HEALTH



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HEALTH

by

E. OBERMER, M.D.

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PREFACE

I AM writing this book for the increasing minority of thinking people who wish to make the best possible use of their mental and physical potentialities. In my experience this minority is impatient with the medical profession, because of its preoccupation with disease rather than health.

I shall try to show that the remedy lies to a certain extent with the public. The law of supply and demand must not be forgotten. Medical training and medical practice will continue to consider the study and treatment of disease as their main interest, as long as the public treats the doctor as a last resource to be called in only in an emergency or severe illness.

Far too many lay people who conduct their affairs with the greatest of intelligence, and who have a highly progressive and enlightened viewpoint on all other subjects, harbour an inexplicable misconception about the subject of health. They are quite satisfied with a negative conception, as a state in which the individual is free from gross disease or disability, and are shocked at the idea of visiting a doctor to ask for advice as to healthy living.

These same people, however, if they possess a motor-car, send it to a garage for periodic over-

haul as a matter of course. They have accepted the principle of "prevention is better than cure" in the case of a complex mechanical device, which plays a relatively small part in their lives. Their inability to apply the same common-sense principle to their own infinitely more complex organism must be due to a fundamental misunderstanding as to the function of science.

While this attitude persists, science or scientific method will continue to be misapplied to the study and treatment of disease, rather than to the furtherance of individual efficiency or health.

Only when the majority, or at any rate a larger minority, is conscious of its birthright of health—I mean health as a positive conception, i.e., continuous wellbeing under all circumstances, or optimum adaptation of the individual to his or her environment—will it be possible to reorganise the medical services of a modern community, and create an Individual Health Service.

Starting from this point of view it would seem logical to postulate that scientific method will have to be applied in an intensive manner to the welfare of the community along two separate but converging lines:

- (1) A Public Health Service—dealing with those factors which affect the community as a whole.
- (2) An Individual Health Service—dealing with an infinite variety of factors which affect the health of the individual.

A Public Health Service is already in existence in every civilised community. I propose to deal with this service only in the most cursory and incidental manner. Few educated people are unaware of the enormous advances in social hygiene thanks to the purification of food and water supplies, and scientific methods of prevention and treatment of epidemic disease, etc. I advise readers interested in the history and present state of the Public Health Services, to consult Singer's Short History of Medicine (1) and Loebel's Whither Medicine (2).

An Individual Health Service does not exist. I shall explain why when I describe the organisation of present-day Private Medical Services, and I shall try to convince the reader of the urgent necessity for the initiation of such a service.

It must not be forgotten that it is only within relatively recent times that medical education and medical practice have adopted the scientific method of approach to their work. In so far that the "cure" of disease and the alleviation of suffering have a greater dramatic appeal to the imagination, they therefore seem more urgent than the less spectacular methods of prevention.

It is within still more recent times, in fact during the present century, that it has been realised that there can be no such thing as cure of disease. Disease means destruction of vital tissue—characteristic of youth—which can never be replaced except by inferior tissue—characteristic of old age.

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Therefore, an individual who has had disease can never be cured, but can only be patched up to survive on a plane of diminished efficiency.

This realisation has brought about a reorientation of enlightened medical thought. This in due course will involve radical changes in the system of medical education. If at the same time enlightened public opinion insists upon receiving intelligent and positive advice as to health, it follows that scientific method will be applied primarily, as it should be, to the study and furtherance of health.

In Chapter VI I shall put forward a personal conception of a positive Individual Health Service for the future. Needless to say I do not claim that it is feasible in every detail, or that it could be realised in a short time, even under the most ideal circumstances. I do claim, however, that such a service would be a vast improvement over present private medical services. My main object, at present, is to put forward a concrete plan in order to stimulate interest and discussion.

Those readers, if there are still any, who believe in a policy of laissez-faire, will obviously disagree with any arguments which are put forward in favour of a positive plan for health. The old argument against interfering with the "freedom" of the individual will be used. Those, however numerous, who hold that point of view, have not been sufficiently powerful to prevent the development of Public Health Services. Equally it is to be hoped, that this attitude of negative obstruction-

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ism will be unable to prevent the development of an Individual Health Service.

Public Health measures may, and almost certainly will, be considerably developed in the future, but they will never be sufficiently individualistic for the promotion of maximum efficiency of the individual.

We live in an age of incredibly rapid transition, as dangerous as it is fascinating. Science has revolutionised the environment in which man lives, in so short a period of time that the slow, natural process of adaptation has been unable to keep pace with the altered circumstances. If man becomes increasingly preoccupied with devising and attending to machinery, he may tend further to neglect his own machine.

The majority of the population now live in towns. Both from an anatomical and physiological point of view, the human organism was planned for a vigorous out-of-door existence. Under urbanised conditions, with a vertiginous rate of increase of nervous and mental stimuli, very few retain any semblance of positive physiological well-being or true health. Almost everybody over the age of thirty, and many even long before this age—when subjected to a sufficiently delicate and sensitive examination—show signs of dysequilibrium or maladjustment due to the excessive stress and strain of mechanised life. If we postulate an almost universal maladjustment of this nature, it follows that the spontaneous mechanism of

individual adaptation to the environment has broken down owing to the time factor. The environment has changed too rapidly.

