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## Original Research Article

# Workplace health promotion in health care settings in Finland, Latvia, and Lithuania

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### ABSTRACT

**Background and objective:** Health care workers (HCWs) have a great background to promote their health – not only their professional knowledge on health but often also special equipment in their work environment. However, it is unclear if HCWs can use such infrastructure to promote their own health as well as what is their motivation to change their own lifestyles. Thus, the aim of the article was to describe workplace health promotion (WHP) situation in health care settings in Finland, Latvia, and Lithuania.

**Materials and methods:** A questionnaire survey of 357 workers from health care sector in three European countries was conducted. Participants were asked to indicate various WHP activities/facilities/programs organized at their workplaces, WHP needs, opportunities to initiate changes related to the healthiness of their workplaces, and readiness to change their lifestyles.

**Results:** Participants from three European countries differed in their WHP needs and in their responses on various activities/facilities/programs implemented at the institutions. Workers from Finnish institutions had the greatest opportunities to make initiatives relevant to their workplaces' healthiness, while Lithuanian workers were least provided with such opportunities. Furthermore, the results showed that there were differences of readiness to change among the workers from the three countries.

**Conclusions:** HCWs recognized various WHP activities, facilities and programs organized at their workplaces; however, their needs were notably higher than the situation reported. WHP situation differed among the three European countries.

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## 1. Introduction

Health care workers (HCWs) are considered to be a key group in health promotion. HCWs can play an important role in increasing awareness among patients and clients regarding lifestyle changes due to the fact that they have the necessary education on healthy lifestyles and health promotion and can reach a substantial number of people in need of lifestyle changes [1].

HCWs' own lifestyle habits and attitudes toward healthy behavior have influence on their practice and activity in promoting healthy lifestyles [2-4]. HCWs serve as role models for patients. Numerous studies have established a link between health behaviors of physicians and their interactions with patients. However, HCWs frequently do not "practice what they preach". Despite considerable knowledge about health and healthy lifestyles, HCWs do not report a healthier lifestyle than the general population.

Research indicates that HCWs have unhealthy habits. According to various scientific data, HCWs smoke and consume alcohol; they may also be characterized by insufficient exercise and unhealthy diet [5-7]. The survey of US adults showed that compared to non-HCWs, health care workers reported more desirable behaviors only for several outcomes: HCWs were more likely to have a personal physician, to have a check-up within 2 years, to have exercised within 30 days, and to deny recent heavy or binge drinking. However, for many behaviors, HCWs demonstrated no difference in the likelihood of the outcomes [8]. Data from US National Health Interview Survey concluded that 35% of HCWs, both from medical offices and clinics/hospitals, were obese [9]. The literature review of lifestyle behaviors and preventive health care among physicians summarized that physicians, like the general population, need to work on improving their diets and increasing physical activity. They are often subjected to prolonged sleep deprivation, and many neglect their own health care and do not take appropriate preventive measures. It is revealed that physicians are notoriously bad patients. One third of Australian residents do not have a GP, and an equivalent proportion of young Irish doctors have not been to see a physician (either their own GP or a walk-in clinic) in the past 5 years [5]. A systematic review of studies of doctors' health concluded that doctors have similar rates of chronic illness and have the same preventive health needs as the general community. It refers to the need to improve doctors' access to health care [10]. Survey on health behavior and a number of lifestyle variables among HCWs in Iraqi revealed that only about one third of them had regular medical check-ups. Nearly two thirds of HCWs reported negative behavior as coping measures for stress relief (i.e. social withdrawal, over-eating, violence, smoking, or taking sedatives). Less than one fifth of HCWs were practicing regular sports [2]. A health examination among 1737 female members of trade union of public employees, 59% of whom were women employed in the Danish social welfare and health care sector, found an increased prevalence of heavy smokers, overweight and obesity, and long-term sick leave compared to other employees at the same income level [11].

