Work-related illness can be prevented,
but knowledge and a willingness to implement the necessary measures are required

The working environment continues to cause illness

Injuries and illness caused by conditions in the workplace should be avoided. Who is responsible for implementing preventive measures? First and foremost, *the enterprise*. Occupational health services and working environment officials are assigned with key tasks, and so is the enterprise management. In cooperation with the labour unions, the management can ensure a good working environment by way of appropriate HSE measures. The *labour inspectorates* also play a key role, partly in designing appropriate regulations, and partly in ensuring that these are complied with. When an injury has occurred, *GPs* and *hospitals* should suspect and diagnose occupationally related illness. The final diagnostics are largely provided by the departments of occupational medicine, but also by other relevant specialist departments, in particular those of pulmonary and dermatological medicine. In addition, the departments of occupational medicine have expertise in identifying complex exposure.

The Journal of the Norwegian Medical Association is now publishing a series of articles that elucidate prevailing challenges in the field of occupational medicine. The range of exposure varies over time, for example because of industrial development in society. Viewed historically, primary prevention has undoubtedly played a role, but some challenges remain – for example, new chemical products continue to be introduced. In other cases well known exposures have given rise to new cases of illness. This could be because the disease in question has a long latency period (such as occupationally related cancer) or because of insufficient monitoring of ongoing exposure.

Work-related hearing loss is an example of the latter, as described by Samant and collaborators in this issue of the Journal of the Norwegian Medical Association (1). According to the Working Environment Act, doctors have a duty to report cases of suspected occupational illness to the Norwegian Labour Inspection Authority. Hearing loss is the most common condition to be reported. The authors have reviewed reports on hearing loss from the period 2002–2009 and point to weaknesses in the reporting system. An unsolved problem is that many employers have no systematic guidelines to protect employees from excessive exposure to noise and no procedures for detecting noise injuries at an early stage. Enterprises (especially small ones) that have no occupational health service may be deficient in this respect.

Lung cancer implies comprehensive challenges in terms of clinical diagnostics and treatment, but the assessment of possible causes also requires considerable attention. Most cases will have a long latency period, and obtaining reliable information on exposure may be difficult after the fact. Previous studies, Norwegian ones included, indicate that approximately 20 % of the cases may have their origin in occupational exposure (2, 3). This issue of the Journal of the Norwegian Medical Association includes a report from St Olavs Hospital, where patients admitted with a first-time diagnosis of lung cancer were examined on an ongoing basis over a period of 2.5 years (4). The report concluded that among the men, altogether 38 % of the cases of cancer (28 out of 73) were most likely or possibly occupationally related. Among the women there was no such correlation. Even though the assessment of causes may be fraught with problems in individual cases (5), the article is a useful reminder of how occupational exposure may be a cause. Referral to the department of occupational medicine should therefore be considered for many types of cancer, and lung cancer in particular.

Chronic obstructive pulmonary disease (COPD) is widespread in the population (6). Previously, smoking was regarded as the completely dominant cause, but this is now gradually changing. In their article, Fell and collaborators refer to findings from a number of studies documenting that exposure at work and in the environment in general may cause COPD (7). This is essential knowledge for preventing the disease, and it also provides a basis for ensuring appropriate compensation to the patient. Here too, the assessment of the cause may be controversial, since many of these patients are also smokers.

Early diagnosis and intervention in the workplace also improve the prognosis for work-related asthma (8). Especially when an allergic mechanism is involved, making a precise aetiological diagnosis can be difficult (9). In other cases irritating fumes and dust (irritants) may exacerbate the condition in patients in whom asthma is already established. This is especially important when young people set out to choose an occupation. In many cases of newly occurring occupational asthma the doctor's advice is to avoid exposure. Because today's system does not provide sufficient financial security, many of these patients may end up in financially dire straits (10).

The articles illustrate many of the current challenges in the field of occupational medicine. There is a need for considerable insight into diagnostics, but also for an understanding of working environment exposure. This will permit us to better assess the causes of occupational diseases. Such an understanding forms the basis for effective prevention and may ensure that the patients receive the compensation to which they are entitled.

Tor Olav Brøvig Aasen
tor.olav.brovig.aasen@helse-bergen.no
Johny Kongerud

Tor Olav Brøvig Aasen (born 1946), Specialist in pulmonary diseases and internal medicine, with special competence in occupationally related pulmonary diseases. He is former Senior Consultant and Head of the Department of Occupational Medicine, Haukeland University Hospital, now Special Advisor/in retirement.
The author has completed the ICMJE form and declares no conflicts of interest.

Johny Kongerud (born 1949), Head of the Department of Pulmonary Medicine, Oslo University Hospital Rikshospitalet and Professor II at the University of Oslo. He is a Specialist in internal medicine and pulmonary diseases and has long-standing research and clinical experience from the field of occupationally related pulmonary disease.
The author has completed the ICMJE form and declares no conflicts of interest.

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