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Review

Obstacles and perspectives. Considerations on health promotion activities performed for older workers in Europe

Nicola Magnavita [1], *

[1] Institute of Public Health, Università Cattolica del Sacro Cuore, Roma, Italy; nicolamagnavita@gmail.com

* Correspondence: nicolamagnavita@gmail.com; Tel.: +39-347-3300367

Abstract: The ageing of workers is one of the most important issues for occupational health and safety in Europe. A number of studies on health promotion intervention for older workers were conducted in European workplaces between 2000 and 2015. This review gives an overview of these studies and considers perspectives for workplace health promotion.

Keywords: Health Promotion; Ageing; Workplace; Occupational Health; Effectiveness; Salutogenesis; Holistic Medicine; Subsidiarity; Participatory approach; Setting.

1. Introduction

Ageing of the workforce presents a challenge for all European countries. Keeping workers active and productive through health promotion intervention is a prime objective of European labour policy. We used the general framework of the ProHealth65+ research funded by EU-CHAFEA to examine workplace health promotion for older workers (WHPOW) in 10 countries belonging to Mediterranean (Italy, Greece, Portugal), Western (Germany, Holland, Czech Republic) and Eastern Europe (Hungary, Poland, Bulgaria, Lithuania) [1].

To identify the largest number of projects carried out between 2000 and 2015 we conducted (1) a systematic review of the literature [2]; (2) research on gray literature; (3) an analysis of major companies using SurveyMonkey [3]. The projects were classified according to the type of intervention carried out, the institutions that took part and the role played by each of them. A total of 622 intervention studies were retrieved. Most of the studies (47.4%) were carried out in Central European countries, while Eastern and Mediterranean Europe undertook fewer projects (31% and 22%, respectively) [4]. Most intervention was designed to discourage retirement and was based on training programs. Overall, health promotion activities were inadequate for the scale of the social and economic changes taking place.

The ProHealth65+ study found that the review of WHPOW activities conducted in Europe from 2000 to 2015 revealed major differences in European countries as regards both the number of projects undertaken and their quality. In Western European countries, the implementation of guidelines and specific measures to promote the health of the elderly together with incentives for companies investing in this sector favoured the development of projects in the workplace. On the other hand, in Eastern European countries and especially in those belonging to the Mediterranean area, the projects failed to meet potential needs [5]. The results of this study have been published in detail elsewhere [6].

In this paper we report our main considerations after making an analysis of WHPOW intervention studies, and put forward proposals for improving health promotion activities.

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2. Obstacles to health promotion

Obstacles encountered in carrying out WHPOW, especially in small companies, include a shortage of financial and human resources for implementing intervention, a lack of flexibility in organising tasks (e.g. job rotation), and an uncompromising attitude on the part of employees and managers. Moreover, regulation often does not support evidence-based practice [7]. Another limiting factor concerns the time taken to implement health promotion measures [8]. A reluctance to change work habits and practices, mostly on the part of long-serving employees, may also constitute an obstacle. This may occur on account of a lack of awareness of the dangerous effects of some habits or due to poor communication regarding the benefits of better working practices or a healthy work environment. A lack of worker participation in the design and implementation of health promotion activities can also affect worker motivation. Lastly, low wages may cause a drastic reduction in the motivation of employees as regards WHP.

2.1. Resources and continuity

Lack of funding is responsible for limiting WHPOW intervention even though the actions for health may produce many economic benefits by increasing productivity and reducing absenteeism and presenteeism associated with chronic diseases. In general, a lack of resources was the obstacle most frequently reported for WHP programs, while strong management support was the element most frequently reported to facilitate this type of intervention [9].

A successful WHP program produces intangible benefits due to increased worker wellbeing and satisfaction. However, since these benefits are not immediate, an initial investment in WHP projects is always necessary. Projects should explicitly include ways of recovering resources so as to ensure continuity of intervention. Since small companies often lack access to health-promotion opportunities available at larger workplaces, it could be useful to provide incentives for smaller workplaces to implement comprehensive WHP programs [10].

Continuity is one of the crucial aspects of WHPOW projects: in many cases a project is sustainable only if it leads to a recovery of resources or a significant improvement in production methods. Many projects come to an end if they are not continuously financed. This general rule has some exceptions. Some Dutch WHPOW projects that were temporarily funded by the government had a positive outcome because several companies decided to take over responsibility for funding after witnessing the beneficial effects of the projects [11].

Most European countries already allocate substantial resources for occupational health, but in many cases these resources are not invested profitably. Although the workplace is an ideal setting for health promotion for older people, it is also the place in which huge resources are being wasted or used inefficiently for purposes other than health promotion. Improving the quality of occupational health in the workplace is the best way to recover resources for health promotion.