Successful adaptation in the future will necessi-

tate:

(1) A rapid change, not only of function but also of structure, or

(2) Assistance of an artificial nature on the part of medical men, or rather applied physiologists: the "Individual Health practitioners" of the future.

The first alternative is impossible, for this generation at any rate. The second alternative is dependent upon (a) more efficient utilisation of present scientific knowledge for this particular purpose, and (b) the acquisition of further knowledge which is not yet in existence.

We do not yet understand the detailed mechanism of the spontaneous process whereby each individual adapts himself to his environment. Within the last few years there has been a slowly growing consciousness of the acute need for more knowledge on this subject. From the writings of eminent men who have put forward a plea for a more intensive study of man in his new environment, I will give two quotations only, both taken from *Constitution and Health* (3) by the American biologist, Raymond Pearl:

"... The fact is, there has been a sad lagging behind the advance of science on the part of what may be termed the non-scientific world, that is, the ethical and spiritual, and we might add, the political. There has been no preparing of the ground for the coming of the gifts of science, and the result is that much that should otherwise have been a benefit to mankind has simply led to social chaos." loc. cit., p. 89, quoted from W. E. Lishmann, "The Contribution of Science to the Future," Nature, Vol. 130,

page 582, 1932.

"... And furthermore there is a kind of moral necessity to go forward in the attempt to get a better understanding of the whole nature of man, lest he perish. The material, mechanised civilisation he has evolved may easily become a monster to destroy him unless he learns better to comprehend, develop, and control his biological nature. Somewhat belatedly it is beginning to be seen that inventions and discoveries that cannot be intelligently managed after they are made are likely to be a curse rather than a blessing." (3). It does not follow that the full realisation of the

It does not follow that the full realisation of the danger should lead to pessimism. Many equally eminent, as well as less eminent thinkers, believe that the physical strain of, as well as the economic contradictions inherent in our present state of civilisation, are so great as to render an ultimate collapse inevitable. I do not believe that this pessimism is justified. I think it possible, in fact more than probable, that pessimism will one day be proved to be a symptom of ill-health. Be that as it may, my own belief is that the intellectual powers

of man, working with the instrument of scientific method, can accomplish greater wonders with man himself than they have with man's environment.

The need must first be widely and consciously felt. I believe therefore, that it is better at the present juncture to err on the side of excessive zeal on the subject of health, than to neglect its importance.

Reorientation of scientific and medical thought in the direction of the study of normal function rather than to the study of disease, is, as I have

said, already taking place.

Those reforms which I shall outline as being necessary, should automatically come about as the culmination of present trends in medicine. As in politics and economics, however, the machine of medical and allied applied sciences has become so cumbersome in each country, that it is in danger of becoming unwieldy. Proper co-operation between workers in different fields of scientific activity—not only in different countries, but in each country itself—is becoming more and more difficult. Those who think as I do may render the world a service by pointing out, even if it be with over-emphasis, that not only are certain reforms necessary, but that large-scale co-ordinated planning is essential; also that the present dangerous period through which we are passing may not allow us unlimited time to bring those reforms and plans into being.

London, September 1934.

E. OBERMER. ,

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(2) J. Loebel: Whither Medicine, Sidgwick & Jackson, London, 1934. English translation by L. Marie Sieveking and Ian Morrow.

(3) Raymond Pearl: Constitution and Health, Kegan Paul, London, 1933, page 89.

(4) John Langdon Davies: Man and the Universe, Harper & Bros., London, 1930.

(5) H. G. Wells: The Outline of History, Cassel, London, Popular Edition, 1930.

(6) Neuburger: History of Medicine, Oxford Medical Publications, 1910, Vol. I.

(7) The Final Report of the American Commission on Medical Education, Office of the Director of Study, 630 West 168th Street, New York, 1932.

(8) Sir Arthur Newsholme: International Studies—Prevention and Treatment of Disease, George Allen & Unwin, London, 1931, Vol. III. Williams & Wilkins, Baltimore, 1931.

(9) H. G. Wells: Science of Life, Cassel, London, 1931.

(10) Louis Berman: The Glands Regulating Personality, Macmillan, London, 1921.

(11) W. Langdon Brown: The Endocrines in General Medicine, Constable, London, 1927.

(12) Innes Pearse and Scott Williamson: The Case for

Action, Faber & Faber, London 1931.

(13) Reports of the St. Andrews Institute for Clinical Research, Henry Froude and Hodder & Stoughton, London, 1922, Vol. I, page 1.

BIBLIOGRAPHY

(14) N. A. Semashko: Health Protection in the U.S.S.R.,

Gollancz, London, 1934, page 23. (15) Sir Arthur Newsholme and John Adams: Kingsbury: Red Medicine, Heinemann, London, 1934.

(16) Loc. cit., page 166.

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