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# Factors of job satisfaction identified by intensive care nurses

## Czynniki satysfakcji z pracy identyfikowane przez pielęgniarki oddziału intensywnej opieki

ABSTRACT

Anaesthetic and intensive care nurses are confronted with different patient needs, problems, pain, and death rate on a daily routine, which over time can lead to emotional exhaustion, fatigue, and burnout, leading not only to job dissatisfaction, but also to a loss of motivation for work. Job dissatisfaction is a key factor in considering job change. The aim of this study was to analyse the factors influencing nurses, job satisfaction in intensive care units166 ICU nurses took part in the study. The data was collected in 2020–2021. The method chosen was a questionnaire survey. The questionnaire consisted of three parts: (1) socio-demographic data; (2) an open-ended question to determine respondents' views on the factors that increase their motivation for their job; and (3) the Job Satisfaction Survey (JSS). It was determined that the mean satisfaction level of nature of nurses' work was at a medium-high level (M = 17.81, SD = 3.3), while relations with coworkers (M = 16.99, SD = 3.4), communication (M = 16.92, SD = 3.7) and supervision (M = 16.74, SD = 4.0) were less than moderate. Nurses' overall job satisfaction was found to be average. Nurses' job satisfaction depended on the nature of the work and their relationships with coworkers. Nurses, who were older, more highly educated, and had less than one full-time job had a higher perception of coworkers and communication.

Keywords: job satisfaction, intensive care units, factors, nurse and hospital

STRESZCZENIE

Pielęgniarki anestezjologiczne i intensywnej opieki każdego dnia stykają się z różnymi potrzebami pacjentów, problemami, bólem i śmiercią. Z czasem może to prowadzić do wyczerpania emocjonalnego, zmęczenia i wypalenia zawodowego, powodując nie tylko niezadowolenie z pracy, ale także utratę motywacji do niej. Niezadowolenie z pracy jest kluczowym czynnikiem przy rozważaniu

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zmiany pracy. Celem badania była analiza czynników wpływających na satysfakcję z pracy pielęgniarek na oddziałach intensywnej terapii. W badaniu wzięło udział 166 pielęgniarek OIT. Dane zostały zebrane w latach 2020–2021. Wybraną metodą było badanie ankietowe. Kwestionariusz składał się z trzech części: (1) danych społeczno-demograficznych; (2) pytania otwartego w celu określenia poglądów respondentów na temat czynników zwiększających ich motywację do pracy; oraz (3) ankiety satysfakcji z pracy (JSS). Ustalono, że średni poziom charakteru pracy pielęgniarek był na średnio-wysokim poziomie (M = 17.81, SD = 3.3), podczas gdy relacje ze współpracownikami (M = 16.99, SD = 3.4), komunikacja (M = 16.92, SD = 3.7) i nadzór (M = 16.74, SD = 4.0) były mniej niż umiarkowane. Ogólna satysfakcja pielęgniarek z pracy okazała się średnia. Zadowolenie pielęgniarek z pracy zależało od charakteru pracy i ich relacji ze współpracownikami. Pielęgniarki starsze, lepiej wykształcone i zatrudnione na mniej niż jeden cały etat lepiej postrzegały współpracowników i komunikację.

**Słowa kluczowe:** satysfakcja z pracy, oddziały intensywnej terapii, czynniki, pielęgniarka i szpital

## Introduction

The analysis of the scientific literature in Hayes *et al.* (2010) showed that job satisfaction is a complex and multifactorial phenomenon. Many authors have analysed the determinants of job satisfaction and dissatisfaction. Atefi *et al.* (2014) identified three main themes influencing nurses' job satisfaction and dissatisfaction: emotions, work environment factors, and motivation. Many nurses reported that they were satisfied with the cooperation and good relations with the members of their profession.

In addition, Plevova *et al.* (2021) also analysed nurses' satisfaction with their teamwork. The data showed that nurses were most satisfied being with other nurses and least satisfied with the level of teamwork in their unit. The strongest relationship was found to be between satisfaction with current position and satisfaction with being a nurse. Another study conducted in the US (2020) highlighted five areas that both increased and decreased job satisfaction and engagement. The areas include professional relationships, rewards, communication, professional development, and workload (Waltz *et al.*, 2020). Salary has been identified as one of the most important factors influencing nurses' job satisfaction. Most nurses explained that nursing is a stressful and difficult job with low salary and reward. Inadequate pay was one of the main reasons for nurses' job dissatisfaction (Atefi *et al.*, 2014). Data from a survey conducted in Lithuania also showed that for older nurses, their

job satisfaction and workload were associated with better pay, additional benefits; whereas for younger nurses with career opportunities, awards, and relationships with colleagues (Ožeraitienė *et al.*, 2014). A study in Brazil found that creating a better working environment could influence nurses' job satisfaction (Dutra, Guirardello, 2021). Nurses' job engagement and job satisfaction affect nurses' caring behavior (De Los Santos, Labrague, 2021). Patient safety is a high priority in healthcare, but delivering safe care remains one of the biggest challenges facing those working in healthcare (WHO, 2017).

