EXPERIENCE OF GENERAL NURSES WITH THE CONDITIONS OF PRACTICING THE PROFESSION IN CZECH HOSPITALS

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Abstract
The specifics of the general nurse profession and the demands placed on this profession are very diverse and burdensome. The adaptation process, working conditions, the performance of the profession within their competencies influencing the perception of one’s own profession and are important factors for the satisfaction of general nurses with the performance of their profession. The authors present the main results of a questionnaire survey focused on the experience of Czech general nurses with the conditions for the performance of their profession in the Czech healthcare system. Specifically, the message focuses on the experience and satisfaction of nurses with the adaptation process, with the profession, with working conditions and with the setting of competencies. The questionnaire survey was conducted within the project, the group of respondents consisted of 2,479 general nurses working in Czech acute care facilities. Most respondents are satisfied with the performance of their profession. For the satisfaction it is important for the respondents to cooperate primarily with the nurses, but also with other staff, setting up the adaptation process in terms of length, the person of the trainer and specific processes. Respondents are the least satisfied with the setting and adherence to competencies. In the current shortage of general nurses in the Czech healthcare system, it is necessary to focus on the monitored factors and solve problems for both new and stabilized employees.

Keywords
adaptation process, competencies, working conditions, profession, satisfaction, general nurse

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1 INTRODUCTION

The profession of general nurse (hereinafter referred to as a nurse), as is the case of all non-medical healthcare professionals, is very demanding and is being constantly influenced by numerous factors. The requirements for the performance of nurse’s profession are diverse, and involve personality characteristics as well as professional knowledge and skills. This broad scope is subsequently reflected in the range of factors, influencing not only the societal perception of this profession, but also the perception of the profession by the nurses themselves.

High levels of work stress, associated with the risk of burnout and job dissatisfaction, affect the quality of care provided and the worker’s health (Applebaum, 2010). In order to respond to the patients’ complex needs and the overall breadth and complexity of the profession, a comprehensive understanding of the psychosocial work environment of nurses is vital (Van Bogaert et al., 2017). Especially nurses’ job satisfaction is gaining the attention of professionals worldwide, as it is closely related to the turnover and quality of patient care (Lu et al., 2019). Studies indicate many factors affecting nurses’ job satisfaction, such as relationship with the organization, professional pride, autonomy, benefits or education (Head et al., 2019). Other factors include good communication and coordination of tasks (Havens et al., 2018), positive work environment and level of perceived powers (Kretzchmer et al., 2019) or the nurses’ confidence in their own professional competency (Biagioli et al., 2018). All of them agree that job satisfaction is a complex phenomenon that needs to be understood in depth and in its entirety, as this can in turn help develop effective, culturally specific strategies to address nursing shortages (Lu et al., 2019).

Medical facilities have been facing a shortage of staff in non-medical healthcare professions, a high workload of staff, often involving activities that are not part of the competencies of nurses and other healthcare professionals, in the long term. This phenomenon is not specific to the Czech healthcare system only. The same situation also characterizes other healthcare systems in the world (e.g. Coomber & Barriball, 2007; Sasso et al., 2019).

Another influential factor of the personnel situation in our healthcare facilities is the fact that the population of Czech general nurses has aged quite significantly in recent years. While in 2012 the peak of the number of nurses was balanced across three age groups between 35 and 49, in 2017 the peak shifted to 40-44. This trend continues and the question remains whether the future increasing deficit of general nurses will be smoothly supplemented by new graduates. As far as this trend is maintained, we can expect a staffing decrease by 9,500 nurses by about 2022, and by more than 20,000 nurses by 2027 (ÚZIS, 2021). In the current conditions, our education system cannot compensate for this deepening deficit. At present, approximately 1,600 general nurses
complete their studies in the Czech Republic each year (MSMT, 2019). The unhappy staffing situation in healthcare facilities, often resulting in nurses being overburdened and their decision to leave their profession, is, as already mentioned, a long-term issue and must be seen as a challenge to be addressed in future for a successful functioning of the healthcare system. Logically, this is closely related to the education of general nurses and its financing, able to provide a sufficient number of new nurses entering the labour market. At the same time, it is necessary to take care of the well-being and stability of those who work in healthcare facilities. Nurses represent the largest group of healthcare professionals and first-line patient care. The perception of workload demonstrably affects nurses' well-being and becomes a critical issue for maintaining this workforce. It is necessary to address this problem area and monitor possible solutions to the long-term unfavourable situation (Holland et al., 2019).

