SOCIAL MEDICINE AS A DISCIPLINE *

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In a highly industrialized country like ours industrial medicine must clearly be accepted as a large and very important branch of social medicine as a whole. Both are concerned with the study and the service of community health and sickness, are likely to employ common methods of socio-medical inquiry and to require similar or identical departments for training and research. If interest in, and the provisions for, industrial medicine have hitherto been slow of growth there is no doubt that their rate of growth will now be accelerated, and that workers in this field will make new and valuable additions to method and to the other foundations of knowledge upon which the social medicine of the future must build its disciplines.

In the short period since I went to Oxford I have repeatedly been asked for definitions of social medicine. None that I have seen or attempted have seemed to me entirely satisfactory, for they cannot at once be sufficiently brief, detailed and comprehensive. The subject is too large. We can, however, say that it is concerned with aetiological inquiry in its widest sense. It has already evolved and will continue to evolve methods of study appropriate to its purposes, among which vital statistics and socio-medical surveys—with the gradually improving techniques which they require—will make essential contributions, while neither laboratory nor social experiment will be excluded from its province. Education, research and practice are all of as much interest to it as they are to clinical medicine, from which (like the medical sciences) social medicine is a natural off-spring. It is concerned with the man-environment relationship, using environment in its fullest implication to include both the material and the personal environment. Its interest is with health quite as much as with disease. In a recent paper (*Nature*, 1944, March 25, p. 363) Professor Sargant Florence defined social medicine as 'the study of the variations in human health and efficiency associated with variations in social conditions.' This is an acceptable definition in so far as the research functions of social medicine are concerned, but it gives no indication that the subject has other academic functions in the sphere of undergraduate and post-graduate teaching and manifold functions in the sphere of practice.

As one entrusted with a reorientation of undergraduate teaching and the organization of a new research institute my interest is primarily in social medicine as a discipline. As such it may be properly regarded for, like clinical medicine, it is not a science nor yet, on the other hand, to be considered merely as an art or mode of practice. Without a careful study and development of methods and principles it is even possible that social medicine in

its new phase—for the ideas supporting it are by no means new—might be given a false start at a time when its contributions alike to human knowledge and well-being are more than ever in demand. Perhaps I may make my present concepts and approach clearer to you by describing—in illustration of social medicine as a discipline—some of our small beginnings at Oxford. But before doing so it may be helpful briefly to outline the influence on medicine of certain other disciplines which have marked the history of the past century. In the process we shall discover some gaps which have been left in the main structure and the consequent need for a considered integration of all the sciences relating to man, that is to say the biological, the clinical and the social sciences. With this integration social and industrial medicine must be intimately connected. Both the historical retrospect and the illustration from current experience may serve as a preamble to the few suggestions which I shall then put forward bearing upon developments and partnerships in your own sphere of interest.

Historical Retrospect

If we look back upon the evolution of medicine in the past century we can recognize three distinct, if overlapping, disciplinary periods. The first might be described as the period of the 'pathological disciplines,' in which, under the influence of the great physician-pathologists—notably Bright, Addison, Gull, Hodgkin and Wilks in this country—the intimate study of morbid changes and processes in the dead-house came to add finite knowledge to the naturalistic medicine of Hippocrates and Sydenham. Histological, chemical and experimental methods followed, but the whole edifice of pathology was reared upon the foundations of morbid anatomy. This pathological discipline was concerned with disease rather than with man in disease.

The second period was the period of the 'experimental or laboratory disciplines' and witnessed the evolution of bacteriology and protozoology under the influence of Pasteur, Koch and the great malariologists. A little later came the contributions of the biochemists and nutritional physiologists, whose work is reaping such a rich harvest to-day. These disciplines have all been concerned with the specific causes of disease, for the most part patiently elucidated in the laboratory and with the aid of the laboratory animal, although they were frequently prompted and assisted by experience in the clinic or the field.

The third period, from which we are now just emerging, might be described as the period of the 'technological disciplines.' It has witnessed the invention of innumerable diagnostic instruments and techniques, including those due to radiology, cardiography, chemistry, endoscopy and biopsy. These techniques have assisted

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the more accurate recognition and study of the appearances and processes of disease in the living patient. They have provided methods of physiological and pathological study at the bedside. Like the other disciplines they too have been concerned with the study of disease in man rather than man in disease.