Many authors have analysed nurses' job satisfaction and patient's safety. A study by Liu *et al.* (2019) found that higher job satisfaction among nurses was directly related to higher patient's safety. Myhren *et al.* (2013) conducted a study involving nurses and physicians in the intensive care units (ICUs). After analysing the data, the authors concluded that there is a reason to believe that low satisfaction among the ICU nurses may affect their performance and patient care. Several factors, such as autonomy and workload, may be related to job satisfaction. Doctors may have more autonomy and influence over patient-related decisions than nurses. In addition, Vermeir *et al.* (2017) point out that job satisfaction is necessary for the stability of the supply organization and for the security of supply. This is best achieved through an organization-wide multimodal prevention and intervention programme that aims to optimize interprofessional communication, workload, and satisfaction. Other studies suggest

that lack of motivation and job dissatisfaction are among the main factors contributing to nurses' migration and willingness to change jobs (Dywili *et al.*, 2013; Goštautaitė *et al.*, 2018; Mikaliūkštienė, Nalivaikienė, 2012).

Job satisfaction refers to the subjective perception of being able to achieve important aspects of work and life in a particular job and can be described as a pleasant, positive emotional state. The assessment of factors that contribute to job satisfaction and/or dissatisfaction provides a measure of job satisfaction, which is used as an objective indicator of motivation for work in all professions, including nursing – one of the most stressful professions in modern society – requiring mental, physical, and emotional skills, especially at the intensive care units.

**The objective of the work**. The main aim of this study was to analyse the factors influencing nurses' job satisfaction at the intensive care units.

**The description of the researched group**. The sample was targeted towards the issue of the study. The survey sample was non-probability purposive. The sample reflects the population of the ICU nurses in Lithuania. According to one Lithuanian city hospital, in September 2021, there were 310 ICU nurses. The sample was selected using non-random purposive sampling to achieve the study objective. A non-random sample is one in which the probability of inclusion of certain individuals in the population is zero or much lower than that of the others. A purposive sample is defined as a sample that includes individuals whom the researcher considers to be representative of the characteristics under study, according to specific objectives. The determination of the sample size was calculated according to Paniotto's formula: $n = 1/(\Delta^2 + 1/N)$, where n is the required number of respondents, $\Delta$ is the probabilistic margin of error of 5%, and N is the population size. The Paniotto formula results in a total of 172 nurses to be interviewed in order to obtain reliable survey results.

A total of 172 nurses participated in the study, of whom 166 nurses completed the questionnaire correctly and met the inclusion criteria. Inclusion criteria were: nurses working in intensive care units, who properly completed the questionnaires in electronic form.

**The method**. The method chosen was a questionnaire survey. Respondents were interviewed in December of 2020 and January and February of 2021. A link to the electronic questionnaire was posted online in the intensive care nurse group forum. The questionnaire consisted of three parts: (1) socio-demographic data of the subjects (respondents were asked about the length of their employment, workload, work shift, education, age, and gender); (2) an open-ended question to determine respondents' views on the factors that increase their motivation for their job; and (3) the Job Satisfaction Survey (JSS) developed by Paul S. Spector (1994). This questionnaire was translated into Lithuanian by Gustainienė, Liesienė, and Kern at the Vytautas Magnus University, in accordance with the requirements of translation (2009). The Job Satisfaction Survey was validated in Lithuanian in 2009 (Gustainienė *et al.*, 2009). This questionnaire consisted of 36 statements that measure employees' job satisfaction. The expression of job satisfaction was measured by summing up all statements in the scale and ranges from 36 (low job satisfaction) to 216 (high job satisfaction; Klimas, 2012).

The Job Satisfaction Survey consisted of nine sub-scales (pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication), each measured by four statements. The sum of the scores for each sub-scale ranged from 4 to 24 points, and the total scale score ranged from 36 to 216 points. Each statement was given a score between 1 and 6. As higher scores indicated higher job satisfaction, the scores for negative statements had to be recorded (Gustainienė *et al.*, 2009).

The internal reliability of the Job Satisfaction Survey was assessed. Cronbach's alpha coefficients are presented in Table 1.
The overall reliability of the questionnaire was $\alpha = 0.823$, but the sub-scales, such as the fringe benefits and operating conditions were not sufficiently reliable ($\alpha < 0.5$), and were therefore not used for statistical analysis.

