INDUSTRIAL MEDICINE

BY

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Just about twenty years ago I saw on the "appointments" notice-board at my medical school an advertisement for a whole-time medical officer in a world-famous industrial organization. My first reaction was one of cynical wonder. Why did a factory, even a large one, want a doctor? What doctor worth his salt could waste years of training and experience working in a healthy community? The treatment of sick and injured employees was surely a matter for general practitioners and hospitals. So I dismissed the matter from my mind, for I had other plans for the future.

It so happened, however, that just about that time I was beginning to have doubts about making an immediate living as a consulting physician. My feet may have been on the bottom rung of the ladder, but the top was far away, and in the city where I lived and worked prospects of promotion tended to be obscure. And as the doubt developed I began to think more and more about the advertisement, for the firm really was famous. Even I knew that. And the terms and conditions seemed fair. Here might be the security that perhaps I hankered after. Arguing that no harm could be done by finding out more about things, I sent in a formal application, and to cut a long story short I was offered the job and accepted it.

Thus almost by chance, and certainly without any previous knowledge of industry, I entered a strange field of medical practice in which at that time only a handful of men were engaged. Fortunately, my particular post-graduate work was now to serve me well. In addition to clinical responsibility I had had some small experience (for I had had to earn a living) in teaching, in research and the discipline of the laboratory, in drafting reports for my chiefs and in departmental organization. The new environment now demanded clinical opinion, more often than not in the written form. Teaching experience enabled one to marshal facts, to state them simply and clearly perhaps, and to stand up to cross-examination from employer and worker across the conference table. Some knowledge of scientific literature made it not too difficult to find sources of information. And a slight experience in the literary field promoted confidence in the preparation of memoranda, unfortunately an essential commitment of any responsible post in well-organized industry.

Early Influences

At my university and hospital I had no guidance in my choice, although I sought it, for to my teachers and colleagues as well as to myself industry and its opportunities for medical men were a closed book. Little emphasis had been laid during my training on the effect of occupation even on sick people; and to my certain knowledge the effect of work itself as a therapeutic agent had seldom been brought to my notice, except in one respect which played an important part in my decision. I had the good fortune during 1927 and 1928 to act as junior assistant to Sir Robert Philip, then Professor of Tuberculosis in Edinburgh University. His patients at a near-by sanatorium were given routine outdoor work

of varying kinds at an early stage in their out-of-bed treatment. As resident medical officer I had to make an assessment of their tolerance for effort. For what duration of time, for instance, could a man with an early apical lesion be expected to dig in the gardens, or what weights could he carry and for what distance? It was my responsibility also to progress them (as best I could) through different grades of work in step with their clinical recovery. The implications of this part of Sir Robert Philip's pioneer work had not occurred to me before, but now it became the basis of a dim belief that occupation and medicine were interrelated and could somehow or other be linked together in even a stronger fashion.

Fitness for Work

One of my first tasks in industrial medicine was to carry out a physical examination of all new entrants to the factory. The firm's aim was to enlist fit workers only and not those likely to break down through ill-health. Rejections on medical grounds therefore were nearly 10% in my first year. But some doubts about my clinical stock-in-trade soon arose, for I found that satisfactory performance on the job, often for many years, was compatible with well-developed organic disease. Frequently I had to see men coming back to work after accidents in the factory, with a view to advising the management about their employment. In the course of examination men were found with cardiac disease, for example, or with well-marked disease of the central nervous system. For ten or twenty years previously they had worked well and efficiently in what were undoubtedly heavy or exacting occupations without absence for health reasons until their injury occurred.

And so my rejection rate decreased; more and more men were given the benefit of the doubt and started work with chronic bronchitis, albuminuria, varicose veins, and rheumatic carditis. I wrote to their doctors where curative treatment was necessary and followed them up, for I had time to do it and (for the first time in my life) adequate secretarial help. Disablement, even of a severe nature, was now in my view no bar to employment—provided one knew something of the demands of the job concerned. This was my first lesson in industrial medicine, learned through personal experience, for at that time it was not mentioned in textbooks or included in any teaching curriculum. Even with all his knowledge of morbid states, of disease syndromes, and of modern treatment, what doctor, I argued, dared deny a man the opportunity of reasonable employment on evidence other than that of reduced occupational capacity?

Rehabilitation

To-day things are different. The story of rehabilitation, first so well told by orthopaedic surgeons and made public in the Delevingne report¹ in 1939, altered the picture. Work was a necessary part of the treatment of fractures and other injuries. And what was good for accident cases surely was good, in principle, for cases recovering from illness. On this basis came the Tomlinson report² in 1943, followed by the Disabled Persons (Employment) Act of 1944, so that official recognition on a large-scale basis was now given to the problem of the handicapped individual and to the need for creating still further employment opportunities for him. The study of work and its demands became increasingly important to the doctor in industry. He had the

additional responsibility of seeing that men and women with frank disablement, who had to be employed,* were given work within their capacity.

