

# Psychological stress of nurses in dialysis centres

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## Introduction

The occupation of a general nurse ranks among very demanding occupations in terms of both vocational training and specific professional performance. Nurses are expected to manage professional work involving the use of technologically advanced equipment as well as the physical and mental load related to their job. They are expected to be able to influence and control the experience and conduct of the sick, to execute various administrative tasks and, last but not least, to be able to cope with their job-related and personal problems.

Work in healthcare is connected with a high degree of strain and stress, which influences both the physical part and the mental part. Excessive load increases the risk of incorrect interventions, decisions, job-related accidents, psychosomatic diseases. Work stress does worsen not only the state of health but also work performance.

## Psychological stress

It is a process of a psychological processing and coping with the requirements and effects of the life and working environment that surround a person, including social relations, events and behavioural requirements.

Psychological stress includes a number of risk factors that affect nurses' work. A nurse needs to maintain concentration, carefully monitor the state of patients, equipment, she needs to respond flexibly to various changes and requirements. She has great responsibility for the result of her own work, she needs to make decisions independently while adhering to the given rules, improvise in unexpected situations and in sudden increase of workload.

She meets people in different (positive and negative) emotional states, she faces pain, suffering, death, communicates with patients' relatives. In communication, she comes across questions regarding very private matters of patients and their families. She needs to be able to cope with the feeling of helplessness when causing pain to other people, carrying out unpleasant interventions, carrying out activities which normally cause distaste. In spite of moderate compensation for her work, a nurse needs to keep training herself and learn new things.

The most common situations that are the source of psychological stress – contact with a dying person and subsequently with his/her family, contact with the diseased who does not understand information provided by the physician, conflicting situations between the nurse and the diseased, between the nurse and physicians, between the nurse and another nurse.

## Methods of Measuring Psychological Stress

Many different methods for the diagnostics and measurement of psychological stress are published in professional literature. These methods may be divided into several groups: methods identifying physiological and biochemical symptoms of stress; methods identifying psychological characteristics of the symptoms of stress; methods focused on difficult life events and day-to-day troubles.

## Objective of the thesis

The objective of the thesis was to map out the psychological stress which nurses working in the dialysis centres operated by B. Braun Avitum in the Czech Republic and Slovak Republic are exposed to.

## Method

The data was collected in the dialysis centres of B. Braun Avitum in the Czech Republic and Slovak Republic in the period from April to May 2015 via anonymous questionnaires supplemented by demographic details of the nurses. The Meister questionnaire was employed to assess the psychological stress among nurses, which contains 10 items assessed on the 5-point working Likert scale (5 – yes, I strongly agree, 4 – I tend to agree, 3 – I do not know, sometimes yes, sometimes no, 2 – I tend to disagree, 1 – no, I strongly disagree). The data is assessed by factors or by the individual items.

## Result

A total of 132 respondents (54%) took part in the survey out of the total of 246 respondents.

88 respondents were from the Czech Republic and 44 respondents from the Slovak Republic. The objective was to determine the level of psychological stress that the nurses working in the dialysis centres operated by B. Braun Avitum in the Czech and Slovak Republics are exposed to.

Tables (Tab. No. 1 and 2) present results that show the evaluation of the Meister questionnaire of neuropsychological work stress by individual factors. The results show that nurses at Slovak dialysis centres are pressed for time. In other respects, the results showed that nurses working at dialysis centres currently do not suffer from psychological stress.

Table No. 3 describes the result of the degree of psychological stress according to the Meister questionnaire among nurses working in the dialysis centres in the Czech Republic and Slovak Republic operated by B. Braun Avitum. The final result among the respondents does not show permanent psychological stress. Table No. 4 classifies the individual degrees of psychological stress.

**Table 1** Evaluation of individual factors – Czech Republic

| Question (abbreviation)          | n  | Median | AP  | SD   |
|----------------------------------|----|--------|-----|------|
| 1. Time stress                   | 88 | 3      | 3.4 | 0.99 |
| 2. Low job satisfaction          | 88 | 1      | 1.7 | 0.92 |
| 3. Great responsibility          | 88 | 2      | 2.4 | 0.91 |
| 4. Stultifying work              | 88 | 2      | 1.7 | 0.88 |
| 5. Problems and conflicts        | 88 | 1      | 1.6 | 0.92 |
| 6. Monotony                      | 88 | 1      | 1.4 | 0.70 |
| 7. Nervousness and tremulousness | 88 | 2      | 1.7 | 0.76 |
| 8. Weariness                     | 88 | 2      | 1.7 | 0.80 |
| 9. Weakness and fatigue          | 88 | 2      | 2.1 | 0.80 |
| 10. Chronic fatigue              | 88 | 2      | 2.4 | 0.89 |
| F1 – Overload                    | 88 | 6      | 7.4 | 0.94 |
| F2 – One-sidedness               | 88 | 4      | 4.8 | 0.83 |
| F3 – Non-specific factor         | 88 | 8      | 7.9 | 0.82 |