The analysis of the survey data was carried out using the statistical analysis software SPSS Statistics 27. The data were evaluated using standard methods of statistical analysis: their

Table 1. Assessing the internal reliability of the sub-scales of the Job Satisfaction Survey

| Job satisfaction sub-scale | Cronbach's alpha coefficient |
|---|---|
| Pay | 0.565 |
| Promotion | 0.652 |
| Supervision | 0.705 |
| Fringe Benefits | 0.279 |
| Contingent rewards | 0.535 |
| Operating conditions | 0.101 |
| Coworkers | 0.550 |
| Nature of work | 0.577 |
| Communication | 0.626 |
| Total satisfaction | 0.823 |

Source: own study based on research.

numerical characteristics (arithmetic mean, frequency, and relative frequency) were calculated. Frequency analysis and correlation analysis were carried out. Continuous variables were calculated as mean and standard deviation. A one-factor analysis of variance was used to compare sample means of the independent variables. Differences between means were considered statistically significant if the probability of error was $p < 0.05$. The Spearman rank correlation coefficient ($r_s$) was calculated to determine the correlation, and associations were assessed by the strength of the relationship between attributes. If $0 < |r_s| \leq 0.2$, the values were very weakly correlated, if $0.2 < |r_s| \leq 0.5$, weakly correlated, if $0.5 < |r_s| \leq 0.7$, moderately correlated and if $0.7 < |r_s| \leq 1$, strongly correlated. The correlation coefficient is positive when both values increase, and it is considered negative when one value increases and the other decreases. When the significance level is $p \leq 0.05$, the difference between the attributes is considered statistically significant. Open-ended question was analysed using the content analysis method. The responses of the respondents were divided into six groups: salary, training, expectations of the supervisor, additional benefits, working conditions, and communication with doctors.

**Ethical aspects.** The research was carried out following the Code of Academic Ethics, which underlines the basic principles of ethics of research, approved by the Resolution No. S-2018-4-4 of the Senate of 17 April 2018. The survey was anonymous. Before the survey, respondents were briefed on the purpose and process of the survey, and it was explained that the survey was confidential: no names were required, and the data would be presented in aggregate. Informed consent was obtained from the participants in the study. All respondents answered the questions individually, without signing their names, so that anonymity was maintained. The survey procedures were carried out in accordance with the Declaration of Helsinki. According to the procedure established by the legislation of the Republic of Lithuania and in accordance with the Code of Academic Ethics of the Senate of redacted, the research conducted by redacted did not require a separate decision of the Research Ethics Committee of redacted University Faculty of Medicine Institute of Health Sciences.

Results

**Characteristics of the subjects.** The majority of participants were women (n = 161; 96.99%) (Table 2).

Respondents were divided into age groups. The largest group was made up of nurses aged 21–30 years (n = 55; 33.13%), while the

Table 2. General characteristics of the subjects (n = 166)

| Features | Groups | Frequency (n) | Relative frequency (%) |
|---|---|---|---|
| Gender | female | 161 | **96.99** |
| | male | 5 | 3.01 |
| Age groups | 21–30 | 55 | 33.13 |
| | 31–40 | 48 | 28.92 |
| | 41–50 | 47 | 28.31 |
| | 51–60 | 16 | 9.64 |
| Education | professional (medical school) | 10 | 6.02 |
| | higher non-university education (college) | 71 | 42.77 |
| | university degree | 85 | **51.20** |
| Full-time workload | < 1 full-time equivalent | 4 | 2.41 |
| | 1 full-time equivalent | 48 | 28.92 |
| | > 1 full-time equivalent | 114 | **68.67** |
| | only on days | 12 | 7.23 |
| Daily working hours | only nights | 2 | 1.20 |
| | 24 hours shift | 62 | 37.35 |
| | Differently | 90 | **54.22** |

Source: own study based on research.

smallest group consisted of nurses aged 51–60 years (n = 16; 9.64%), with a mean age of 37,63 years. Half of the nurses had a university degree (n = 85; 51.20%). The assessment of the data on the workload of the respondents showed that 68,67% (n = 114) of the respondents have more than 1 full-time job, and that 54.22% (n = 90) of the respondents have a varied working day. The mean number of years of experience as a general nurse was 14.48 years and as an ICU nurse, 12,62 years.

