ABSTRACT

Background: Aging of the workforce challenges European countries. Keeping aged workers healthy and productive, through health promotion, is a key goal of European labour policy. The aim of the present study was to collect experiences of workplace health promotion for older workers (WHPOW) conducted in 10 representative countries of Central Europe, Eastern Europe and the Mediterranean.

Methods: A literature review of activities of WHPOW was conducted through a comprehensive search of major scientific databases and on the website of the major European Agencies on worker health promotion. The search was restricted to papers published in English from 2000 to 2015. Companies were asked for additional documentation about WHPOW programmes in a survey conducted with SurveyMonkey.

Results: A total of 756 initiatives regarding WHPOW were identified. 134 of these were guidelines, regulations, or review studies. The remaining 622 activities were intervention studies performed or promoted in the workplace and targeted at older workers or at the aging of the workforce. Most of the programs were carried out in Central Europe (295, 47.4%), less in East Europe (193, 31.0%) and in Mediterranean countries (134, 21.6%).

Conclusions: Our study shows that there are only a limited number of WHPOW actions throughout the 10 selected European Countries. While in Central Europe widespread interest in issues of aging workforce has resulted in national policies to encourage WHPO, not all the countries of Eastern Europe are equally well equipped. Lastly, in Southern Europe health promotion activities are largely inadequate compared to needs.

Key words: Aging; Health Promotion; Workplace; Occupational Health; Employment

BACKGROUND

The increase in life expectancy and the reduction in birth rates have altered the age pyramid and put welfare systems at risk throughout Europe. In recent years, all European governments have adopted policies to rise the retirement age and abolish benefits for early retirement, thus considerably increasing the age of the workforce [1].

Aging of the workforce, a phenomenon that affects all European countries, increases the need for worksite health promotion for older workers (WHPOW).

Since this process has taken place without any changes in working methods, many older workers are currently faced with jobs designed for young people. This situation can cause immediate problems for the health and safety of workers. It can also increase the chance of errors,
which in some crucial sectors (e.g., those concerning health, transport, industry, the police and many others) may endanger the health and safety of others [2; 3]. This means that not only employers and employees, but the public as a whole has a vested interest in developing WHPOW [4].

The workplace has always been seen as the ideal environment for health promotion, as it is the place where active people spend most of their time working according to specific schedules. It is therefore the ideal place to conduct health promotion activities on a large number of workers. Many companies have an occupational health and safety (OHS) service in the workplace that provides the necessary expertise and health services at no additional cost. Companies have a vested interest in their workers’ health since this safeguards the latter’s working capacity. Employees, on their part, are interested in their own health and in keeping their wellbeing and earning capacity intact. For all these reasons, Workplace Health Promotion (WHP) is widely applied by many of the largest companies, especially in countries like the US where the health service is mainly private.

Aging of the workforce is a problem that involves all European countries, but the way to deal with this issue is quite different, as policies for older workers depend upon the social, economic and cultural context of each national society. Although sufficient information is available about the health promotion activities conducted in Scandinavia [5; 6], very little is known about those of other European countries. We decided to fill this information gap, performing an inventory of WHPOW activities conducted in 10 representative countries of Central Europe (Czech Republic, Germany, The Netherlands,), Eastern Europe (Bulgaria, Hungary, Lithuania, Poland) and the Mediterranean (Greece, Italy, Portugal).

Workplaces are extremely varied since they differ in relation to type of activity, history, traditions, and availability of services. The size of an enterprise and its geographical location considerably influence the level and type of workplace health activities to be implemented. National health and safety policies also affect the availability of occupational health and safety (OHS) services and modify the subtle distinction between occupational risk prevention and health promotion, thereby creating a powerful background disturbance in our research.

For all these reasons we opted for a binary method: the first systematically collected peer-reviewed and grey literature, while the other one made direct contact with companies to learn about the WHPOW activities that had been undertaken.

METHODS

A grey and scientific literature review, integrated by a survey of companies, was carried out to collect the existing information on institutions involved in WHPOW in the 10 selected European countries. The study was performed within the project “ProHealth65+: Health promotion and prevention of risk – action for seniors” funded by EU-CHAFEA with the aim to analyse best practices and roles of institutions active in the field of health promotion for the elderly in Europe.