To be effective, a promotion program requires not only economic resources, but also and above all, human resources and scientific knowledge. Health promotion must be based on evidence [12-15].

2.2. Evaluation of the effectiveness of WHPOW

The evaluation of results remains a crucial issue for WHPOW programs. Most WHPOW programs do not envisage an evaluation of results, and even when an assessment is made, there is a lack of scientific evidence since evaluation is performed at the end of a project rather than after a period of time when the lasting effects of the improvements achieved can be demonstrated.

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Furthermore, since WHPOW programs rarely contemplate the existence of an external advisor, there is the risk of a conflict of interests if evaluation is carried out by those conducting the WHPOW intervention. The same applies to other aspects of workplace health promotion, although some evidence indicates the long-term effectiveness of multicomponent lifestyle interventions in the workplace, the limited number of high quality studies and the lack of consistency among studies preclude a conclusive assessment. More thorough, well-reported studies are needed to fully understand the impact of interventions [16-27]. Methods such as ROI (Return On Investment), that are used to assess the effectiveness of programs, need to be carefully evaluated because their application has raised considerable criticism [28]. However, it is widely accepted that well-designed and well-executed intervention studies founded on evidence-based principles can achieve positive health and financial outcomes [29].

2.3. Occupational health: current and historical approaches

The system of insurance against occupational diseases was set up in most developed countries a hundred years ago to deal with industrial work in which occupational hazards were an inevitable consequence of production. Since it was not possible to change the occupational environment, the only form of justice was to offer compensation to the sick worker.

A century later, the situation has changed completely. New technologies have brought safety to all work environments. European Directives oblige employers to implement occupational health and safety measures in all countries, and nowadays most causes of disease are to be found outside the workplace.

In spite of these changes, the approach to occupational health has remained substantially the same as a century ago. Occupational health services still look for early signs of disease and the insurance system provides compensation for the sick worker. This so-called "laboristic" approach, that focuses only on occupational aspects, fails to take into account the health risks that are not directly related to work, in spite of the fact that diseases arising solely from work constitute only a minute part of all chronic diseases affecting workers. All the diseases that European workers attribute to work are actually due to a number of factors. Musculoskeletal disorders - by far the most frequent complaint affecting European workers - are the result of several different factors that include heavy load carrying, awkward postures, repetitive movements, lack of exercise, obesity, psychosocial factors, and many others. Exposure to each of these risks may be both occupational and non-occupational. If an employee has back pain, a physician cannot clinically detect the cause of this disorder.

The “laboristic” approach and the possibility of obtaining financial compensation for work-related back pain can lead to the so-called “compensation syndrome” where the employee emphasizes all work-related aspects of his/her illness and overlooks others. A doctor, who in most cases is a trade union doctor rather than the company doctor, makes a diagnosis of occupational disease. The insurance institute conducts an investigation and, if the occupational cause and effect relationship is established, compensates the employee and punishes the employer who may be sued for damages by the worker and prosecuted by the State. All this process takes years and does not improve health.

If the current “laboristic” approach were to be abandoned in favour of a more holistic approach, far more resources would be available to invest in promotion against all health risks. A new culture of health promotion in occupational health and safety (OHS) practice is urgently needed [30]. The workplace could become the ideal environment for promoting a healthy lifestyle [31].

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2.4. Unnecessary bureaucracy

In some cases, public resources that have been allocated for the health of workers are used in an unprofitable way. For example, every year the Polish Occupational Medicine Service (OMS) carries out 4.5 million mandatory preventive examinations of individuals who are seeking employment [32]. These medical examinations are carried out irrespective of the possible working conditions that neither the future employee nor the physician can foresee. After this medical examination, a qualified physician issues a certificate stating whether or not the individual is fit for work. It is hard to understand the usefulness of this procedure which neither prevents occupational risks nor promotes healthy lifestyles. Moreover, the Polish OMS undertakes no curative measures and, even if called upon to perform a routine medical examination of workers, is not entitled to intervene in the working environment to reduce occupational health and safety risks.

To have sufficient resources for workplace health promotion, it is essential to avoid this type of unnecessary expense.

2.5. Target health, not diseases

Some researchers argue that health promotion interventions should be directed specifically at workers with an elevated risk of chronic disease. A recent, very interesting review selected some US workplace interventions that targeted at-risk employees on the basis of the latter's disease or disease-related risk factors [33]. However, this approach is not suitable in workplaces where fairness requires health promotion activities to be offered to all workers, not just to a limited number. The ideal solution is to promote health rather than look for disease. The presence of occupational health services in many workplaces allows this to be done.

