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Perception of patient safety climate in Latvian healthcare personnel: the effect of patient safety training

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Summary

Background

Studies suggest possible relationships between PS culture, climate, individual's behaviour and medical errors.

A range of training materials have been developed by World Health Organization (WHO) to support training of healthcare professionals to improve their understanding and knowledge of PS.

The first Latvian concept for PS was accepted in 2017, however, only few hospitals have recommended learning systems, but postgraduate PS training is occasional.

Patient safety training (PST) effect on perception of safety climate are not fully investigated yet.

Aim

To investigate differences between Latvian health care professionals in assessment of safety climate according to their participation in PST programmes.

Methods:

- PS climate using a previously validated Staff Survey for Measuring of PS (SSMPS) questionnaire.
- Socio-demographic and work-related conditions.
- Differences between healthcare professionals that participated in PST programs in their assessment of domains of SSMPS - Mann-Whitney test

Results

Study sample - 744 participants from 24 hospitals:

- 146 (20%) physicians,
- 321 (43%) nurses,
- 75 (10%) from an administrative staff;
- women (92.1%)
- aged 45-54 (36,4%)
- working full time (91.5%)
- assessment contained 42 items expressed from 1 to 5
- the lowest values were observed for safety climate (3.38 of 5)

Descriptive Statistics				
	N	Mean	Std. Deviation	Variance
Job Satisfaction	744	3,63	,531	,283
Perceptions of Management	744	3,43	,624	,390
Safety Climate	744	3,38	,439	,193
Stress Recognition	744	3,73	,691	,478
Teamwork Climate	744	3,57	,400	,160
Working Conditions	744	3,49	,614	,377
Valid N	744			

Participants of training program “Teamwork role on healthcare quality and safety” participated in this study during year 2017-2018

	Nurses		Others	
	Mean	Std	Mean	Std
Safety Climate	3,37	0,45	3,49	0,49
Teamwork Climate	3,62	0,48	3,81	0,66

- Nurses perceived safety and teamwork climate more critical than other healthcare professionals

Results

- 390 (52.4%) of entire study population never attended PS training or attended only one lecture.
- **We didn't observe significant differences between those that attended and those didn't attend PST** at all or attended only one of lectures in their assessment of PS climate for four investigated SSMPS domains: Safety Climate, Teamwork Climate, Job Satisfaction, Stress Recognition.
- The **difference** between nurses (n=321) attended and didn't attend PST **was observed in Stress Recognition** domain of SSMPS ($p < 0.01$).
- Those nurses that passed more than one PST (N = 148, 47.6%) **assessed work stress impact on patient safety more critical** than those that didn't attend PST or attended only one lecture (mean \pm standard deviation 3.56 ± 0.66 and 3.85 ± 0.86 , respectively).

Conclusion

- PST showed effect on nurses' acknowledgement of how performance is influenced by stressors.
- Stress, high workload, staff shortage are usual factors in healthcare, therefore human factors training should be part of PST.
- Physicians' perception of human ability to work safely in stressed conditions should have attention.
- No PST differences in other investigated SSMP domains indicates **PS climate should be improved through PS culture and reporting-learning systems as recommended internationally.**

Key Measurement Components of Patient Safety for Hospital Care

(OECD Health working paper NO. 119. Culture as a cure: assessments of patient safety culture in OECD countries; 2020)



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