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# HEALTH EDUCATION AND COMMUNICATION IN OCCUPATIONAL HEALTH SERVICES IN FINLAND\*

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This article discusses health education and communication in Occupational Health Services (OHS) based on a questionnaire study conducted in Finnish OHS in 2005. The study focused on educational activities carried out by OH professionals and directed at individual employees, work communities and groups, and representatives of client organisations. The questionnaire was sent to 1 132 OH professionals - physicians, nurses, physiotherapists and psychologists - working in 130 OHS units, and representing different OHS providers in Finland. 635 respondents (162 physicians, 342 nurses, 96 physiotherapists, 35 psychologists) returned the questionnaire. The overall response rate was 58 %. There were statistically significant differences in educational activities by different professional groups; differences were also related to the length of working experience in OHS. For all OH professionals, individual employees were the primary clients of health education and communication. Education was less often directed at work communities and representatives of client organisations. However, many issues related to health and well-being at work are not within the reach of individual employees. The impact of health education would be more evident if it also reached those organisational stakeholders with discretion in decision-making. Furthermore, OH personnel should pay attention to the social aspect of learning and work more with groups and work communities.

**KEY WORDS:** *counselling, nurses, physicians, physiotherapists, psychologists*

In spite of the contributions of health education and communication in the field of public health promotion, educational activities have only seldom been focused on in Occupational Health Services (OHS). There is a particular lack of empirical studies on health education and communication in OHS that would provide an overview of educational activities in the everyday work of Occupational Health (OH) personnel. Moreover, many of the studies on health education and communication in OHS have been conducted in specific client organisations and OHS units, and their results are not transferable to other

OHS contexts. In addition, most of the studies have focused on health education by occupational health nurses and physicians and the ways in which they counsel individuals.

Occupational health physicians spend less time on health education than nurses, although a doctor's appointment could be an effective context for learning (1-4). It has been suggested that health education by OH physicians is mostly the transmission of information, while nurses emphasize personal empowerment and greater autonomy of clients concerning their own health (2, 5-6). On the other hand, the methods nurses commonly use seem to be more suitable for knowledge transfer than for helping the clients develop skills needed in maintaining and promoting health (5-6).

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Many of the studies on health education by nurses and physicians in OHS align to the traditional view of health education as influencing the knowledge, beliefs and health behaviour of an individual in order to maintain and promote their personal health. However, health education can also be examined in the wider context of health promotion by utilising the concept of health literacy (7-11). The term "health literacy" refers to the level of literacy and education as the determinants of health and well-being of a population (cf. 12-14). Health literacy can be defined as cognitive and social skills which determine the ability of individuals to gain, understand, and use information to promote and maintain good health (15).

In the broad sense, health literacy refers to a range of outcomes to health education and communication activities that include improved knowledge and understanding of health determinants, and changed attitudes and motivations related to health behaviours. According to this view, efforts to improve knowledge, understanding and capacity to act should not only be targeted at changing personal lifestyle or health behaviour of individuals, but also at raising awareness of individuals and collectives about the social and organisational factors affecting health, safety, and well-being. Moreover, health education and communication aims to support individual and collective actions that can modify these factors (8).

Adopting this view into health education and communication in OHS indicates that health education and communication can benefit individuals, work communities and organisations. It broadens the scope of educational activities in OHS and also calls for considering other forms of health education and communication than informing and counselling individual employees.

Former research in OHS has paid little attention to other forms of health education and communication. Until now, we know fairly little about educational activities directed at work communities and groups or how different representatives of client-organizations are informed by OHS. Still, organisational leaders, managers, and entrepreneurs are in need of information and advice concerning occupational health and safety and how to promote it (2, 16-18). This is particularly true for the representatives of small- and medium-sized enterprises, for whom OHS can be the most important source of health and safety information (17).

In addition to disseminating health and safety information, OHS can facilitate learning about health

and safety issues in groups, work communities, and organizations, as was demonstrated in an in-depth case-study on health education and communication in the OHS of a large construction company. The occupational health nurses and the physician working in the OHS unit of the company educated not only individual employees, but also different representatives of the client organisation - human resources (HR), line managers, foremen, occupational safety personnel, union representatives, and the company's top management - and work communities and groups (2, 19).