In Italy, occupational health physicians carry out around 10 million mandatory medical examinations and routine check-ups a year - probably the largest number in Europe. However, only a few of these activities are aimed at health promotion.

This large number of annual medical examinations (most of which include blood and urine tests despite their acknowledged low job-specificity) is due to a concept of "health surveillance" distorted by cultural and historical factors [34]. Unless there is a clear diagnostic purpose, it is useless to carry out blood tests or instrumental analyses. However, this is often done because workers believe that it is their right ("acquired right") to have these tests and employers consider tests to be a more concrete result than a health education program. OHS companies also find it easier and more profitable to sell health products rather than set up, implement and check the long-term results of a health promotion program.

It is debateable whether these medical examinations should be carried out at the expense of the employer and in a country that offers an efficient and universal Public Health System with the screening, diagnosis and treatment of non-work-related diseases. Clearly, we seem to be over-testing; but are we offering correct and adequate health promotion at the same time?

2.6. Linking industrial hygiene and occupational health

Misuse of health care resources also occurs in current occupational health practice where many occupational physicians face a number of important limitations due to a lack of clinical and

occupational exposure information at the time of medical examination, or even threats to their professional independence. This situation often occurs in external OHS services, especially in connection with knowledge of occupational and non-occupational sickness absence data, participation in the investigation of work accidents and occupational diseases, and access to the prevention service on the part of workers.

Poor coordination and communication between the OHS, the National Health Service and the employer's insurance companies, and failure to exchange medical records when a worker changes jobs or an employer contacts a different external OHS service, impair occupational health practice. Inadequate exposure information (e.g. job description, risk evaluation, environmental measurements) is of particular concern because without the necessary information Occupational Medicine loses all meaning. If the occupational physician merely assesses the condition of each individual worker without trying to improve the working environment and adapt it to the individual, he/she is simply not doing his/her job.

Existing evidence supports an integrated approach [35]. If industrial hygiene and occupational health function separately, working conditions may be seriously impaired. Unfortunately, in some countries, such as Poland, where the Work Safety and Hygiene service and the Occupational Medicine service are separate [32], integration between services is very rare.

2.7. Accessibility of health care in the workplace

Accessibility poses an important problem for external prevention services. Most European enterprises are small and medium-sized, and often distributed over an extensive geographical area. Physicians employed by external occupational services are often located at some distance from workplaces so that their contact with workers is limited to routine medical examinations. Internal prevention services, on the contrary, have good accessibility, so physicians are able to examine workers more frequently after sick leave and increase the probability of early detection of occupational health problems and vulnerable workers. An assiduous presence of the medical service is essential for successful health promotion, since recent studies in the field [36] have shown that the there is a constant demand for the advice of an occupational physician.

2.8. "Fitness for job"

The fact that health examinations are almost always followed by a fitness-for-work certificate that is issued regardless of the job and its associated risks, may have an unintentionally detrimental effect on workers. Since it is claimed that companies are reluctant to accept workers who are given a 'conditional' fit–for-work certificate, some workers who could most benefit from WHP activities may decide to avoid this type of prevention service. Employee participation is an essential requisite for workplace health promotion.

2.9. Sharing the costs of health promotion

Ageing of the workforce has such important repercussions on the productive capacity of public and private enterprises that health promotion for older workers has become a vital issue.

ProHealth65+ research has shown that some European countries have already taken important steps to tackle this question. Supranational institutions are urging all European countries to rapidly adopt the same correct approach.

The true task of occupational medicine is to improve occupational health. This can only be achieved by adopting a holistic approach that takes into account not only occupational risks, technical and medical expertise and ergonomic adaptations in the work environment, but also habits and lifestyles that may favour the onset of diseases and thereby interfere with working capacity.

The holistic approach to occupational health is considered to be of prime importance in some central and northern European countries. The most numerous and effective WHPOW projects are concentrated in Scandinavian and central European countries [37, 38]. In these countries health promotion often has fiscal incentives. In Flanders, for example, the State recognizes company commitment to health promotion and participates by providing some of the necessary funding [39]. This significant commitment to the promotion of occupational health services should act as a guide for policy and labour laws in other European countries.

A particular aspect of health promotion concerns the management of disability. Recovering the full working capacity of a worker with a handicap is certainly better than providing compensation for his/her handicap. Germany offers an excellent example of how workers with disabilities can recuperate without the provision of monetary compensation [40]. This policy is crucial for elderly workers who often suffer from chronic diseases and disabilities.