2 METHODOLOGY

2.1 Aim

The aim of this paper is to present selected results of a questionnaire survey examining the experience of general nurses with practising their profession in Czech acute care hospitals. It specifically focuses on the nurses’ experience and satisfaction with the adaptation process, the profession as such, the working conditions and the competency settings. The questionnaire survey took place within the TAČR ETA TL01000094 Project ‘The Competent Nurse for the 21st Century: The Analysis and Design of the Optimization of Nursing Education and Professional Practice’.

2.2 Data collection

Data collection took place using a self-designed non-standardized questionnaire. The monitored areas, resp. the basic objectives of the questionnaire survey, were based on previous in-depth interviews with 31 nurses with different lengths of experience and on different job positions, aiming to identify factors that significantly affect nurses' satisfaction (Glajchová et al., 2021). The questionnaire was consulted with all application guarantors of the project – the Czech Association of Nurses, the Joint Accreditation Commission and the representatives of the participating medical facilities. The questionnaire was created in the Lime Survey system and was accessible on-line on the server of the University of Pardubice from May to the end of June 2019.

A link to the questionnaire with a request for completion was distributed to nurses in all acute care hospitals in the Czech Republic. The distribution took place in cooperation with the aforementioned project application guarantors and with the Czech Ministry of Healthcare.
The questionnaire was divided into the following eight topic areas:

1. Adaptation process
2. Perception of the profession
3. Working conditions
4. Competency settings
5. Negative influences in the performance of the profession
6. Support of higher competencies
7. Recommendations for increasing the number of general nurses
8. Identification and sorting items

Respondents chose from the provided answers or subjectively evaluated the degree of meaning or agreement with a stated positive statement (strongly agree, agree, disagree, strongly disagree).

The obtained data were processed by descriptive statistics and analysed using correlation non-parametric tests (Spearman correlation). To confirm the correlations, the ordinal variables were converted to numeric ones. Due to the scope of the questionnaire survey, this paper focuses only on analyses concerning the adaptation process, working conditions, competency setting, and the degree of respondents’ satisfaction with these areas. In the previous part of the research, these areas proved to be important not only for the setting of young graduates in a particular workplace and in the organization and stabilization of the more experienced, but also to be important factors influencing the positive perception of the profession (Glajchová et al., 2021).

2.3 Population

The respondents to the questionnaire survey were nurses working in Czech acute care hospitals. 5,097 general nurses were contacted. Thereof, 2,618 questionnaires were excluded due to the absence of sorting elements (33 questionnaires) and due to non-response (2,585 empty questionnaires).

The remaining questionnaires were included in the research, so there were 2,349 complete questionnaires and 130 questionnaires with incomplete evaluation. Thus, the sample counts totally 2,479 general nurses.

The following basic characteristics of the population were monitored – gender, age, education, length of experience and care for relatives. From the job characteristics, the further monitored factors were: job position, type of hospital, ward and type of operation they worked in.