The systematic literature review was conducted according to the PRISMA criteria in the electronic databases MEDLINE, ISI Web of science, SCOPUS, The Cochrane Library, CINAHL and PsychINFO. The search was restricted to papers published between 2000 and 2015 in English or Italian. A detailed description of the method is published elsewhere [7]. An online search of WHPOW activities carried out in the ten European countries was also performed, by entering on Google the keywords “health promotion”, “age management” and “older worker”, in a country specific string (i.e. “health promotion”, “age management”, “older worker” and “Italy”). A specific research was conducted on the website of the major European Agencies of worker health promotion (ENWHP, Eurofound, ILO, EU-OSHA). In a survey conducted online with the SurveyMonkey programme companies were asked for additional documentation regarding WHPOW initiatives. The list of companies was obtained by collecting together the rankings of the world’s major corporations according to sales, brand, appreciation by workers and attention to the elderly. The biggest companies in the world in terms of total revenue in the Fortune 500 Global 2014 list, the top 500 companies in the world in terms of brand strength in 2014 listed by Brand Finance, the places to work included in The Best Multinational Workplaces in Europe in 2014, The Best Large Workplaces in Europe in 2014, and The Best Small and Medium-sized Workplaces in Europe in 2014 edited by the Great Place to Work Institute, and the 100 best companies for older workers produced by The American Association of Retired Persons (AARP) were used. After elimination of duplicates, the e-mail and postal addresses of 651 companies were found. Companies were invited to respond to a short list of questions about the health promotion programs for older workers they had performed (or were performing).

We included in our selection only intervention studies that: 1) were performed, or promoted, in the workplace; 2) were devoted to older workers. We included both studies that adopted a “workplace setting approach”, i.e., in which all health promotion actions (mainly changes in conditions in the workplace) begin and end in the same working environment, and studies with a holistic approach that 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. Studies targeted to all the workers (not specifically to older workers) were included if they had age-related issues among their specific targets.

For the definition of the term “older worker” we have
adopted a flexible policy. In general, we have considered “older” the workers over 50 years of age, since this is the prevailing attitude. However, considering the fact that there are many different definitions and different ages are taken as old age limit, we have included all intervention studies targeted to the elderly, regardless of age that the authors of the study had chosen as cut-off.

When available information was sufficient, we analysed the organisational details of health promotion interventions. The role played by each of the institutions that took part in the WHPOW were classified according to the SPOFER method [8]. Given the fact that most of the studies included in our selection did not explicitly define health, we adopted the method suggested by Torp and Vinje [5], by examining study descriptions of the health outcomes to deduce the underlying concept of health.

Theoretical and descriptive studies, data base, networks and guidelines concerning the issue of workplace health promotion for aged workers are important in health research, as they demonstrate attention to the problem and the availability of expertise resources. However, these studies do not ultimately result in any behavioural or environmental change that leads to improved health and cannot be assimilated to practical health promotion activities. Two researchers (DLM and IC) independently performed the screening assessment of studies and the final inclusion process was based on consensus. In the event of disagreement between investigators, disagreement was solved by consulting an additional reviewer (UM).

RESULTS

The scientific literature search identified 9,791 studies. Of the 6,714 studies that remained after removal of duplicates, 6,415 were excluded following analysis of the title and abstract. After full text analysis, a further 168 studies were excluded as they failed to meet the inclusion criteria. A total of 28 works (three of them were protocols) were eligible for inclusion in our study. Addition of the activities detected through the grey (online search) review led to the identification of a total of 756 documents aimed at workplace health promotion for older workers in the 10 European countries examined.

Of these 622 programs, 525 were specifically and clearly targeted at older workers and were performed and/or promoted in the workplace. 97 programs targeted at workers of all ages were also considered, as they were aimed at promoting health in later life.

Some of the European countries that we selected have developed and implemented programs that encourage WHPOW initiatives (Table 1). These guidelines and documents are widely used in Central and Eastern Europe, but are absent in Mediterranean countries. The latter countries also lack the laws and regulations concerning WHPOW, which are found in Central, and Eastern Europe.

