

# ASSUMPTIONS OF WORKPLACE HEALTH PROMOTION IN PRIMARY HEALTH CARE

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## **Annotation**

*The aim of the study was to investigate assumptions of workplace health promotion in a primary health care (further PHC). The instruments were used for research: Work Experience Measurement Scale (WEMS) Salutogenic Health Indicator Scale (SHIS) and questions about the additional work factors. It was found that the positive experience of work and additional factors were associated with better health and well-being of their assessment, a positive significant correlation ( $r=0.48$ ,  $p<0.001$  and  $r=0.65$ ,  $p<0.001$ ) was found. A model was created, in which psychosocial work factors were suggested to be used as the resources for health promotion and maintenance of the PHC work sector, separately for doctors, nurses and other staff.*

**Key words:** psychosocial work factors, health promotion at work, salutogenic, primary health care sector.

## **Introduction**

Today the work of human and society as a whole means much more than just securing financial prosperity. The work for person is an opportunity to take a position in society, feel acknowledged and respected and etc. The work determines human lifestyle, circle of friends and even the state of health (1). The work of human life has become a very important and significant, so that a growing body of research related to the work, working environment and human health impacts. Quality of life is associated with a positive psychosocial work environment (2). In Sweden a "good workplace" is one that has a positive impact on the working person. A "healthy workplace" is defined much more - this is a working place with a positive psychosocial work environment that positively affects not only the individual, but also the work done by the individual (3). Work psychology researchers says that positive workplace is than, when good health and energy is coming back (4, 5).

Health care is one of the largest economic sectors in the EU, which requires a lot of workforce. About 17 million people is working in the Health care's sector. In the health sector needs to develop a better psychosocial working conditions, because of aging, polymorbidity and health care facilities demand is growing up (6).

**Problem of the topic.** Over the past two decades, the health care sector had a lot of organizational changes and the reasons of it were: increased staff workload, downsizing and etc. During that period, it was tested a range of health care management system, to change its function and purpose (7). 15 years ago, an extensive hospital staff downsizing PHC sector, and in particular, increased workload and increased working hours, due to the increased PHC employee disability (illness) and the number of "absenteeism" (8). Studies have found that more and more doctors, especially women, diagnosed mental disorders (9, 10, 11). Psychosocial work conditions need to be improved, as observed in the rapid development of health care staff emigration from Lithuania. One reason is the low salaries, but also influenced by the dissatisfaction with working conditions and peer disagreements (12). The first steps in relation to the promotion of health at work, were taken in 1986. Ottawa conference, organized by the World Health Organization, at the time. And only then gradually evolved salutogenic thinking. Antonovsky salutogenic model helps to understand the factors that supports and enhances human health (13, 14, 15).

**Relevance of the topic.** However now there is little known about the positive work factors that strengthen and support the health of the work environment. Most of the studies and research work is about negative work factors and their causes, the working environment risk factors and health problems (16). In the workplace we need to look more positive factors that

promote employee health promotion or help to maintain existing health. Health promotion at work should be based on a holistic approach to the workplace, such as: work is organized, how peer relationships and so on. Employers should take interest in the type of work factors supports and enhances the health of workers (17). Health promotion must be concerned not only employers but also the workers themselves.

**Research methodology** is based not only salutogenic theory, but also other theories, its exploration of labor relations and health, such as a positive experience. Questionnaires on work experience (WEMS), additional work psychosocial factors and health status (SHIS) (18) have been developed, theoretically based, validated and psychometrically tested in Kristianstad University, Sweden (19, 20, 21). During the survey all these questionnaires were used in combination in order to determine the relationship between the work of psychosocial factors and health, and create a scientific basis for intervention, positive operational factors, assumptions, creating a health-enhancing PHC work environment for workers.

**The object:** primary health care work sector.

**Aim of the work:** to investigate assumptions of workplace health promotion in primary health care.

**Research goals:**

1. To describe the health promotion work salutogenic perspective.
2. To analyze the experience and organization of psychosocial factors and compare their manifestation depending on the level of employment of employees, gender, age and workload PSP sector.
3. Assess the health sector workers PSP salutogenic health indicators and compare their health assessment of the level of employment, age, gender and workload respects.
4. To establish the relationship between work experience psychosocial factors of expression and the PSP sector employees health status, assessed salutogenic health indicators.
5. Create the PSP sector employees positive psychosocial work factors model, which should be assumed to strengthen or maintain the PSP health, creating a positive work environment based on salutogenic health point of view and study the results.