The total sample of respondents consisted of 2,387 women (96.3%) and 92 men (3.7%). In terms of the age structure of the population of respondents, the average age was 44.8 years; the oldest...
respondent was 71 and the youngest 21 years old. The largest group consisted of nurses between the ages of 40 and 49 (n = 473; 39.3%). The respondents’ professional experience ranged from less than one to 51 years. The average professional experience was 23.7 years; the most numerous were respondents with 20 to 39 years of professional experience (n = 1504; 60.7%). In terms of the highest completed education, the most had higher education (n = 913; 36.9 %), respondents with the highest completed secondary or vocational college education were 201 (28.9 %) and 726 (29.3 %) respectively. The last sorting criterion of the basic characteristics of the sample was caring for someone in the household, where 1,249 (50.4 %) respondents cared for minor children or another family member.

In terms of job position, the population of respondents mostly consisted of nurses (n = 1,020; 41.2 %) and specialist nurses (n = 765; 30.9 %). There were 628 (11 %) charge and ward nurses; 34 (2.6 %) were head nurses/nursery care deputies and respondents on another managerial position. In terms of the type of ward, respondents most often worked in surgical wards (n = 558; 22.0 %), intensive care and emergency units (n = 494; 19.9 %), outpatient clinics (n = 442; 17.8 %) and internal medicine wards (n = 416; 16.8 %). According to the type of operation, 1,323 (53.4 %) respondents worked on a shift basis and 1,156 respondents (46.6 %) on morning duties. In terms of age, length of experience and gender, the research population corresponds to the Czech population structure of general nurses (ÚZIS, 2019).

3 RESULTS

The first area monitored was the adaptation process. 96.2 % of respondents considered it important (‘strongly agree’ or ‘rather agree’ responses). 95.5 % of respondents considered the person of a trainer to be a key factor in the course of the adaptation process.

92.2 % of respondents evaluated the length of the adaptation process as sufficient (‘agree’ and ‘strongly agree’), but only 50 % of the respondents chose ‘strongly agree’. In the following item, the respondents directly evaluated the required length of the adaptation process, focusing on the areas in which the new employee adapts and acquires basic orientation. Graph 1 shows the respondents' opinion regarding the sufficient length of adaptation in three basic areas (Graph 1). A significant majority of respondents (65 %) believe that 3 months are enough to adapt to the team. For adaptation to independent work and cooperation in the hospital, most respondents prefer a longer adaptation process of 6 months to 2 years.
As part of the adaptation process, respondents also assessed their personal experience in their workplace. Specifically, they assessed how well the adaptation process was set up, whether there was a sufficient number of trainers available for new employees, the quality of their training, whether the trainers had adequate work conditions available and whether their feedback was provided. These factors are influenced by the setting of conditions and rules in the given workplace. More than half of the respondents believe that the adaptation process is well set up (74.3 %), that there is a sufficient number of trainers in the workplace (59.2 %) who are well trained (63.4 %), have the conditions for a good performance of their trainer’s role (54.2 %) and provide the new employee with quality feedback (73.2 %). The most dissenting answers were encountered in the item focused on a sufficient number of trainers in the workplace (34.7 %) and in the evaluation of the conditions for good performance of the trainer’s activities (39.1 %). On the contrary, the least dissenting answers were encountered in the item focused on the quality of the trainer’s feedback (18.5 %).

The authors observed the relationship between the evaluation of the adaptation process and its duration. There is a very weak negative correlation between these sets of questions. Therefore, no relationship can be inferred between the duration of the
adaptation process and the satisfaction assessment. The more satisfied the nurses were with the adaptation process, the more often they stated that less time was necessary and vice versa (Table 1). This weak negative correlation can be explained by the fact that the minimum adaptation's time is fixed, as well as by its significance and the usual concurrency of adaptation time with the trial period. The authors did not expect any significant correlation in this aspect.

<table>
<thead>
<tr>
<th>ADAPTATION</th>
<th>Spearman Correlation Coefficient</th>
<th>LENGTH OF ADAPTATION</th>
</tr>
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<tr>
<td></td>
<td>Sig. (2-tailed)</td>
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According to the individual criteria of the population of respondents, we also monitored whether there were any differences across the groups in the value of the median of points obtained according to answers for selected in individual items. For the evaluation of the adaptation process for the nurse profession performance, 0–32 points could be achieved, where the higher the score, the greater the level of agreement. For the duration of adaptation, the results differed in the observed features. Older and more senior nurses were more likely to report that it took less time to adapt than younger nurses. On the contrary, nurses with higher education, on higher job positions and those working on a shift basis and at intensive care and/or emergency units, reported a longer required duration of adaptation.

