

MULTIDISCIPLINARY MODEL OF OCCUPATIONAL HEALTH SERVICES. MEDICAL AND NON-MEDICAL ASPECTS OF OCCUPATIONAL HEALTH

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Abstract. Since 1950, the International Labour Organization (ILO) and the World Health Organization (WHO) have had a common definition of occupational health. The definition was adopted by the Joint ILO/WHO Committee on Occupational Health at its First Session (1950) and revised at its 12th Session (Geneva, November 1995). Occupational health should aim to promote and maintain the highest degree of physical, mental and social well-being of workers in all occupations; to prevent amongst workers the departure from health caused by their working conditions; to protect workers in their employment from risk resulting from factors adverse to health; to place and maintain workers in an occupational environment adapted to their physiological and psychological capabilities; in summary, to adapt work to the workers and each worker to his or her job.

According to the ILO Convention No. 161/1985 (1) and the 1996 WHO Global Strategy on Occupational Health for All, to protect the worker against sickness, disease and injury arising out of his or her employment, the establishing of occupational health services for all workers is recommended. The Convention as well as the Strategy emphasize the importance of multidisciplinary approach and multisectoral collaboration. It is evident that during the last decades of the 20th century, the concept of occupational medicine and occupational health has been changed. Occupational health services mean services entrusted with essentially preventive functions. Is there still a room for medical services provided by occupational physicians? The dominance of medical professionals seems to disappear in the modern multidisciplinary model of Occupational Health Services.

Key words:

Occupational health, Occupational medicine, Care of workers' health, Occupational Health Services (OHS)

INTRODUCTION

In the past, workers' health care as provided by physicians was a part of general health care rather than a part of complex system built on different assumptions. Even in the second half of the 20th century, many European countries designed their workers' health care from the viewpoint of medical care only. Medical examinations carried out by any physician in some countries, or authorised physicians in other countries, were considered to be the most important function of occupational health services

(OHS). Although no country established OHS to be merely curative, in some countries, especially in the newly independent states (NIS) and the countries of central and eastern Europe (CCEE), treating of all kinds of workers' injuries was practiced until the nineteen nineties. But health protection at work is not only a matter of national policy and legislation. For many years, standards for occupational health and safety have also been elaborated at an international level. The International Labour Organization (ILO) has been active in this field for about eighty years already, and its policy on occupational health

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and safety is essentially contained in its international conventions and accompanying recommendations. The ILO Occupational Health Services Convention No. 161 of 1985 can be considered as a cornerstone in establishing new occupational health directions.

NEW CONCEPT OF OCCUPATIONAL HEALTH DEVELOPED BY INTERNATIONAL ORGANIZATIONS

The first step taken jointly by WHO and ILO in 1950 during their first joint expert committee was to discuss the definition of occupational health. The broad definition of occupational health was then accepted and has been later referred to: "occupational health should not only include occupational diseases and accidents but all health aspects of man at work, the adjustment of work to man and of each man to his or her job".

Thirty five years had passed until the ILO adopted the Occupational Health Services Convention [1], which laid down general principles respecting occupational health practice, including workers' health surveillance, and the manner in which occupational health services should be established and operated. The Convention defines OHS as multidisciplinary services.

One year earlier, in 1984, the idea of multidisciplinary occupational health services was expressed in the EEC Economic and Social Committee's Opinion on occupational medicine. The Opinion states that, given the importance of occupational medicine in improving health protection and safety at work, it is essential in the general interest to ensure that all workers in the private and public sector (including agriculture) are covered by occupational health services, regardless of the size of the undertakings in which they work. The objectives of an occupational health service are broadly defined. Its primary aim is to prevent all occupational risks, including accidents at work. This preventive role implies actions to improve working conditions and work organization so that these are geared as far as possible to the needs of the worker. Since preventive action must encompass all aspects of working conditions, occupational health service must be

multidisciplinary and employ specialists from different fields (physicians, ergonomists, safety specialists, chemists, toxicologists etc.). Undertakings cannot only have either their own service or join a group service, but can also be affiliated to a service in any other equivalent form or structure, provided that the costs of occupational health care are borne directly or indirectly by the employers. The Opinion also states that all occupational staff must be appointed under conditions that safeguard their autonomy (which means that their appointment cannot be left solely in the hands of the employer) and that workers and their representatives must be consulted on and informed about the organization and running of occupational health services.

The emphasis is shifting from structure to function. It would seem more important that an occupational health service is able to deal with all relevant aspects of working conditions and to operate in close co-operation with employers and workers, than to focus on how it is organized or what the composition of its staff exactly is.

But returning to the ILO Convention, the term "occupational health services" means services entrusted with essentially preventive functions and responsible for advising the employer, the workers and their representatives in the undertakings on:

- (i) the requirements for establishing and maintaining a safe and healthy work environment which will facilitate optimal physical and mental health in relation to work; and
- (ii) the adaptation of work to the capabilities of workers in the light of their state of physical and mental health.