**Assessing the job satisfaction of intensive care unit nurses.** The overall job satisfaction score was found to be 105.13 ± 15.83 on average, which means that the majority of nurses were moderately satisfied with their jobs. The lowest total score for overall job satisfaction was 62 and the highest was 149. The survey assessed seven separate aspects of job satisfaction. It was determined that the mean level of satisfaction with the nature of nurses' work was at a medium-high level (M = 17.81, SD = 3.3), whereas relations with coworkers (M = 16.99, SD = 3.4), communication (M = 16.92, SD = 3.7) and supervision (M = 16.74, SD = 4.0) were less than moderate. Aspects causing dissatisfaction with the job were pertaining to contingent rewards (M = 12.42, SD = 3.6), possibility of promotion (M = 12.37, SD = 4.0). The lowest level of job satisfaction for nurses resulted from the assessment of their salary (M = 11.88, SD = 3.7).

We analysed how job satisfaction depends on the nurses' age. We found that older respondents assessed relations with coworkers higher compared to younger respondents (p = 0.009). Nurses of all age groups had the lowest scores for pay (from 11.23 to 12.80), promotion opportunities (from 11.27 to 13.31), and contingent reward

Table 3. Assessment of job satisfaction aspects according to age groups, educational background and workload (n = 166)

| M±SD | | Pay | Promotion | Supervision | Contingent rewards | Coworkers | Nature of work | Communication |
|---|---|---|---|---|---|---|---|---|
| | | M±SD | M±SD | M±SD | M±SD | M±SD | M±SD | M±SD |
| Age groups | 21–30 | 12.80±3.83 | 11.27±3.77 | 16.22±4.12 | 12.75±3.65 | 15.76±3.12 | 17.58±3.18 | 16.49±3.44 |
| | 31–40 | 11.31±3.76 | 12.96±4.08 | 16.69±4.14 | 11.88±3.68 | 17.33±3.66 | 18.13±3.27 | 16.96±3.97 |
| | 41–50 | 11.23±3.7 | 12.74±4.24 | 17.30±4.25 | 11.91±3.41 | 17.64±3.34 | 17.83±3.46 | 17.17±4.17 |
| | 51–60 | 12.31±2.79 | 13.31±3.77 | 17.06±2.38 | 14.38±3.46 | 18.31±3.19 | 17.63±4.17 | 17.50±3.16 |
| | $p$ | 0.106 | 0.095 | 0.589 | 0.068 | **0.009** | 0.871 | 0.733 |
| Education | professional (medical school) | 11±3.43 | 14.40±3.43 | 15.70±3.91 | 13.50±2.79 | 17.20±3.85 | 16.80±2.57 | 14.80±3.52 |
| | Higher non-university education (college) | 11.97±4.01 | 12.14±3.95 | 16.11±4.18 | 12.17±3.74 | 16.52±3.35 | 17.90±3.26 | 16.52±3.99 |
| | university degree | 11.91±3.34 | 12.33±4.15 | 17.39±3.83 | 12.49±3.62 | 17.36±3.47 | 17.86±3.54 | 17.49±3.51 |
| | $p$ | 0.742 | 0.253 | 0.1 | 0.535 | 0.310 | 0.619 | **0.051** |
| Full-time workload | <1 full-time equivalent | 10.25±3.3 | 13.00±3.65 | 17.25±3.50 | 14.25±2.75 | 18.75±2.21 | 18.25±3.86 | 17.25±2.63 |
| | 1 full-time equivalent | 12.50±4.01 | 11.75±4.27 | 16.65±4.77 | 12.35±3.80 | 15.92±3.51 | 17.17±3.4 | 16.46±4.04 |
| | >1 full-time equivalent | 11.68±3.6 | 12.61±3.9 | 16.76±3.71 | 12.38±3.58 | 17.39±3.36 | 18.07±3.33 | 17.10±3.7 |
| | $p$ | 0.298 | 0.443 | 0.955 | 0.594 | **0.026** | 0.289 | 0.611 |

M – man; SD – Standard deviation
Source: own study based on research.

opportunities (from 11.88 to 14.38). Other aspects of job satisfaction were scored higher, but the mean scores were not statistically significantly different between age groups (p > 0.05) (Table 3).

We assessed the job satisfaction of nurses with different educational backgrounds. It was found that nurses with higher non-university and university education were not more satisfied with communication (p = 0.051) than those with professional education. There was no statistically significant difference in satisfaction with other aspects of work (p > 0.05). We also assessed whether job satisfaction depends on workload. The results revealed that those having less than one full-time job are statistically significantly more satisfied with their coworkers than those keeping more than one full-time job (p = 0.026). Those having less than 1 full-time job were more satisfied with promotion, supervision, contingent rewards, coworkers, nature of work, communication, and overall satisfaction, but their opinions were not statistically significantly different (p > 0.05).