Work at health care sector is related to wide range of occupational risk factors including psychosocial, ergonomic,

chemical, biological and physical risks. Long working hours, shift work, stress, limited access to healthy and regular food, sedentary jobs – these are only some of the work factors, which characterize work at health care sector. Such occupational hazards can influence employees' health risk behavior. According to a number of research health risk behavior is one of the ways to cope with stress. Occupational stress can promote health risk behavior or impede to reduce or dispose of such behavior [6,7,12]. For instance, research of nurses showed that smoking was indicated as a way to cope with tense situations at work. Stress was also named by nurses as an impediment to quit smoking as well as a factor, which increased the risk to start smoking again [6,13]. A lot of studies revealed burnout, reality shock, intention to leave and less commitment to work among nurses [6,14,15].

One of the ways to improve health behavior and health status of HCWs is workplace health promotion (WHP). According to the definition stated in Luxembourg Declaration, WHP is "the combined efforts of employers, employees and society to improve the health and well-being of people at work which can be achieved through a combination of improving the work organization and the working environment, promoting active participation, encouraging personal development" [16]. We based our study on this definition because it covers a variety of aspects that are important when analyzing workers' lifestyles. Luxembourg Declaration on WHP enables an interdisciplinary approach and stresses on the importance of joint initiatives including education and policy activities. WHP can be implemented with the help of specially designed programs (opportunities available to employees at the workplace or through outside organizations to begin, change, or maintain health behaviors) and environmental support (improving various facilities at and nearby the workplace that help protect and enhance employee health) [17].

The Second European Survey of Enterprises on New and Emerging Risks asked establishments about measures for health promotion among employees. The results revealed that specific budget for health and safety measures and equipment was set each year by 41% of establishments. The most frequently reported one (35% of establishments) was raising awareness of the prevention of addictions (smoking, alcohol, drugs), followed by raising awareness of nutrition (29%) and the promotion of sports activities outside working hours (28%) [18].

Health promotion hospitals (HPHs) functions as one of the contemporary strategies to improve quality in health care. It is interesting to mention that in the past, projects carried out within the HPH network were characterized by a more traditional focus on health promotion interventions for patients and to a lesser extent for staff. The focus of the HPH projects is now enlarging, and health promotion strategies include the issue of staff health, which is not only important because of the direct effect on health professionals' health, but also because of the link between staff health and satisfaction and patient outcome and satisfaction [19]. But the process of extending and incorporating these activities at a broader level has been slow.

Research indicates that the effectiveness of WHP depends not only on employers (to what extent do they create

conditions suitable for healthy lifestyles and implement appropriate activities), but also on employees, i.e. are they motivated to participate in such activities and do they comprehend the personal importance of healthy lifestyle [20].

Knowledge presented above raises the following questions: What is the situation in health care settings? Are these settings suitable for promoting healthy lifestyles for HCWs? What programs aimed at enhancing healthy lifestyles of employees are being implemented? What is HCWs' readiness to use various health promotion activities? Therefore, the aim of this article is to describe WHP situation in health care settings from the workers' point of view: (a) various activities/facilities/programs organized at HCWs' workplaces; (b) WHP needs; (c) opportunities to initiate changes related to the healthiness of HCWs' workplaces; (d) readiness to change their lifestyles. The article also seeks to compare WHP in three European countries: Finland, Latvia, and Lithuania.

## 2. Materials and methods

### 2.1. Sample

A questionnaire survey of employees in 15 health care institutions was conducted in 2014. Institutions that took part in the survey were rehabilitation and social care institutions. Such institutions were chosen for their services, which include health promotion, as well as their staff, which is mainly composed of employees with medical background. The size of the institutions ranged from 29 to 150 employees. Size not exceeding 150 employees was chosen presuming that there can be less attention given to WHP in small enterprises as enterprises usually do not employ occupational health specialists. Institutions were chosen partly randomly based on the principle of availability and convenient sampling.