Research focusing mainly on occupational health nurses' and physicians' educational activities has provided only a partial picture of health education and communication in OHS. In Finland, health education and communication are the responsibility of all professionals working in OHS (20). In addition to nurses and physicians, occupational health psychologists and physiotherapists are members of the OH teams. Their contribution has been neglected in former studies on health education and communication in OHS.

To fill the gap in scientific knowledge concerning OH personnel's educational activities and to provide a general picture of health education and communication in OHS practice in Finland, we conducted a questionnaire study in Finnish OHS units. In addition, the study explored the views of OH personnel about the impact of their educational activities and how they thought health education and communication in OHS should be developed in the future. The overall aim of the study was to produce general knowledge about health education and communication in OHS that could be utilised in developing models of good health education and communication practices in OHS in order to improve the effectiveness of health education and communication by OHS.

## SUBJECTS AND METHODS

### *Study design*

The study was carried out as a postal survey between June and August 2005. A stratified, random sample of 130 OHS units was chosen out of the Finnish OHS unit register (N=816). The sample represented different occupational health service providers in Finland according to ownership

(municipal health centres, private medical centres, employers' own OHS units, and units owned by a group of employers) and according to size in terms of the number of OH personnel (less than six to six or more) and the number of individual clients (less than 2000 or 2000 and more).

#### Subjects

The questionnaire was sent to 1132 OH professionals working in the chosen OHS units:

504 nurses, 387 physicians, 146 physiotherapists, and 65 psychologists. There were 635 respondents: 342 nurses, 162 physicians, 96 physiotherapists, 35 psychologists. The overall response rate was 58 %. The nurses' response rate was 68 %, physicians' 42 %, physiotherapists' 66 %, and psychologists' 54 %.

Of the respondents, 84 % were women (99 % of the nurses, 54 % of the physicians, 85 % of the physiotherapists, and 71 % of the psychologists). The average age was 46 years, ranging from 44

**Table 1** Sum scales and their reliability measured by Cronbach's alpha

Sum scale		Number of items	Cronbach's alpha
INDIVIDUAL CLIENTS			
Situations	Work ability and rehabilitation assessments	5	0.92
	Health examinations and other visits in the OH unit	3	0.92
	Ergonomic and work place surveys	3	0.78
Content	Health and work ability	2	0.53
	Physical overload at work	4	0.82
	Smoking and national diseases	4	0.89
	Free time and hobbies	2	0.87
	Work community issues	4	0.88
	Violence and threat of violence	2	0.82
Methods	Informing and advising	2	0.65
	Practical exercises and illustrations	3	0.79
WORK COMMUNITIES AND GROUPS			
Situations	Surveys	3	0.78
	Work community work	5	0.91
	Different groups	4	0.85
	First aid and occupational safety training	2	0.70
Methods	Written communication	2	0.74
	Practical exercises and case studies	4	0.89
EMPLOYERS AND OTHER REPRESENTATIVES OF CLIENT ORGANIZATIONS			
Situations	Regular meetings and other cooperation situations	4	0.88
Content	Promoting work ability and health	4	0.87
	Occupational safety	4	0.94
	Sick leaves and drug dependency	3	0.85
	Job control	5	0.93
Methods	Discussions and advising	2	0.70
	Training and lectures	2	0.78

years (physiotherapists) to 49 years (psychologists). The majority of the respondents worked in private medical centres (47 %); 38 % worked in municipal health centres, 12 % in employers' own OHS units, and 3 % in OHS units owned by a group of employers. Mean work experience was 13 years (nurses 13 years, physicians 14 years, physiotherapists 7 years, and psychologists 11 years). Overall, 87 % of the respondents had completed their professional training for OHS (98 % of the nurses, 80 % of the physicians, 90 % of the physiotherapists, and 38 % of the psychologists). Of the OH professionals, 52 % worked mainly in OHS for small enterprises employing less than 50 employees.

### Questionnaire

The questionnaire covered educational activities by OH personnel directed at individual employees, work communities and groups, and employers and other representatives of client organisations. It contained 12 items about the situations, 44 items about the content, and 10 items about the methods of health education and communication for individual clients. For groups and work communities, there were 20 items about the situations and content and nine items about the methods of education. Health education and communication for employers and other representatives of the client organisation was examined through 11 items concerning the situations, 37 items about the content, and seven items about the methods.