We found a statistically significant very weak negative relationship between work experience and pay satisfaction ($r_s$ = −0.149; p = 0.05; Table 4).

We also found a statistically significant negative very weak correlation between work experience and satisfaction with salary ($r_s$ = −0,149; p = 0,05) and a positive weak correlation between work experience and satisfaction with coworkers ($r_s$ = −0.309; p = 0.005), as well as a very weak correlation between work experience and satisfaction with communication ($r_s$ = 0.151; p = 0.052). This suggests that nurses are less satisfied with their salary the longer they work, however with increasing work experience, they were more satisfied with coworkers and communication.

**Evaluation of proposals to improve nurses' work motivation.** Proposals to increase nurses' motivation were analysed and evaluated. As a result of the large number of suggestions made by the respondents, similar responses were grouped together, and the frequency of repetition was calculated and presented in Table 5.

Nurses would prefer to get an increase in their salary; to be respected and appreciated by doctors; to have their employer organize training or refresher courses; to have an even distribution of workload and flexible working hours; to have a better psychological and emotional working environment; and to receive more praise from their manager for a job well done. The least important are additional benefits at work, such as extended holidays or free parking.

Table 4. Assessment of job satisfaction aspects and work experience in anaesthesia and intensive care units (n = 166)

| Job satisfaction aspects | Work experience in anaesthesia and intensive care unit | |
|---|---|---|
| | $r_s$ | p |
| Pay | **−0.149** | **0.05** |
| Promotion | 0.090 | 0.249 |
| Supervision | 0.082 | 0.293 |
| Contingent rewards | 0.023 | 0.769 |
| Coworkers | **0.309** | **0.005** |
| Nature of work | 0.045 | 0.565 |
| Communication | **0.151** | **0.052** |
| **Total** | 0.143 | 0.065 |

Source: own study based on research.

Table 5. Suggestions made by respondents to improve work motivation

| Aspect | Proposal | Frequency of recurrence (n) |
|---|---|---|
| Salary | Salary rise | **29** |
| | Awards | 6 |
| | Opportunities for additional work | 1 |
| | Salary increase with increasing seniority | 1 |
| | Pay and workload equivalence | 1 |
| Training | Organised learning and development courses | **8** |
| | Enhancement of career opportunities | 2 |
| | Expansion of job opportunities and competences in line with education | 1 |
| | Enhancement of nurses' medical knowledge | 1 |
| | Encouragement for participation in scientific activities | 1 |
| | Organised placements in medical institutions in other countries | 1 |
| Expectations from supervisor | Recognition for a job well done | **4** |
| | Equal behavior with all medical workers | 3 |
| | Rotation of management staff | 1 |
| Additional benefits | Extension of holidays | 1 |
| | Provided free parking | 1 |
| | Pay for travel to work | 1 |
| Working conditions | Observance of work and rest regime | 1 |
| | Equitable distribution of workload | **7** |
| | Psychological and emotional improvement of the working environment | **7** |
| | Establishment of a workload of no more than 1 full-time equivalent | 6 |
| | Flexible working hours | 5 |
| | Provision of working facilities | 3 |
| Relations with doctors | Evaluation of nurses and the work they do | **15** |
| | Doctors' respect for nurses | **12** |
| | Increase in nurses' personal responsibility in decision-making | 6 |
| | Change in attitudes towards nurses (recognition of the profession) | 5 |
| | Promotion of teamwork | 3 |
| | Resolution of conflicts and mistakes rather than blame | 1 |
| | Avoidance of gossip | 1 |
| | Organised shared leisure time with colleagues | 1 |

Source: own study based on research.

## Discussion

In our study, the majority of participants were women (96.99%). These findings are similar to other studies. In the study by Lu *et al.* (2015), 856 nurses participated, 99.4% of whom were women. Mousazadeh et al (2018) conducted a study involving 124 critical care nurses. Just under three quarters (71%) of the participants were women. The participants ranged in age from 20 to 50 years. In addition, 33.9% of the participants belonged to the age group 26–30 years (Mousazadeh *et al.*, 2018). In our study, a third of the subjects (33.13%) were aged between 21 and 30 years. In addition, 102 health professionals – i.e., nurses, physicians, and clinical secretaries – took part in the Portuguese study (Pereira *et al.*, 2017). The majority (70.3%) of the participants were women. They ranged in age from 27 to 61 years, with a mean age of 43.45 years (SD = 9.47). The mean age of our subjects (37.63 years) was also very similar to that of the participants in this study.

