## INDUSTRIAL HEALTH LEGISLATION - A PLEA FOR ACTION\*

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In the Republic of South Africa with its rapidly and everexpanding industries there exists an acute need for consolidating legislation in connection with occupational health.

Broadly speaking, there are two approaches to occupational health, namely, the clinical and environmental. The aim of the first is to achieve healthy workers, while that of the second is to achieve healthy factories.

It is remarkable that we in South Africa have, in our Factories Act and the machinery of its implementation, gone to great lengths to ensure that factory buildings and the necessary adnexa are adequate and hygienic. But when it comes to the dynamic processes within the building or, more particularly, when these processes are liable to affect the health of the worker, the situation is dealt with by a series of ill-defined and vague references scattered through various Acts. There are so many loopholes in the existing legislation that factories handling toxic and dangerous substances are able to get away with a minimum of preventive measures. It is thus not to be wondered at that only a few of the largest industries have anything more than a token medical service consisting of a 'factory doctor' who conducts an outpatients' service once or twice a week, but who has little or no interest in or knowledge of preventive measures in the factory.

Only in the mining industry, in the case of pneumoconiosis, have adequate legal measures been instituted to apply well-known principles of occupational health to the control of a disease which, in the early days, threatened the health of every worker who ventured into a mine. Is it necessary to wait for epidemics of other industrial diseases before similar controlling steps are taken for industries which often carry a much greater hazard?

Many examples can be quoted of factories handling dangerous metals, lethal dusts, toxic chemicals, formidable drugs, and the plastic materials with their threats (many still undiscovered) to the skin and the lungs. In addition to all this there are now the dangers of ionizing radiation, where the health of employees is, for all practical purposes, left to the discretion of an employer who may or may not, depending on the stage of his enlightenment, do anything about the matter.

A possible solution to this undesirable situation is that the provision of occupational health services, which are essentially preventive, should be made a legal requirement before any factory is allowed to produce its ware. The aims of such legislation should be threefold: Firstly, the definition of the hazard should be made possible. This may vary from one extreme, where there is no occupational health danger, to the other, where the processes involved require urgent measures for protection of health. Secondly, once the hazard has been defined, the law should make individual remedial measures obligatory. Unfortunately it would, in the third instance, also be neces-

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These three requirements could be met in the following way:

### A Licensing Committee

A Licensing Committee should be established to define the hazard and lay down what requirements would have to be met regarding individual health services and environmental control. In the execution of the first-named function the Committee could obtain assistance from the Council for Scientific and Industrial Research and, probably more important, from the Bureau of Standards. The 'Licensing Committee' should consist of representatives from one or both of the abovementioned organizations, from employers and employees in industry, and from related Government departments. It should also include well qualified appointed individuals.

The Committee should have the authority to issue a licence without which work cannot be performed in a factory. A similar licence under the Factories Act is now required to ensure a 'healthy' factory building, and the idea of extending the licence to achieve healthy workers would thus not be novel. Management would then be required to institute such items of an occupational health service as would be necessary to carry out the requirements of the licence in safeguarding the health of its employees. This would be a case of legalizing a moral obligation which the employer has towards his employees. The method of providing the necessary services should be left to the employer, subject to the approval of an authority to be established.

This authority or inspectorate should also be responsible for the legal enforcement and control of the scheme, and there are two possible reasons why an authority of this nature should be established. Firstly to provide a central medical inspectorate which could be run on parallel lines with the present factory inspectorate, and secondly, to designate this responsibility to local authorities, through the medium of their Health Departments. In view of the fact that our industries generally are situated in and around the larger centres, where local authorities have well established Health Departments with the necessary personnel and the means of control to carry out any legislative requirements, there may be merit in this second alternative. On the other hand, one must also look to the future.