In addition, one open question ("something else, what?") was asked about the situations, content, and methods of health education and communication for each of the three client categories (individuals, work communities and groups, and representatives of client organisations) if the offered items did not include all the issues the respondents regarded as relevant. The respondents were asked to grade all the items using the Likert scale from 1 = "never" to 5 = "always".

The questionnaire also contained structured and open questions about the impact of educational activities and about what the respondents saw as the most important issues in developing health education and communication in OHS in the future.

### Analysis

Factor analysis was used to identify factors, which explained the variability between the items concerning the situations, the content, and the methods of health

education and communication within the three client categories. Sum scales were developed from the items with the highest factor loadings within each factor (minimum loading 0.54). Content validity was measured by Cronbach's alpha (Table 1).

Variance analysis was applied in testing differences in the mean values of the sum scales. P-values under 0.05 were considered significant. Only statistically significant differences are reported. All statistical procedures were conducted using the SPSS 13.0 Statistical Package (SPSS Inc., Chicago, IL, USA). Content analysis was used to analyse answers to open questions.

## RESULTS

### *Health education and communication in the work of OH personnel*

Employees were the primary clients of health education and communication in OHS. Of the other actors of client organisations, OH personnel directed their educational activities most often to line managers and foremen (Table 2). OH professionals who had worked for at least five years in OHS provided health education to top management, line managers, foremen, HR staff, and occupational safety personnel more often than those with shorter OHS working experience. These clients - with the exception of top management - received information and advice more often in OHS that provided services for medium-sized or large organizations than when the client organizations were small.

Individual clients received information and advice about their personal health and work ability most often during work ability and rehabilitation assessments. Also, health examinations and other visits to the OHS unit, as well as ergonomic and workplace surveys, were common situations of educating individuals in OHS. There were significant differences in health education and communication directed to individual clients between occupational health nurses, physicians, physiotherapists, and psychologists. Health examinations were the most common counselling situations for nurses. Physicians provided information and advice for individuals mostly during work ability and rehabilitation assessments, which were the most common counselling situations for psychologists as well. Only physiotherapists

**Table 2** The frequency of educational activities by OHS personnel directed at different customer groups ( $\bar{x}$  = mean values: 1=never, 2=seldom or fairly seldom, 3=occasionally, 4=often or fairly often, 5=always). Alphabetical letters indicate the results of Tukey's test ( $a>b>c>d$ ,  $p<0.05$ ).

Clients	Nurses (n=342) $\bar{x}$	Physicians (n=162) $\bar{x}$	Physio- therapists (n=96) $\bar{x}$	Psycho- logists (n=35) $\bar{x}$	Total (n=635) $\bar{x}$
Employees	4.55 <sup>a</sup>	4.35 <sup>b</sup>	4.65 <sup>a</sup>	3.86 <sup>c</sup>	4.47
Top management	3.16 <sup>ab</sup>	2.90 <sup>bc</sup>	2.94 <sup>abc</sup>	2.69 <sup>bc</sup>	3.03
Line management	3.50 <sup>ab</sup>	3.19 <sup>bc</sup>	3.36 <sup>abc</sup>	3.29 <sup>abc</sup>	3.37
HR staff	3.08 <sup>ab</sup>	2.94 <sup>ab</sup>	2.86 <sup>abc</sup>	2.46 <sup>bc</sup>	2.98
Occupational safety personnel	3.31 <sup>a</sup>	2.90 <sup>bcd</sup>	3.15 <sup>abc</sup>	2.52 <sup>cd</sup>	3.14
Union representatives	2.82 <sup>a</sup>	2.50 <sup>b</sup>	2.52 <sup>b</sup>	2.14 <sup>b</sup>	2.65

educated individual clients most often at workplaces, usually in the course of ergonomic and workplace surveys (Table 3).

Differences in the frequency of counselling situations were also related to OH personnel's work experience in OHS. OH professionals who had worked for at least five years in OHS provided information and advice for individual clients more often in all situations examined in the study than those with shorter OHS work experience. OH personnel who mainly served small enterprises most often educated individuals in the context of work ability and rehabilitation assessments, and health examinations and other visits to the OHS unit.