Job satisfaction is an important nursing outcome that is influenced by the work environment (Boamah *et al.*, 2018). Aiken et al (2013) conducted a study in twelve European countries: Belgium, England, Finland, Germany, Greece, Ireland, the Netherlands, Norway, Poland, Spain, Sweden, and Switzerland. A total of 33 659 hospital, medical and surgical nurses participated in this study. The study found that in most countries, more than one in five nurses (11–56%) were dissatisfied with their job; with dissatisfaction related to wages, educational opportunities, and opportunities for advancement. A significant proportion (19–49%) of nurses intended to leave their job, although those who thought it would be easy to find another job varied considerably among countries (16–77%). Moreover, in a 2015 study in China, just under half (44.4%) of nurses reported feeling satisfied with their job (Lu *et al.*, 2015). Job satisfaction is related to job role, occupation, and teamwork. This finding is supported by a study conducted by E.A. Burmeister *et al.* (2019) in seven countries: Australia, Iceland, Italy, South Korea, Lebanon, Turkey, USA. A total of 6212 registered nurses participated in the study. The percentages of all nurses who

responded 'satisfied' and 'very satisfied' with their current position, occupation, and teamwork were 69%, 78%, and 72%, respectively. Registered nurses in Iceland (87%), Australia (82%), and the USA (78%) reported to be the most satisfied with their current position, while those in Turkey (36%) and South Korea (31%) reported to be the least satisfied. Our study also revealed that the quality of their work, communication, relation with colleagues, and attitude towards supervision are caused by nurses' job satisfaction. In addition, our results showed that those having less than one full-time job were statistically significantly more satisfied with their relationship with colleagues than those doing more than one full-time job. It was also found that the older respondents valued teamwork more than the younger ones. A study in Portugal also confirmed our findings that health professionals were most satisfied with the nature of the work, relations with coworkers and communication, and most dissatisfied with pay (Pereira *et al.*, 2017). In Serbia, a study involving 1337 nurses was conducted in 2014. Factor analysis identified three factors with varimax rotation: leadership role expectations, nurses' external job satisfaction, and internal job satisfaction. However, this factor also reflected dissatisfaction with pay. The other factor, intrinsic job satisfaction, reflects the nurse's personal job satisfaction (Veličković *et al.*, 2014). In addition, data from a survey conducted in Lithuania (2014) showed that nurses' overall job satisfaction was average (Ožeraitienė *et al.*, 2014). The results of our study showed that the respondents' overall job satisfaction was also moderate, as reported by other researchers.

Motivation is one of the most important factors in job satisfaction. A study conducted in Greece in years 2009–2010 found that achievement is the most important motivation for work. Job satisfaction, job type, and age of the subjects were statistically significantly related to motivational factors. Therefore, the ever-changing health sector requires human resources and workplace planning in healthcare to promote nurses' performance and job satisfaction and to improve the quality of services (Gaki *et al.*, 2013). Our study results showed that the longer the nurses' work experience, the less satisfied they

are with their salary, but with increasing work experience they are more satisfied with their colleagues and communication. Study of Makowicz *et al.* showed that the level of satisfaction with nurse professional work decreased as the age of respondents increased. One of the factors contributing to this situation was the COVID-19 pandemic (Makowicz *et al.*, 2022).

In addition, a study conducted in Lithuanian nursing hospitals showed that work motivation is positively influenced by the opportunity to improve sufficient nursing resources and good team relations, while negatively influenced by remuneration, high workload, negative emotions associated with deaths of the patients, job dissatisfaction, grief, and reduced efficiency of services (Žalaitė *et al.*, 2019). Besides, another study conducted in Poland and Lithuania showed that low job satisfaction was associated with low remuneration, which is still inadequate for professional duties (Kwiecień-Jaguś *et al.*, 2018). Improving the working conditions of nurses is essential in terms of workload, organisational structure, roles and responsibilities, appropriate remuneration, improving staff health, and teamwork.

Liu *et al.* (2015) argue that organisations should create a supportive work environment in order to increase nurses' motivation and job satisfaction, because if an employee's efforts go unnoticed, they will experience job dissatisfaction. The most important things that our subjects would like to see were an increase in their salary; respect and appreciation shown by their doctors; training or refresher courses organised by their employers; even distribution of workload and flexible work schedules; psychological and emotional improvement of the working environment; and more frequent praise from their managers for a job well done. It is important for managers to pay attention to their employees, their expectations, and job satisfaction, to ensure and create a positive work atmosphere and to retain good professionals (Kudo *et al.*, 2010). Managing a healthcare facility based on the management principles, knowing nurses' views on the determinants of work motivation would help to motivate staff more effectively and increase job satisfaction, which would lead to quality patient-centred healthcare services. Motivational tools should form a unified individual system for each organisation, depending on the organisation's vision, goals, and culture (Viningienė, 2012).

