

6<sup>th</sup> International Conference on Intercultural Education “Education and Health: From a transcultural perspective”

## Sources of work-related stress and their effect on burnout in midwifery

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### Abstract

The aim of this cross-sectional study was to examine sources of occupational stress and their association with burnout in midwives. 100 midwives (mean age 54.62; SD=11.94) working in gynaecologic and obstetric clinics in Slovak hospitals were included in study. Expanded Nursing Stress Scale and Maslach Burnout Inventory were employed. The respondents reported high, average and high levels of depersonalization, emotional exhaustion and personal accomplishment, respectively. A strong relationship was found between conflict with doctor, supervisor, as well as other midwives, work overload and emotional exhaustion. Positive relationship was found between conflict with both, doctors and other co-workers, work overload and personal accomplishment.

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Selection and peer-review under responsibility of HUM-665 Research Group “Research and Evaluation in Intercultural Education”.

*Keywords:* Work-related stress; Burnout; Midwives

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### 1. Introduction

A stable and productive health service system has cardinal importance for any country’s functioning. Health service includes nursing and midwifery, which constitute the biggest component of this sector of services. The both professions are perceived as stressing and mentally demanding (Carson, Bartlett, Croucher 1991, Coffey, Coleman, 2001, Fagin et al. 1995; Schaufeli, Janczur, 1994; Snellgrove, 1998) meaning that nurses and midwives are extraordinarily sensitive to burnout.

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Healthcare facilities differ in size and type, and nurses meet with various working tasks and working times (e.g. night shifts), working conditions (insufficient staffing) and with stress-related situations (suffering and death of patients) (Cooper, 1998). Working environment is one of the most important sources of working stress. The importance of working stress management is acknowledged, apart from other things, by safety and health protection principles, as it was discovered that it was connected not only with a loss in productivity and shortening of working time, but also with an increase in sickness rate and accidents at work (Moustaka, Constantinidis, 2010). A person exposed to stress at work shows a whole range of emotional, cognitive, behavioural and physiological reactions to various harmful effects of work, work organisation and working environment (Knezevic et al., 2011).

Cavanagh (1997) and Cocco, Gatti, De Lima Mendonça and Camus (2003) divide the stressors in healthcare professions into three categories, which are personal (or intrapersonal), interpersonal, and stressors of working environment or organizational stressors. The personal stressors include incapacity to manage household, work and sometimes also study duties and an insufficient preparation of staff for the demanding nursing tasks. The interpersonal stressors reflect relationships with doctors, managers, other managerial staff and co-workers (Basson & Van der Merwe, 1994). The working environment stressors include modern technology, which is basically dehumanizing and anonymizing (Cavanagh, 1997), high working load and long working time, which do not contribute to personal and social life (Basson & Van der Merwe, 1994; Cavanagh, 1997), life-threatening procedures of nurses, care for patients, in particular meeting with pain, suffering and death of patients, undertaking the responsibility (Cavanagh, 1997), lack of autonomy (Schaufeli & Enzmann, 1998), conflict of roles and role ambiguity (Levert et al. 2000) and insufficient staffing (Erasmus, Poggenpoel & Gmeiner, 1998; Kilfedder, Power & Wells, 2001).

The most common negative consequences of stress are particularly the deterioration of performance and efficiency, decrease in productivity, decreasing quality of customers services, health problems, frequent absence, accidents at work, use of alcohol and drugs, deliberately destructive behaviour, e.g. spreading unconfirmed rumours and stealing (Happel, Pinikahana & Martin, 2003; Perrewé, 1991, Quick, Quick, Nelson, Hurrell, 1997; Wright, Smye, 1996) and even suicide (McGrath, Reid, Boor, 2003; Knezevic et al., 2011). Psychological reactions to stress can include: growing anxiety, difficulties with concentration, negative emotions, lack of attention, depression, fatigue and burnout syndrome (Knezevic et al., 2011). The possible direct and indirect stress-related effects require an adequate attention. Maslach and Jackson (1986) assumed that the presence of specific requirements (i.e. overworking and personal conflicts) and the absence of concrete resources (i.e. command of coping mechanisms, social support, autonomy and participation) can lead to the occurrence of burnout, which results in further anticipated negative effects, such as physical diseases, change in attitude to work, absenteeism.

Purpose of the study:

- Determine and describe the main job related stressors that affect midwives.
- Investigate the relationship between work related stressors and burnout.

## **2. Method**

### *2.1. Participants*

We used convenience sampling method to recruit participants to our study. Our study sample consisted of midwives working at the departments and clinics of gynecology and obstetrics in Slovakia. Of the 130 distributed questionnaires, 100 participants returned a completed questionnaire. The response rate was 77%. All of the research participants were women (n=100). The average age of respondents was 37.91±11.03, the minimum age was 22 and maximum age was 59.21% of all respondents had vocational school education, 20% of women were certificated obstetrics/gynecology nurses and 53% of midwives had university education. The basic characteristics of the respondents are presented in Table 1.

