Nurses Motivation and Burnout: Is there a Connection?
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ABSTRACT
Aim: The research deals with the rate of burnout syndrome, motivation factors of Herzberg's two-factor motivation theory and their mutual relation in general nurses working in the University Hospital Olomouc. The aim was to identify personal priorities among hygiene factors with general nurses and the degree of their saturation by the employer. Comparison of the findings clearly shows the biggest divergence between wishes and reality of the working environment of general nurses and the relation to burnout syndrome.

Methods: A quantitative approach was chosen for the research. To collect data, two questionnaires were used: a standardised MBI (Maslach Burnout inventory) and a non-standardised Motivation factors questionnaire, which was on the principles of Herzberg's motivation theory after several discussions with hospital management.

Results: The result of the survey research revealed an existing, statistically significant relation between the burnout syndrome rate and the degree of dissatisfaction with hygiene factors according to Herzberg's theory. The assumption about the existence of a significant negative relation between burnout syndrome rate and salary was not confirmed. Factors of salary care for the patient and job security occupy the top levels on the preference list. The most diverging factors include salary and job security. The results confirm the protective effect the saturation of Herzberg's hygiene factors has on the burnout syndrome rate.

Conclusion: The survey research confirmed the importance of saturating hygiene factors as a protective factor against burnout syndrome. It has been confirmed that an increasing saturation decreases the burnout syndrome rate in general nurses in University Hospital Olomouc.

KEY WORDS
general nurse, motivation, burnout, Herzberg theory

INTRODUCTION
The issue of burnout is a very topical one. These days, the rivalry is a commonplace, time and resources for a good work are lacking, the life tempo is getting faster and the risks are rising. The ongoing social, economic and political changes put new requirements on an individual: emphasis on performance and competitiveness grows as well as the urge to use the individual capabilities and responsibilities to the maximum (Blossfeld et al., 2005). Health care and social services in particular are facing numerous problems connected with the growing demands on the employee without an adequate support from the management, which increases the burnout rate (Havrdová et al., 2010). The nursing profession (hereinafter „nurse“ understood as „a general nurse“) ranks among the high-risk professions for burnout due to the composition of demands. The role of a general nurse (hereinafter further as GN) in health care is – next to the – medical staff – absolutely essential. With the aging population, the demand for the scope and effectiveness of health care provided is growing. Growing demands and strain in the nursing profession could lead to fluctuation. (Vévoda et al., 2010). Job satisfaction and the saturation of hygiene factors and motivators together with mitigation of occupational stress may – apart from other causes – play an important role in the prevention of burnout may. Burnout and low job satisfaction are frequent causes of fluctuation of health care staff. Job satisfaction is an important predictor in contemplating leaving the employer (Gurková et al., 2013). According to Hart (2001, p. 15), more than half of GN’s who potentially want to leave the employer stated the reason is low job satisfaction. According to Herzberg’s theory of job satisfaction, there are 14 hygiene factors and mo-
To investigate the effect of burnout on the personal preferences in factors of job satisfaction in general nurses. The other goal is to investigate the effect of burnout on the subjective ranking of the individual value ladder of hygiene factors and motivators amongst general nurses in the University Hospital in Olomouc. The first goal is to ascertain the subjective ranking in personal preferences in factors of job satisfaction in general nurses in the University Hospital in Olomouc.

**Aim 1** To ascertain the subjective ranking of preferences in factors of job satisfaction and their saturation amongst general nurses in the University Hospital in Olomouc.

**Aim 2** To investigate the effect of burnout on the individual ladder of hygiene factors and motivators amongst general nurses in the University Hospital in Olomouc.

**Aim 3** To find out whether there are significant differences in saturation of hygiene factors and motivators between group N1 (GN’s not at risk of burnout) and N2 (GN’s at risk of burnout and GN’s with a burnout confirmed).

**H0** We expect there is no significant correlation between the rate of emotional exhaustion found with the MBI questionnaire and satisfaction with wage/salary.

**HA** We expect there is a significant negative correlation between the rate of emotional exhaustion found with the MBI questionnaire and satisfaction with wage/salary.

