AN INDUSTRIAL REHABILITATION CENTRE

BY

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The Ministry of Labour has opened a Centre at Egham for the industrial rehabilitation of male patients. This represents a new experiment in the general field of rehabilitation, and the object is to combine the functions of reconditioning, physical development, restoration, vocational guidance, and purposeful training. It is constructed on the lines adopted in Army practice, which has emphasized the importance not merely of finding a job for a man but of finding the right job for him. It has been realized that the complete employment of available man-power, so essential in total war, demands the complete utilization of the individual. He must be placed in an occupation which fully exercises all his available faculties and not in one which is within the easy compass of his competence. While this holds good for the fit man, it is equally important for the disabled. The Centre is constructed on the lines which the Army has evolved to meet these problems.

Description of Centre

The Centre is situated 1½ miles from the village and railway station of Egham, in 54 acres of park-land. It is under the control of a manager, appointed by the Ministry of Labour, chosen for his wide knowledge and experience of industrial occupations and training. It is equipped with first-class workshops for various building and engineering occupations, and there are also courses for handy-men and gardeners. These facilities, which are all under a highly qualified teacher, are used to test suitability for various occupations, and further provision will be made in the light of experience.

The Medical Officer, who has undergone a course of special instruction, discusses the aptitude and potential capacity of each man with the manager. He co-operates with him in the choice of employment, and regulates progression of training on medical grounds—a most important feature in all forms of rehabilitation. He has a staff of medical auxiliaries, including fully trained physiotherapists, and the remedial gymnastics are in the hands of a senior Sergeant Instructor of the Army Physical Training Corps, released for the purpose from a military convalescent depot.

The Centre contains an excellent gymnasium, a physiotherapy department, and a recreation hall. Provision is made for entertainment, and particular attention is paid to the proper use of leisure. The kitchen and catering are under the supervision of a qualified dietitian. Special care is given to the manner in which meals are served, as the psychological effect of this is considerable.

The course is normally of six to eight weeks' duration. It is of an active character and is therefore not suitable for men who are still in the earlier convalescent stages of recovery from illness. The Centre does not provide medical treatment or nursing. The following cases are not accepted: (1) men suffering from infectious or contagious diseases; (2) cases of psychosis or severe neurosis; (3) epileptics; (4) the totally blind. On completion of the course the men go either direct to employment in their previous or in some other occupation, or are transferred to a vocational training centre for a full-time course in the new occupation chosen for them.

The types of case which it is considered would derive benefit by transfer to Egham may be roughly described under the following headings.

Rehabilitation

After all debilitating illness or injury, even when restoration to full functioning capacity is envisaged and will be attained, there is a period between the cessation of active treatment and full employment during which working efficiency remains impaired and accident-proneness is increased. Simple convalescence is not enough. This interval should be bridged by skilfully graduated remedial exercises, directed not only to the restoration of function in the disabled part but also to the mental and physical demands of the future employment. The patient must be progressively and adequately trained so that he can take up a full day's work without fear of relapse or ill effect. This stage can be pursued satisfactorily only when undertaken away from the hospital atmosphere.

Rehabilitation involves the study of the whole man. The physical, psychological, social, educational, and environmental aspects must all be borne in mind. It is one continuous process, beginning at the moment when the patient is deemed to be able to take an active interest in his recovery, progressing through the ambulant stages, and ending with his final hardening to the requirements of his prospective job or of a full-time course of training.

There comes a time, however, in the convalescent stage of all serious disease and disability when an assessment must be made as

to whether the patient can return to his former employment, whether some modification of his original work is necessary, or whether a new vocation must be found for him. Men sent to Egham for reconditioning to the demands of their old employment have, in addition to the remedial measures employed, the advantage of graduated vocational retraining in its various workshops. When, on the other hand, the disability is of such a nature as to preclude continuance of previous occupation or some modification of it, another and more suitable job must be found. Here also the centre at Egham offers a unique opportunity of deciding, during the period of reconditioning, the type of occupation a man could usefully fulfil and to which he could gradually be trained. Early reinstatement and training for a definite and specific purpose carries with it an added psychological impetus.

Vocational Guidance and Purposeful Training

The more favoured members of the community are able at an early age to make up their minds as to which trade or profession they wish to adopt, and have the opportunity of pursuing it or of taking up another before it is too late. The less fortunate, because of social or environmental circumstances, or because of a short-term policy of economic return, are often lured into a vocation entirely unsuitable. The disabled man is particularly in need of guidance in the choice of his career, and for this he requires the advice both of a doctor versed in the many-sided aspects of rehabilitation and of an expert conversant with the varying demands of the different branches of industry. It is surprising how inept is even the normal but uninstructed individual in the simplest tasks, such as digging, jumping, lifting, and climbing. When dealing with the substandard, correction of faulty technique may not only prevent further disability but may be productive of considerable economy of energy—a point of great importance to the handicapped man.