The sample of the study ( $N = 357$ ) composed of 103 workers from Finnish institutions (52.9% working at rehabilitation institutions; 47.1%, social care), 124 workers from Latvian institutions (63.7%, rehabilitation; 36.3%, social care), and 130 workers from Lithuanian institutions (46.9%, rehabilitation; 53.1%, social care). Study participants' professions were doctors (7.3% of Latvians, 3.9% of Lithuanians), nurses/nurses' assistants (40.8% of Finns, 21.8% of Latvians, 33.1% of Lithuanians), social workers/social workers' assistants (1.9% of Finns, 19.4% of Latvians, 20.0% of Lithuanians), physiotherapists/massage specialists/fitness specialists (11.7% of Finns, 18.6% of Latvians, 7.7% of Lithuanians), other HCWs (e.g. psychologists, nutritionists, occupational therapists) (17.5% of Finns, 2.4% of Latvians, 2.3% of Lithuanians) and other (e.g. administration, cooks, cleaning staff) (24.3% of Finns, 29.0% of Latvians, 17.6% of Lithuanians). As much as 3.9% of Finnish, 1.6% of Latvian and 15.4% of Lithuanian respondents did not indicate their profession. Female participants constituted 94.1% of Finnish, 75.8% of Latvian, and 92.3% of Lithuanian workers. The mean age of the employees from Finland, Latvia, and Lithuania was  $47.1 \pm 11.5$ ,  $46.8 \pm 13.3$ , and  $41.9 \pm 11.2$  years, respectively.

Before the beginning of the survey, agreement of employers of all the institutions was obtained. Institutions were

provided with a comprehensive explanation about the purpose of the study, the way the following results will be used as well as confidentiality of the answers. A number of questionnaires given to the institutions corresponded to the actual number of workers employed at particular workplaces.

### 2.2. WHP activities/facilities/programs

Researchers' teams from Finland, Latvia, and Lithuania were collaborating on an English version of the questionnaire and later on translated and adapted the national-level questionnaires for the use in following survey. As it is described in the definition of the WHP, well-being at workplaces can be achieved through a combination of activities directed to improve working environment, promoting active participation in various programs and encouraging personal development. Therefore, the situation of existing environment and WHP programs in health care institutions as well as possible need for these elements were analyzed during the survey. Participants were asked to answer "Yes" or "No" to the questions regarding the real WHP situation at their workplaces (e.g. Staff dining or a healthy food canteen or shop organized for the employees: Is it organized at your workplace?) as well as their needs for various WHP activities (e.g. Sports hall in employees' use: Do you recognize it as a real need at your workplace?).

### 2.3. Readiness for lifestyle changes

To reveal a personal motivation of HCWs to lead healthier life, their readiness to change their lifestyle was analyzed. According to the transtheoretical model (TTM), when adopting a new behavior people move through a series of stages: precontemplation (where the individual is not thinking about making a change), contemplation (where the individual intends to make a change, but not in the immediate future), preparation or ready for action (where the individual intends to try to make a change in the immediate future and may be making small preparatory changes), action (where the individual actively attempts the change), maintenance (where the individual continues the change behavior but it requires active or conscious effort to be sustained) and relapse (where the individual managed to make lifestyle changes, but then reverted back to old habits) [21].

A review of the literature, conducted by Donovan et al. [22], shows that a number of variety of measures for the health behavior have been used to classify respondents into the stages of change (from 32-item measure to 4 item agree-disagree scale). TTM is used in the majority of research in the field of behavioral change; however, most of them concentrate on different sites rather than workplace health promotion [23]. We included 6 questions, representing all stages of change, into our questionnaire. Based on the assumption that HCWs are well educated in health and health promotion field and their behavior might be healthy as well, we added one more question aimed at distinguishing those respondents, who are not planning to start changing their lifestyle because their lifestyle habits are already quite healthy, thus, they do not need to change their behavior.

## 2.4. Responsibility for health and possibilities to initiate changes

Active participation of HCWs in WHP activities was analyzed through the possibilities to initiate and influence the workplace healthiness at their work.

Study participants were also asked to indicate their opinion about who is responsible for their health, and to choose from the following answers: Promoting my health is my own responsibility/is the responsibility of my employer/is the responsibility of my family doctor/My health is determined by destiny, coincidences or fortune/and Other.

## 2.5. Statistical analysis

For the analysis of data, IBM SPSS Statistics 21 was used. Differences of WHP activities/facilities/programs and WHP needs among the countries were analyzed using cross-tabulations (tables  $2 \times 3$ ) and chi-square statistics. We did not refer to the statistics of chi-square tests if a case had expected count less than 5 (there was only one such case). For the analysis of answers on opportunities to initiate changes related to the healthiness of workplaces as well as readiness to change lifestyles, statistics of Kruskal–Wallis test was calculated. The results were considered statistically significant at the  $P$  level of 0.05.