There has been considerable progress in this field of matching worker and job. We are now at the stage of developing techniques of providing occupational information for doctors through job analysis and job evaluation which may end much of the indecision we have shown as a profession in advising on employment problems. The practice of medicine is entering into a phase of industrial usefulness which may supplement the clinical field both in the factory and in the hospital.

Occupational Disease

Occupational disease as a formidable issue has seldom come my way, though for many years I have worked in many different communities, large and small. Curiously enough I have often regretted the fact. A tangible problem, clinically defined, can open a specific field of study which if handled efficiently shows positive results which can be put on the credit side more readily than many other ventures in industrial health. The control of serious hazards is well managed by many industrial medical officers. Wisely they seek collaboration from chemists, physicists, and engineers; and in this respect we owe much to the example of our American colleagues. The informed industrial physician meeting a specific toxic risk now seeks assistance from specially experienced research workers, for within the last five to ten years high-level help has become available through the special machinery of the Medical Research Council.

Technical Solitude

I remember the feeling of isolation that soon developed when I entered industry. I was surrounded, no doubt, by many more people than before, my outlook widened, and my general education progressed rapidly. But I missed the sense of belonging to a medical school where at a moment's notice I could go to my seniors for help and advice on clinical matters. This was ultimately resolved, for, with permission, I became clinical assistant at a local hospital and in time made friendly contacts with a new group of doctors in a new city.

But most of all I missed the help and advice and criticism of men doing my own job. Surely other doctors in industry had much to tell me. This was soon overcome, however, when I found, among others, E. R. A. Merewether in Birmingham, A. J. Amor in Swansea, R. E. Lane in Manchester, and L. P. Lockhart in Nottingham. It was interesting, too, to know then that I was not alone in my feeling of technical solitude, and so, in 1935, came the natural birth of the Association of Industrial Medical Officers. But not until 1944 were we ready as a group of specialists to satisfy the profession as a whole that there was a need and a demand for our own scientific journal. In that year, through the far-sightedness of the British Medical Association, was published the first number of the *British Journal of Industrial Medicine*, which compares favourably with any other of its kind in the world.

To-day the importance of health in industry is as great as ever. We have progressed in terms of time and experience to think of worker-groups, of group health, of the importance of the impact of the individual on the group,

*Under the Act employers of 20 persons and upwards are required to have 3% of their workers on the Ministry of Labour's register of disabled persons.

and of group morale. But the occupational demands of the individual man in the factory or the shipyard, or the woman in the office, in terms of physical and mental health, are equally great. There is in industry a deep need for good young clinicians, socially minded, and with ideas about the future of medicine wider than those imposed on me and my generation by the boundaries of disease entities. Financially the right man should have few regrets in taking up this work as a full-time career. With suitable qualifications and experience, and in time, there is good reason to believe that he will be accorded the status and remuneration of his contemporaries in the consultant field.

Advice to New Entrants

General practitioners can benefit not only by working as part-time industrial medical officers but, as the second Cohen report³ points out, in finding that "a knowledge of a man's occupational background with its wide implications cannot do other than improve a doctor's efficiency in general practice." If you wish to become a good general practitioner my advice is not to take on too many outside jobs. A man with a full list cannot adequately work within industry, except in rare circumstances. If you can, try to find one appointment, and cherish it. Industrial health can be only a minor part of your professional life; let it stay as such.

For the man who wishes to specialize in industrial health (and, in spite of many views to the contrary, I contend that industrial health is a special branch of medicine) there are frequent openings in factories, mines, and other occupational groups, in research, and in Government service. For such men educational facilities are unfortunately few, but they are available in the London School of Hygiene, for example, and at Manchester University. For what it is worth, my advice, if you wish to enter industry, is not to demand security too early in life. Experience is there to be gained, in humble and junior jobs, and I would seriously suggest that success will come more effectively if you do start at the bottom. You qualify at, say, 25 or 26; you do your house jobs; you do your time of National Service—and here, incidentally, you gain vital knowledge of an important occupational community. Perhaps you do some general practice: I strongly advise it. By then you are nearing 30. If you want to succeed in industrial health a higher qualification is, in my view, essential. Thus you will demonstrate to yourself the clear value of a continuing discipline, and you will stand well with your colleagues in other specialties. Then come to us in industry, for we want you.

REFERENCES

- ¹*Final Report of the Interdepartmental Committee on the Rehabilitation of Persons Injured by Accidents.* 1939. H.M.S.O., London.
- ²*Rehabilitation and Resettlement of Disabled Persons.* 1943. H.M.S.O., London.
- ³*The Training of the General Practitioner.* 1950. British Medical Association, London.

The first group of 36 tuberculosis patients from Scotland left Prestwick Airport on June 15 for Switzerland under the National Health Service scheme providing treatment abroad. The Under-Secretary of State for Scotland saw them off. There were 18 men and 18 women, aged from 18 to 39, and they went by air to Geneva, completing the journey to Mont Blanc Sanatorium, Leysin, by rail.