FACTORS DETERMINING THE EFFECTIVENESS OF NURSING WORK

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ABSTRACT

The requirements towards nursing professional activities are increasingly rising. The quality of the activities is expected to improve and expand constantly. Nursing is associated with high levels of stress stemming from the specificity of the different professional roles. A study among 191 nurses working in surgical, therapeutic, intensive care units and children's hospital wards was conducted. The aim of the study was to identify factors affecting work efficiency of nurses. Daily nursing activities in hospital wards include implementation of highly intensive tasks. The data show that for a significant proportion of respondents their professional work is very intensive (59.00%), with increased physical (34.50%) and mental (55.80%) workload. Not a small proportion of nurses report being distracted at work. More than half have an alarming sense of omission at the end of the working day (54.70%). Almost half of nurses report frequent cases of headache (44.20%) and (57.70%) sleep disorders. Part of the respondents assess their mood as depressed. These specificities of the profession are a prerequisite for reduced work efficiency and likelihood of medical errors.

Keywords: *profession, work-efficiency, behavior, nurse, hospital*

INTRODUCTION

Professions arise at some stage in the process of division of labor and the accompanying social differentiation (2). The process of professionalization is one in which individuals acquire certain level of skills, distinguishing them from other groups (8). Through this process groups seek to improve their collective status in society (5).

As a profession, nursing requires a high level of expertise, making complex decisions and a sense of

responsibility and usefulness. The complexity of the work of nurses is determined by the nature of their operations. The object of their work is the individual who at the same time can be seen as a subject. The approach towards each patient must be individualized and require from the nurse mental and emotional involvement (8). Although a positive impact of labor on the human psyche is reported, according to some authors, long-term performance of the same professional activities could lead to occupational fatigue (9). A significant part of health professionals working in innovative areas are with long working hours, overtime and requirements for further qualification. This intensive professional activity affects their health and increases the risk for chronic diseases (9). The professional group of nurses is exposed to stress, which is a prerequisite for professional deformation and emotional exhaustion (6,7).

Medical professionals face increasing pressure from various aspects. They need to improve patient

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care despite the shortage of staff and adopt new technologies in an ever-evolving environment. In the working process, they often skip the breaks appointed for physical and emotional recovery (9).

OBJECTIVE

To investigate the factors affecting work efficiency of nurses in hospital wards.

MATERIAL AND METHODS

A survey among 191 nurses from the University Hospital "St. Marina" - Varna, hospital "St. Anna" - Varna, the public hospital in Dobrich, working in therapeutic, surgical, intensive care units and children's wards was carried out. The survey was conducted in the period October - December 2014. Descriptive statistical analysis were performed with SPSS v. 15.0.

RESULTS

In the study a total of 191 nurses working in therapeutic (27.23%), surgical (38.21%), intensive care (20.94%) and pediatric (13.62%) wards took part. The largest part of the respondents is in the age group 41-50 years (38.20%) and with professional experience over 20 years (50.80%). The professional nursing activities are associated with increased levels of stress because of their specific character. Medical professionals perform a variety of roles. They care for the patients, constantly are in contact with the suffering of the sick, sometimes become the target of the patient's anger and aggression or fall into conflicts. The requirements for the nursing activities are rising and the nurses' qualification needs to be constantly improved and expanded. Each of these problems can be regarded as a stressor, affecting the efficiency of work. Daily nursing activities in hospital wards are accompanied by the implementation of additional tasks, often with increased intensity.

We asked the nurses to assess their daily work tempo. Slightly more than half of the respondents noted that they work in great stress and with a high speed (59%). They are followed by respondents working "sometimes" in high speed (40%) (Fig. 1). The results reveal a sense of high labor requirements among nurses. Depending on the type of department in which nurses work, speed and pressure are regu-

larly high in surgical (61.40%) and neonatal wards (58.20%).

Fig. 1. Self-assessed daily speed of work

The age of the nurses is a factor affecting the sense for high speed of the professional activities ($p < 0.05$). The work is classified as regularly with high speed by the nurses above 50 years (72.5%). With increasing the age (up to 40 years) the feeling of high workload and speed increases. In the age group 41-50 opinions split between high and normal speed and above 50 years again dominates the feeling of high workload and speed. The results may be related to the natural physical fatigue characteristic of the higher age (Fig. 2).