The second area evaluated was the respondents' perception of the profession and working conditions. The nurses evaluated how important the monitored factors were for them and how satisfied they were with them. The vast majority of respondents stated that they were satisfied with their profession (96.8%) and that it was important for them (98%). A smaller part of respondents considered their profession prestigious, where 37.8 % of respondents completely agreed and 31.4 % rather agreed with the statement "I perceive my profession as prestigious". Thus, 30.8 % of respondents disagreed with this statement. One of the factors affecting employee's satisfaction is satisfaction in their own workplace. In our survey, almost 90 % of respondents expressed their satisfaction in the workplace, and this factor was important for 99.2 % of respondents. There is a high correlation between the evaluation of satisfaction with the profession and the perception of importance of the profession (Spearman correlation, $r = 0.7$, $\alpha = 0.07$). However, there is a surprisingly lower correlation between job satisfaction and general
satisfaction ratings (Spearman correlation, $r = 0.5, \alpha = 0.07$). Their satisfaction in the workplace is affected by selected factors in different ways (Graph 2).

Most respondents stated the following factors as highly important for workplace satisfaction: cooperation with nurses (93.5%), number of staff (91.7%), cooperation with doctors (91.1%), work organization system (89.5%), support from a direct superior (87.2%) (Graph 2).

Factors affecting employee satisfaction

Graph 2
Importance of factors influencing respondents’ satisfaction

Cooperation with nurses proved to be the most influential factor in workplace satisfaction (Table 2). Further factors are ordered by the strength of the correlation coefficient ($r \geq 0.7$): working hours, relationships and support from the superior, cooperation with lower nursing staff, cooperation with doctors.

Table 2
Correlation between overall satisfaction and the setting of monitored factors

<table>
<thead>
<tr>
<th>COOPERATION WITH NURSES</th>
<th>Spearman Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
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<tr>
<td></td>
<td>0.94</td>
<td>0.000</td>
<td>2443</td>
</tr>
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8
The evaluated perception of the professions’ societal importance differed throughout the respondent groups according to the monitored criteria. The evaluation of societal importance and prestige of the profession increases with age and length of professional experience. The higher the age and the longer the experience among the respondents, the higher their satisfaction and the better the perception of their profession. Also, the level of agreement rose with increasing degree of education and higher job position. Nurses working on morning duties perceived evaluated their profession and satisfaction higher.

The third monitored area was the area of competencies and their settings. For correct understanding within the project, we defined competencies as the intersection of professional competence to perform activity and the authorization to perform such activity. We were interested in whether, in the nurses’ opinion, the competencies in their workplace were adequately set, described, adhered to, assigned and re-assessed. Again, the respondents expressed their degree of agreement with various statements focused on the observed factors that may affect the competency settings (Graph 3).

**Graph 3**
Level of agreement with setting of and adhering to competencies

In terms of compliance with the legislation and the related setting of conditions for work performance within the competencies of a nurse, we can state that 60% of the respondents expressed their satisfaction with the legislative setting of competencies in the Czech Republic.
However, only 10.1% of the respondents fully agreed with the statement that the legislative competency setting of a nurse in the Czech Republic is correct. More than 70% of respondents agreed that the Labour Code and other related legislation is being adhered to. However, less than a third (22.9%) of the respondents were absolutely positive about not exceeding their competencies. Almost 40% of respondents disagreed with the statement that the conditions for performing their profession in the workplace within the specified competencies are adequate. Less than 65% of respondents agreed that competencies were regularly reassessed in the workplace. About a third reported that they were not being reassessed. A significant majority (86.4%) of respondents believed that employees were sufficiently acquainted with their competencies in their workplace and, in their opinion, the respondents themselves were being sufficiently educated in their competencies (86.3%).