The Netherlands was the country with the greatest amount of WHPOW projects (133 programs), followed by Germany (111) and Italy (102). The countries with the

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>NAME</th>
<th>YEAR</th>
<th>BRIEF NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>Collection of good practices in the field of occupational rehabilitation, guidance, training and employment for people with disabilities in Bulgaria and Belgium</td>
<td>2012</td>
<td>Social inclusion of people with disabilities</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>The worker and age or age management in the workplace (Zaměstrnanec a věk aneb age management na pracovišti)</td>
<td>2012</td>
<td>Guidance document</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Age management to work with workers aged 50+ - methodological guide (Age management pro práci s cílovou skupinou 50+ — metodická příručka)</td>
<td>2012</td>
<td>Guidance document</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Employment of persons with disabilities (Zaměstrňávání osob se zdravotním postižením)</td>
<td>2012</td>
<td>Guidance document</td>
</tr>
<tr>
<td>Germany</td>
<td>Guidelines for workplace monitoring ’55 plus’ - review of agecritical working conditions</td>
<td>2006-2009</td>
<td>Development of age-appropriate work design.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>The training courses programme on ergonomic risk factor assessment</td>
<td>2006</td>
<td>Fitting work system components to older workers’ abilities</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Toolbox sustainable employability (Toolbox duurzame inzetbaarheid)</td>
<td>2013</td>
<td>Preventing health problems at work</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Towards a crown plan: route map for a successful third career stage</td>
<td>2013</td>
<td>To encourage employees to treat their “third” (or subsequent) life phase in a positive way</td>
</tr>
<tr>
<td>Poland</td>
<td>With age, with advantages - workshops for employers</td>
<td>2012</td>
<td>To raise awareness on retaining 45- to 50-year-olds in employment</td>
</tr>
</tbody>
</table>
fewest projects were Portugal (6 programs), Hungary (23) and Greece (26). Overall, Central Europe developed 295 programs, East Europe 193, Mediterranean Europe 134. (Figure 1).

**DISCUSSION**

We detected 622 WHPOW experiences in the ten European countries selected. Our study was limited by the fact that we were unable to collect all the WHPOW activities performed in the past. A number of programmes had not been reported in peer-reviewed or in grey literature, and were therefore unavailable. Since these experiences were not reported, they may not have been significant. To the best of our knowledge, our study is the first attempt to identify and compare WHPOW experiences in different areas of Europe.

Despite a certain degree of under-reporting, we have nevertheless shown that, compared to the overall number of occupational health and safety activities constantly carried out in European workplaces, very few WHPOW studies have been undertaken. In 2014, the EU-28’s business economy was made up of around 26 million active enterprises (based on 27 Member States and estimates of missing data for Greece), up of around 26 million active enterprises (based on 27 Member States and estimates of missing Greece data), with some 143 million persons employed. The largest active enterprise population was registered in Italy (3.9 million), followed by France (3.4 million), Spain (2.9 million), Germany (2.8 million) and the United Kingdom (2.2 million) [10]. In the European Union, legislation in each Member State establishes whether health surveillance is statutory, optional or voluntary for the entire working population or for a specific group. While the European legislation sets the minimum requirements, most Member States have detailed provisions designed to provide advanced protection for workers’ health. In many countries, workers must pass a medical health check before starting any type of employment, while in other countries this is only required for certain exposures/job titles/sectors. In addition to protecting workers’ health, medical examinations should provide all-round prevention, including social protection (i.e. promoting access to work and compensation, adaption of work to the worker). Workers should have the opportunity to demand medical examination in suspected cases of work-related ill health, (i.e. occupational disease, or general disease aggravated by work) [11].

Important differences of opinion between employers and employees have been observed as regards what constitutes a risk factor for occupational health. According to employees, occupational health risk factors are predominantly job-related, while employers consider individual lifestyle behaviours to be relevant risk factors for occupational health [12]. This difference of opinion results in two different approaches to occupational health: the “laboristic” approach, aimed at preventing environmental risk factors, and the “holistic” approach, which includes the promotion of healthy habits and behaviours at an individual level. Our study demonstrates that most occupational health services in Europe are currently adopting the first type of approach.

We observed that WHPOW activities in European countries vary considerably from country to country. There is a great disparity between countries that actively promote actions for aged workers, and countries devoid of any policy for older workers. In general, the topic of workforce aging is on the agenda of most countries of Central and Eastern Europe but is overlooked in Mediterranean countries.

In order to make a correct analysis of the differences
observed in different areas of Europe, we must examine the role of companies and national governments.

