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# Job satisfaction of healthcare professionals in palliative care departments and factors affecting job satisfaction during the COVID-19 pandemic

Zadovoljstvo poslom zdravstvenih radnika na odeljenjima palijativnog zbrinjavanja i faktori koji utiču na zadovoljstvo poslom tokom pandemije COVID-19

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# Abstract

Background/Aim. The COVID-19 pandemic had a significant impact on the healthcare system, particularly healthcare providers such as nurses/medical technicians, who were obliged to adhere to strict procedures and manage their time effectively during shifts. The aim of this study was to identify internal strengths, weaknesses, threats, and challenges in palliative care management during the COVID-19 pandemic from the perspective of nurses/medical technicians. Methods. A cross-sectional study was conducted on a 100% sample of nurses/medical technicians working in hospital-based palliative care in two clinics in Belgrade (47 respondents in total). The research instrument was a Questionnaire on Employee Satisfaction. The survey was conducted during September and October 2022. Results. Assessing the job satisfaction of nurses/ medical technicians revealed moderate job satisfaction (3.43), which was mostly influenced appropriate financial compensation the by and

# Apstrakt

Uvod/Cilj. Pandemija COVID-19 je značajno uticala na zdravstveni sistem, posebno na pružaoce zdravstvenih

implementation of measures to prevent and control the spread of the COVID-19 infection. The dimensions of management that were significantly related to respondents' satisfaction were motivation and adequacy of hygienic conditions and measures to control COVID-19 ( $\gamma^2 = 62.83$ , p = 0.004 and  $\chi^2 = 36.42$ , p = 0.006, respectively). Conclusion. Nurses/medical technicians who experience stress at work in regular conditions tend to react the same way in different conditions, such as those related to COVID-19 infection. The most difficult challenge that the management faces is the recognition of the importance of the work of nurses/medical technicians by the community. Therefore, it is vital to respect and support the most important professional values of nurses/medical technicians, such as valuable achievements, the importance of professional challenges, personal growth and development, and independence in practice.

# Key words:

# covid-19; job satisfaction; nurses; palliative care.

usluga kao što su medicinske sestre/medicinski tehničari, koji su morali da se pridržavaju strogih procedura i efikasno upravljaju svojim vremenom tokom smena. Cilj rada bio je da se iz perspektive medicinskih sestara/tehničara

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identifikuju unutrašnje snage, slabosti, pretnje i izazovi u upravljanju palijativnim zbrinjavanjem tokom pandemije COVID-19. Metode. Studija preseka sprovedena je na 100% uzorku medicinskih sestara/tehničara koji rade na bolničkom palijativnom zbrinjavanju u dva kliničko bolnička centra u Beogradu (ukupno 47 ispitanika). Instrument istraživanja bio je Upitnik o zadovoljstvu zaposlenih. Anketiranje je sprovedeno tokom septembra i oktobra 2022. godine. Rezultati. Procena zadovoljstva poslom medicinskih sestara/tehničara pokazala je umereno zadovoljstvo poslom (3,43), na koje je najviše uticala odgovarajuća finansijska nadoknada za rad i sprovođenje odgovarajuih mera za sprečavanje i kontrolu širenja COVID-19 infekcije. Dimenzije menadžmenta koje su bile u značajnoj vezi sa zadovoljstvom ispitanika su motivacija i adekvatnost higijenskih uslova i mera za kontrolu COVID- 19 infekcije ( $\chi^2 = 62,83$ , p = 0,004 i  $\chi^2 = 36,42$ , p = 0,006, redom). **Zaključak.** Medicinske sestre/tehničari koji doživljavaju stres na poslu u redovnim uslovima imaju tendenciju da reaguju na isti način u različitim uslovima, kao što su i oni povezani sa infekcijom COVID-19. Najteži izazov sa kojim se menadžment suočava je prepoznavanje važnosti posla medicinskih sestara/tehničara od strane društvene zajednice. Zbog toga je važno poštovati i podržavati najvažnije profesionalne vrednosti medicinskih sestara/tehničara, kao što su vredna dostignuća, važnost profesionalnog izazova, lični rast i razvoj i samostalnost u praksi.

#### Ključne reči:

covid-19; posao, zadovoljstvo; medicinski tehničari; nega, terminalna.