## 3. Results

Study participants' needs and activities/facilities of healthy work environment are shown in Fig. 1. In general, many workers from all three countries named various needs. However, compared to Finland, there were less activities/facilities organized in Latvia and Lithuania. Most of the respondents from Finland expressed needs for staff dining/healthy food canteen/shop (89.1%) and shower facilities (84.3%). Most of Latvian and Lithuanian respondents also felt needs for shower facilities (95.7% of Latvian and 95.3% of Lithuanian workers) as well as relaxation rooms (94.9% of Latvian and 83.4% of Lithuanian workers). Statistically significant differences among countries were found for the needs of staff dining/healthy food canteen/shop ( $P < 0.01$ ), relaxation rooms ( $P < 0.01$ ) and dissemination of information about healthy lifestyles ( $P < 0.01$ ).

Data regarding WHP activities/facilities organized at the workplaces showed that countries differed statistically significantly in cases of staff dining/healthy food canteen/shop ( $P < 0.001$ ), shower facilities ( $P < 0.05$ ), safe places to park bicycles ( $P < 0.001$ ), sports halls ( $P < 0.001$ ), relaxation rooms ( $P < 0.01$ ), and dissemination of information about healthy lifestyles ( $P < 0.05$ ). Dissemination of information about healthy lifestyles was indicated as organized by only 44.3% of Latvians, in contrast to more than 60.0% of participants from Latvia expressing such need (Fig. 1). In terms of Lithuanian institutions, almost all of the activities/facilities were indicated as available by only around 40.0–50.0% of Lithuanian employees (except for showers), staff dining/healthy food canteen/shop being the least mentioned facility by the participants from Lithuania (22.7%), contrary to more than

two thirds of Lithuanians feeling in need of it. In Finland, however, staff dining/healthy food canteen/shop as well as showers was the most mentioned facilities (98.0% in both cases).

Respondents' answers about WHP programs and their corresponding needs are represented in Fig. 2. They all named needs for occupational safety and illness prevention programs (90.0% of Latvian, 88.7% of Finnish, and 82.75% of Lithuanian workers). Many participants from Lithuanian and Finnish institutions were also in need of programs regarding psychosocial work environment (conflict management, coping with stress, social skills, promotion of job control and decision-making) (83.1% and 80.3%, respectively) and many Latvian workers expressed the need of formation of lifestyle skills that sustain and promote health (81.8%). Statistically significant difference among countries was found only for the need of guidelines/prevention activities against psychoactive substances use at work ( $P < 0.001$ ).