2.10. Subsidiarity

Subsidiarity is another significant aspect of the northern European model of health and safety promotion in the workplace. On the basis of this principle, the State rarely intervenes in consultations among social partners. Safety and health at work are primarily the responsibility of companies and workers. The transition from a proto-industrial top-down, authoritarian model to a more modern participatory and democratic bottom-up pattern is not easy, especially in countries where there is a high unemployment rate. However, according to European Directives on Health and Safety at Work founded on worker participation, this is the path that should be undertaken.

Countries such as the Netherlands and Germany, where this process has already been adopted, are familiar with the difficulties involved. A large supply of readily available resources is required and it is useful to create networks of small and medium-sized enterprises, coordinated by local organizations and supported by expertise from universities. Institutions that insure against occupational injuries should fund these efforts, and social partners should give their support.

Our analysis of experiences in EU countries showed that the successful development and implementation of WHPOW depends largely on involving both employees and management. Ageing is a highly complex phenomenon, so it is essential to adopt a multi-level approach involving the collaboration of different departments in order to effectively manage the health of an ageing workforce. Activities undertaken as part of a wide-ranging strategy and implemented by large parent companies or local authorities are more likely to be sustained over time, and the presence of external consultants can offer valuable technical experience and expertise.

As resources are vital for sustaining WHPOW programs, it is essential to make a preliminary assessment and regular evaluation of the measures adopted. To be successful, a program should ideally implement a life-long approach, with actions that focus on introducing early changes in

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lifestyles for all employees. At the same time, it should also incorporate personalised and flexible measures. Intervention that includes flexible working hours, provision for mentoring or the transfer of knowledge and extra days off would address some of the specific needs of the working population.

2.11. Type of setting

Our study focused on intervention studies that were developed or implemented in the workplace. The workplace is considered to be particularly interesting and important for health promotion because it has a powerful impact on a large number of people both during and after their working life. The development of WHP projects is facilitated in large enterprises because of the availability of medical resources and staff skilled in environmental and human resources management. Moreover, the fact that the workplace brings together large numbers of workers in a single place at a given time is an additional incentive for performing health promotion in that setting. Another vital aspect of health promotion activities in the workplace is naturally the need for cooperation between employers and employees.

However, the fact that health promotion action usually takes place in the workplace, does not mean that all intervention studies adopt a "workplace setting approach", i.e. all health promotion action begins and ends in the same environment. Poland et al. [41] stated that taking a 'setting approach' to health promotion means not only addressing the contexts in which people live, work, and play and making these the object of inquiry and intervention, but it also involves considering the needs and capacities of people in different settings. The authors of this type of health promotion project recognize that both the problem and the solution lie within the same setting and that intervention must change the setting itself. In these projects, changing the central and underlying health factors does not merely involve changing people's health behaviour, it also entails modifying the settings themselves [42, 43]. In a work context, this means that both the problem and the solution lie within the setting and are therefore closely related to the production of goods or services on the part of the enterprise. Rarely can the promotion of workers' health be obtained only through changes in conditions in the workplace. When this occurs, rather than health promotion, it is merely a question of prevention of occupational risks, which, according to European Directives, is a mandatory task of the employer. Activities devoted exclusively to the safety and control of industrial risk factors were not included in our research. Most health promotion needs to go beyond the boundaries of working activities by using a holistic approach to focus on physical, social and organizational factors. An example of a 'non-settings' approach is when the workplace becomes a place where people can be contacted and their behaviour can be changed in relation to diet, physical activity, or other non-occupational factors. In this way, health promotion activities can be performed in a setting without applying a 'settings' approach.

Our review indicated that the sole aim of most WHPOW intervention studies was to change the habits and lifestyles of workers and did not envisage any change in or control of the working environment. These studies adopted a 'non-settings' approach as they used the workplace only as an environment in which health-promoting activities could be carried out on workers in order to change their behaviour in relation to lifestyle factors such as diet, smoking and physical activity. They did not focus on the setting itself.

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2.12. Type of approach to changes in the environment

We also observed that health promotion projects with a 'settings' approach to the workplace followed two distinct methods: a non-participatory, top-down approach, and a participatory, bottom-up approach. Participatory studies used group interventions that enabled workers to have a say in how the actions were conducted. Examples included health circles, problem-based learning groups and many others that required an active effort on the part of the employees. Most of these WHPOW studies used psychosocial measures as indicators, since they wanted to change the organizational culture and climate toward older workers. Studies of this type used more qualitative research methods than those that adopted a different approach.

The non-participatory 'settings' approach included studies that aimed at improving health by changing the physical work environment or work organization without involving employees in decisions about what changes should be made or how these should come about. These studies relied mainly on the opinions of experts and on technical measures, and often resorted to industrial hygiene or human resource management methods.