These three disciplines have been and will remain invaluable and necessary to progress, but they have all tended to distract attention from the patient as a person and as a member of a family or group or larger society, and from those domestic, occupational, economic and other stresses which so frequently provide the background of disease and disability. They have studied the intimate rather than the ultimate causes of disease. They have, to a considerable extent, been responsible for the overspecialization of thought and action which has marked the medicine of the past half-century, in the course of which the old clinical humanism has suffered a partial eclipse. Important though their influence has been on the teacher and the student and on practice, it has not been always or wholly a beneficent influence. We have lacked during the period of their development an integrating discipline to enable us to see things whole and in their proper relationships to one another.

During the same century in which these disciplines evolved, and prompted by the pioneer influence of men like Chadwick, Simon, Southwood Smith and Farr, there was, of course, a parallel discipline directed towards the study and elimination of the environmental causes of disease. I say 'parallel' advisedly, for preventive and remedial medicine have never shared their problems as freely as they should have done. Drainage, water supplies, and the detection and isolation of infectious disease and, more slowly, attention to housing and the material conditions in industry were until a relatively recent date the chief concern of public health authorities and the factory inspector. Consideration for the personal, social, economic and nutritional aspects of public health—as for the psychological aspects of individual health—somehow lagged behind. We now recognize that the discipline of public hygiene has been open to the imputation of being, like the other three, impersonal. The intimate man-environment relationship, like the mind-body relationship in clinical medicine, was not sufficiently stressed in the earlier conceptions of industrial and preventive medicine. In the medical schools, as in the service of the community, remedial medicine and public health have been treated in separate compartments. The practitioner for the most part has become remarkably incurious about the causes of disease and their removal; the health officer, too, incurious about the intimate life of the citizens whose health he protects. Health education has been but tentatively fostered. To put the case quite briefly and in another way, disease and its immediate causes have been intimately studied; health and its causes are only just beginning to attract the attention which they should command; the patient as a person (rather than a 'case') and as a member of a social group has often been neglected.

And so, coming full circle, we discover the need for fresh directives in the shape, firstly, of a better planned social medicine, serving as an integrator and influencing both education and research and, through them prevention and practice; and, secondly, of a better planned clinical and personal medicine, which will keep in better perspective the body-mind-environment relationships of the individual. It is surely significant that both the Goodenough Committee's report and recent memoranda of the Royal College of Physicians should have emphasized the urgent need for developing the teaching of

social and of psychological medicine in the undergraduate period. The applications of such teaching to the problems of industry need no emphasis.

A Teaching Programme

Now let me briefly relate how we are hoping to meet this situation at Oxford in the respective fields of education and research. We are first of all trying to ensure that the teaching shall become available throughout the clinical period. Social medicine should not and cannot be regarded as another special study. Its relations with clinical medicine are too obvious; they must be taught together. The course which we gave in the first working year included a series of lectures by myself on the broader scope and aspects of the subject, with special consideration of outstanding diseases such as tuberculosis, the venereal diseases, rheumatic fever and peptic ulcer, each discussed as a social rather than as a clinical problem. A second series of lectures was given by my colleague, Dr. W. T. Russell, on the elements of vital statistics, with consideration of mortality tables and their preparation, of infant and maternal mortality and mortality in relation to occupation and socio-economic class; and on the epidemiology of measles, diphtheria, whooping cough and tuberculosis. In addition we arranged for special lectures or demonstrations on their services or particular problems by Dr. Williams, Medical Officer of Health for the City of Oxford; Dr. England, Tuberculosis Officer for the County of Oxfordshire; and by Miss Rees, head of the Almoner's Department at the Radcliffe Infirmary, on the province and functions of the medical social worker.

Our other main approach to the subject is through the method of the case-conference. These conferences are attended by students in the clinical period and by house-officers and other medical graduates and almoners. A case from the wards or elsewhere is first of all presented clinically by the medical clerk or house-physician. It is next presented from the social point of view by the almoner (as medical social worker), who will have secured the full co-operation of the patient and visited the home or place of work or both and made the necessary inquiries in regard to the domestic and economic situation, to work and wages and any particular difficulties in the material or personal environment. Regarding the conference as a consultation we then endeavour to see what correlations may be established, or at least considered, between the patient's disease and his or her living and working conditions and, with the help of the senior almoner, what can be done on discharge from hospital to ensure an amelioration of conditions or the availability of special forms of help and after-care or re-employment. Not infrequently, as might be expected, and especially in the more chronic types of case, the social history throws quite as much light on the patient's trouble as the detailed investigations in the hospital ward. A diagnosis is achieved in the fuller sense of the word. We have also arranged for field-visits for small groups of students to a factory welfare centre (the works themselves, for security reasons, are not at present accessible) and to public health concerns. Later we hope to provide experience for some of them in the shape of home visits and an introduction to the methods of social history-taking. As between the lectures and other demonstrations we thus provide a preliminary view of social medicine as it touches both the individual and the community. The background of vital statistics I regard as particularly important, for the student in hospital is too little informed about the

incidence and mortality (according to age, class and occupation) of the diseases which he sees.