In more traditional OHS, which can be called Industrial Health Services, primary relationship was that between physician and patient with an active role played by the physician. In OHS, the number of actors is much larger and include, at least, the physician, the employer, the workers and their representatives. The physician is now expected to act as an advisor or an agent reporting to the employer rather than to act on behalf of an individual patient. The new model is designed to protect legitimate interests of the employer who is expected to follow the physician's advice. The occupational physician thus

“becomes a partner in the management of the enterprise”[2].

The Convention defines the following functions of occupational health services:

- (a) identification and assessment of the risks from health hazards in the workplace;
- (b) surveillance of the factors in the work environment and working practices which may affect workers' health, including sanitary installations, canteens and housing where these facilities are provided by the employer;
- (c) advice on planning and organization of work, including the design of workplaces, on the choice, maintenance and condition of machinery and other equipment and on substances used in work;
- (d) participation in the development of programs for the improvement of working practices as well as testing and evaluation of health aspects of new equipment;
- (e) advice on occupational health, safety and hygiene, ergonomics, as well as on individual and collective protection equipment;
- (f) surveillance of workers' health in relation to work;
- (g) promoting the adaptation of work to the worker;
- (h) contribution to measures of vocational rehabilitation;
- (i) collaboration in providing information, training and education in the fields of occupational health and hygiene and ergonomics;
- (j) organization of first aid and emergency treatment;
- (k) participation in analyzes of occupational accidents and occupational diseases.

It is evident, while looking at the above mentioned functions that occupational health services, even when enlarged by provision of curative and general health services promoted by Recommendation No. 171 [3], accompanying the Convention, are not basically medical services. One can single out with ease the functions that may be actualized successfully without medical professional background. Assessing the above functions it is worth noting that stress has been put on primary rather than on secondary or tertiary prevention. Taking literally, none of the functions, even the one defined as “surveillance of workers' health in relation to work”, requires the physician to be employed. According to Glossary that has been

included into the ILO Guidelines [4] “workers' health surveillance” does not necessary mean medical examination carried out by the physician. It can read as follows: “Workers' health surveillance is a generic term which covers procedures and investigations to assess workers' health in order to detect and identify any abnormality. The results of surveillance should be used to protect and promote the health of the individual, collective health at the workplace, and the health of the exposed working population. Health assessment procedures **may include, but are not limited to, medical examination**, biological monitoring, radiological examination, questionnaires or a review of health records”. That is why many occupational professionals asked about their activity in OHS may say that these are the functions defined in Article 5 of the Convention, including “workers' health surveillance”.

The Convention states in Article 9 that the composition of the personnel shall be determined by the nature of the duties to be performed. Occupational health services shall carry out their functions in co-operation with the other services in the undertaking. As it is also stated in Article 9 of the Convention, measures shall be taken, in accordance with national law and practice, to ensure adequate co-operation and co-ordination between occupational health services and, as appropriate, other bodies concerned with the provision of health services. Non-medical functions, such as safety and occupational hygiene, may be organized, which is the case in Poland, as separate departments within or outside the enterprise. As the physician in isolation cannot be truly effective in managing occupation-related cases, regardless of what form of organization is selected, it is essential that there be clear lines of communication and a close working relationships between the essential non-medical functions and the medical ones. The trouble is, taking into account the functions defined in the Convention, which one of them is strictly medical and, as such, should be reserved for the physician. Maybe that is why in the Netherlands – the country where the introduction of the multidisciplinary OHS are most advanced among European countries – “the percentage of physicians in the staff decreased” and “homogeneity of the field, due to the dominance of the medical professionals, disap-



peared" [5]. The Dutch researchers link these facts with privatization tendencies in the social security system that plays a very important role in shaping occupational health practice in the Netherlands, but other reasons can also be considered. The researchers also write off a growing pressure on the OHS institutions to demonstrate their effectiveness to the companies [5]. Meanwhile, the periodic prophylactic medical examinations – well-known and frequently applied form of medical activity in occupational health practice – for years have been considered as the tool of weak effectiveness. These medical examinations are carried out in the hope that "illness" can be prevented by taking early action. This hope is certainly not always justified [6]. Pre-employment examinations, for example "in some occupations are essential; in others they are probably desirable, but could well be simplified or modified; and in a great many others they are a sheer waste of medical man-hours which could have been better spent in more useful activities" [7]. But any trial of limiting the number of medical examinations was, and still is hardly accepted by the physicians. Moreover, a primary relationship between physician and the patient seems to vanish when the ultimate objective of occupational health is defined as "a safe and satisfactory work environment in which a healthy, active and productive worker, free from both occupational and non-occupational diseases, can carry out his or her daily work motivated to develop both as a worker and as an individual"[8]. Environment as a patient? This is against medical tradition followed heretofore. When health surveillance does not mean medical examination, when patient is defined as an environment, and pre-employment examinations are strongly restricted by law in order to abandon selection on health status, is there still a room for medical functions in multidisciplinary OHS?