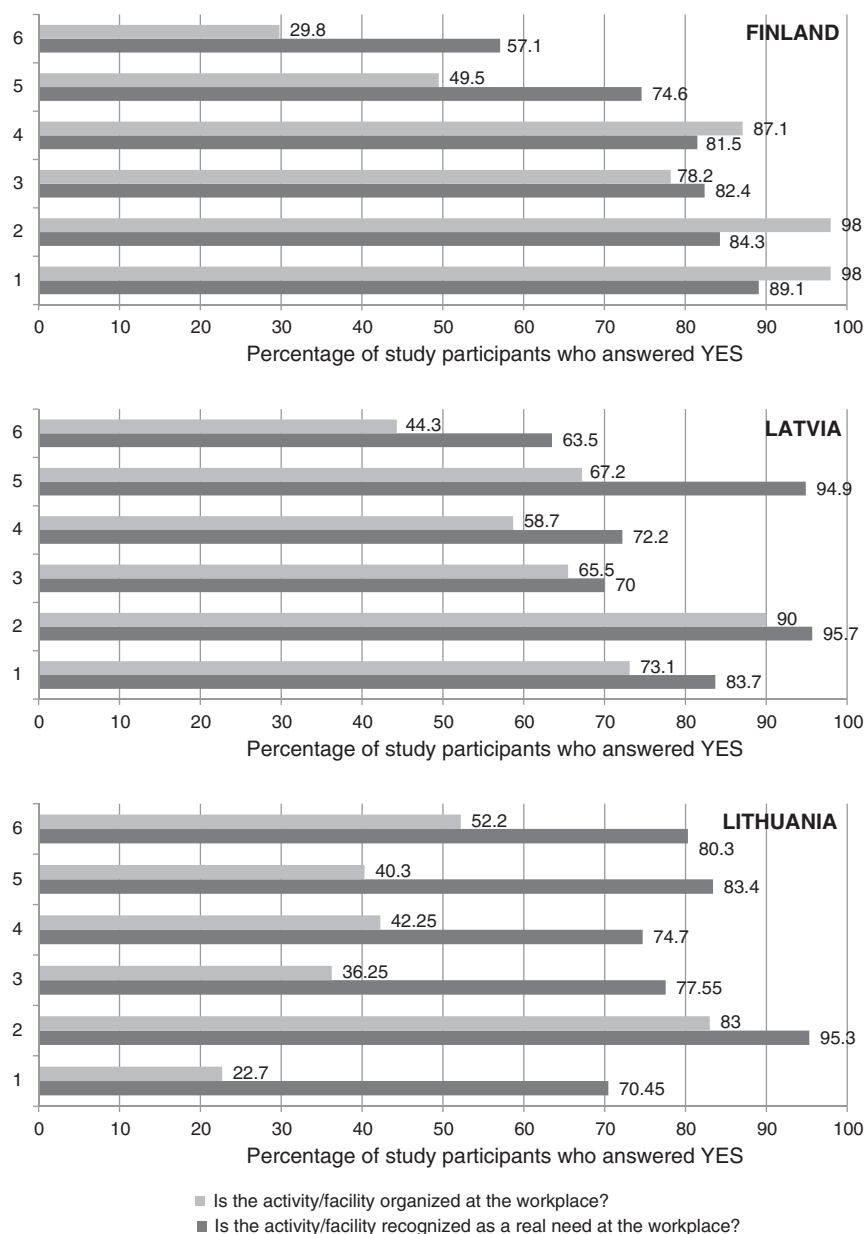
When considering WHP programs organized at the workplaces, the case of Lithuania requires a special mention due to the notably small amount of participants who indicated such programs at their institutions. For example, only nearly 15.0% of Lithuanian workers mentioned weight management groups or healthy nutrition programs, though more than 60.0% of Lithuanians expressed it as a real need. Furthermore, more than half of Latvians as well as half of Fins expressed the need of weight management groups or healthy nutrition programs, in contrast to only around one third and one fifth of Latvian and Finnish respondents respectively indicated this program as organized at their workplaces. There were statistically significant differences among countries for all of the programs organized at the workplaces ( $P < 0.01$ ).

When answering the question about who is responsible for their health promotion, almost all of the participants indicated that promoting health is their own responsibility (98.0% of Lithuanians, 96.0% of Fins, and 71.8% of Latvians). In case of Latvia, there were around 5.0% of workers, who indicated the responsibility of employer and the same percentage of employees, who indicated the responsibility of family doctor. As much as 8.5% of participants from Latvia answered that their health is determined by destiny, coincidences, or fortune.

Workers' opportunities to initiate changes related to the healthiness of their workplaces appeared to be different among countries ( $P < 0.001$ ). Workers from Finnish institutions had the greatest opportunities to make initiatives relevant to their workplaces' healthiness, while Lithuanian workers were least provided with such opportunities. More than half of Fins (57.4%) answered that they had very much or quite a lot of such opportunities, compared to only one fifth of Lithuanians and slightly more than one third of Latvians (Table 1).

Considering a possible link between employees' readiness to choose healthy lifestyles and various WHP activities/facilities/programs, workers' answers about readiness to change their lifestyle were analyzed. Difference of readiness to change among the countries proved to be statistically significant ( $P < 0.001$ ). Table 2 represents the number and percentage of respondents falling into each of the 7 stages of change.