This study has limitations. One limitation of this research might be that the survey was conducted online, the second limitation was lack of distinction between city and rural hospitals, and that most nurses were of younger age. The results presented above show the need for further research in future.

## Conclusions

1. Nurses' overall job satisfaction was average. Job satisfaction depends on the nature of the job and the relationship with coworkers. Coworkers and communication with coworkers were better appreciated by older, more educated employee that has less than one full-time. Nurses' satisfaction with their pay decreased with increasing work experience.

2. The most common causes of job dissatisfaction were lack of appreciation of nurses' work, pay, negative emotions at work, and lack of incentives. Nurses would most like to see a pay rise, to be respected and appreciated by doctors, and to receive training or refresher courses from their employer. Nurses also wanted an even distribution of workload and flexible working hours, a psychological and emotional improvement of the working environment, and more frequent praise from their manager for a job well done. Knowing the factors determining the job satisfaction of nurses can help to motivate staff. The greatest advantages of the study are the practical recommendations for employers to increase nurses' job satisfaction.

## References

Aiken L.H., Sloane D.M., Bruyneel L., Van den Heede K., Sermeus W., RN4CAST Consortium. (2013). Nurses' reports of working conditions and hospital quality of care in 12 countries in Europe. *International Journal of Nursing Studies*, 50(2), 143–153, https://doi.org/10.1016/j.ijnurstu.2012.11.009.

Atefi N., Abdullah K.L., Wong L.P., Mazlom R. (2014). Factors influencing registered nurses

perception of their overall job satisfaction: A qualitative study. *International Nursing Review*, 61(3), 352–360, https://doi.org/10.1111/inr.12112.

Boamah S.A., Spence Laschinger H.K., Wong C., Clarke S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. *Nursing Outlook*, 66(2), 180–189, https://doi.org/10.1016/j.outlook.2017.10.004.

Burmeister E.A., Kalisch B.J., Xie B., Doumit M.A.A., Lee E., Ferraresion A., Terzioglu F., Bragadóttir H. (2019). Determinants of nurse absenteeism and intent to leave: An international study. *Journal of Nursing Management*, 27(1), 143–153, https://doi.org/10.1111/jonm.12659.

De Los Santos J.A.A., Labrague L.J. (2021). Job engagement and satisfaction are associated with nurse caring behaviours: A cross-sectional study. *Journal of Nursing Management*, 29(7), 2234–2242, https://doi.org/10.1111/jonm.13384.

Dutra C.K.D.R., Guirardello E.B. (2021). Nurse work environment and its impact on reasons for missed care, safety climate, and job satisfaction: A cross-sectional study. *Journal of Advanced Nursing*, 77(5), 2398–2406, https://doi.org/10.1111/jan.14764.

Dywili S., Bonner A., O'Brien L. (2013). Why do nurses migrate? A review of recent literature. *Journal of Nursing Management*, 21(3), 511–520, https://doi.org/10.1111/j.1365-2834.2011.01318.x.

Gaki E., Kontodimopoulos N., Niakas D. (2013). Investigating demographic, work-related and job satisfaction variables as predictors of motivation in Greek nurses. *Journal of Nursing Management*, 21(3), 483–490, https://doi.org/10.1111/j.1365-2834.2012.01413.x

Gostautaite B., Buciuniene I., Milasauskiene Z., Bareikis K., Bertasiute E., Mikelioniene G. (2018). Migration intentions of Lithuanian physicians, nurses, residents and medical students. *Health Policy*, 122, 1126–1131, https://doi.org/10.1016/j.healthpol.2018.07.001.

Gustainienė L., Liesienė J., Kern R. (2009). *Pasitenkinimo darbu klausimynas*, https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fpaulspector.com%2Fassessment-files%2Fjss%2Fjss-lithuanian-caponnetto.doc&wdOrigin=BROWSELINK (accessed: 28.09.2024).

Hayes B., Bonner A., Pryor J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: A review of recent literature. *Journal of Nursing Management*, 18(7), 804–814, https://doi.org/10.1111/j.1365-2834.2010.01131.x.

Job Satisfaction Survey, https://paulspector.com/assessments/pauls-no-cost-assessments/job-satisfaction-survey-jss/ (accessed: 28.09.2024).

Klimas A. (2012). *Kūrybinio klimato, darbuotojų kūrybingumo bei darbo motyvacijos ryšys su pasitenkinimu darbu* [master thesis]. Kaunas: Vytautas Magnus University.