A need for establishing the multidisciplinary model of occupational health services has also been stressed by WHO. In May 1996, the World Health Assembly discussed occupational health and adopted a resolution on the WHO Global Strategy on Occupational Health for All [9], requesting the Director-General to promote the implementation of the Global Strategy on Occupational Health for All within the framework of the Ninth General Program

of Work. Member states were urged to devise national programs on occupational health for all, based on the global strategy, with special attention to pull occupational health services for the working population, including migrant workers, workers in small enterprises, in the informal sector, and for other occupational groups at high risk and with special needs, including children at work. The Plan of Action for the Implementation of the WHO Global Strategy on Occupational Health for All has been prepared.

Following the WHO Global Strategy on Occupational Health for All, countries are encouraged to provide support services and other infrastructures needed for the development of multidisciplinary OHS. The preventive approach should be given the highest priority. Disciplines relevant to OHS include occupational medicine and nursing, occupational hygiene, work physiology and physiotherapy, ergonomics, safety and work psychology.

DOES MULTIDISCIPLINARY OHS REALLY OPERATE IN EUROPEAN COUNTRIES

There are several models of occupational health services that are evident in Europe. The models vary according to the extent to which they are dominated by members of the medical profession, such as appears to be the case in France and Poland, or the opposite extreme in Denmark. In most European countries, employers are obliged by law to establish an occupational health service in large enterprises and the nature of the personnel it employs is to some extent also defined. There are countries where traditionally employers have had the greatest discretion over the establishment of occupational health services (This is the case of the United Kingdom and Ireland), "although changes introduced as the result of the Framework Directive 89/391 may introduce a stronger element of compulsion into the use of preventive services in these countries" [10]

By the way, let us look at Framework Directive 89/391. There is only one article, namely article 14, where health surveillance is mentioned. It reads as follows: "To ensure that workers receive health surveillance appropriate to the health and safety risk, measures shall be introduced

in accordance with national law and/or practices” [11]. It should be noted however that worker, which is also stated in Article 14, may receive health checks if he/she so wishes.

Does the multidisciplinary model of occupational health services really operate in European countries? Taking into account the data collected in the studies of “Multidisciplinary Services in Occupational Health and Safety in the European Union” [12], the level of the enforced use of multidisciplinary services, whether compulsory or voluntary, varies through the countries of Europe. The Danish study has reported that the countries where the use is compulsory are: Austria, Belgium, Denmark (but only in specific sector of industry), Finland, France, Italy, Netherlands, Portugal and Spain. In other countries, multidisciplinary services are voluntary. But, according to my knowledge, even if the use of multidisciplinary occupational health services is compulsory, it does not mean that such a service really operates. Much of the motivation for employers to use multidisciplinary services is to prove compliance with legislation [2]. There is a lack of scientific evidence about the effectiveness of the multidisciplinary OHS model.

In the late 1970s the EEC Economic and Social Committee suggested the Community to adopt the respective directive in order to secure coverage of all the workers by occupational health services. Today, the Community seems to have given up its ambition to harmonize national provisions relating to occupational health services. As Professor Gevers, an expert in the European legislation on occupational health and safety, has written: “...this is to some extent understandable. The generalization of occupational health care, its gradual extension to all enterprises and its multidisciplinary character, make it more and more difficult to define and impose a single common model, apart from the different conditions prevailing in each of the Member States” [13]. Both organizations, WHO and ILO, seem to believe in one concept only – multidisciplinary model of OHS. Are these organizations right? Much more data-based evidence should be collected to answer this question.

CONCLUSION

1. According to the ILO Convention and the WHO Global Strategy on Occupational Health for All, the establishing of multidisciplinary model of occupational health services in order to protect workers' health, is recommended. The European Community is much more flexible and seems to have given up its ambition to establish one common OHS model.
2. The ILO/WHO recommendations are based on a new concept of occupational health. The priority has been given to primary prevention against secondary or tertiary one. As a result, the dominance of non-medical function or non-medical aspects of occupational health can be noticed. In the countries where multidisciplinary OHS are compulsory, which is, for example, the case in the Netherlands, also the dominance of medical professionals seems to disappear. The multidisciplinary OHS model can be described as a model of safety or occupational hygiene services (with social aspects of health included) rather than a model of medical services. It is evident that occupational health services do not mean medical services.
3. In the future, even the establishment of multidisciplinary model of OHS without a physician as a member of a team is imaginable.
4. It is believed that multidisciplinary model of OHS is much more effective than traditional one but there is a lack of scientific evidence to support this opinion.

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