We observed that scientific literature focuses mainly on facilitating the ability of individual workers to cope and on reducing their discomfort, while grey literature, which is usually financed by the employer, concentrates on making changes to policies and procedures at group level in order to adapt jobs and provide organizational support. The two different types of WHPOW reports, that Williams Whitt et al. observed in previous studies [13], indicate a different approach to workplace health promotion on the part of scientific / governmental bodies and companies.

Companies in Europe have gradually become aware of the need to adapt to an aging workforce [14], and certain practices are now specifically targeted at their older workers. However, a recent study comparing the age-based human resource strategies that have been adopted in Germany, Italy, The Netherlands, Poland, and other European countries, showed that rather than formulating strategies for promoting active aging, most European employers continue to opt for the easy way out, via exit strategies [15].

If we examine the contribution of individual States, we see that research on the employment participation of older workers in the Netherlands is well advanced compared to some other countries [16]. Research studies in the Netherlands focus mainly on “sustainable employability” (“duurzame inzetbaarheid” in Dutch), a widely supported issue that has attracted research funding and led to numerous initiatives. For example, between 2004 and 2010, the Dutch government gave 21 million euros in temporary subsidies to companies to create better conditions for the employment of older workers. A total of 444 projects designed to ‘Stimulate the working life of older employees’ received financial support. The final progress report of the national programme indicated that most of the companies that had implemented WHPOW projects, continued these actions after their subsidies had ended. In most cases, the projects had raised awareness of older age policies and had eliminated some of the barriers preventing the employment of older workers [17; 18; 19]. Moreover, between 2004 and 2007, the Ministry of Social Affairs and Employment set up the Action group ‘Grey Works’ (‘Senior Power: working with experience’) to implement a policy for ‘Stimulating longer working life of older employees’. This project aimed to disseminate information and best practices for elderly workers, stimulate the productive employment of older workers and also establish dialogues and agreements with social partners [9]. Another example was the national programme weight gain prevention (NHF-NRG) which included interventions aimed at changing environmental components, and gave the first short-term results at the beginning of 2005 [20]. Clearly, the Netherlands has also produced a number of tools available online for improving the health of older workers.

The issue of ageing of the workforce has also been promptly tackled at many levels in Germany where the quality of social dialogue varies from sector to sector but is generally of a high standard. Although working conditions have always been the subject of social dialogue, recent demographic changes and the expected shortage of skilled manpower have aroused more interest in these issues and led to examples of collective agreements specifically related to these problems. Germany also has a long-standing and high-level social security system. Given the emphasis on an injured worker’s recovery rather than compensation, insurance companies play a vital role in both OSH prevention and rehabilitation [21].

German governments and institutions have undertaken a number of initiatives in order to tackle demographic and social changes related to population aging. In 2012, the Federal Government launched the “Every Age Counts” (Jedes Alter Zählt) program that aimed at obtaining a motivated, qualified and healthy workforce by promoting and maintaining health at the workplace, avoiding or minimising risks, giving importance to lifelong qualifications and training, creating framework conditions for longer working lives, promoting a culture of longer working lives, and rewarding lifetime achievements during retirement. The Federal Government has therefore encouraged the creation of age-appropriate workplaces in conjunction with employer associations and trade unions, the Länder, local authorities, social security institutions and other relevant stakeholders.

In 2007, another national strategy, known as the Joint German Occupational Safety and Health Strategy (Gemeinsame Deutsche Arbeitsschutzstrategie, GDA), was approved by the Federal Government, the Federal States and the Public Accident Insurance Institutions. The aim of this strategy is to promote the safety and health of workers of all ages by introducing workplace health promotion activities. For the years 2013 – 2018 GDA activities will focus on three specific objectives: (1) Improvement in company occupational safety and health, (2) reduction in work-related health hazards and musculoskeletal disorders and (3) protection and strengthening of health in the case of work-related mental load [22]. Most of these activities impact on demographic change and an ageing workforce.