## Introduction

Job satisfaction is an emotional reaction to the work performed by a person <sup>1</sup>. It is influenced by economic and sociological categories and indicators of employee motivation and the work environment<sup>2</sup>. Determining job satisfaction is significant because it can predict employees' future behavior <sup>3</sup>. The work environment in healthcare institutions is a complex, multifactorial phenomenon that directly affects the quality of healthcare services for providers and recipients <sup>4</sup>. Burnout is a common problem among healthcare professionals in the healthcare sector. High levels of job demands, long working hours, low levels of job control, and poor work-life balance are some of the factors that contribute to burnout in healthcare settings <sup>5</sup>. The coronavirus disease 2019 (COVID-19) pandemic has highlighted that the lack of resources, motivation, work organization, job satisfaction, and the presence of stress and work challenges affect healthcare workers, especially nurses, who are at risk of burnout and have a higher intention to leave the health sector <sup>6–8</sup>. During the COVID-19 pandemic, healthcare units have faced additional challenges, such as shortages of personal protective equipment, increased workload due to a higher number of patients, and fear of infection <sup>9</sup>. The pandemic has emphasized the essential role that nurses play by exposing themselves to COVID-19 patients <sup>5</sup>. Palliative care is a demanding and emotionally challenging field, that requires nurses to work with patients who are seriously ill and often nearing the end of their lives; this position has been found to affect job satisfaction <sup>10</sup>.

Palliative care is a human right that all geriatric and oncology patients in the terminal stages of the disease should have in order to reduce their suffering and preserve their dignity.

To ensure the continuity of care, case management in palliative wards has been developed for patients with complex care requirements as an integrative part of palliative care. It consists of the assessment, planning, implementation, coordination, monitoring, and evaluation of health services and has been used for many years in psychiatry and geriatrics <sup>11</sup>. There are different research results on its

effectiveness, models, and variations in case management <sup>12</sup>. However, it is difficult to compare studies due to different research methods and outcomes and unclear descriptions of case management <sup>13–15</sup>. Therefore, it is essential to study hospital-based palliative care management during the COVID-19 pandemic, especially for nurses who are exposed to time and obligatory procedures during their shifts.

The aim of this study was to assess the job satisfaction of nurses and medical technicians in palliative care departments during the COVID-19 pandemic and identify organizational factors that affect job satisfaction.

#### Methods

# Study and sample type

A descriptive cross-sectional study was conducted on a sample of 47 nurses and medical technicians working in the COVID-19 zone of hospital-based palliative care at two clinics in Belgrade, Serbia: Department of Oncology of the Clinical Hospital Center Zemun (with 30 respondents) and Department of Geriatrics of the Clinical Hospital Center Zvezdara (with 17 respondents). Of the 47 nurses and medical technicians who participated in the study, seven were men and 40 were women. All (n = 47) employed nurses and medical technicians completed the questionnaire, resulting in a response rate of 100%. There were 16 nurses and medical technicians under the age of 34, 25 were aged from 35 to 54, and six were over 55. Nine respondents performed some managerial functions. Most (n = 35) of the nurses and medical technicians in this study did not have other jobs, while a minority (n = 2) worked in teaching, private practice (n = 4), and other sectors (n = 6).

#### Research instrument

A questionnaire on employee satisfaction, which is unique for all primary, secondary, and tertiary healthcare institutions in the Republic of Serbia, was used as a means of data collection in this study. The questionnaire consists of 24 questions classified into four thematic units. The first group of questions (twelve questions) is related to the assessment of management in palliative care units from the aspect of resources (equipment, workspace, communication), motivation, and work organization. The respondents were asked to mark their answers on a 5-point scale ranging from 1 ("very bad") to 5 ("excellent").

The second group of questions (six questions) is related to work in the COVID-19 zone in terms of the presence of stress, work challenges, and job satisfaction. The respondents were asked to mark their answers on two 5-point scales ranging from 1 ("not at all" for questions thirteen and fourteen, and "very dissatisfied" for question eighteen) to 5 ("very much" and "very satisfied").

The third group of questions (five questions) defines the demographic and professional characteristics of the respondents. The last question in the fourth category of questions is open-ended in terms of respondents' comments and suggestions for improving the quality of work and employee satisfaction.

The questionnaire was standardized, validated, and approved by the Institute of Public Health of Serbia "Dr. Milan Jovanović Batut" and the Ministry of Health of the Republic of Serbia. It has been in use for ten years and was distributed in Serbian, supplemented by questions related to the COVID-19 pandemic, which began in March 2020<sup>16</sup>.