The last area of the evaluated factors was the performance of competencies within the general nurse qualification. The vast majority of respondents (76.7%) believed that the competencies of a nurse were exercised by staff with adequate professional (or specialized) competence. Most respondents (89.5%) from the given evaluated area agreed that in their work they performed activities for which they were professionally qualified. Last but not least, we also focused on whether in their work, the respondents performed activities in substitution of doctors and lower-level healthcare staff without qualifications as a general nurse. Unfortunately, as for doctors’ activities, the result was relatively balanced, with 46.6% of respondents performing doctors’ activities, and in the case of competencies of lower healthcare, the level achieved even 68.8% of respondents.

In terms of the relationship between competency assessment and competency setting, there is a strong positive correlation between answers to the set of competency assessment and satisfaction assessment questions. The higher the level of agreement with the observance of competencies, the higher the reported level of overall satisfaction with the performance the respondents’ profession (Tab. 3).

<table>
<thead>
<tr>
<th>SATISFACTION</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
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</table>

In terms of the perception of competencies and their setting, there were again differences between the various groups of respondents. In general, with higher age and longer experience, respondents were more satisfied with their competencies and their settings in the workplace.
The level of satisfaction grew even higher, and a higher level of satisfaction was apparent in the group of nurses working in morning shifts.

In all the areas described above, it can be stated that the results/respondents’ assessment was increasingly positive with rising age and length of experience, on higher positions and with a higher level of respondents’ education.

4 DISCUSSION

The aim of this paper is to present selected findings of a questionnaire survey, focused on a sample of Czech general nurses (n = 2,479) working in acute care facilities. In this paper, we focused on the evaluation of the adaptation process, perception of one’s own profession and satisfaction with the assigned competencies and their setting in terms of legislation, but also processes in the workplace. We consider monitoring these parameters to be valuable for the healthcare system of the country. Nurses’ satisfaction and positive perception of their profession and set processes also supports higher adherence of nurses in the workplace. Labrague and McEnroe-Petitte (2018) state in a review study that, based upon sources available since 2002, peer-reviewed publications have looked at the workload of new nurses and their competencies. However, factors that can help reduce stress and workload at the beginning of a career have very rarely been observed. In our study, the importance of a correct setting of the adaptation process (96.2% of respondents) in an adequate length (92.2%) as well as the trainer’s role (95.5%) proved to be significant factors influencing the adaptation process.

The presented questionnaire survey was preceded by a qualitative survey focused on the perception of the profession by nurses with varying lengths of experience and job positions. Even in this part of the study, one of the key outcomes was the person of the trainer as one of the major factors. The interviewed respondents also agreed on the importance of and need for an adaptation process of sufficient length and content (Glajchová et al., 2021).

In the legislation, the adaptation process is regulated by the Methodical Instruction for the Implementation and Completion of the Adaptation Process for Non-Medical Healthcare Professionals of the Ministry of Health of the Czech Republic (Ministry of Healthcare of the Czech Republic, 2009). However, the rules are not set unambiguously. When setting up the adaptation process, it is crucial to consider the current needs and situation and respect the needs of people in the adaptation process. The survey also clearly showed that the required length of the adaptation process depends on the area in which the new worker adapts. The highest level of respondents’ agreement that an adaptation process of 3–6 months is sufficient was expressed for adaptation in team (89.3%) and for independent work (76.1%). The more satisfied the
respondents were with the adaptation process set-up, the shorter they needed to adapt themselves. On the other hand, almost half of the respondents thought that 3-6 months were not sufficient to adapt to cooperation throughout the hospital. These conclusions correspond to Armstrong’s recommendation (2015) that the adaptation process should be conceived at 3 different levels: workplace (job content), work team (collaboration) and organization, all requiring different adaptation times and different approaches.