**Materials and methods**

Work Experience Measurement Scale (WEMS) (22) The Salutogenic Health Indicator Scale (SHIS) (23), and questions about the additional work factors were used in this survey (22). The respondents rated the 25 statements of the questionnaire on a scale from 1 (strongly disagree) to 6 (strongly agree) or 7 (not relevant). The study included 8 PHC institutions of Klaipėda city, 3 public and 5 private. This PHC institutions was taken random selection from all Klaipėda city PHC institutions list. In total, 386 employees were questioned PHC (104 doctors, 191 nurse and 91 other staff (table 1)). The response rate was 83.9%. Quantitative data was standartized. SPSS program, version 17 was used for analyzing quantitative data. Cronbach's alpha was used to test questionnaires' reliability, Student's t-test and ANOVA to compare averages, Pearson's correlation and the linear regression to set connections,  $\chi^2$  to distribute frequency, multiple regression method to create a positive working model of psychosocial factors, which have assumption to promote health of PHC employees at work. Significance level was chosen  $p < 0.05$ .

**Results**

Results of the study showed that in the public PHC institutions mostly works nurses (78.5%), on the contrary, in private PHC institutions mostly works other PHC workers. The group of nurses females took the greater part (100.0%) as compared with doctors (85.6%) or other PHC workers (96.7%). More than half of doctors (62.5%) were aged over 55, nurses was a little bit younger than doctors (nurses 57,7% were aged 35-54). Other PHC sector workers were mostly younger than 35 years (55,5%). The study showed that nurses works biggest workload (52.9%) as compared with doctors (27.0%) or other PHC workers (37.4%) (Table 1).

Table 1

Sociodemographic characteristics according to PHC sector working positions

Characteristics	Positions					
	Doctors		Nurses		Other PHC workers	
	n	%	n	%	n	%
In all	104	100,0	191	100,0	91	100,0
<b>PHC type of institution</b>						
Public PHC	65	62,5	150	78,5	49	53,8
Private PHC	39	37,5	41	21,5	42	46,2
$(\chi^2 = 19,7, IIs = 2, p < 0,001)$						

Characteristics	Positions					
	Doctors		Nurses		Other PHC workers	
	n	%	n	%	n	%
<b>Gender</b>						
Female	89	85,6	191	100,0	88	96,7
Male	15	14,4	0	0	3	3,3
$(\chi^2 = 32,0, df = 2, p < 0,001)$						
<b>Age (years):</b>						
< 35	9	8,7	11	24,4	25	55,5
35 - 54	30	28,8	109	57,7	50	26,4
≥ 55	65	62,5	71	46,7	16	10,6
$(\chi^2 = 63,2, df = 4, p < 0,001)$						
<b>Workload (posts) in PHC institution</b>						
≤ 0,5	7	6,7	6	3,1	10	11,0
> 0,5 - 1	69	66,3	84	44,0	47	51,6
> 1	28	27,0	101	52,9	34	37,4
$(\chi^2 = 24,4, df = 4, p < 0,001)$						

Doctors had more positive attitude in evaluating autonomy at work than nurses or other PHC workers. Meanwhile, most nurses positively assessed the time experience at work. Other PHC workers evaluated positively supportive working conditions and reorganization. All PHC sector working positions with the highest averages in all areas of experience, evaluated the management of work (table 2).

Table 2

Work experience assessment in accordance with the position in the PHC work sector

WEMS domains	Positions			ANOVA	
	Doctors	Nurses	Other PHC workers	F test	p-value
	m (95% CI)	m (95% CI)	m (95% CI)		
Supportive working conditions	76,4 (72,7 – 80,0)	77,0 (74,4 – 79,7)	79,9 (76,6 – 83,2)	1,062	0,347
Internal working experience	78,1 (74,8 – 81,5)	77,9 (75,6 – 80,2)	78,2 (75,0 – 81,4)	0,011	0,989
Autonomy	71,5 (66,4 – 76,7)	64,0 (60,2 – 67,7)	65,8 (60,6 – 70,9)	2,900	0,056
Time experience	65,3 (59,7 – 70,9)	75,0 (71,8 – 78,1)	74,5 (70,8 – 78,2)	6,365	<b>0,002</b>
Management	81,8 (78,1 – 85,4)	83,1 (80,8 – 85,5)	83,2 (79,6 – 86,7)	0,241	0,786
Reorganization	61,2 (55,8 – 66,6)	62,6 (58,8 – 66,4)	68,3 (63,7 – 72,9)	2,081	0,126