**SAMPLE AND METHODOLOGY**

The quantitative approach was selected for the research, employing an ex-post-facto research design. Two questionnaires were used to gather data: the standardised (Maslach Burnout Inventory) and a non-standardised Motivation factors questionnaire. The MBI is one of the most commonly used instruments for the diagnosis of burnout, covering three areas: emotional exhaustion (hereafter as EE), depersonalisation (hereafter as DP) and personal accomplishment (hereafter as PA) (Maslach, Goldberg, 1998). The Motivation factors questionnaire was created in 2004 based on the principles of Herzberg's two-factor theory. After expert methodology discussions with hospital management, it was adjusted to reflect contemporary conditions in inpatients institutions. The questionnaire was verified with a group of 3081 nurses (Vévoda et al., 2010). The non-standardised measuring tool was constructed to investigate the subjective rankings of the individually preferred hygiene factors and motivators of job satisfaction and to ascertain the subjectively perceived order of saturation of each of the motivation and hygiene factors amongst nurses. Statistical processing was done using the SPSS 19 Base nad MS Excel 2010 software, Pearson correlation, the Euclidean distance model, and the Mann-Whitney test on significance level of 0.05.

**SAMPLE CHARACTERISTICS**

The respondents were selected using simple purposive sampling, the only inclusion criteria being an employee at the University Hospital in Olomouc in the position of a general nurse. The research sample was then divided into two sub-groups based on the investigated level of burnout: the N1 sub-group (nurses who are not at risk of burnout and those who are at risk of burnout) and the N2 group (nurse with burnout confirmed). A total of 1,284 questionnaires
were distributed, the return rate was 55.1 %, i.e. 1043 questionnaires, 10 questionnaires were discarded because they had been filled out incorrectly. The age of the nurses taking part in the research ranged from 21 to 61 years. Variables regarding the length of work experience and age were not included in the research.

RESULTS
Using the Euclidean distance model, we found that the most preferred factors seen as a subjective preference of GN’s are „Wage/salary“ (Salary), „Care for patients“ (Care) and „Job security“ (Job_sec). The least preferred factor is „Career advancement“ (Career) (see Graph 1).

Seen from the subjectively perceived saturation of hygiene factors and motivators by the employer, the NS’s consider „Care for patients“ (Care) most saturated, „Opportunity to make use of modern technology and equipment“ (Technology) and „Image“ (Image). The least saturated factor is „Social and fringe benefits offered by the employer“ (Benefits) and „Wage/salary“ (Wage) (see Graph 2).

Graph 1 Euclidean distance model of personal preferences (PP) from hygiene factors and motivators

Graph 2 Euclidean distance model of perceived saturation of hygiene factors and motivators by the employer
The greatest discrepancy between the factor preference and its saturation was found in „Wage/salary“ and „Job security“. These factors are seen very important by the GN’s and at the same time are the least saturated by the employer.

In order to investigate the effect of burnout on the individual scale of hygiene factors and motivators, the Euclidean distance model was used. The N1 group puts the factor „Care for patients“ on the first place, followed by „Wage/salary“ and „Work climate“. The N2 group puts „Wage/salary“ on the first place, followed by „Job security“ and „Care for patients“. The group at risk of burnout and burnout sufferers largely prefer „Wage/salary“ compared to the group not at risk of burnout, which prefers „Care for patient“. Using the Mann-Whitney test, a significant difference was found in the ranking of factors „Wage/salary“ (p = 0.035) and „Benefits“ (p = 0.015) – a significantly higher preference in N2, „Opportunity for further education“ (p = 0.008) – a significantly higher preference in N1.

In order to learn about the correlations between burnout [emotional exhaustion („EE“), depersonalisation („DP“), personal accomplishment („PA“)] and the rate of saturation of each factor, the Pearson’s correlation was used. Table 1 shows all significant correlations found.

The correlation between the saturation of „Wage/salary“ factor and the degree of depersonalisation (DP) $r = -0.152$, which is significant on significance level $p_{0.05}$. The relationship between satisfaction with monetary reward and degree of emotional exhaustion is not significant on significance level $p_{0.05}$. We can assume that there is no significant correlation between the degree of emotional exhaustion established with the MBI questionnaire and the perceived saturation of „Wage/salary“ factor. The hypothesis was verified and the null hypothesis was accepted.

Saturation of „Work climate“, „Achievement“, „Interpersonal work relationships with peers“, „Opportunity for further education“, „Non-monetary recognition of individual work“, „Job security“, „Work conditions“ and „Care for patients“ show positive correlation with personal satisfaction dimension and correlate negatively with the dimension of emotional exhaustion and depersonalisation. The strongest correlation was found between the degree of personal satisfaction and saturation of „Achievement“ factor ($r = 0.331$), „Responsibility, autonomy“ ($r = 0.328$) and the factor „Interpersonal work relationships with supervisors“ ($r = 0.314$). When the above mentioned factors are saturated for a GN, the job brings her personal satisfaction and can protect against burnout.