Table 1. Background characteristics

Characteristics	n	%
Length of practise		
< 1	8	8
1 –3y.	14	14
3 –5y.	6	6
5 –10y.	8	8
10 –20y.	22	22
20 –30y.	25	25
≥30	17	17
Work area		
Delivery room	26	26
Surgery room	7	7
Outpatient dep.	9	9
Gynaecology and obstetrics clinic	58	58
Marital status		
Single	30	30
De facto/married/widowed	57	57
Separated/ divorced	13	13

The average length of experience was 15.43 years. The most midwives (25%) taking part in the research worked in the field for 20 - 30 years. The least respondents (6%) worked in the field from 3 to 5 years.

The most midwives (58%), participating in the research, worked at the gynecology and obstetrics clinics (gynecology department, obstetrics department and postpartum department). The least respondents (7%) worked in surgery rooms.

## 2.2. Measures

The demographic questionnaire contained two sections. In the first, we collected personal information such as age, marital status, education. The second section captured work- related variables such as years of midwifery experiences, work area, employment status and weekly shift hours.

Expanded Nursing Stress Scale (ENSS) was used to measure nurses job related stressors. The ENSS is an expanded and updated revision of the classic Nursing Stress Scale (NSS) developed by Gray-Toft & Anderson (1981). The original 34 items of the NSS measured the frequency and major sources of stress in patient care situation. Major changes in health care delivery and the work environment of nurses stimulated French et al. (2000) to identify stressful situations not reflected in the NSS and develop an expanded version useful for diverse work settings. ENSS contains 57 items in nine subscales: Death and Dying, Conflict with Physicians, Inadequate Emotional Preparation, Problems Relating to Peers, Problems Relating to Supervisors, Work Load, Uncertainty Concerning Treatment, Patients and their Families, and Discrimination. The 57 items were arranged in a 5 point Likert response scale. The response were 'never stressful' (1), 'occasionally stressful' (2), 'frequently stressful' (3), 'extremely stressful' (4), and doesn't apply (0) (French et al., 2000). Internal consistency reliability was assessed using Cronbach's coefficient alpha. The 57-item ENSS demonstrated improved reliability ( $\alpha = .96$ ) (French et al. 2000) over the original NSS ( $\alpha = .89$ ) (Gray-Toft & Anderson, 1981). Individual subscale reliability in our study ranged from  $\alpha = .88$  (problems with supervisors) to  $\alpha = .65$  (discrimination).

The levels of burnout were measured by Maslach Burnout Inventory (MBI) for midwives (Maslach and Jackson, 1986). The MBI contains a series of 22 statements, whereby midwives are asked to indicate to frequency of the

experience, ranging from ‘never’ (0) to ‘everyday’ (7). It measures three dimensions of burnout; high levels of emotional exhaustion (EE, nine items) and depersonalisation (DP, five items) and low levels of personal accomplishment (PA, eight items) indicate increased risk of burnout.

### 2.3 Ethical considerations

Permission to conduct the project was granted by Ethical Committee at Jessenius Faculty of Medicine CU in Martin, Slovakia.

## 3. Results

SPSS program was used to analyze the results. Of the 130 participants recruited to the study, 100 returned a completed questionnaire. The response rate was 77%.

The total job related stress was calculated using mean and standard deviation measures (Table 2).

Table 2. Most stressful subscales and least stressful subscales perceived by midwives

Subscales	Mean	±SD	Min.	Max.
Death and Dying	2,07	1,15	0,29	3,86
Conflict with Physicians	2,02	0,82	0,00	3,60
Workload	1,90	0,73	0,00	3,50
Problems with Supervisors	1,86	0,61	0,00	2,67
Uncertainty Concerning Treatment	1,76	0,93	0,00	3,86
Patients and their families	1,73	0,72	0,22	3,33
Inadequate Preparation	1,50	0,80	0,00	3,50
Problems with Peers	1,29	0,80	0,25	3,88
Discrimination	0,64	0,74	0,00	3,67

The descriptive analysis indicated that death and dying and conflict with physician were the most stressful events perceived by midwives (mean=2,07; SD=1,15; frequently stressful). Experiencing discrimination on basis of their sex and/or being sexually harassed were the least stressful events perceived by midwives (mean=0,64; SD=0,74; never stressful to does not apply).

Table 3. Mean scores for burnout

	Mean	Std.deviation	Burnout rating
Emotional exhaustion	24,25	9,78	Moderate
Depersonalization	19,64	5,37	High
Personal accomplishment	14,78	7,57	High

The respondents reported high, average and high levels of depersonalization, emotional exhaustion and personal accomplishment, respectively.

