent years by aerial bombardment; it is likely to become increasingly difficult during the next decade, and may well constitute the major problem of all Local Authorities. We believe that