In health education and communication for individual clients, nurses and physicians focused on the traditional topics of health education: personal health and work ability. Physiotherapists focused on physical overload at work that included musculoskeletal disorders and healthy and safe working practices and positions. Psychologists provided information and advice particularly about work community issues such as collaboration and relationships in the workplace, organisational change, and how the work is organised. (Table 3.) In addition to the profession, the differences in the content of health education and communication for individual clients were related to the size of client organisations. In OHS for smaller enterprises, OH personnel provided health education about personal health and work ability, smoking and national diseases, and violence and threat of violence more often than those working for larger companies.

Informing and advising was the most common method of health education and communication for individual clients in all professional groups of OHS.

Physiotherapists utilised practical exercises and illustrations more often than other OH professionals (Table 3).

Work communities and groups received health education by OH personnel less often than individual clients. Most often, health education and communication for work communities and groups was conducted in the context of different surveys such as workplace surveys, collective health examinations, and surveys of physical functionality. In contrast to other OH professionals who provided education in the course of surveys, psychologists educated work communities and groups mostly within work community work. For them crisis situations, change processes and work community development projects were typical contexts of health education (Table 4).

OH personnel with longer work experience conducted health education and communication within surveys more often than those with less experience. In addition, work community work, different groups, and training in first aid and occupational safety were significantly more common for them than for the less experienced personnel. Different groups were more common contexts for health education by OHS for medium-sized and large companies than for small enterprises.

Written communication was the most common method of health education and communication for work communities and groups among nurses and physicians; it was also prevalent in the work of physiotherapists and psychologists. Still, more often than written communication, physiotherapists and psychologists used practical exercises and case studies (Table 4).



**Table 3** The situations, content, and methods of health education for individual clients in OHS by nurses, physicians, physiotherapists and psychologists ( $\bar{x}$  = mean values of sum scales: 1=never, 2=seldom or fairly seldom, 3=occasionally, 4=often or fairly often, 5=always). Alphabetical letters indicate the results of Tukey's test ( $a > b > c > d$ ,  $p < 0.05$ ).

	Nurses (n=342) $\bar{x}$	Physicians (n=162) $\bar{x}$	Physio- therapists (n=96) $\bar{x}$	Psychologists (n=35) $\bar{x}$	Total (n=635) $\bar{x}$
<i>Situations</i>					
Work ability and rehabilitation assessments	4.24 <sup>a</sup>	4.37 <sup>a</sup>	3.71 <sup>b</sup>	3.30 <sup>b</sup>	4.14
Health examinations and other visits in the OH unit	4.42 <sup>a</sup>	4.18 <sup>b</sup>	2.83 <sup>c</sup>	1.62 <sup>d</sup>	3.97
Ergonomic and work place surveys	4.00 <sup>b</sup>	3.52 <sup>c</sup>	4.29 <sup>a</sup>	2.20 <sup>d</sup>	3.83
<i>Content</i>					
Health and work ability	4.53 <sup>ab</sup>	4.34 <sup>bc</sup>	4.38 <sup>abc</sup>	3.83 <sup>d</sup>	4.42
Physical overload at work	3.87 <sup>b</sup>	3.64 <sup>c</sup>	4.44 <sup>a</sup>	2.01 <sup>d</sup>	3.79
Smoking and national diseases	4.04 <sup>a</sup>	4.00 <sup>a</sup>	3.10 <sup>b</sup>	1.39 <sup>c</sup>	3.74
Free time and hobbies	3.50 <sup>bc</sup>	3.01 <sup>d</sup>	3.87 <sup>ab</sup>	3.63 <sup>abc</sup>	3.44
Work community issues	3.32 <sup>b</sup>	2.96 <sup>c</sup>	2.81 <sup>c</sup>	3.92 <sup>a</sup>	3.18
Violence and threat of violence	3.08 <sup>ab</sup>	2.60 <sup>bc</sup>	2.01 <sup>d</sup>	2.94 <sup>abc</sup>	2.79
<i>Methods</i>					
Informing and advising	4.49 <sup>a</sup>	4.38 <sup>a</sup>	4.50 <sup>a</sup>	3.85 <sup>b</sup>	4.43
Practical exercises and illustrations	2.39 <sup>b</sup>	2.12 <sup>c</sup>	3.46 <sup>a</sup>	1.95 <sup>c</sup>	2.46

Employers and other representatives of client organisations received health education and communication from OH personnel less often than employees (Table 2). Educational activities for these clients were conducted in meetings and other cooperation situations such as negotiations during organisational change, work ability assessments of disabled persons, and occupational safety meetings. They consisted of discussions and advising about the work ability and health of employees that included such issues as ways of promoting employee health and work ability, physical work load, and rehabilitation options (Table 5).

