Great changes have taken place in the fields of occupational and environmental medicine in Sweden during the past decade. Unemployment, work stress, and indoor climate problems have become increasingly common. Chemical exposures in industry and serious work accidents have continued to decrease. State subsidies to occupational health services have been withdrawn and the legislation concerning, for example, occupational diseases has been changed in order to decrease state expenditure. Research has focused on, for instance, ergonomic and psycho-social factors, electromagnetic fields and exposures causing allergy. There is a growing awareness of the need for more emphasis on prevention, which should act in favour of both hospital-based occupational and environmental medicine and the occupational health services sector.

Introduction

The rapid changes that have taken place in the arena of working life during the 1990s has resulted in greater attention being paid to new work-related medical problems and issues. For this reason, stress in connection with organizational, psycho-social and ergonomic conditions has become increasingly evident in many work places, whereas traditional chemical and physical risk factors have receded into the background [2]. Within the area of environmental medicine, on the other hand, chemical substances, electromagnetic fields and noise, for example, have attracted augmented attention [1]. The importance of indoor environments with regard to health and well-being – not least considering the increasing occurrence of allergies and other types of hypersensitivity among the population – represents an area in which the common points of interest between work and environmental medicine are particularly explicit. Developments in Sweden are consequently progressing toward increased co-ordination and integration between expertise in occupational and environmental medicine, especially concerning prevention, research and development.

The situation in Sweden differs from many other countries in that occupational medicine within the public sector of health services and occupational health connected to occupational health services have traditionally been treated as two separate disciplines. When the Swedish National Board of Health and Welfare, in 1992, last stipulated in which specialities physicians were to receive specialist competence, occupational health was given the status of a new speciality, while the speciality of occupational medicine was changed to occupational and environmental medicine (OEM). Company physicians primarily work in corporate health-service centres, which provide services to multiple companies, or in units within large corporations. Their main duties include preventive and diagnostic measures for work-related injuries and diseases plus work adaptation and rehabilitation. Specialists in OEM primarily work in university hospitals, where they are occupied with clinical duties (examination of complicated referral cases) and providing advice and carrying out teaching and research. This means that the stipulated description of goals for specialist training differs from the one speciality to the other.

Training and education in OEM

Undergraduate medical training

Courses involving OEM during medical training are arranged in slightly different ways at the six medical
Postgraduate specialization in OEM

Following the granting of a medical degree, all doctors must complete at least 18 months (usually 21 months) of clinical internship encompassing internal medicine, surgery, psychiatry and general medicine in order to qualify for registration. Only then can they apply to county-financed specialist training. Such duties at university hospitals are limited to a specific period, but are treated as open-end internships at other hospitals. To achieve specialist status, at least 5 years of work under supervision is required in accordance with the described goals for specialist training stipulated by the National Board of Health and Welfare [3]. The head of the specialist clinic, who has the prime responsibility for this training, then decides whether the physician meets these described requirements for becoming a specialist. If such is the case, the Board issues a specialist certification.

Specialization in OEM encompasses in-depth knowledge and expertise concerning how factors in the general physical environment and the working environment affect the health of groups and individuals in the population. It also covers the study and treatment of specific environment-related diseases and injuries. Specialists in OEM must be able to co-operate with other experts and authorities both within and without the health- and medical-service fields. This applies, for example, to occupational health services and labour inspection activities as well as to the environment- and health-protection services of municipalities, to the county administrative board and to the authorities responsible for contagious diseases. Specialists in OEM often possess a particular standing, and responsibility, as dispensers of information and knowledge. This requires systematic training in the collection, collation and dispersal of information. Thus, specialist training contains several different major ingredients, such as clinical patient duties and preventive work, which includes identifying, evaluating and controlling risk factors as well as monitoring and checking the health status of groups and individuals. It also includes the employment of methods and strategies for effective prevention of diseases and injuries. The ability to carry out epidemiological and toxicological studies must be acquired by hands-on practice. A knowledge of relevant legislation, regulations and labour market agreements is also necessary.

Approximately half of the duties of a specialist trainee are carried out at units for OEM. The major part of the remaining duties involves training in internal medicine. Some parallel training takes place at psychiatric facilities. The purpose is to give the physician knowledge of diagnostics and etiology with regard to psychiatric disturbances, which, among other things, may be relevant when assessing questions concerning neurotoxicity.

Theoretical studies are to be carried out in combination with clinical duties. Participation in relevant courses, conferences, etc. are also suitable segments in an individual training schedule, which should be arranged in consultation with the supervisor. Owing to the small number of physicians partaking of specialist training in OEM, the number of suitable state-subsidized courses is greatly limited. Clinics therefore attempt to arrange short courses themselves suitable for both specialist and advanced training. International courses are also utilized to some extent.

As do other specialist associations, the Swedish Association for Occupational and Environmental Medicine has been offering a voluntary specialist degree for several years in consort with the Swedish Medical Society. It consists of a written test and an oral examination based on patient cases as well as of a systematic study of a problem concerning OEM. It is still too early, however, to comment on the significance of this endeavour in raising quality, since only a few new specialists have so far graduated.

Postgraduate specialization in occupational health

Physicians active in the field of occupational health services have traditionally been recruited from other specialties, supplementing their education with a corporate-physician course of 9 weeks within an 18-month period. This has been arranged for many years by the National Institute for Working Life. Such is still the case, despite the fact that the speciality of occupational health was formally approved by the National Board of Health and Welfare in 1992, and thereby made equal to other specialities. The description of its goals specifies that the speciality of occupational health is to be based on a broad medical competence, equivalent to other specialities involved with substantial patient contacts (e.g. general practice). In addition, a company physician should have in-depth knowledge of the way in which factors in the physical and psycho-social working environment affect the health and working capacity of employees. Work aimed at abetting health, at prevention and at rehabilitation comprises the major areas of knowledge. A specialist serves as an advisory-expert resource for both the employer and the employee. All