Table 4. Correlations between work-related stressors and burnout subscales

	Emotional exhaustion		Depersonalization		Personal accomplishment	
		p		p		p
Death and Dying	0,160	0,115	0,056	0,586	0,129	0,209
Conflict with Physicians	0,345	0,001	-0,022	0,829	0,265	0,009
Workload	0,326	0,001	-0,018	0,864	0,195	0,057
Problems with Supervisors	0,297	0,004	0,000	0,999	0,200	0,055
Uncertainty Concerning Treatment	0,257	0,011	-0,018	0,864	0,195	0,057
Patients and their families	0,301	0,003	-0,086	0,400	0,267	0,008
Inadequate Preparation	0,081	0,426	-0,233	0,022	0,152	0,137
Problems with Peers	0,276	0,006	0,004	0,968	0,344	0,001
Discrimination	0,135	0,184	0,241	0,018	0,167	0,102

A strong relationship was found between conflict with doctor, supervisor, as well as other midwives, work overload and emotional exhaustion. On the other hand we found positive relationship between conflict with both, doctors and other co-workers, work overload and personal accomplishment. In addition, negative but weak relationship was revealed between inadequate preparation and depersonalization.

#### 4. Discussion

In our research, using questionnaire method, we wanted to discover the most common stressors acting at the workplace in the group of midwives, as well as their relation to burnout. In the 'Expanded nursing stress scale', death and dying of patients were stated as the most important stressing factor. The second most commonly stated stressing situation was conflict with a doctor, whereas conflicts with co-workers were less frequent in our group.

Blair and Littlewood (1995) also emphasized that working relationships belong among potential stressors. Two main sources of stress in this field are, as they state, conflicts with co-workers and lack of support from other employees. The results of another assessment showed that lack of social support from colleagues and superiors and lower satisfaction with chief nurse significantly contributed to the origination of stress (Sveinsdottir, Biering, Ramel, 2006).

Studies showed that organizational and managerial characteristics influenced experiences of nurses with stress at work (Santos et al., 2003). In regard to the previous researches it seems that a big part of potential sources of stress with nurses is of organizational nature (Santos et al., 2003; Duquette et al., 1994). Apart from the response to physical and psychical condition of patients, also the increased demands at work, due to the use of sophisticated technologies; competition among hospitals; lack of staff; overwork; lack of work autonomy and feedback; as well as decreased possibility of advancement, seem to be the main factors affecting emotional exhaustion of workers (Janssen, deJonge, Bakker, 1999; Bierman, 1983).

Cooper (1998) supports the opinion that difficulties of coping with stress in combination with psychological or emotional instability can lead to violence, and also that healthcare workers are affected by the risk of physical and psychical violence from patients, or their families. Even if the care for patients and their families were generally not evaluated as negative by the midwives, inadequate requirements from patient or her family members were mentioned quite often in the questionnaire.

Discrimination was stated in our study by midwives as the least stressing factor, which experienced only a low number of respondents. The collective of authors Kamal et al. (2012) came to a different finding, they focused in their research on identification of stressors in a group of nurses. Although the respondents of the study marked discrimination and harassment as the least stressing factor, they evaluated it more negatively (sometimes stressing to often stressing) than the respondents in our set (never stressing or not applicable).

The midwives of our study experienced a high rate of depersonalization and a medium rate of emotional

exhaustion. This could indicate that midwives cannot efficiently cope with the stressors acting in the working environment (Mollart et al., 2013). On the other hand, however, the respondents stated a high rate of personal performance which reflects their feeling of competence and successfulness at work.

Whereas it seems that the working environment stressors contribute to distress of midwives (as the found relations between stressors and emotional exhaustion indicate), the results proved hardly any relationship between stressors and depersonalization. On the contrary, a positive relationship was found between personal performance, problems with co-workers and care for patient and his family. So it can be assumed that an efficient coping with conflicts with other midwives, or with patients and their families contribute to a positive evaluation of own competence and professionalism.

The limitations of our study include a relatively small set of participants, which does not allow generalising the found knowledge onto a broad population of midwives. Moreover, the study does not include some factors that can have a stressing effect on midwives (work in shifts, lack of resources etc.).

## 5. Conclusion

Over the last decade there was an increased interest in the stress experienced by nursing staff including midwives. Although some stress situations are specific for a certain type of hospital facilities, midwives are subjected to a more general stress resulted from physical, psychological and social aspects of the working environment. High stress levels often result in burnout of employees and change of their attitudes to work, and thus they can negatively influence the care for patients. The interventions focused on control of stress sources in the working environment seem to be important for the support of work of healthcare staff and the preservation of their performance and health.

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