For some years now the literature has indicated the participatory model as an example to follow for the promotion of health [44].

2.13. Concept of health

Since the studies included in our selection did not explicitly define health, we examined the resulting health outcomes. An analysis of the intervention undertaken enabled us to deduce the underlying concept of health. According to Torp and Vinje [45], health promotion projects are based on three different concepts of health: the traditional idea that sees health as absence of disease (therefore health behaviour, injury, occupational or non-occupational diseases, absenteeism); the salutogenic concept of positive health (i.e. engagement, satisfaction, self-esteem, motivation); and a middle-of-the-road way of defining or describing health based on dual intervention (work ability, general health).

The majority of studies in the workplace referred to pathogenic health outcomes such as the presence/absence of diseases or injury. Examples of these outcomes are common mental disorders, such as anxiety, depression, distress or burnout; musculoskeletal disorders; cardiovascular diseases; allergy and accidents. Many studies included health behaviour action that focused on safe working techniques and the use of personal protective equipment at work. Some studies included lifestyle measures such as healthy eating, physical activity and non-smoking behaviour that were clearly detached from the core activities of the company. Health outcomes measured in other studies were absenteeism, i.e. the frequency of absence from work due to illness, or presenteeism, i.e. working despite being ill.

A more limited number of studies used outcomes such as general health and the quality of life, or work ability, often measured by the Finnish Work Ability Index. Both the quality of life and work ability can be used as positive measurements, but they are used more often negatively to measure injuries or work-related diseases.

Positive health outcomes such as self-esteem and job engagement were rarely considered. Most studies used more than one outcome measurement related to health. Moreover, several studies included outcome measurements related to the working environment, productivity and satisfaction with the type of intervention.

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3. Conclusions

Although the literature indicates health promotion interventions based on a salutogenic approach and a participatory method designed to modify lifestyles and work environments as being the most effective, the majority of studies we surveyed had a traditional clinical approach aimed mainly outside the workplace. Any changes that were made to the workplace, were almost always decided with a top-down approach. As a general conclusion we can state that work is a fundamental health factor. Workers account for around half of the world's population and since the well-being of workers is closely linked to companies and national productivity, it consequently influences the well-being of the entire population.

Health promotion at work is linked to at least two more strategies for improving health in the workplace: 1) wellness programs, with emphasis on the lifestyle of individuals, and 2) occupational health and safety with a focus on physical work-related risk factors [46]. Most experts [37, 47] argue that WHP should adopt a holistic approach that includes both of these aspects, as well as focusing on psychosocial and organizational work factors. Health promotion interventions should be designed to bring about structural changes in production that would significantly improve the work situation.

There are three main approaches to health promotion that place a focus on 1) a problem (e.g. accident prevention and reducing smoking levels), 2) the population (e.g. ageing in good health), or 3) the setting (e.g. schools that promote health). However, most studies conducted in the workplace do not aim to change the work environment, focusing instead on changing health behaviour by means of a specific type of intervention.

Despite the number of theoretical health promotion documents that explicitly describe health as a positive concept related to physical, mental and social well-being and not simply to the absence of disease, very few health promotion studies in the workplace use positive health measurements.

Both the Ottawa Charter for Health Promotion and the Luxembourg Declaration on Workplace Health Promotion in the European Union reflect a holistic view of health, and explicitly refer to the WHO's definition of health as a complete state of well-being. Well-being at work is strongly related to positive aspects, such as motivation, engagement, and job satisfaction [48]. The most recent literature emphasises the idea that health must be seen as the ability to adapt and self-manage in the face of physical, social and emotional illnesses or constraints that are more or less chronic [49]. In accordance with Antonovsky's [50] salutogenic perspective, individuals should be helped to move towards higher levels of overall health, well-being and achievement. This positive, holistic and dynamic approach embraces the need to focus on people's resources and their capacity to create health [51].

Compared to practitioners in other medical fields, occupational physicians have always focused less on treatment and more on the prevention of accidents and diseases. The occupational health focus has been, and still is, mainly on risk factors and the prevention of diseases rather than on health promotion defined in a positive and / or holistic manner. Research on workplace health promotion in European countries often resembles traditional disease prevention. In future, health promotion programs conducted in the workplace should focus not only on risk factors and the prevention of disease, but should put more emphasis on a participatory approach leading to positive health outcomes.

The ageing of the active population means that health promotion is a necessity rather than a mere option. Consequently, European institutions should urge national entities to introduce further health promotion intervention, involve social partners and private bodies in this objective and share experiences and effectiveness tests.

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