Nurses had counselling situations with representatives of client organisations more frequently than the other OH professionals. In addition to discussing and providing advice about workers' work ability and health promotion, nurses dealt with occupational safety issues, and sick leaves and drug dependency more often than the others. Similarly, in the work of physicians and physiotherapists, the emphasis was on

work ability and health promotion of the employees; physicians also provided information and counselled on such subjects as sick leaves and drug dependency. For psychologists, job control was the most common content of health education and communication for representatives of client organisations. Job control refers to the possibilities to influence one's own work, changes at the work place and in the work organisation, leadership and management, organisation of work, and uncertainty related to work (Table 5).

OH personnel with longer work experience had counselling situations with employers and other representatives of client organizations more frequently than those with shorter work experience. They also dealt with such issues as work ability and health promotion of employees, sick leaves and drug dependency, and job control issues more often than the less experienced personnel. Education and communication on occupational safety was more common when client organisations were small than when they were medium-sized or large.

**Table 4** The situations and methods of health education for work communities and groups in OHS by nurses, physicians, physiotherapists and psychologists ( $\bar{x}$  = mean values of sum scales: 1=never, 2=seldom or fairly seldom, 3=occasionally, 4=often or fairly often, 5=always). Alphabetical letters indicate the results of Tukey's test ( $a>b>c>d$ ,  $p<0.05$ ).

	Nurses (n=342) $\bar{x}$	Physicians (n=162) $\bar{x}$	Physio- therapists (n=96) $\bar{x}$	Psychologists (n=35) $\bar{x}$	Total (n=635) $\bar{x}$
<i>Situations</i>					
Surveys	3.26 <sup>b</sup>	3.01 <sup>c</sup>	3.64 <sup>a</sup>	1.95 <sup>d</sup>	3.19
Work community work	2.82 <sup>b</sup>	2.57 <sup>c</sup>	2.00 <sup>d</sup>	3.50 <sup>a</sup>	2.67
Different groups	2.25 <sup>b</sup>	1.89 <sup>c</sup>	3.31 <sup>a</sup>	2.37 <sup>b</sup>	2.33
First aid and occupational safety training	2.15 <sup>a</sup>	1.67 <sup>b</sup>	1.39 <sup>b</sup>	1.24 <sup>b</sup>	1.86
<i>Methods</i>					
Written communication	2.95 <sup>ab</sup>	2.40 <sup>bc</sup>	2.95 <sup>ab</sup>	2.57 <sup>abc</sup>	2.79
Practical exercises and case studies	2.41 <sup>b</sup>	1.73 <sup>c</sup>	3.00 <sup>a</sup>	2.85 <sup>a</sup>	2.36

#### *The impact of OHS educational activities*

The impact of OHS educational activities was evaluated by 492 respondents (77 %,  $n=635$ ); 280 nurses (81 %,  $n=342$ ), 110 physicians (69 %,  $n=162$ ), 80 physiotherapists (83 %,  $n=96$ ), and 26 psychologists (74 %,  $n=35$ ). Most often they described positive effects deriving from their health education and communication in terms of changes in the life style, knowledge and attitudes, health behaviour, and health of individual clients (70 %,  $n=342$ ). Improvements in occupational safety, in the physical working environment and in the use of safety equipment were reported by 148 (30 %) OH professionals. Sixty-eight respondents (14 %) reported that they had contributed to the better functioning of workplaces and to improvements in management and leadership practices in work communities and organisations.

Nurses and physicians ( $n=210$  nurses,  $n=69$  physicians) most often reported about positive changes in health behaviour, lifestyle, and health of employees. The majority of the physiotherapists ( $n=44$ ) described improvements in employees' work practices and in workplace ergonomics. When assessing the impact of health education and communication, occupational health psychologists referred most often to changes on the level of work communities ( $n=21$ ); they had identified improvements in the functioning of work communities, in leadership practices, and in developing solutions to workplace conflicts.