The survey was carried out during September and October 2022. It was conducted individually with each respondent according to ethical standards and principles by the researchers. Before the start of the research, approval was obtained from the Ethical Committees of the Clinical Hospital Center Zvezdara, Belgrade (No. IRB00009457, from October 5, 2022) and the Clinical Hospital Center Zemun, Belgrade (No. 151/1, from September 27, 2022), where the research was carried out. Informed consent was obtained from all subjects involved in the study.

During the first wave of the COVID-19 pandemic, there was not enough room for all patients who needed palliative care in the special departments of some of the Clinical Centers and Hospital Centers in Belgrade. At the time of the survey, Serbia was facing the seventh pandemic wave, with over 1,300 new cases a day <sup>17</sup>, and the conditions all over the country significantly improved.

## Sample of variables

The main variables of the research were extracted from the questionnaire on employee satisfaction and related to specific aspects (dimensions) of management in palliative care units. Several questions from the questionnaire were combined to form a total of five aspects of management, which are listed below: 1) Resources - It is vital to provide adequate resources, including necessary equipment and sufficient space, as well as available time for work. 2) Motivation - If we focus on motivation, it is essential to enhance motivation through promoting autonomy in work, acknowledging the value of work by superiors, providing opportunities for professional development and education, and finally ensuring appropriate financial compensation. 3) Communication - Considerable time and effort should be devoted to improving communication and cooperation among colleagues and with patients. 4) COVID-19 - It is recommended to maintain adequate hygienic conditions for work by implementing measures to prevent nosocomial infections and control the COVID-19 infection. 5) Management - The significant element is to optimize the organization of work in the palliative care unit.

## Statistical analysis

The database was created using Excel, and the statistical processing was done using the PSPP program (an open-source SPSS clone). The sample size was determined using the "pwr.chisq.test" function from the R statistical package, using common values for the significance level (0.05) and power of the test (0.80). The minimum sample size obtained by this method was n = 45. Descriptive statistics methods were used to process the data, and the Chi-square ( $\chi^2$ ) test was used to test the significance of the hypotheses, along with the contingency coefficient to measure the strength of the relationship. A *p*-value < 0.05 was considered statistically significant. The reliability of the questionnaire was evaluated using the Cronbach's alpha method.

#### Results

The attitudes of respondents towards different aspects of management in palliative care units (Table 1) show that

#### Table 1

Respondents' attitudes on different aspects of management in palliative care units during the COVID-19 pandemic
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Dimensions of menocoment	Measures of description			
Dimensions of management —	mean $\pm$ SD	med	mod	
Provision of resources (equipment for work; adequate space for work; available time for work)	$3.55\pm0.85$	4.00	4	
Motivation (autonomy in work; appreciation of work by superiors; opportunity for professional development and education; financial compensation)	$3.55\pm0.85$	3.75	4	
Communication and cooperation (with colleagues and with patients)	$4.03 \pm 0.72$	4.00	4	
Maintaining adequate hygienic conditions for work in accordance with measures to prevent nosocomial infections and implementing adequate measures to prevent and control the COVID-19 infection	$3.80\pm0.84$	4.00	4	
Management and organization of work	$3.74 \pm 1.03$	4.00	4	

COVID-19 - coronavirus disease 2019; SD - standard deviation; med - median; mod - most frequently occurring value.

Sinanović Š, et al. Vojnosanit Pregl 2024; 81(2): 81-88.

they value communication with their colleagues and cooperation with patients the most (mean 4.03). They also value other aspects of management almost equally, including the provision of resources, motivation, maintaining adequate hygienic conditions to prevent and control COVID-19 infection, and organization of work.

Of the individual variables, financial compensation for work received the lowest rating from respondents, with an average rating of 2.76.

The biggest challenges in the work of nurses and medical technicians during the COVID-19 pandemic (Table 2) were exhaustion due to workload and working while using protective equipment.

Slightly less than half (n = 21; 44.7%) of the respondents claimed they experienced only one of the offered challenges at work. It was observed that 25 (53.2%) respondents declared that they faced more challenges at work. Eight (17%) respondents faced two challenges, nine (19.1%) respondents faced three challenges, five (10%) respondents faced four challenges, while two (4.3%) respondents indicated all seven challenges. Only one (2.1%) respondent did not experience any challenges at work during the COVID-19 pandemic.