The Work of an Institute

Turning next to the work of the Institute of Social Medicine, it should be mentioned that, in addition to my own staff, the Institute houses at present the Oxford Nutrition Survey and the Bureau of Health and Sickness Records.* The latter comes under my directorship and is equipped with modern punch-card and sorting machinery. Our first field-survey is directed to a study of the health, growth and development and infection-experience of the pre-school child in the City of Oxford and will cover a large sample to be obtained from all social groups. This survey is based on the welfare centres and involves correlated clinical, anthropometric and social studies and a three-monthly follow-up—a paediatric research assistant collaborating with a social worker under the general direction of myself and Dr. Russell. Dr. Dagmar Wilson and I have also been engaged upon a goitre survey in north Oxfordshire on behalf of the Goitre Sub-Committee of the Medical Research Council. Dr. Russell has undertaken an analysis of sickness absenteeism records in a large factory with a view to correlating accidents and the main types of sickness with age, sex, season and particular trades or types of work. We have already a good collaboration with the health departments in the City and County, and with the medical and welfare departments of a factory. We are considering, in a preliminary way, the standardization of a pre-employment health examination.

It is not likely that the Institute will interest itself in specific industrial hazards. We look to Dr. Donald Hunter and his department at the London Hospital and to others for the further activation of interest and research in this important field. It is more than likely, however, that we shall interest ourselves in the prevalent types of illness encountered among factory workers, illness not necessarily confined or directly or wholly due to the particular industry but causing a large sick-wastage in it or in industry as a whole. Peptic ulcer and the chronic rheumatisms might well be studied in a factory community in their possible relationships with age, sex and season and with changing shifts and certain types of physical and mental stress. We have enough on hand to keep us busy for some time to come. You will note that we make no sharp distinction in our minds between industrial and other social problems. Industry, we recognize, provides communities and environments which lend themselves to particular studies, but the worker has his domestic environment too and is a member of the general community. Given good co-operation and understanding social experiments should, however, be more readily devised in a factory than in more scattered populations. Changes in the material environment, hours of labour and amenities can be made and their effects on health and output statistically assessed. Such experiments must eventually prove of value both to the worker and the work.

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Future Developments

Finally let us consider how the universities may come to play their part elsewhere in the development of this new discipline. Edinburgh and Birmingham are establishing departments of social medicine and it is quite clear that there will be room for other departments or institutes having a university association and envisaging diverse programmes of teaching and research. Some of these will doubtless concern themselves primarily with the problems of industry. The practice of industrial medicine can only benefit from academic collaboration.

How and where could industrial medicine as a discipline within the broader framework of social medicine be best developed? Given the men and women with appropriate training and vision, given the endowments which it would well repay industry itself to provide, it would at least seem reasonable to suggest that a great university city, such as Manchester, might include within its medical faculty a department of social medicine wherein the problems of health in the factory, shop or outdoor trades would be a first consideration; that Liverpool, as a great seaport and university city, might have an institute with a special interest in the problems of maritime hygiene and of sickness hazards and incidence among seamen, both at sea and ashore; or that Cardiff might create an institute which would turn its attention more particularly to the problems of health and disease in mining communities.* In such institutes (which I would rather see associated with a university than specially erected to work in isolation on behalf of a single industry or on a specific problem) there should be opportunities for the post-graduate training of doctors and social workers as well as for statistical and field or other special research. With them the practising industrial medical officer should share his experience and his difficulties. And always there should be the closest possible relationship between the academic department and all those engaged in handling the practical problems of health and disease in nearby working communities. The clinician, the statistician, the nutritional physiologist, the industrial psychologist, the social worker and others will find their place in the academic team. Laboratories for physiological, nutritional and psychological investigation, a library and reference bureau and statistical machinery will be necessary features of such institutes. But social and industrial medicine will always need to pursue their problems in the field, to study the community at risk and so to counteract the old tendency to academic detachment from which medical research and teaching in this and other countries have too long suffered. The framing of disciplines and the integration of clinical, scientific and social studies are tasks of such fundamental importance that we would do well to give them the most careful consideration and to avoid precipitate adventures. These subjects are now much in the public eye. It will fall to your Association, among others, to ensure that they are wisely fostered.

* At the time of delivery of this address the announcement of the Nuffield Foundation's offer of grants totalling £150,000 for the development of teaching and research in industrial medicine at Manchester, Glasgow and Durham had not been made.