Furthermore, half of the psychologists ( $n=13$ ) noted the effects of health education and communication on individual clients in terms of improved job control and awareness about health and safety issues.

#### *How health education and communication in OHS should be developed in the future*

Four hundred and three respondents replied that health education and communication in OHS needs to be developed further (63 %,  $n=635$ ); 216 nurses, 97 physicians, 69 physiotherapists and 21 psychologists). Eighty-eight respondents (22 %) suggested that developing health education and communication in OHS requires more collaboration between OHS teams and with client organisations. Better planning of educational activities in OHS was seen as important by 75 respondents (19 %); 56 respondents (14 %) believed that support for the competencies needed in health education and communication was necessary to ensure the effectiveness of health education and communication by OHS.

For most of the nurses, intensifying collaboration between different OH professionals and between OHS teams and workplaces ( $n=47$ ) and improving their own competencies ( $n=47$ ) were important ways of developing health education and communication in OHS. Nurses also wanted to have more time for planning and follow-up ( $n=34$ ). Physicians most often suggested that developing health education in OHS required improved planning and follow-up of

**Table 5** The situations, content, and methods of health education and communication for employers and other representatives of client organizations in OHS by nurses, physicians, physiotherapists and psychologists ( $\bar{x}$ =mean values of sum scales: 1=never, 2=seldom or fairly seldom, 3=occasionally, 4=often or fairly often, 5=always). Alphabetical letters indicate the results of Tukey's test ( $a>b>c>d$ ,  $p<0.05$ ).

	Nurses (n=342) $\bar{x}$	Physicians (n=162) $\bar{x}$	Physio- therapists (n=96) $\bar{x}$	Psycho- logists (n=35) $\bar{x}$	Total (n=635) $\bar{x}$
<i>Situations</i>					
Regular meetings and other cooperation situations	3.67 <sup>a</sup>	3.28 <sup>b</sup>	2.82 <sup>c</sup>	2.53 <sup>c</sup>	3.38
<i>Content</i>					
Promoting work ability and health of employees	3.63 <sup>a</sup>	3.29 <sup>b</sup>	3.57 <sup>a</sup>	2.59 <sup>c</sup>	3.47
Occupational safety	3.61 <sup>a</sup>	3.04 <sup>b</sup>	2.13 <sup>c</sup>	1.12 <sup>d</sup>	3.10
Sickness leaves and drug dependency	3.40 <sup>a</sup>	3.29 <sup>a</sup>	1.97 <sup>b</sup>	2.27 <sup>b</sup>	3.10
Job control	3.01 <sup>a</sup>	2.76 <sup>b</sup>	2.21 <sup>c</sup>	3.24 <sup>a</sup>	2.84
<i>Methods</i>					
Discussions and advising	4.15 <sup>a</sup>	3.91 <sup>b</sup>	3.63 <sup>c</sup>	3.54 <sup>c</sup>	3.98
Training and lectures	2.71 <sup>abc</sup>	2.61 <sup>bc</sup>	2.87 <sup>abc</sup>	3.07 <sup>ab</sup>	2.73

the educational activities (n=18). They also wanted more collaboration within OHS teams and with client organisations (n=13).

For the majority of physiotherapists, multi-professional teamwork was the solution for improved health education in OHS (n=20). Also, focusing on planning, follow-up and evaluation of education (n=8) and improving their own competencies (n=8) were seen as important. Most of the psychologists would increase multi-professional teamwork and develop joint practices of health education and communication in OHS (n=8).

## DISCUSSION

The focus of health education and communication in the work of Finnish OH personnel was on individual employees. In OHS, health education and communication consisted mainly of providing information and advice for individual clients about their personal health and work ability, physical overload at work and healthy and safe working practices, as well as about issues concerning the functioning of work communities. With the exception of psychologists, the impact of educational activities was also most often considered in terms of an individual.

Educating individuals in order to enable them to take care of their own health is one of the main

strategies in health promotion (21, 22). Improving health literacy of individuals has been considered as central in answering to the health challenges of the day; for example, to lifestyle diseases. This view suggests that health problems ultimately can be solved only by individuals, who need knowledge and skills that enable them to make better choices related to their health (23). This individually-centred approach to health literacy emphasizes individual and not collective responsibility for health (24, 25).