Interestingly, nurses and medical technicians from palliative care units who worked in the COVID-19 zone did not report more stress, pressure, and tension (mean 3.57) than while working under regular working conditions (mean 3.6). Specifically, nurses and medical technicians who feel greater tension, stress, or pressure in regular working conditions had the same experience and reaction mechanism while working in the COVID-19 pandemic conditions, and this relationship is statistically significant ( $\chi^2 = 60.89$ ; p = 0.000).

Moreover, stress, pressure, and tension under regular and COVID-19 pandemic conditions have a high established reliability of over 0.7 (0.804). The average value of the self-assessment of overall job satisfaction of the nurses and medical technicians in this research is 3.43 out of a maximum of 5, where a score of 5 indicates the highest possible job satisfaction and a score of 1 indicates the lowest possible job satisfaction. More than half (57.4%) of the respondents rated their job satisfaction as 3, and no respondents gave a rating of 1. About 4.3% gave a rating of 2, 29.8% of respondents gave a rating of 4, and 8.5% gave a rating of 5.

Finally, in terms of descriptive statistics, 19 (40.4%) respondents considered changing jobs in the next five years, while five (10.6%) considered moving to the private sector. Seven (14.9%) had plans to work outside of the healthcare sector in the next five years, while eight (17%) respondents had plans to work abroad.

Should we consider management in palliative care units as a whole (the sum of all 12 indicators), there is no statistically significant relationship between management and overall job satisfaction ( $\chi^2 = 96.92$ ; df = 78; p = 0.072).

Regarding the relationships presented in Table 3, the motivation of respondents is most closely related to job satisfaction, followed by maintaining hygienic conditions and implementing adequate measures to prevent and control the spread of the COVID-19 infection ( $\chi^2 = 62.83$ , p = 0.004 and  $\chi^2 = 36.42$ , p = 0.006, respectively). There is a significant relationship between job satisfaction and the provision of resources in a healthcare facility ( $\chi^2 = 40.96$ ; p = 0.042). However, cooperation with colleagues and relationships with patients, as well as the organization of work in the institution, did not have statistically significant values (Table 3).

If we observe the relationship between each item and job satisfaction, we can see that there is a statistically significant relationship with financial compensation ( $\chi^2 = 38.33$ ; p = 0.000), followed by the implementation of adequate measures against COVID-19 ( $\chi^2 = 23.98$ ; p = 0.004).

#### Table 2

The biggest challenges in the work of nurses and medical technicians from palliative care units during the COVID-19 pandemic

Challenges et work	Frequency distribution			
Challenges at work	1 1	rank order		
Work under totally new conditions	20 (42.5)	3		
Exhaustion due to workload	23 (48.9)	1		
Exhaustion due to work under protective equipment	21 (44.7)	2		
Availability of protective equipment	5 (10.6)	7		
Availability of information	14 (29.8)	4		
Uncertainty and fear of infection	12 (25.5)	5		
Dealing with patient experience	8 (17.0)	6		

COVID-19 - coronavirus disease 2019.

# Table 3

The significance of the relationship between different aspects of management in palliative care units during the COVID-19 pandemic and the job satisfaction of respondents

Parameter	Management									
	resources		motivation		communication		COVID-19		management	
Complete	$\chi^2 = 40.96$	df = 27	$\chi^2 = 62.83$	df = 36	$\chi^2 = 28.67$	df = 18	$\chi^2 = 36.42$	df = 18	$\chi^2 = 16.75$	df = 12
satisfaction at work	p = 0.042	CC = 0.68	p = 0.004	CC = 0.76	p = 0.053	CC = 0.62	p = 0.006	CC = 0.66	<i>p</i> = 0.159	CC = 0.51

COVID-19 – coronavirus disease 2019; df – degree of freedom; CC – correlation coefficient; p < 0.05 is considered statistically significant.

A small number of respondents made remarks and suggestions for improving the quality of work and the satisfaction of nurses and medical technicians working in palliative care units. They requested a salary increase (two respondents), proposed achieving better communication between health workers (one respondent), and requested the provision of new beds in palliative care units (one respondent).

#### Discussion

One of the most important goals of management is to create a positive and stimulating psychosocial climate in the institution so that employees perform their jobs willingly, gladly, readily, and with quality. Indicators of an inadequate psychosocial work environment include poor financial status of employees, inadequate safety at work, inadequate communication at the workplace, poor working conditions, heavy physical and mental strain, the existence of psychosomatic illnesses among employees, and frequent absences from work <sup>18, 19</sup>.