*n* – absolute frequency, *AP* – arithmetic average, *SD* – standard deviation

**Table 2** Evaluation of individual factors – Slovak Republic

| Question (abbreviation)          | n  | Median | AP  | SD   |
|----------------------------------|----|--------|-----|------|
| 1. Time stress                   | 44 | 4      | 3.8 | 1.05 |
| 2. Low job satisfaction          | 44 | 1      | 1.9 | 1.15 |
| 3. Great responsibility          | 44 | 3      | 3.1 | 0.99 |
| 4. Stultifying work              | 44 | 1.5    | 1.6 | 0.66 |
| 5. Problems and conflicts        | 44 | 1      | 1.6 | 0.99 |
| 6. Monotony                      | 44 | 1      | 1.6 | 0.92 |
| 7. Nervousness and tremulousness | 44 | 2      | 2.1 | 0.90 |
| 8. Weariness                     | 44 | 2      | 2.1 | 1.01 |
| 9. Weakness and fatigue          | 44 | 2      | 2.5 | 0.95 |
| 10. Chronic fatigue              | 44 | 3      | 2.7 | 1.11 |
| F1 – Overload                    | 44 | 8      | 8.5 | 1.01 |
| F2 – One-sidedness               | 44 | 3.5    | 5.1 | 0.91 |
| F3 – Non-specific factor         | 44 | 9      | 9.4 | 0.99 |

*n* – absolute frequency, *AP* – arithmetic average, *SD* – standard deviation

**Table 3** Stress classification

| Factor           | Question                   | Czech Republic   |               | Slovak Republic  |               |
|------------------|----------------------------|------------------|---------------|------------------|---------------|
|                  |                            | Median questions | Result factor | Median questions | Result factor |
| I.               | 1. Time stress             | 3                |               | 4                |               |
|                  | 3. Great responsibility    | 2                | 7             | 3                | 8             |
|                  | 5. Problems and conflicts  | 1                |               | 1                |               |
| II.              | 2. Low satisfaction        | 1                |               | 1                |               |
|                  | 4. Stultifying work        | 2                | 4             | 1.5              | 3.5           |
|                  | 6. Monotony                | 1                |               | 1                |               |
| III.             | 7. Nervousness             | 2                |               | 2                |               |
|                  | 8. Weariness               | 2                | 8             | 2                |               |
|                  | 9. Fatigue                 | 2                |               | 2                | 9             |
|                  | 10. Long-term tolerability | 2                |               | 3                |               |
| Calculation      |                            |                  | 15            |                  | 17            |
| Resulting degree |                            | I.               |               | I.               |               |

**Table 4** Psychological stress classification

|   |  |
|---|--|
| 1 | Psychological stress where it is not probable that health, subjective state or performance shall be affected (irrespective of haphazard situation-based fluctuations during a work shift). |
| 2 | Psychological stress where temporary effects on the subjective state or performance may be affected.   |
| 3 | Psychological stress where health risks need not be excluded.  |

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## Conclusion

The job performed by a nurse is very demanding, but if approached in the right way it can be beneficial not only for the patients but it can also be the source of personal self-fulfilment and self-satisfaction arising from the meaningful activities performed by the nurse.

At present, a nurse is exposed to many stressful situations. It is not easy to work in such a challenging environment. She needs to take on a lot of functions, she needs to be able to resolve problematic situations and perceive the diseased within the holistic concept. To care for all their needs and learn to be empathetic. Psychological and physical demands of this profession should be noted as well.

She lives and works for others and she tries to help them. But how to help nurses? Are they able to take care of their mental health themselves? These are questions we do not have answers for yet. First of all, a nurse needs to take care of herself, then she is able to take good care of others. However, prevention is much better than therapy. Therefore, mental hygiene and relaxation methods need to be learnt.

This survey has found out that nurses working in dialysis centres operated by B. Braun Avitum in the Czech Republic and Slovakia do not suffer from psychological stress.