Results of the study showed (table 3) that there were statistically significant differences in terms of time experience (p = 0.003) and internal working experience (p = 0.040) in areas under the PHC sector employees workload. The most positively assessed time experience at work PHC sector employees who working >1 workload. Autonomy, internal working experience and reorganization at work most positively assessed employees who working ≤0,5 workload. The results were very similar speaking about management and supportive working conditions for all employees working in different workload (table 3).

Table 3

Work experience in the assessment by the PHC sector staff workload

WEMS domains	Workload (posts)			ANOVA	
	≤ 0,5	> 0,5 - 1	> 1	F test	p-value
	m (95% CI)	m (95% CI)	m (95% CI)		
Supportive working conditions	81,0 (73,7 – 88,3)	76,7 (74,1 – 79,2)	78,1 (75,3 – 80,9)	0,724	0,485
Internal working experience	81,0 (75,0 – 87,0)	76,0 (73,7 – 78,4)	80,1 (77,7 – 82,5)	3,242	<b>0,040</b>
Autonomy	70,4 (60,9 – 80,0)	64,5 (60,9 – 68,1)	68,3 (64,1 – 72,4)	1,247	0,288
Time experience	73,6 (65,4 – 81,9)	68,4 (64,9 – 71,8)	76,9 (73,5 – 80,2)	6,017	<b>0,003</b>
Management	84,5 (77,1 – 91,9)	81,8 (79,4 – 84,1)	83,7 (81,0 – 86,4)	0,696	0,499
Reorganization	71,0 (60,4 – 81,6)	62,0 (58,3 – 65,7)	64,4 (60,4 – 68,3)	1,375	0,254

PHC sector workers health was analyzed by salutogenic health indicators. Statistically significant differences in the health assessment according to their work position, age, gender, and workload has not been found. However, nurses, other PHC staff, younger than 54 years, employees who working ≤0,5 workload and women most positively assessed their health and well-being (table 4).

Table 4

PHC health assessment salutogenic health indicators in the current position, age, gender and workload

Variables	SHIS		F test	p-value
	m	(95% CI)		
<b>Working position</b>				
Doctors	65,5	62,0 – 69,1	0,691	0,502
Nurses	68,0	65,3 – 70,7		
Other PHC workers	68,1	64,3 – 71,9		
<b>Age (years)</b>				
< 35	67,6	62,6 – 72,5	2,186	0,114
35 - 54	69,2	66,7 – 71,8		
≥ 55	65,0	61,8 – 68,2		
<b>Gender</b>				
Female	67,4	65,5 – 69,3		0,708
Male	65,7	55,5 – 76,0		
<b>Workload (posts)</b>				
≤ 0,5	70,9	65,0 – 76,9	1,125	0,326
> 0,5 – 1	66,1	63,5 – 68,7		
> 1	68,4	65,3 – 71,4		

The positive experience at work was related to better health and well-being. A positive moderate correlation ( $r = 0.48$ ,  $p < 0.001$ ) between the experience of psychosocial factors and health was assessed by salutogenic health indicators. It can be assumed that the improvement of work experience factors would strengthen workers' health in PHC (picture 1).