Almost half of the respondents from Lithuania answered that their lifestyle habits are so healthy at the moment, that



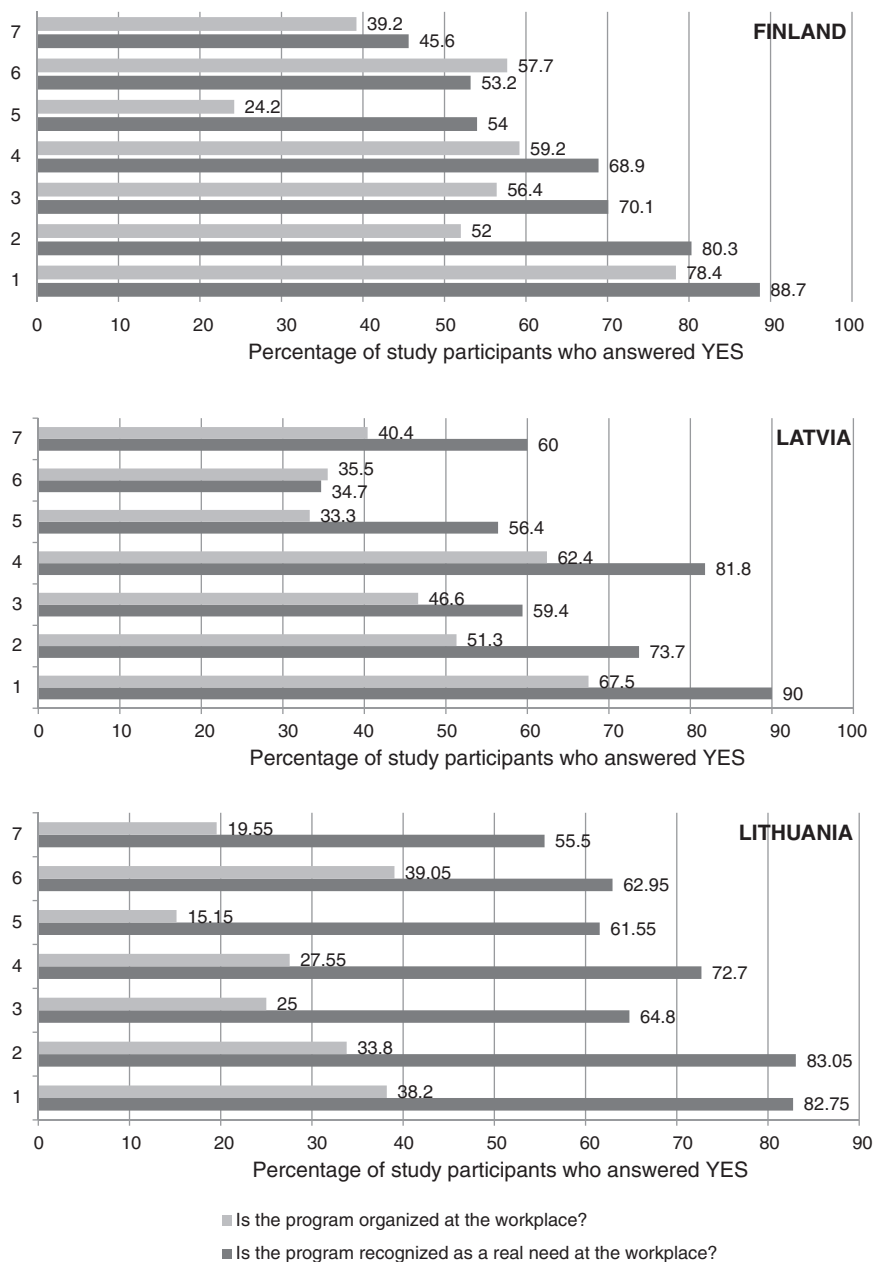
**Fig. 1 – Percentage of study participants from Finland, Latvia, and Lithuania who answered 'yes' to the questions regarding activities/facilities organized at the workplaces and their corresponding needs. 1, Staff dining or a healthy food canteen or shop; 2, shower facilities in employees' use; 3, safe places to park bicycles at the workplace; 4, sports hall in employees' use; 5, relaxation room in employees' use; 6, dissemination of information about healthy lifestyles for employees, e.g. health education.**

they have no reason to start making changes. This answer was also the most popular among Finnish group (31.0%), while Latvian respondents were not so confident (17.2%). On the other hand, the answer “I am not interested in making changes in my lifestyle habits” was chosen more frequently among Latvian respondents compared to other countries. In all countries, a very similar number of respondents considered making changes within 1 to 6 next months, i.e. were either in contemplation or preparation stages (20.0% in Finland, 25.9% in Latvia, and 23.1% in Lithuania, when the second and third questions were combined). Also, when analyzing the real changes already taking place during last 6 months or longer