Kudo Y., Kido S., Shahzad M.T., Shida K., Satoh T., Aizawa Y. (2010). Enhancing work motivation for Japanese female nurses in small to medium-sized private hospitals by analyzing job satisfaction. *The Tohoku Journal of Experimental Medicine*, 220(3), 237–245, https://doi.org/10.1620/tjem.220.237.

Kwiecień-Jaguś K., Mędrzycka-Dąbrowska W., Chamienia A., Kielaite V. (2018). Stress factors vs. job satisfaction among nursing staff in the Pomeranian Province (Poland) and the Vilnius Region (Lithuania). *Annals of Agricultural and Environmental Medicine: AAEM*, 25(4), 616–624, https://doi.org/10.26444/aaem/75801.

Liu J., Liu Y.H. (2016). Perceived organizational support and intention to remain: The mediating roles of career success and self-esteem. *International Journal of Nursing Practice*, 22(2), 205–214. https://doi.org/10.1111/ijn.12416.

Liu J., Zheng J., Liu K., Liu X., Wu Y., Wang J., You L. (2019). Workplace violence against nurses, job satisfaction, burnout, and patient safety in Chinese hospitals. *Nursing Outlook*, 67(5), 558–566, https://doi.org/10.1016/j.outlook.2019.04.006.

Lu M., Ruan H., Xing W., Hu Y. (2015). Nurse burnout in China: A questionnaire survey on staffing, job satisfaction, and quality of care. *Journal of Nursing Management*, 23(4), 440–447, https://doi.org/10.1111/jonm.12150.

Makowicz D., Lisowicz K., Bryniarski K., Dziubaszewska R., Makowicz N., Dobrowolska B. (2022). The impact of the COVID-19 pandemic on job satisfaction among professionally active nurses in five European countries. *Frontiers in Public Health*, 10, 1006049, https://doi.org/10.3389/fpubh.2022.1006049.

Mikaliūkštienė A., Nalivaikienė R. (2012). Employment opportunities for graduate nurses from 4 Vilnius hospitals. *Nursing Education, Research and Practice*, 2, 74–8.

Mousazadeh S., Yektatalab S., Momennasab M., Parvizy S. (2018). Job satisfaction and related factors among Iranian intensive care unit nurses. *BMC Research Notes*, 11(1), 823, https://doi.org/10.1186/s13104-018-3913-5.

Myhren H., Ekeberg O., Stokland O. (2013). Job satisfaction and burnout among intensive care unit nurses and physicians. *Critical Care Research and Practice*, 2013, 786176, https://doi.org/10.1155/2013/7861.

Ožeraitienė V., Gaigalaitė V., Arnatkevič J. (2014). Profesinės veiklos vidinės motyvacijos ir pasitenkinimo darbu charakteristikų tyrimas. *Medicinos Teorija ir Praktika*, 20(4), 292–298.

Pereira I., Veloso A., Silva I.S., Costa P. (2017). Compromisso organizacional e satisfação laboral: Um estudo exploratório em unidades de saúde familiar portuguesas. *Cad Saude Publica*, 33(4), e00153914, https://doi.org/10.1590/0102-311X00153914.

Plevová I., Zeleníková R., Jarošová D., Janíková E. (2021). The relationship between nurse's job satisfaction and missed nursing care. *Medycyna Pracy*, 72(3), 231–237, https://doi.org/10.13075/mp.5893.01035.

Veličković V.M., Višnjić A., Jović S., Radulović O., Šargić Č., Mihajlović J., Mladenović J. (2014). Organizational commitment and job satisfaction among nurses in Serbia: a factor analysis. *Nursing Outlook*, 62(6), 415–427, https://doi.org/10.1016/j.outlook.2014.05.003.

Vermeir P., Degroote S., Vandijck D., Mariman A., Deveugele M., Peleman R., Verhaeghe R., Cambré B., Vogelaers D. (2017). Job satisfaction in relation to communication in health care among nurses: A narrative review and practical recommendations. *SAGE Open*, 7(2), https://doi.org/10.1177/2158244017711486.

Viningienė D. (2012). Darbuotojų darbo motyvacijos ir pasitenkinimo darbu sąsajos. *Regional Formation & Development Studies*, 6,161–170, https://doi.org/10.15181/rfds.v6i1.2339.

Waltz L.A., Muñoz L., Weber Johnson H., Rodriguez T. (2020). Exploring job satisfaction and workplace engagement in millennial nurses. *Journal of Nursing Management*, 28(3), 673–681, https://doi.org/10.1111/jonm.12981.

World Health Organization. (2017). *Patient Safety: Making Health Care Safer*. Geneva: World Health Organization.

Žalaitė G., Afanasjeva B., Girban B. (2019). Nurses motivation for work in hospice. *Journal of Medical Sciences*; 7(11), 1–9.