What may suffice now when we are in effect only on the threshold of much greater development may not be good enough for the future. I am thinking here of the Orange River project and of Border industries near the Bantustans. It is not improbable that control by local authorities, under some of the conditions obtaining in these areas, may not be adequate. For this reason a centralized medical inspectorate is really indicated. Such centralized authority might be able to apply a more standardized and uniform control throughout the country and at the same time inspectors of factories and of industrial health may reap mutual benefit from closer cooperation.

This kind of health control in industries is not new and neither is the scheme I am putting forward entirely novel. Much has been done in most European countries in this respect. There is no reason why industrial health laws in these countries should not be closely studied and their best features selected and altered to suit our conditions. We have here an urgent need for and a unique opportunity of being able to develop model legislation in a sphere where hardly anything at present exists. A recent quotation by Murray1 in reviewing occupational health in Britain and abroad may equally apply here. He states: 'If we could have the legislative arrangements of France, the medical examination scheme of Bulgaria, the chain of institutes of Italy, the agreements of Germany and Scandinavia, the teaching arrangements of the USSR, Finland and Yugoslavia, the blanket coverage compensation scheme of Canada, the instrumentation of Czechoslovakia and the enormous voluntary effort of the United States linked to our own (the British) Factory Inspectorate . . we should indeed be paragons of occupational health.' To this could well be added the Dutch Industrial Medical Services Act, 1959, which includes in an elastic framework most of the above attributes.

#### The Availability of Medical Manpower

It is not my intention to discuss details. Principles are important at this stage. But one detail cannot be lightly passed over. That is the availability of medical manpower both for the original inspections and the subsequent implementation of any requirements. This work should be in the hands of people adequately trained for the work. This opinion is confirmed by a recent resolution of Federal Council<sup>2</sup> which reads:

'That in the interest of both employers and employees it is highly desirable that industries should provide medical services within each industry, either individually, where the number of employees would warrant it, or by combining with neighbouring undertakings. Such services should be directed by adequately trained industrial medical officers on a full- or part-time basis to suit particular conditions.'

The question arises whether there are enough persons available for this work in South Africa. The answer is unfortunately in the negative, but, on the other hand, doctors could hardly be expected to do postgraduate training in a subject for which there has been up to now little or no demand. But the converse is also too true.

Any legislation should be applied with circumspection —at first only a limited sphere should be covered, but subsequently coverage should be expanded in ever-widening circles. At the same time facilities should be established in this country for doctors to obtain the necessary training both in theory and practice. In addition, undergraduate training in occupational medicine should be introduced in the syllabus even if it were to mean the reduction in teaching time of some other courses which, at present, have a very limited value.

A similar situation existed some years ago when a prerequisite of DPH for practitioners of public health became necessary. Because the qualification got adequate recognition, more and more people made a point of obtaining it until today no-one would think of applying for

#### SUMMARY

Present legislation to protect the health of industrial workers—excluding those on registered mines—consists of illdefined and vague references scattered through various Acts and are easy to evade. It is suggested that the provision of occupational health services should be prescribed by law. The extent of such services should be defined by a 'Licensing Committee' who should be authorized to issue licences to factories on condition that the set requirements are met. A central medical inspectorate should be established to enforce the legal requirements. The industrial medical services should be in the hands of people adequately trained for the work, and suggestions are made on how such medical manpower should be made available.

### REFERENCES

1. Murray, R. (1963): Lancet, 1, 283. 2. Federal Council Minutes (1962): S. Afr. Med. J., 36, 996.

#### DISCUSSION OF PAPER

Dr. L. G. Norman, Chief Medical Officer, London Transport, and Chairman, Occupational Health Group, British Medical Association.

In general, the scheme put forward seems good. Difficulty might arise where factories change their processes. Reliance cannot be placed on a central medical inspectorate alone owing to the time factor involved, and a local industrial health scheme would be essential to ensure the success of the scheme. However, I am not enthusiastic about bringing factory health services under the supervision of local authorities—too much local politics are involved; but it may work in association with a central medical inspectorate.