The attainment of these objects demands a catholic outlook and a wide appreciation of the responsibility entailed, in accurate and careful selection of employment, assessment of recovery, graduation in training on the physical side, and appraisal of the essential psychological and environmental background. Enthusiasm must be engendered, and the whole-hearted co-operation of the individual must be ensured. These objects can only be attained under the twin guidance of a technician who appreciates the nature of the task and of a doctor capable of assessing functional capacity on anatomical, physiological, and psychological grounds.

Skilled vocational guidance is of particular value to the ex-Service man who has been discharged from the Forces with some residual disability. He may have been a skilled worker before the war; or his Service experience may have kindled an ambition for progressive and skilled work of a kind he had not previously contemplated; or he may have gained some technical knowledge in one of the recognized Service trades. For such a man a disability may appear the end to all his hopes, and, left to himself, he may drift into unsatisfactory employment, with the danger that later on, when opportunities are not so easy as at present, he will become a disgruntled citizen. The psychological factor in such cases is all-important. The atmosphere and expert advice provided at Egham should restore confidence and help the man on the road to a useful place in the working life of the community.

Research

The experiment should provide excellent material, collected and controlled by a follow-through mechanism, for group research on a considerable scale into problems of rehabilitation and re-vocation generally. Much information could be collected with regard to restricted function in a wide field of medicine and surgery that would be helpful as a general guide to occupational placement. It is hoped that the Ministry of Labour will develop a service of this kind in co-operation with industrial medicine—which has already contributed so much—by compiling statistics into the occupations open to individuals with specific disabilities, into the aetiology of minor medical conditions which lead to ill-health and reduced efficiency rather than to disease, and into many and varied problems of common interest.

Admission

The Centre was planned to receive patients direct from hospital or within two to three weeks of their discharge. All hospitals in England and Wales have been circularized by the Ministry of Health. A simple certificate (on a form known as R.D.11) from the hospital authorities is all that is required; it is the duty of the Ministry of Labour representative who attends the hospital to explain the details of the course to the patient and to arrange his journey. Application can also be made at any local office of the Ministry, in which case a certificate (on the form R.D.11) is required from the man's private doctor.

The scheme is a voluntary one. The cost, including full maintenance and instruction and fares to and from the Centre, is borne by the Ministry of Labour. In addition each man receives an allowance

of 24s. a week for himself, with a supplement of 10s. a week for his wife and 4s. a week for each child. An ex-Service pensioner continues to receive his full pension.

Further information can be obtained from any local office of the Ministry of Labour. The manager of the Centre will be glad to receive medical officers and other members of hospital staffs. The address is the Egham Industrial Rehabilitation Centre, Wood Lee, Egham, Surrey, and the telephone number is Egham 880.

It is hoped that both hospitals and industrial doctors will take advantage of this Centre, for the benefit of their patients.

PREVENTIVE MEDICINE: TEACHING AND PRACTICE

INAUGURAL LECTURE BY PROF. J. M. MACKINTOSH

An address on teaching and practice in preventive medicine was given at the London School of Hygiene and Tropical Medicine on June 23 by Dr. J. M. MACKINTOSH, the newly appointed Professor of Public Health, University of London. The chair was taken by Lord WOOLTON, Minister of Reconstruction.

Prof. Mackintosh, who was introduced by Prof. Major Greenwood, began by repeating a definition of social medicine given by Gordon Smith in 1824—"The application of medical knowledge to man in his social state." But the history of public health teaching, he said, went further back than that. In 1786 Johann Peter Frank was appointed director of public health of Austrian Lombardy, and his international fame led to the creation of the first chair of public health in a British university (Edinburgh). Andrew Duncan sen., who became professor of the Institute of Medicine in Edinburgh in 1789, began in 1795 a series of lectures on medical jurisprudence, including "medical police"—a term quite familiar to Scottish ears—in which he dealt with both personal and environmental health. In 1798 Duncan presented a memorial, as the outcome of which in 1807 George III granted a commission creating a professorship of medical jurisprudence and medical police "as taught in every university of reputation on the Continent."

