Editorial

Industrial injuries compensation

Most developed countries make statutory provision for the compensation of industrial injuries, although the criteria for classifying diseases as compensatable vary greatly. In the United Kingdom, no fault compensation for specified occupational diseases began with the Workman's Compensation Act of 1897, but the current system was established under the National Insurance (Industrial Injuries) Acts of 1946 and 1975. The scheme is administered by the Department of Social Security and provides benefits to employed earners for industrial accidents and for some "prescribed" diseases that have arisen out of and in the course of work. Diseases are prescribed by the Secretary of State on the advice of the Industrial Injuries Advisory Council (IIAC), which also advises more generally on the workings of the scheme and on regulations under the Social Security Acts.¹

The 1975 Social Security Act stipulates that a disease or injury may be prescribed in relation to employed earners if the Secretary of State is satisfied that:

"(a) it ought to be treated having regard to its causes and incidence and other relevant considerations as a risk of their occupations and not as a risk common to all persons; and (b) it is such that in the absence of special circumstances the attribution of particular cases to the nature of employment can be established or presumed with reasonable certainty."

The first criterion requires unequivocal evidence of a causal relation between occupational exposure and disease. The second criterion, attribution to occupation in the individual case "with reasonable certainty," has been interpreted as meaning "on the balance of probabilities"—that is, more likely than not. It follows that consistent evidence of increased incidence of disease in relation to an occupational hazard does not on its own justify prescription. The link with occupation must be sufficiently strong that individual cases can be attributed to work on the balance of probabilities. Diseases such as silicosis and asbestosis clearly satisfy this criterion, and were prescribed early in the history of the scheme. Many of the diseases considered by IIAC more recently, however, are less specific to occupation.

When case definition is clear cut—for example in the diagnosis of cancers—the requirement for individual attribution on the balance of probabilities translates mathematically into a stipulation that the

relative risk associated with a given level of exposure to the hazard should be at least two. Thus in its report on occupational lung cancer the Council was unable to recommend prescription in gas retort workers, despite the strong evidence that they are at increased risk of the disease.² Their relative risk was not sufficiently high. Where an occupational disease has other established causes (lung cancer and smoking for example), these do not preclude prescription provided that risk is at least doubled by the occupational hazard. In theory a problem might arise if the non-occupational cause functioned as an effect modifier—for example, if the risk of lung cancer were doubled in non-smokers but not in smokers. In practice, however, this has not been an issue to date.

The situation is more complicated when no simple dichotomy exists between those who do and those who do not have a disease. Disorders such as chronic bronchitis and emphysema are not all or none phenomena, but a matter of degree. Respiratory function in the general population has a continuous and unimodal distribution. The wording of the 1975 Act does not cater for this state of affairs. In its investigation into chronic bronchitis and emphysema, the Council received evidence from various parties, most of whom agreed that coal dust could cause hypersecretion of mucus and that FEV₁ was on average reduced in coal miners.³ But by what criteria should one decide whether airflow limitation in a coal miner who smokes is due on the balance of probabilities to his occupation? No doubt his work has contributed to his disability, but has it given him a disease that he would not otherwise have had?

A practical approach to this problem is to define cases at the level of respiratory impairment that qualifies for compensation. The point at issue then is whether, given his smoking habits, a coal miner's risk of this level of impairment is as much as doubled by his work. The evidence available at the time of the Council's investigation did not allow a confident answer to this question, and prescription therefore could not be recommended.

Occupational asthma illustrates a further problem. Asthma is currently prescribed in relation to a range of specified sensitisers, but the regular introduction of new chemicals and processes into industry means that new causes of occupational asthma will continue to arise. Whereas it is possible periodically to add new causes to the list of prescribed agents, such a

system will inevitably entail delays during which deserving cases go uncompensated. The Council in its most recent report therefore proposed a new category of occupational asthma caused by "any sensitising agent" as well as an extended list of specified causes.⁴ This would allow compensation of those whose asthma was caused by a previously unrecognised sensitising agent.

Most diseases now considered for prescription by IIAC are common in the community and not specific to occupation. With the rules governing prescription, it is inevitable that some people with genuine occupational disease will not receive recompense. None the less, every effort is made to secure compensation for industrial injury within the statutory guidelines.

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- 1 Industrial Injuries Advisory Council. *Periodic report*. London: HMSO, 1990.
- 2 Industrial Injuries Advisory Council. *Occupational lung cancer*. London: HMSO, 1986. (Cmnd 37.)
- 3 Industrial Injuries Advisory Council. *Bronchitis and emphysema*. London: HMSO, 1988. (Cmnd 379.)
- 4 Industrial Injuries Advisory Council. *Occupational asthma*. London: HMSO, 1990. (Cmnd 1244.)