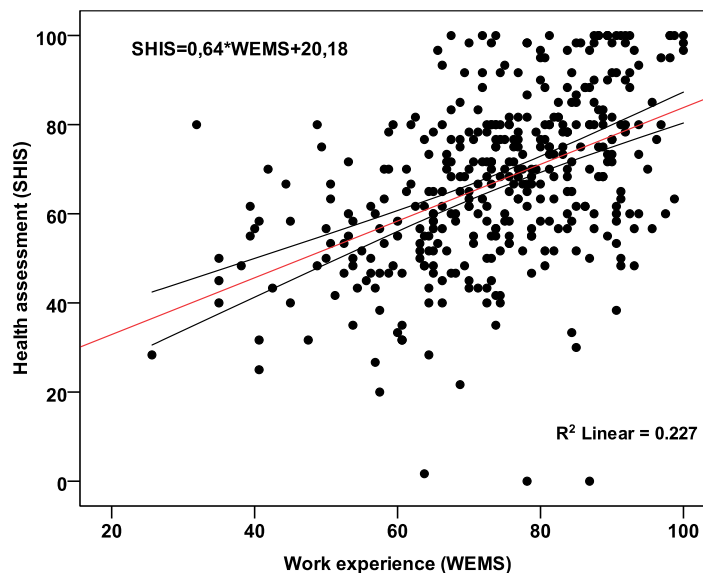
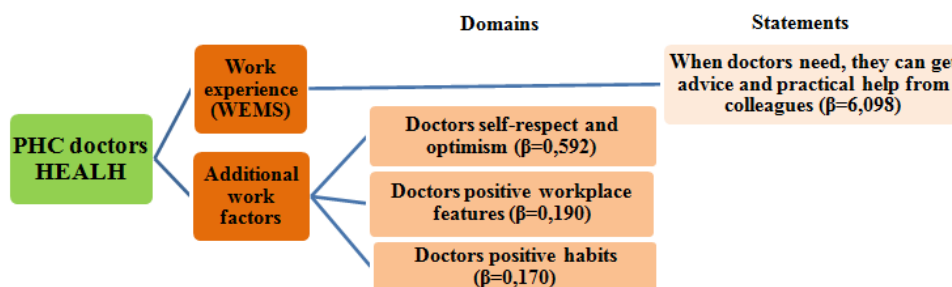


Fig 1. Linear regression PHC health assessment dependence on work experience

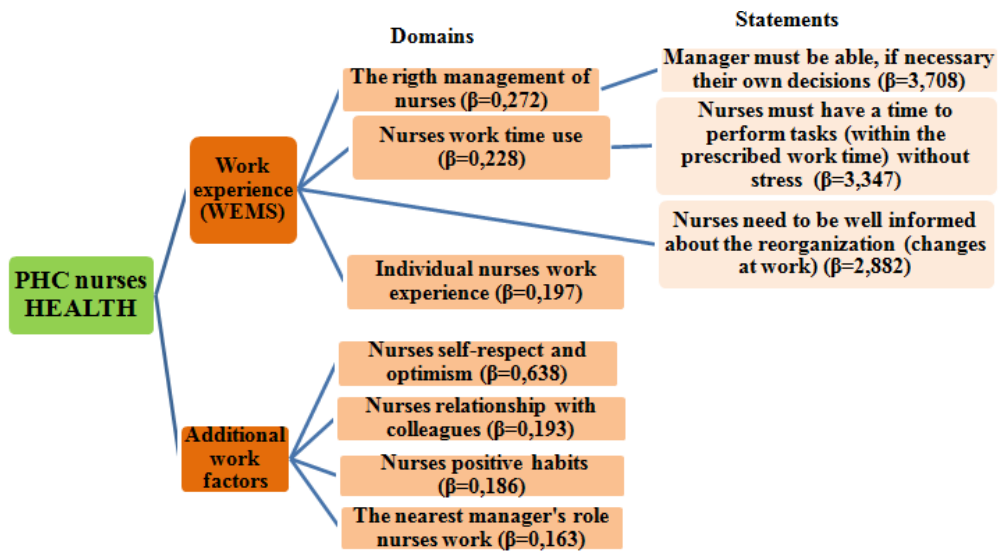
According to salutogenic approach and study results, a model in which the work of psychosocial factors was suggested to use the PHC as a means to their health or to enhance or maintain (separately for doctors, nurses and other staff). Doctors health promotion can be a source of labor relations, based on the collegiate, the opportunity to consult with colleagues ( $\beta = 6.098$ ), in particular in circumstances of extraordinary situations (picture 2).



Remark: When  $\beta$ -coefficient is bigger than other, it means that this work factor is more important for PHC doctors health.