By concentrating mainly on individuals, one can easily lose sight of other determinants of health at work. In work communities and organisations, many issues related to health and safety are not within the reach of an individual employee, but require collective responsibility and action in workplaces and organisations. Health and safety at work are also determined by the ways in which organisational members responsible for decision-making in work communities and organisations take health and safety issues into account.

In the changing world of work, besides the traditional causes of ill-health related to work and work conditions and how to prevent them, an understanding of the changes of today's work life and their consequences in work organisations is crucial for those responsible for work processes and organisations. For example, organisational downsizing and perceived fairness of management



and supervisory practices have a significant impact on the health and work ability of the employees (26-29). In turn, these are related to the performance of the organisation (30-32).

By providing relevant information about work and health and counselling – not only individual employees, but also work communities and groups and those organisational stakeholders with discretion in decision-making – OHS can support the development of shared knowledge and understanding, norms and practices that enable organisational members to promote their health and well-being at work and to develop work and working conditions that maintain and promote health.

However, the results of this study imply that work communities and groups, as well as top management, line managers and foremen, HR staff, and other representatives of client organisations are only occasionally regarded as clients of health education and communication in OHS. The results suggest that educating employers and other representatives of client organisations is not as common way of action in OHS as educating employees.

The results demonstrate how the educational activities by different OH professionals are related to their specific areas of expertise. The multi-professional character of the Finnish OHS can be seen as a strength by which it is possible to answer to the multiplicity of client needs. According to OH personnel, to exploit multi-professionalism more fully in health education and communication requires a more systematic and collaborative way of action.

The methods mainly used in OHS, especially in educating individual clients and groups and work communities, are narrow and professional-centred. Only physiotherapists and psychologists utilised more participative and activating methods that are needed when the aim is adult learning (33-38). Furthermore, longer work experience in OHS seems to broaden the scope of educational activities in terms of clients, situations, and content of health education, but the methods stay the same. This reflects the need for improving competencies needed in health education and communication as was also recognised by the respondents in this study.

## CONCLUSION

In promoting health and safety in work organisations, educational activities directed mainly

at individual employees are not sufficient. The impact of health education by OHS would be more evident if it also reached those organisational stakeholders with discretion in decision-making. In addition to employees, OH personnel should also consider other organisational members as their clients of health education and communication. Furthermore, OH personnel should pay attention to the social aspect of learning and work more with groups and work communities. Consequently, they need to be able to employ methods that can facilitate the learning of individuals, groups and organisations.

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### Sažetak

#### ZDRAVSTVENO OBRAZOVANJE I INFORMIRANJE KOJE PROVODE SLUŽBE MEDICINE RADA U FINSKOJ

U ovome se članku raspravlja o zdravstvenom obrazovanju i informiranju koje provode službe medicine rada, a na temelju istraživanja provedenog među tim službama 2005. U središtu su ispitivanja bile obrazovne aktivnosti medicinarada usmjerene na radnike kao pojedince, radne zajednice i skupine te predstavnike korisničkih organizacija. Upitnik su dobila 1132 medicinarada, uključujući liječnike, medicinske sestre, fizioterapeute i psihologe zaposlene u 130 jedinica koje pružaju usluge medicine rada u Finskoj. Ispunjene je upitnike vratilo 635 sudionika (162 liječnika, 342 sestre, 96 fizioterapeuta te 35 psihologa). Ukupni odgovor iznosio je 58 %. Zamijećene su statistički značajne razlike u obrazovnim aktivnostima između pojedinih zanimanja, a one su bile povezane i sa stažem u medicini rada. Svim medicinarima rada pojedinačni radnici primarni su korisnici zdravstvenoga obrazovanja i informiranja. Obrazovanje se rjeđe usmjeravalo na radne zajednice i predstavnike korisničkih organizacija. Međutim, mnoga otvorena pitanja vezana uz zdravlje i dobrobit na radu nisu u nadležnosti pojedinačnih zaposlenika. Utjecaj zdravstvenoga obrazovanja bio bi stoga svrhovitiji kada bi ono obuhvatilo i one strukture koje donose odluke. Osim toga, osoblje medicine rada treba obratiti pozornost na socijalni aspekt učenja te treba više raditi sa skupinama i radnim zajednicama.

**KLJUČNE RIJEČI:** *fizioterapeuti, liječnici, medicinske sestre, psiholozi, savjetovanje*

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