(according to TTM, action and maintenance stages, i.e. 4th and 5th questions combined), results showed that Lithuanians were less active than Finns and Latvians (9.4% versus 42.0% and 31.9%, respectively). Results revealed that some of the respondents in all countries did not succeed in their lifestyle changes (i.e. reverted back to the old habits).

#### 4. Discussion

The infrastructure of health promotion is a key to successful WHP (Luxembourg Declaration on Workplace Health Promo-



**Fig. 2 – Percentage distribution of study participants from Finland, Latvia, and Lithuania who answered “yes” to the questions regarding workplace health promotion programs and the corresponding needs. 1, Occupational safety and illness prevention programs; 2, programs on conflict management, coping with stress, social skills, promotion of job control and decision-making; 3, exercise groups; 4, formation of employees' lifestyle skills that sustain and promote health; 5, workplace or health care organized weight management groups or healthy nutrition programs; 6, guidelines and prevention activities against psychoactive substances use at work; 7, involving employees and their families in active leisure activities.**

tion in the European Union, 1997). Interventions targeting health promotion and preventive health care issues such as proper nutrition, regular exercise etc. have been shown to positively impact both the personal health of HCWs and their counseling practices and these would be a worthwhile investment for health care systems [1,2,5,7]. Our survey revealed that there are a lot of WHP activities, facilities and programs for HCWs implemented in Finland, Latvia, and Lithuania. However, countries differed in this respect. Considerably more workers from Finland recognized various WHP

activities/facilities/programs organized at their workplaces, compared to Latvian and Lithuanian employees.

HCWs from three European countries differed in their needs for healthy food infrastructure, relaxation rooms, and information about healthy lifestyles as well as prevention against psychoactive substances use at work. Furthermore, there were differences in various WHP activities, facilities and programs organized at the workplaces. Thus, it can be assumed that HCWs not only have broad knowledge about healthy lifestyles and health risk behavior; their workplaces

**Table 1 – Study participants' answers about the extent of opportunities they have in making initiatives relevant to their workplaces' healthiness.**

Extent of opportunities	Finland	Latvia	Lithuania
	N (%)	N (%)	N (%)
Very much	27 (26.7)	18 (15.1)	12 (9.7)
Quite a lot	31 (30.7)	24 (20.2)	13 (10.5)
Some extent	18 (17.8)	33 (27.7)	33 (26.6)
Only a little	8 (7.9)	17 (14.3)	18 (14.5)
Not at all	10 (9.9)	16 (13.4)	34 (27.4)
I do not know	7 (6.9)	11 (9.2)	14 (11.3)

Note:  $P < 0.001$ .

are also equipped with special settings, which are aimed at maintaining and strengthening patients' health. However, the results of our survey might indicate that they cannot use such infrastructure for the promotion of their own health as much as needed.

Differences among the countries can be explained by the backgrounds of WHP implementation in those countries. Finland has a more extensive legislative background for occupational health services and WHP implementation. It is well known that legislation should be adequate to build a substantial background for occupational health services and WHP implementation at the workplace. All three countries have specific legislations and other documents on occupational safety and health issues, including WHP, but Finland is the only country that has adopted a specific law on occupational health care [24]. For example, according to the results of the survey which was conducted in Lithuania and which involved enterprises that had to employ occupational health specialists by the law, only a third of such enterprises implemented programs on health promotion and illness prevention [25]. Moreover, according to the definition, WHP is the combined efforts of employers and employees [16]. Nevertheless, results of our survey showed that HCWs in three countries had different opportunities to make initiatives which are relevant to their workplaces' healthiness. In Finland, only 6.9% of respondents claimed that they had no such opportunities, compared to 13.4% of Latvian and 27.4% of Lithuanian workers.