Factors that positively affect the psychosocial aspects of work in any health institution are adequate work requirements, a reliable and fair work environment, trust in colleagues and managers, the perception of justice, respect and social inclusion, and validation of the importance of the nurse's work <sup>20, 21</sup>.

Our experience during the COVID-19 pandemic suggests that nurses and medical technicians in the palliative care unit value adequate communication with their colleagues and good cooperation with patients the most, indicating that they are satisfied with the nature of the work they do.

However, for their job satisfaction, the provision of resources in the health institution (extrinsic factors) <sup>22</sup>, the implementation of adequate measures against COVID-19, and appropriate financial compensation are much more important, which is consistent with other research <sup>23–27</sup>.

Nurses are dissatisfied with their income, which is crucial for their existence and is also a way of recognizing their investment in the work they perform <sup>28</sup>, especially under conditions of increased stress. This is the opinion of nurses from most European countries, except Finland and the Netherlands. Nurses from Poland and Slovakia are particularly dissatisfied because their salaries cannot cover the basic costs of living <sup>24</sup>.

Salaries greatly influence job satisfaction, and dissatisfaction may lead to increased turnover and even leaving the profession. The lowest scores of the respondents are in the domains of salary and working conditions. About 60% of respondents want to change jobs, while about 55% indicate that they experience more than one challenge in their daily work. This data is worrying, considering that many studies indicate a direct positive relationship between nurse work satisfaction and patient health outcomes <sup>29–32</sup>.

Research conducted in Jordan discovered that nurses are mostly (67.4%) dissatisfied with their salary and the negative perception of nurses in society (62.2%). They are moderately satisfied with their work (average score around 3 out of a possible 5), while around 23.3% of respondents want to leave their workplace in the next year, and 18.1% are neutral on this issue <sup>30</sup>. However, as in our research, there was no statistical significance between the mentioned variables; if there was, it was quite weak. There is only a significant negative correlation between job satisfaction and salary and the intention to leave the workplace <sup>30</sup>, while in our research, this correlation does not exist.

Research in Egypt indicated that the most significant stressor for nurses during the COVID-19 pandemic was the work environment and, above all, overtime work, frequent night shifts, unsuitable work, and rest regimes. Furthermore, nurses did not have enough time to spend with their families and loved ones <sup>33</sup>.

About 40% of respondents in this study were completely or mostly satisfied with their jobs, but two-thirds considered changing their jobs. In a survey in Croatia, approximately 65% of nurses were completely or mostly satisfied with their job, and around 68% considered changing their job <sup>34</sup>. Other studies confirm this disparity. Although about 73% of nurses were satisfied with their current job and workplace, and about 82–88% with their profession, 48% of them intended to go to another workplace within the same profession field, while about 41% of respondents considered leaving the profession entirely <sup>35</sup>.

Job satisfaction is partially related to the psychological characteristics of personality and engagement at work <sup>36</sup>. Nurses specializing in some type of healthcare, such as palliative care, show higher levels of job satisfaction and work engagement than general nurses because of their extensive work experiences, career identity, stronger feelings of responsibility, clear job descriptions, and a sense of mission in their work <sup>36</sup>.

As far as psychological personality characteristics are concerned, nurse specialists have developed the following dimensions of psychological capital: self-efficacy, hope, resilience, and optimism <sup>33, 36</sup>. All of these personality traits are essential for the appropriate adaptation to new conditions of life and work, particularly for controlling emotions in the case of working under pressure and improving the ability to achieve work goals.

Additionally, high levels of job satisfaction and increased engagement at work have been shown by nurses who work in healthcare institutions with the following characteristics: clear rules and a proactive strategy, consistency in decision-making, the creation of a positive psychosocial atmosphere at work together with well-known ethical principles of work, clear observation of the public interest in the operation of the health institution <sup>36–38</sup>, autonomy at work, clear job feedback, improved relationships between nurses and managers, and reduced levels of conflicts between job demands and the level of responsibilities of nurses <sup>39</sup>.

Quality leadership, feedback from managers, and support from colleagues are important aspects of job satisfaction because they contribute to the perception of nurses belonging to the team. This consequently leads to the perception of less physical effort at work, less intensity of work dynamics, fewer feelings of injustice, and fewer occurrences of conflicts within the team <sup>4</sup>. This is also supported by the fact that the nurses in our study did not work double shifts, which represents an additional risk factor for health and the perception of the workplace because they affect daily life and prevent complete rest.