**DISCUSSION**

„Wage/salary“ is for long time the most preferred factor amongst GN’s and at the same it is one of the least saturated one in their opinion. This finding corresponds with previous publications (Ivanová et al., 2013; Juríčková 2005; Nakládalová et al., 2011; Věvoda, Ivanová, Horváth, 2005; Věvoda et al., 2010). However, insufficient saturation of this factor does not lead to developing emotional exhaustion, which is contrary to the findings of Rouleau et al. (2012, p. 9). It was found out that despite the insufficient saturation of „wage/salary“ does not lead to burnout, as soon as the burnout is confirmed in a GN, wage becomes the most important factor of job satisfaction. The “Care for patients” that was originally first moves lower on the second place. Herzberg, Mausner, Snyder-man (2003) put wage amongst hygiene (preventive) factors, or dissatisfactors, which do not contribute to job satisfaction itself.

„Care for patients“ is the factor GN’s prioritise on their value ladder and is at the same time as the most saturated one. However, insufficient saturation of this factor demonstrates a high negative correlation with emotional exhaustion (-0.366) and can be ranked among important salutors. Aiken et al. (2001) reached similar results. The most important protective factors against burnout was „Work climate“ and „Non-monetary recognition“ (see. Krivohlavý, 1998, p. 93–97).

One of the limitations of this study is the fact that the respondents’ specialisation was not taken into consideration. This factor may have played a role in the ranking of preferences. The research was only conducted amongst nurses in the University hospital in Olomouc and the results can not be generalised.

**CONCLUSION**

The factor „wage/salary“ may seem as a crucial factor based on the priority ascribed to it by the GN and the perceived insufficient saturation, however, the insufficient saturation itself does not lead to emotional exhaustion. As opposed to „wage/salary“, the major contributing factors leading to burnout are insufficient saturations of „work climate“, „work conditions“, „Interpersonal work relationships with peers“, „Non-monetary recognition of individual work“. The most effective prevention against burnout – compared to „Wage/salary“ – is „Non-monetary recognition of individual work“ and „Work climate“.

To conclude, management of institutions providing complex health care should focus on factors such as work climate and non-monetary recognition, which motivate GN’s and prevent burnout at the same time.
Table 1 Significant correlations between burnout and saturation of factors

<table>
<thead>
<tr>
<th></th>
<th>Cooperation with other professions (doctors, other non-medical health care staff, specialists, religious workers)</th>
<th>Interpersonal work relationships with supervisors.</th>
<th>Career advancement</th>
<th>Opportunity to make use of modern technology and equipment</th>
<th>Prestige of your occupation</th>
<th>Interpersonal work relationships with your peers</th>
<th>Wage/salary</th>
<th>Opportunity for further education (courses, training, seminars, further study)</th>
<th>Non-monetary recognition of your individual work (appraisal, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>-0.155*</td>
<td>-0.166*</td>
<td></td>
<td>-0.199**</td>
<td></td>
<td>-0.168*</td>
<td>-0.273**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DP</td>
<td></td>
<td>-0.130*</td>
<td>-0.152*</td>
<td>-0.152*</td>
<td>-0.140*</td>
<td>-0.140*</td>
<td>-0.193**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>0.260**</td>
<td>0.314**</td>
<td>0.189**</td>
<td>0.265**</td>
<td>0.247**</td>
<td>0.209**</td>
<td>0.167**</td>
<td>0.272**</td>
<td>0.145**</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Job security</th>
<th>Image (esteem, reputation) of you health care institution in public</th>
<th>Care for patients</th>
<th>Work conditions (work and health safety, space at workplace, organisation of work)</th>
<th>Providing information (sufficient access to information and their provision)</th>
<th>Fringe/social benefits provided by the employer (personal accounts, vitamins, meal vouchers, etc.)</th>
<th>Work climate</th>
<th>Responsibility, autonomy (freedom to make decisions using your own judgement)</th>
<th>Achievement (accomplishment at work, chance to see the results of your work, problem solved)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>-0.209**</td>
<td>-0.366**</td>
<td>-0.259**</td>
<td>-0.259**</td>
<td>-0.160**</td>
<td>-0.303**</td>
<td>-0.205**</td>
<td>-0.287**</td>
<td></td>
</tr>
<tr>
<td>DP</td>
<td>-0.162*</td>
<td>-0.172**</td>
<td>-0.278**</td>
<td>-0.259**</td>
<td>-0.153**</td>
<td>-0.193**</td>
<td>-0.153**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>0.228*</td>
<td>0.239**</td>
<td>0.272**</td>
<td>0.190**</td>
<td>0.284**</td>
<td>0.223**</td>
<td>0.251**</td>
<td>0.328**</td>
<td>0.331**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (1-tailed).
*. Correlation is significant at the 0.05 level (1-tailed).
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REFERENCES

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