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Diagnosis of psychosocial risk determinants and the prioritization of organizational intervention objects among medical occupational groups in a public healthcare institution

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BACKGROUND

- As the work environment is one of the most significant sources of stress, employers in the European Union are obliged to identify psychosocial risk determinants and take preventive measures to improve workers' health and well-being while at work.
- The aim of this study was to determine which medical occupational group is the most exposed to stress and where any differences lie between medical occupational groups regarding the perception of psychosocial risk determinants and organizational intervention objects in the Lithuanian public healthcare institution.

MATERIALS AND METHODS

- A cross-sectional study designed to examine health workers' attitudes toward the psychosocial risk determinants and organizational intervention objects using a complex quantitative tool.
- The period: All data was collected by paper questionnaires from February to March 2017.
- The sample consisted of 467 health workers employed in one of the largest public primary healthcare institutions (the eight healthcare institutions were merged into one in 2002) in Lithuania. The institution employed 690 health workers in 2017 (response rate 68 %).

RESULTS
(1)

- *Stress and occupational groups*. The mean ranks of work-related stress scores were statistically significantly different between groups, $\chi 2(3) = 12.14$, $p < 0.01$ (results of the Kruskall–Wallis test). Dunn-Bonferroni's post hoc analysis revealed statistically significant differences in work-related stress scores between doctors (262.90) and heads of units (183.29) ($p = 0.016$).
- *Psychosocial risk determinants and occupational group*. Results of the Kruskal–Wallis test showed that six psychosocial risk determinants (work overload, $\chi 2(3) = 13.41$, $p < 0.01$; overtime $\chi 2(3) = 14.23$, $p < 0.01$; tight deadlines $\chi 2(3) = 8,64$, $p = 0.03$; unclear role, $\chi 2(3) = 15.24$, $p < 0.01$; being under-skilled $\chi 2(3) = 10.30$, $p = 0.02$; responsibility $\chi 2(3) = 13.66$, $p < 0.01$) had mean rank scores differing statistically across occupational groups.

RESULTS
(2)

- Dunn-Bonferroni's post hoc analysis revealed statistically significant differences in:

  - *Work overload* scores between doctors (263.63) and heads of the units (187.41) ($p = 0.028$), and doctors and other health workers (211.15) ($p = 0.015$),

  - *Overtime* scores between doctors (263.42) and other health workers (200.73) ($p = 0.001$),

  - *Tight deadline*s scores between doctors (257.47) and other health workers (209.89) ($p = 0.033$),

  - *Unclear role* scores between heads of the units (152.50) and doctors (226.68) ($p = 0.032$), heads of the units and nurses (239.14) ($p = 0.005$), and heads of the units and other health workers (256.53) ($p = 0.001$),

  - *Being under-skilled* scores between doctors (212.52) and nurses (251.81) ($p = 0.041$),

  - *Responsibility* scores between other health workers (203.07) and doctors (252.87) ($p = 0.016$), and other health workers and heads of the units (282.62) ($p = 0.016$).

RESULTS
(3)

- *Organizational intervention objects and occupational group.* Results of the Kruskal–Wallis test showed that all organizational intervention objects (except stress management training) had mean rank scores differing statistically across occupational groups: work–life balance, $\chi2(3) = 13.19$, $p < 0.01$; skills/abilities matching to the job demands, $\chi2(3) = 15.29$, $p < 0.01$; variety of tasks, $\chi2(3) = 51.06$, $p < 0.01$; social support, $\chi2(3) = 9.33$, $p = 0.02$; organizational support, $\chi2(3) = 17.88$, $p < 0.01$; participation in decision making, $\chi2(3) = 8.08$, $p = 0.04$; communication, $\chi2(3) = 10.10$, $p = 0.02$; justice of reward, $\chi2(3) = 14.70$, $p < 0.01$; manager feedback, $\chi2(3) = 15.65$, $p < 0.01$.
- Dunn-Bonferroni's post hoc analysis revealed statistically significant differences in:

  - *Work–life balance* scores between doctors (202.67) and heads of the units (282.10) ($p = 0.017$), and doctors and nurses (244.51) ($p = 0.023$)

  - *Skills/abilities matching to the job demands* scores between heads of the units (295.91) and other health workers (198.30) ($p = 0.002$),

RESULTS
(4)

- *Variety of tasks* scores between other health workers (158.98) and doctors (264.57) ($p < 0.001$), other health workers and heads of the units (315.43) ($p < 0.001$), and other health workers and nurses (239.76) ($p < 0.001$); heads of the units and nurses ($p = 0.023$),

- *Social support* scores between doctors (213.57) and heads of the units (295.64) ($p = 0.017$),

- *Organizational support* scores between heads of the units (332.00) and doctors (218.53) ($p < 0.001$), heads of the units and nurses (235.45) ($p = 0.002$), and heads of the units and other health workers (223.12) ($p = 0.001$),

- *Participation in decision making* scores between heads of the units (295.64) and doctors (217.84) ($p = 0.028$),

- *Justice of reward* scores between doctors (207.33) and heads of the units (292.10) ($p = 0.012$), and doctors and other health workers (259.78) ($p = 0.018$),

- *Manager feedback* scores between heads of the units (308.00) and doctors (215.63) ($p = 0.005$), and heads of the units and nurses (223.57) ($p = 0.009$),

The post hoc analysis revealed no statistically significant differences in *Communication* among occupational groups.

DISCUSSION

- The study findings suggest that doctors' group is the most exposed to work-related stress. Doctors experienced stress mainly due to high job demands: workload, overtime, tight deadlines, responsibilities. In addition, doctors did not feel the institution's efforts to ensure work-life balance, social support, organizational support, involvement in decision-making, fairness of remuneration. This group also indicated lack of managerial feedback.
- Nurses and other health workers were more stressed by role risk determinants: role overload (being under-skilled for a job) and unclear role. The results suggest that nurses and other health professionals face a conflict between their professional role expectations and work realities. They also pointed out that organizational support did not fulfill their needs.
- Other health professionals also indicated lack of variety of tasks.
- Heads of units emphasized only responsibility as a psychosocial risk. In addition, all objects of organizational intervention were the most relevant to heads of units. These findings are not surprising, as heads of units are responsible for unit performances and their work is largely administrative in nature.

LIMITATIONS

- The main limitations of this study are the cross-sectional nature of the study, limiting inferences of causality, and its dependence on self-reporting.
- Another limitation, it did not include individual intervention objects that focus on helping individual employees to develop skills to manage, cope with, and reduce stress at work, whereas organisation-level interventions address the health and wellbeing of relatively large groups of workers in a uniform way

Conclusion

- The findings showed that different medical occupational groups in the same public health care institution highlighted different psychosocial risk determinants as causes of stress. The prioritization of the organizational intervention objects among these groups also differed.
- The study results suggest that focusing on the average worker do not have practical value, and that it is important to understand the differential effects of different job characteristics on work outcomes considering occupational status while developing coping strategies in the institution.
- Finally, the findings suggest that public health care institution should pay more attention to the working conditions of their doctors, in particular, to time pressure and work overload.

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