The study conducted in Israel 22 found that the most essential component of occupational satisfaction is related to personal accomplishment. This means that even under the circumstances of the pandemic, the most significant occupational values of the nurses are worthwhile accomplishments, the importance of professional challenge, diversity and interest in the job, personal growth and development, and independence in their practice (intrinsic factors).

Nurses who describe their job as involving meaningful work are the ones who are highly satisfied with their jobs <sup>40</sup>. Research also indicates some protective effects of emotional intelligence against the adverse effects of psychosocial risks such as burnout syndrome <sup>41</sup>.

The results of our research correlate with other research in which the importance of finding meaning in work, the importance of work and dedication to work, as well as opportunities for education and advancement are observed as significant internal factors for nurses' job satisfaction and their desire to stay at work <sup>4</sup>. On the other hand, the degree of nurses' commitment to work correlates with the availability of human resources and improves team performance <sup>42</sup>. The lack of resources in conditions of increased demands at work leads to the increased exhaustion of healthcare workers <sup>43</sup>.

The most stressful jobs are those that involve high expectations, coercion, and low support. This was the situation created at the beginning of the COVID-19 pandemic because there were high expectations and pressures on healthcare workers that were not commensurate with their existing knowledge and abilities. At that time, there was not enough possibility to control and support employees, which generated stress <sup>44</sup>.

In hospitals, the most significant stressors for nurses are the lack of autonomy and the high psychological and emotional demands of the job 45. In primary health care, the absence of predictable situations and the lack of support from managers are the most significant stressors <sup>46</sup>. Health workers themselves believe they are among the groups most affected by the psychosocial aspects of the workplace <sup>47</sup>. Therefore, the identification of risks in the workplace is crucial for the motivation of employees and the improvement of working conditions. For nurses, motivation and social support are the most important protective factors for preventing the occurrence of work-related mental health disorders <sup>48</sup>.

Interventions to reduce the stress of healthcare workers in the workplace are primarily related to the creation of an optimal psychosocial climate. These include the active participation of healthcare workers in making decisions regarding their work tasks in terms of the content and working conditions, having a choice of methods, tasks, and time for their performance, providing opportunities for advancement, perceiving the importance and significance of the work they perform, having a commitment to the workplace, transparent and open communication between colleagues and superiors, and the existence of clear levels of responsibility.

This type of organization and atmosphere should lead to increased capacities for innovation among employees, as well as the use of tools for generating original and valuable ideas and applying those ideas in practice <sup>42</sup>. This can only be achieved if employees are empowered, supported, and given independence at work <sup>49, 50</sup>.

# Limitations of the study

Possible bias in the sample selection was overcome by performing the study on a 100% sample. Although the sample size provides good statistical power for data analysis, generalizing the results must be cautiously approached primarily because of cultural differences. Since exposure and outcomes are measured simultaneously in this study, previous knowledge about issues or topics can affect the determining exposure or outcome, resulting in recall bias. Furthermore, this study demonstrates the relationship between two variables, but no causal inferences should be drawn from these results. Finally, despite being completely anonymous, participants tended to rate themselves better in terms of stress levels and dealing with new forms of organization in healthcare institutions. These results could be complemented by further qualitative research to obtain a broader and deeper understanding of the needs of nurses and medical technicians in the workplace, with the goal of reducing their turnover, improving the quality of healthcare, and increasing job satisfaction.

#### Conclusion

The greatest internal strengths in the process of providing healthcare in palliative care units during the COVID-19 pandemic are proper communication and cooperation with colleagues and patients, dedication to work, as well as opportunities for the education of nurses and medical technicians. Perceived weaknesses and threats relate to the large volume of work and the lack of human resources in a situation of increased job demands and low wages.

The biggest challenges for reducing nurse turnover in palliative care units, improving the quality of healthcare, and increasing job satisfaction are ensuring adequate redistribution of the nursing workforce to reduce workload, ensuring highquality healthcare, enabling greater autonomy in the work of trained nurses, providing adequate resources for work, offering support and clear feedback from managers and colleagues, enabling adequate rest for nurses during and outside of working hours, promoting salary scales that reflect the complexity and the responsibility level of the work, and recognizing the importance of nurses' work by the community.

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#### Data availability statement

Data and research results are part of the doctoral dissertation project that will be available after the defense to the extent permitted by the regulations of the University of Kragujevac at the following link: https://eteze.kg.ac.rs/.

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#### **Conflicts of interest**

The authors declare no conflict of interest.

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