Fig. 2. Self-assessed daily speed according to age group

Environmental conditions also influence work speed. A well-organized working environment is a prerequisite for stress-free work. Appreciating the importance of their working conditions, nurses' opinions are that they should be improved (57.70%). Work environment is defined as favorable by a quarter of the respondents (26.90%) and according to 15.40% it is rather unfavorable. Working conditions and speed of work may significantly reduce the motivation of employees and are a prerequisite for reduced work efficiency.

An important factor influencing work efficiency is overload. A significant proportion of respondents often experience increased mental (55.80%) and physical (34.60%) load in their work (Fig. 3).

Fig. 3. Assessment of efficiency and workload of nursing activities

The results are not surprising and are related to the expanding framework of nursing activities. Today nurses are not only technically fulfilling doctor's prescriptions. They perform specific activities requiring greater involvement in decision-making, assessment of patient's status, nursing diagnosis and others.

Self-assessment of mental and physical overload in work is accompanied by a sense of reduced work efficiency. More than a half of respondents report that "1-2 times or more per month" they are distracted at the workplace (76.20%). At the time of the study a significant part of the respondents determine that they are distracted more often – "1-2 times a week or more" (15.40%). Lack of concentration may be associated with various factors, such as tiredness, illness, insomnia, headaches, etc.

Fig. 4. Self-evaluation of the degree of distraction at the work according to the type of department

The type of hospital department and the specificity of the activities may also be a factor for distraction at work (Fig. 4).

The data show that nurses from surgical units are more often distracted (26.80%). Self-assessment of inattention among nurses is prone to errors. The assessment of anxiety shows that almost all of the respondents have a feeling of omissions at the end of the workday. It happens regularly to 54.70%, sometimes to 41.50% of the nurses and only 3.80% of nurses report no feeling of omitted tasks and respectively anxiety at the end of the working day. Most nurses continue to think about their professional activities during the time for relaxation.

Relationship has been found between the age of nurses and their sense of omissions at the end of the working day ($p < 0.05$). Most of the respondents in the youngest age up to 30 years (72.3%) regularly feel they have missed something. Such a feeling for some of the time have 21.3% of the respondents in the same age group. In the age group 31-40 years "regular feeling of omission" report 47.6% of the respondents, and "sometimes" - 28% of them. In the age group 41-50 years 49.6% only "sometimes" they feel they might have made an omission, while 45.1% "regularly" have a similar experience. Almost half (46.5%) of the nurses over the age of 50 regularly think they might have missed some task, compared to 42.6% having such feeling only sometimes. In the younger age nurses have a stronger sense of insecurity, which may be due to insufficient experience.

The feeling of failure may be associated with distraction of workers and an increased physical and mental stress. Nurses in pediatric (50%) and surgi-

Fig. 5. Anxious feeling of omission at the end of the working day by type of department

cal departments (43.80%) more often have a feeling of omission at the end of the working day (Fig. 5).

Highly standardized activities combined with increased workload are a prerequisite for increasing levels of stress. Many external signs of stress are visible for managers and colleagues. They are related to changes in behavior or mood. Studying the behavior of nurses we asked them to identify the statements characteristic of their status lately. Sleep disturbances (such as difficulty in falling asleep, awakening, anxiety, etc.) are selected by more than half of the respondents (57.7%) (Fig. 6).

Fig. 6. The behavior of nurses to overcome worries and anxieties

Among more than a third of the respondents the frequency of headaches is increased (36.4%). For half of them (46.2%) tobacco use and food consumption (for 28.80%) is also increased probably wishing to distract themselves from worries and anxieties. For 11.50% increased consumption of alcoholic beverages is also reported. Data show a profile of nurses characterized by a high level of anxiety and such behavior could affect work efficiency.

CONCLUSIONS

1. A significant proportion of respondents consider the speed of work activities as high (59.60%). Such opinion is expressed mainly by those working in surgical and neonatal wards and nurses in the higher age group.
2. For medical professionals working conditions are essential and efforts should be made to improve them. A significant proportion of respondents more often experience mental strain in the process of their work (55.80%) and 34.50% complain of increased physical activity, possibly due to expanding professional tasks.

3. More than half of the respondents are often distracted at work. Nurses in pediatric (50%) and surgical (43.80%) wards have an increased sense of omission at the end of workday.
4. In the last year the use of cigarettes (46.20%) and food (28.80%) among respondents has become more frequent, while 11.50 percent have increased the consumption of alcoholic beverages as a means to reduce anxiety. More frequent are cases of disturbed sleep (57.70%) and headache (44.20%).

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