The New Quality of Work Initiative (Initiative Neue Qualität der Arbeit, INQA), launched in 2002 by the BMAS, regional states, social insurance institutions, and social partners, constitutes an independent platform for a constructive exchange of information and ideas on business practice. INQA funds networks, publications, and databases on good practices, as well as some activities concerning older workers. An important example is The Demographic Network (Das Demografie-Netzwerk e.V., DDN), a non-profit network of more than 350 companies with around two million employees, that aims
at disseminating non-discriminatory, age-neutral human resource policy, holistic health promotion and the transfer of knowledge between generations. INQA also promotes the WAI-Network (WAI-Netzwerk), an association of enterprises and users of the Work-Ability-Index (WAI), to control and improve working ability in the aging workforce.

Recently the Czech Republic also introduced several significant reforms in response to ageing of the population. These initiatives focused mainly on the participation of older workers in the labour market and were concerned with promoting employment and fighting age-discrimination. The current Programme for the Support of Positive Ageing (2013-2017) deals with OSH matters and stresses the need to develop flexible work conditions for older workers. It also promotes the adoption of a “life-course approach” that focuses on the person at all different stages of life [23]. This approach, if effectively implemented, will greatly improve the working conditions of older workers. Some Czech national initiatives, such as awards for companies that introduce improvements for the elderly may be very useful in promoting specific projects and stimulating companies to adopt and share good practices.

All in all, the countries of Central Europe appear to be quite active in dealing with the problems of aging of the workforce. Eastern Europe offers a less homogenous picture. Poland has a considerable number of initiatives, although they are still inadequate to meet the needs. Bulgaria has a small number of well-implemented WHPOW initiatives supported by a well-developed legislative and institutional framework based on EU regulations and directives, and on a successful social dialogue on OSH at national level. However, the economic crisis has led to a reduction in health promotion measures [24]. Therefore, despite the presence of international collaboration and research projects in Bulgaria, the latest public health and health promotion tools have remained largely underutilized [25]. Health promotion interventions focus mainly on healthy behaviour, health information, education and communication, training for health professionals, and health surveys among the population and medical staff [26]. Conversely, in Lithuania wage increases and work relations issues are still the most important topics on the social partners’ agenda and questions such as sustainable work, older workers or disabled workers arouse little interest [27]. In Hungary, Government initiatives have rather broad, general objectives. Only a few initiatives introduce concrete measures, which are all related to increasing the employability of older workers rather than focusing on their working conditions. Also there is a general lack of dissemination and communication regarding WHP initiatives; in fact it is very difficult to find up-to-date, accurate and publicly available information in this field. Moreover, it is almost impossible to assess the effectiveness the programmes undertaken due to an almost total lack of (post hoc) impact assessment [28]. WHPOWs are non-existent.

The WHPOW scene in Mediterranean countries is far from promising. The so-called PIGS, i.e. the five euro-zone nations that were considered economically weak as a result of the financial crisis, i.e. Portugal, Italy, Ireland, Greece and Spain, mostly belong to the Mediterranean area. On May 10 2010, European leaders approved a 750 billion euro stabilization package to support these nations. The economic problems in the PIGS nations have inevitably led to a reduction in the resources devoted to health promotion. The initiatives we examined are located mainly in Italy, a country that has a long OHS tradition and an advanced social dialogue. However, the activities undertaken are considerably fewer than are needed.

There is still little evidence to show that WHPOW is effective and cost-effective [29]. The effectiveness of health promotion has proved to be greater in younger populations than in older people [30]. Moreover, process evaluations are not systematically performed in worksite health promotion programmes [31]. There is a need for high-quality studies and accurate statistical analyses of the studies performed [32].

CONCLUSIONS

In conclusion, a great effort on the part of European and supra-national institutions is needed in order to disseminate the best practices and principles of health promotion for older workers in all European countries. European institutions must encourage EU member states to disseminate workplace health promotion resources (methods, programmes, good practices) in national languages, and to promote prizes and rewards for institutions active in the field of health promotion for aged workers.

The knowledge that lifestyle interventions during work time can contribute to a healthier working population must also induce enterprises and local/national authorities to share the cost of health promotion.

European member states should also allocate more resources to public health promotion programmes in the workplace, and explore new and stable forms of workplace health promotion funding by involving private actors. They should also develop methods to ensure that effective workplace health promotion activities are shared among the many institutions active in this field. Support should also be given to the participation of older workers in company health policy decision-making. Lastly, occupational health professionals must extend their activities so that the effective promotion of healthy lifestyles in workers is encompassed in a holistic approach to health.
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