Fig. 2. Positive psychosocial work factors model for PHC doctors

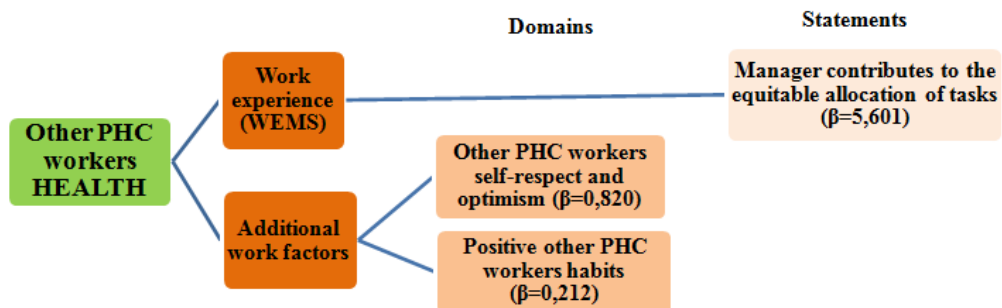
According to a model developed by nurses in health promotion could become a source of leadership style when the leader makes its own decisions ( $\beta = 3,708$ ). Nurses work should be organized so that they keep up without stress (in time) to perform tasks within the prescribed time ( $\beta = 3.347$ ) and to be well-informed about the changes at work ( $\beta = 2,882$ ) (picture 3).



Remark: When  $\beta$ -coefficient is bigger than other, it means that this work factor is more important for PHC nurses health.

Fig. 3. Positive psychosocial work factors model for PHC nurses

Meanwhile, another PHC staff health promotion resource could become the head of the contribution of a fair distribution of tasks to employees ( $\beta = 5.601$ ) (picture 4).



Remark: When  $\beta$ -coefficient is bigger than other, it means that this work factor is more important for PHC other workers health.

Fig. 4. Positive psychosocial work factors model for PHC other workers

### Discussion

Discussing the results were compared to Lithuania PHC and Swedish hospital labor sector studies. Comparison showed that the assessment of work experience both in their position, both age groups, the Lithuanian health care workers, almost all labor practice areas evaluated more positively than in the Swedish health care workers. With the exception of the Swedish hospital doctors, who are just a little bit more positive assessment of individual experience and changes in work than Lithuania PHC staff. Compared with the Swedish hospital data Lithuania PHC doctors had nearly doubled the next time use at work.

### Conclusions

1. Research and salutogenic theory based on work experience and health assessment scale helps to identify the working environment, organization and management aspects, which positively operates health. Work environment research is oriented to a positive work environment factors that are more acceptable to employers and employees. The results provide valuable information for employers on how to improve the health of workers at the same time increase productivity and improve service quality, which is especially important in the health care sector.

2. The analysis showed that doctors were more positive mood, talking about personal responsibility at work than nurses or other staff. Meanwhile, most nurses positively assessed the time experience at work. Other PHC workers evaluated positively supportive working relationships and reorganization. All PHC-sector workers positions with the highest averages in all areas assessed the management of work.

3. Identified by doctors, nurses and other staff groups, the interface between the experience of psychosocial factors and health, health indicators evaluated salutogenic PHC sector. The positive experience was related to better their health and well-being assessment. A positive moderate correlation ( $r = 0.48$ ,  $p < 0.001$ ) between the experience of psychosocial factors and health, assessed salutogenic health indicators. To establish that the increase WEMS growing and SHIS, so it can be assumed that the improvement of work experience factors that strengthened workers' health and PHC.

4. The model in which the work of psychosocial factors is suggested to use the PHC as a means to their health or to enhance or maintain (separately for doctors, nurses and other workers). Doctors health promotion can be a source of labor relations, based on the collegiate, the opportunity to consult with colleagues, in particular in circumstances extraordinarily situations. Nurses health promotion could become a source of leadership style when the leader makes its own decisions. Other workers (administration, receptionists, technicians and etc.) health promotion resource could become the head of the contribution of a fair distribution of tasks to employees.

### Recommendations

Examination of the positive work of psychosocial factors on the PHC to workers' health, to identify differences that could have practical implications health promoting working environment. Create models can be put into practice and use the PHC health strengthening management level. It would be beneficial to all organizations in the PHC, because not only improve health, but also efficiency.

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