As early as in the course of education, future health professionals must be prepared for the process of adaptation and supported in their early stage of employment. However, even after the adaptation process, workers must be continuously supported by setting up processes and lifelong learning (Hallin & Danielson, 2007).

The perception of one’s profession is affected by the setting of rules and processes, the course of adaptation process and the rules of lifelong learning. One third of respondents do not perceive their profession as prestigious. On the other hand, workplace satisfaction was perceived by a majority of respondents as a positive and important factor. Respondents attached importance to relationships in the workplace, specifically to the relationship with their superior. Relationships with management and team cooperation affect overall satisfaction and have an impact on staying in the workplace (Haroková & Gurkova, 2013). As in our questionnaire survey, Bégat et al. (2005) found in their study that nurses’ levels of satisfaction depended on the following factors: work stress and anxiety, relationship with colleagues, cooperation and communication, work motivation and professional development. The importance of superior’s support was also demonstrated in a study by Andrews and Dziegielewski (2005).

The setting of competencies and the performance of the profession within a set and fixed framework also affects the perception and performance of the nurse’s profession as such. In the qualitative survey that preceded the presented questionnaire survey, the vast majority of respondents commented on the setting and exceeding of competencies as a fact forming part of their daily work (Glaichová et al., 2021). In the questionnaire survey, more than half of the respondents stated that they performed activities for doctors, exceeding their competencies, a third of the respondents performed activities for lower healthcare staff. Only less than 23% of respondents stated that competencies in their workplace were set correctly and adequately. Exceeding competencies is a topic that resonates as one of the problems that need to be addressed, both in terms of legislation and specific set-up at the workplace, but also the setting of nation-wide processes contained in the concept of nursing as a sector (Ministry of Healthcare of the Czech Republic, 2021).
Most respondents feel sufficiently informed about their competencies and education in their competencies. Lifelong learning is one of the factors that help to manage the workload and demands of the nurse profession, to better deal with dissatisfaction with the profession and to increase the positive perception of the profession as such (Atefi et al., 2014).

In the monitored areas of factors influencing satisfaction, it can be stated that the level of satisfaction increases with rising age and length of experience, with increasing level of education and higher job position. The same finding was also provided in a study by Emily Wood et al. (2021).

5 CONCLUSION

The results of the presented questionnaire survey showed, and in many cases confirmed, certain problems associated with the performance of the nurse profession as perceived by 2,479 general nurses working in acute care hospitals in the Czech Republic.

A significant majority of respondents said that they were satisfied with their profession and the workplace, and both were important to them. Most nurses believe that their satisfaction in the workplace is affected by cooperation with nurses, the number of staff, cooperation with doctors, the system of work organization and the support of the immediate superior. These factors are strongly correlated with their satisfaction.

Most nurses consider the adaptation process to be important and the trainer to be a key person. The majority of nurses also stated that the length of the adaptation process at their workplace was sufficient and that they were satisfied with its set-up. The nurses consider the adaptation process lasting 3 months to 1 year to be optimal, but most of them believe that adaptation in the team and for independent work can be completed by the nurse within 6 months. About a third of the nurses believe that there are not enough trainers in their workplace and that trainers do not do their job well.

A significant result of the survey is the nurses’ very low satisfaction or even dissatisfaction with the adherence to and exceeding professional competencies based on the professional competence of individual professional groups of healthcare staff.

Older and senior nurses, nurses on higher positions and with higher levels of education expressed themselves more positively about all the areas monitored.

The observed satisfaction factors are very topical in the context of the current shortage of general nurses in hospitals and on the labour market in general. Not only the influx of new graduates, but also the stabilization of existing staff is gaining in importance. Satisfaction is a predictor of stabilization and the factors affecting it should be a challenge for any management. In the
current shortage of quality workers in the non-medical healthcare professions, we believe that the results will contribute to improving the situation in healthcare facilities.

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