## Dr. J. P. A. Venter, Chief Medical Officer, Department of the Workmen's Compensation Commissioner.

In view of my official association with the Workmen's Compensation Office it is difficult for me to comment on the paper. However, I should like to point out that, although the Department of Labour employs no medical inspectors, it has the power under existing legislation to stop work in factories if the health of workers is threatened.

At present there are some anomalies in the interpretation and application of the Factories Act and the Mines and Works Act.

It might also be difficult to obtain medical staff for an inspectorate since present salaries might not be attractive enough.

## Dr. J. F. C. du Toit, Chief Medical Officer, South African Railways.

Great difficulty might be experienced in obtaining personnel qualified in industrial health. One reason for this is that for the Diploma in Industrial Health DPH is a prerequisite. I would welcome it if this requirement were waived and if local universities, either here or in Pretoria, could be encouraged to provide training.

## Dr. C. A. Erasmus, Head, Department of Preventive Medicine, University of the Witwatersrand.

I should like to point out that the DPH was not a prerequisite of DIH in a previous course run at the University of the Witwatersrand. A special sub-committee was recently established at the University to investigate the establishment of a DIH course in the near future.

### Dr. T. F. Kethro, Assistant Medical Officer, Ernest Oppenheimer Hospital, Welkom.

As Dr. Norman pointed out in his talk at the Plenary Session, legislation should only follow once the demand has been established. It is up to all of us here to establish this demand for occupational health services from which legislation would then naturally flow.

## Dr. L. R. B. Birt, Medical Consultant, Anglo American Corporation of South Africa Limited.

We have to be practical and keep in mind the grave shortage of doctors at present existing in this country. There would have to be a demand before people would wish to take the DIH. Such a demand might very well be established if, as a first step, a central medical inspectorate were instituted.

I must point out that a knowledge of certain elements of public health would be essential for the industrial medical officer working in outlying mines and factories. The industrial medical officer will have to be responsible for the workers' health not only while he is at work but also in the environment where he might find himself during his off-duty hours. I am thinking of such things as housing, water supplies, sewage, etc.

# Dr. A. J. Orenstein, Doyen of Industrial Health in South Africa.

This paper may very well serve as a working basis for industrial health services in South Africa. I think it would be wise to start with a medical inspectorate around which the rest of such a scheme could be built up. I have been advocating the establishment of a medical inspectorate for years, and I think this Group, which is most representative, should say whether we should have this or not.

## Dr. W. Waks, Chief Medical Officer, Iscor.

The whole question of occupational health is still in

the hands of medical people. The final assessment of occupational health will always remain as an assessment of the health of the individual. This monitoring can only be done satisfactorily by doctors, and hence medical inspectors are necessary. That would be the easiest and best way to start.

Dr. L. G. Norman.

It started that way in England with one medical inspector.

## Dr. J. P. Dalton, Chief Medical Officer, Modderfontein Dynamite Factory.

I am in full agreement with the paper and the remarks of the previous speaker. The time has arrived for the Government now to make an appointment. Industrial health services cannot be left to the industries only. It may be in order for the large industries, many of whom have done much in this connection, but it does not apply to smaller industries.

### Dr. A. J. Orenstein.

No new or special legislation would be required to appoint a medical inspector, and it would be easy enough for the appropriate government department.

#### Dr. D. J. Lapping, Natal.

Many years ago this had been under consideration, but unanimity could not be reached whether such an appointment should be made in the Labour or Health Departments. Mainly because of this, the scheme had been shelved. This meeting should give an indication of its preference.

This point led to discussion but it was finally agreed that although the general preference seemed to be for the Health Department, an appointment in the Labour Department might also have merit. The meeting was not in a position to indicate its absolute preference.

Dr. Coetzee then moved and Dr. Waks seconded, 'That it is the opinion of this meeting that a Governmental Medical Inspectorate of Factories and Works should be established as soon as possible'. The motion was carried unanimously.