



Psychosocial risk factors for stress and burnout among nurses

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Background

Psychosocial risks in the workplace have been identified as significant emerging risks for the stress and burnout among employees.

Aim

To explore the psychosocial risk factors (PSRF) for stress and burnout among registered nurses working in Tartu University Hospital.

Methods

A cross-sectional survey was carried out among registered nurses at Tartu University Hospital during April and May 2011. The PSRF, stress, and burnout were measured using version two of the Copenhagen Psychosocial Questionnaire (COPSOQ II) [1]. Descriptive statistics and Pearson's r correlation with sequential Bonferroni correction were used to analyse the data [2]. The significance level was set at $p < 0.01$. For the analysis all the items of the PSRF, stress, and burnout were scored from 0 to 100 points (the five response options were 0, 25, 50, 75, and 100, and the four response options were 0, 33.3, 66.7, and 100) to make the scoring on the different scales comparable [3]. The total score on a scale was the mean of the scores of the individual items. Cronbach's alpha was calculated to assess the internal consistency of the scales of the PSRF, stress, and burnout.

Results

The analysis was based on 404 nurses (45% of the full-time working population of nurses), including 397 female and 7 male nurses. After sequential Bonferroni correction, most of the 21 PSRF statistically significantly correlated with self-rated stress and burnout (15 and 16 correlations, respectively). Most significant positive correlations were revealed between quantitative demands and stress and burnout, work pace and burnout, emotional demands and burnout. Most significant negative correlations occurred between rewards and burnout and social relationships at work and stress.

Table 1. Number of items, means, standard deviations and Cronbach's alphas for the scales of the work-related psychosocial factors and mental health problems.

Psychosocial factors and MHPs (scales)	Number of items	Mean	95% CI	Cronbach's alpha
Demands at work				
Quantitative demands	4	32.2	30.51-33.9	0.71
Work pace	3	66.3	64.76-68.0	0.81
Cognitive demands	4	67.2	65.6-68.7	0.75
Demands for hiding emotions	3	73.3	71.6-75.1	0.50
Emotional demands	4	57.1	55.3-58.8	0.76
Work organisation and job contents				
Influence	4	33.3	31.3-35.4	0.74
Possibilities for development	4	68.6	67.1-70.2	0.75
Meaning of work	3	80.2	78.7-81.7	0.78
Commitment to the workplace	4	63.7	61.7-65.6	0.73
Interpersonal relationships and leadership				
Predictability	2	63.2	61.2-65.3	0.82
Rewards	3	57.6	55.5-59.7	0.86
Role clarity	3	78.9	77.5-80.2	0.81
Role conflicts	4	35.9	34.0-37.8	0.78
Quality of leadership	4	59.6	57.4-61.9	0.89
Social support from colleagues	3	59.9	57.8-62.0	0.71
Social support from supervisor	3	57.8	55.2-60.5	0.83
Social relationships at work	3	71.4	69.5-73.4	0.87
Values at the workplace				
Mutual trust between employees	3	71.1	69.19-73.0	0.71
Trust regarding management	4	63.7	62.28-65.2	0.73
Justice and respect	4	49.3	46.76-51.9	0.82
Social inclusiveness	4	61.3	59.75-62.9	0.65
Mental health problems				
Stress	4	41.2	39.5-42.8	0.83
Burnout	4	45.1	43.4-46.7	0.88

Table 2. Pearson's r correlations adjusted using sequential Bonferroni correction for psychosocial factors and mental health problems of a group of 404 nurses.

Psychosocial factors (scales)	Stress	Burnout
Demands at work		
Quantitative demands (workload)	0.38*	0.38*
Work pace	0.21*	0.33*
Cognitive demands	0.10	0.19*
Demands for hiding emotions	0.06	0.20*
Emotional demands	0.27*	0.31*
Work organisation and job contents		
Influence	-0.12	-0.19*
Possibilities for development	-0.13	-0.04
Meaning of the work	-0.17*	-0.13*
Commitment to the workplace	-0.03	0.01
Interpersonal relationships and leadership		
Role conflicts	0.18*	0.18*
Role clarity	-0.14*	-0.08
Predictability	-0.24*	-0.21*
Rewards	-0.24*	-0.30*
Quality of leadership	-0.20*	-0.20*
Social support from colleagues	-0.19*	-0.17*
Social support from supervisors	-0.18*	-0.19*
Social relationships at work	-0.30*	-0.29*
Values at the workplace		
Mutual trust between employees	-0.16*	-0.12
Trust regarding the management	-0.20*	-0.25*
Justice and respect	-0.25*	-0.25*
Social inclusiveness	-0.10	-0.04

*statistically significant p -values ($p < 0.01$).

Discussion

The results of this study suggest that there would be an improvement in the PS work environment of hospital nurses.

A number of strategies could be used to help prevent stress and burnout among nurses. The findings of the present study suggest that it is important to monitor quantitative and emotional job demands and work pace [4]. As stress and burnout of nurses seemed to be related to interpersonal relationships and values, fair and respectful relationships between colleagues and supervisors should be maintained.

Conclusions

Psychosocial risk factors such as quantitative and emotional demands and work pace may contribute to high levels of stress and burnout among nurses [4].

References

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