The Diploma in Public Health

The next landmark was the action of the General Medical Council in drawing attention in 1869 to the desirability of inserting in the *Medical Register* a qualification in State medicine, which eventually received sanction in 1886. The action of the G.M.C. was due largely to four men—Henry Acland, Stokes of Dublin, E. A. Parkes, and H. W. Rumsey. But even so opinion was divided. Billroth in Germany, in order to emphasize the value of the basic sciences in medical education, confessed that he was not interested in the struggle for public health, and Welch took this view to Baltimore when he became professor of pathology in 1884, though later, when Welch set himself to organize his new school of hygiene, he said that he was trying to stress the humanistic aspect of medicine because in the past the whole emphasis had been—and he thought the times had demanded that emphasis—on the scientific side.

In England the institution of the D.P.H. arose in response to a specific public need for officers of health when bacteriology opened up a new field of study. A generation ago it was reasonable that medical officers of health should be expected to supervise bacteriological and chemical work. As recently as 1925 one or two medical officers of health were still public analysts for their areas. The immense broadening of the fields of bacteriology and applied chemistry inevitably led to specialization, and medical officers of health, burdened with increasing administrative duties, were forced to leave laboratory work to experts—a tendency accentuated by the provisions of the Local Government Act, 1929, and by the various Housing Acts.

The changes in health policy which took place up to the end of the last war were only feebly reflected in the diploma course. As recently as 1920 British universities, speaking broadly, took no cognizance of the D.P.H. To gain experience in public health administration the student was usually left to shift for himself; the course was not as a rule well knit,

and in some cases the teaching fell lamentably behind the needs of applied practice. It had often been said that there was a great gap between the establishment of scientific knowledge and its application to human needs. This was partly due to economic causes, partly to lack of administrative machinery, and partly to insufficient diffusion of knowledge.

Colleges of Preventive Medicine

The primary importance of a school or university department of hygiene, Prof. Mackintosh continued, was to make good practitioners of health, to send out competent men and women with a high sense of their calling and a scientific outlook. It was easy to speak these brave words and difficult to translate them into organized teaching courses, but there were certain guiding principles:

(1) No school or university can create a scientific outlook in its students unless it is actively engaged in research in the basic sciences—that is to say, sciences for the advancement of knowledge irrespective of immediate practical considerations.

(2) The department should direct the application of scientific work to problems of public health—for example, through surveys, routine laboratory investigations, statistical and epidemiological studies, and field experiments.

(3) The department should be strictly associated with current administration, including housing and sanitation, institutions and hospitals, and the everyday duties of the practising M.O.H.

(4) The department should co-ordinate the postgraduate course for the D.P.H. by means of direct teaching of the principles of preventive medicine in order to weld the course into a coherent whole. It was the duty of the professor of preventive medicine to see that the course as a whole was complete, sound in structure, balanced in emphasis, and sufficient as a framework on which to build experience.

The earliest examples of schools designed as colleges of preventive medicine were the School of Hygiene and Public Health at Johns Hopkins University, the University of Toronto School of Hygiene, and the London School of Hygiene and Tropical Medicine. All these drew much of their inspiration from a report prepared in 1915 by W. H. Welch and Wickliffe Rose and presented to the General Education Board of the Rockefeller Foundation, and none of them could have achieved success without that Foundation's support. A school of this kind, especially when it catered for the needs of graduate students, must necessarily have a large staff for teaching and research. It must enlarge its borders far beyond the ordinary university school or department. It should aim at offering exceptional opportunities for graduates, but it should not offer diplomas in special subjects, nor should it directly provide clinical instruction, although it might make arrangements to that end.

Organization of Teaching Courses

The type of organization which best provided for intensive study and research and general instruction was the system of basic and elective subjects which obtained at Johns Hopkins University. This had the advantage of flexibility. As for clinical instruction, the right approach to clinical medicine was through the training of a physician, and this applied equally to tuberculosis, venereal diseases, infectious diseases, maternity and infant welfare, and child health. The health officer must, of course, have enough knowledge of these matters to enable him to administer with understanding the community services which dealt with them. A term of residence in a fever hospital was a valuable experience for a health officer, but it did not of itself make him an expert in infectious diseases, for which he would require a background of medicine and paediatrics. Similar considerations applied to tuberculosis and venereal diseases. The course should be chosen in order to train men and women to be competent administrators both of institutions and of public health services generally; but the course was merely an introduction to administration, and must be followed by practical experience in institutions and health departments. There was a feeling in this country that administration could not be taught academically, and that only what was called practical administration was of any value to the student, but it would be a poor preparation for a career in preventive medicine if students acquired knowledge of a subject without any background of the wider principles of administration.