Our results showed that there were differences of readiness to change among the workers from the three countries. However, very similar number of respondents from Finland, Latvia, and Lithuania considered making changes, i.e. were

either in contemplation or preparation stages. As HCWs are key actors in promoting healthy lifestyles to other groups (such as patients), it is of utmost importance to find strategies to engage this professional group, also including those with less favorable lifestyles, in activities that promote their own health and healthy behavior. In a systematic review on determinants of participation in WHP programs, Robroek et al. concluded that HCWs do not seem to be more prone to participate in WHP programs than the rest of the working population [26]. These findings correspond with the conclusions drawn in the Swedish project "Lifestyle in the West", which included around 48,600 employees from the public healthcare sector [1]. Thus, it is very important to find out what obstacles HCWs face in health behavior change process and what motivates them to choose healthy habits. According to Transtheoretical model, individuals at different stages of change would have different attitudes, beliefs and motivations with respect to the (desired) new behavior [21]. So, motivating HCWs to choose healthy habits, we need to know in which stage of change they are and individualize the health communication strategies. It should be a key message to occupational health specialists who care for employees in health care institutions, as well in any other institution or enterprise.

We would like to mention some limitations of our survey. First, small study sample and limited types of institutions that took part in our survey did not ensure a possibility to generalize the results to all HCWs in three European countries. Thus, it would be worthwhile to increase a sample size and involve a greater variety of institutions that employ HCWs. Second, WHP needs might be related to various socio-demographic factors, such as occupational group (doctors or nurses or other), and also to institution type (rehabilitation or social care); therefore, a potential impact of such factors might also be analyzed in future research. Third, when asking respondents about readiness for change, we used the term "lifestyle" or "lifestyle habits". Readiness to change different habits can be different. For example, person may have plans to quit smoking, but has no intention to exercise more. For this reason, needs of various WHP activities/facilities and/or programs can also be different. So, in future it would be interesting to ask about various health behaviors. Forth, when asking about readiness to change, we used a 6 months' time frame. Some researchers concluded that it might be expected that the shorter, more specific time frame would have yielded a more reliable result. A number of studies have not used any

**Table 2 – Readiness of employees for lifestyle changes in Finland, Latvia, and Lithuania.**

Stage of change	Finland	Latvia	Lithuania
	N (%)	N (%)	N (%)
1. I am not interested in making changes in my lifestyle habits.	3(3.0)	27 (23.3)	8 (6.8)
2. I have considered of starting making lifestyle changes during the next 6 months.	12 (12.0)	21 (18.1)	13 (11.1)
3. I have considered of starting making lifestyle changes within one month.	8 (8.0)	9 (7.8)	14 (12.0)
4. I have started to make lifestyle changes during the last 6 months, and this is still continuing.	26 (26.0)	31 (26.7)	4 (3.4)
5. I have started to make lifestyle changes more than 6 months ago, and this is still continuing.	16 (16.0)	6 (5.2)	7 (6.0)
6. I have managed to make lifestyle changes, but then reverted back to my old habits.	4 (4.0)	2 (1.7)	15 (12.8)
7. My lifestyle habits are so healthy at the moment, that I have no reason to start making changes.	31 (31.0)	20 (17.2)	56 (47.9)

Note:  $P < 0.001$ .

time frame [22]. It is also worth to mention that WHP issues may be analyzed not only from the perspective of public health and medicine, but also from the point of view of other disciplines such as education and psychology.

## 5. Conclusions

We can conclude that there are a lot of different activities, facilities and programs implemented in health care settings in Finland, Latvia, and Lithuania. However, HCWs' needs of WHP are notably higher than the situation reported. Countries differ in WHP activities, facilities and programs as well as the corresponding needs expressed by HCWs. Though almost all of the respondents agree that they are responsible for their own health, they are not always motivated and ready to change their behavior and lead a healthy lifestyle. According to the results of our survey, HCWs from all three countries fall into different stages of change, which means that they have different intentions to change their behavior. Thus, it is important to engage HCWs in activities that promote their health and motivate them to lead healthy lifestyles by assessing workers' stage of change and by proving them with opportunities to use WHP infrastructure.

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## Conflict of interest

The authors declare no conflict of interest.

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