

## ORIGINAL ARTICLE / ОРИГИНАЛНИ РАД

# Motivation and job satisfaction among hospital nurses in Bulgaria – a cross-sectional study



Boryana Angelova-Levterova<sup>1</sup>, Yordanka Georgieva-Borukova<sup>2,3</sup>

<sup>1</sup>Medical University of Plovdiv, Department of Health Management and Healthcare Economics, Plovdiv, Bulgaria;

<sup>2</sup>Medical University of Plovdiv, Faculty of Public Health, Plovdiv, Bulgaria;

<sup>3</sup>Kaspela University Hospital, Plovdiv, Bulgaria

## SUMMARY

**Introduction/Objective** The competitive healthcare market is focused on quality health services and the search for effective methods to improve the quality of these services represents a continuing challenge for healthcare managers. It has been found that satisfaction with the work of nurses directly affects the quality of care and patient satisfaction. The aim of this study was to examine the factors influencing the motivation and job satisfaction of hospital nurses.

**Methods** A cross-sectional study in private and public hospitals of Plovdiv region (second largest region in Bulgaria), established as training and teaching bases for nurses was conducted. The sample comprised of nurses employed in internal wards, surgical wards, intensive care units, and neurology ward settings.

**Results** Most of the participants 55 (67.1%) are working in public hospitals and 27 (32.9%) in private ones. All of the respondents were women with a mean age of  $50.57 \pm 11.6$  years. Only 40.3% of nurses were satisfied with their job and employees in public hospitals were generally more dissatisfied, although both sectors have identified “payment” and “working conditions” as being an important source of dissatisfaction.

**Conclusion** Motivation and job satisfaction studies play an important role in providing appropriate medical care in the healthcare sector. The results of this study demonstrate the importance of good job salary, good working conditions, and co-workers’ support for job satisfaction.

**Keywords:** cross-sectional study; job motivation; job satisfaction; nurses; healthcare

## INTRODUCTION

Job satisfaction is one of the most actively and extensively studied topics in the field of organizational behavior. Theorists’ and researchers’ interests on that topic dates back to the beginning of the last century as a part of attempts to understand the human behavior in working conditions [1]. The competitive healthcare market is focused on quality health services and the search for effective methods for improving the quality of these services represents a continuing challenge for healthcare managers. Many researchers are looking for a link between job satisfaction and job performance [2]. The interest in the motivation and satisfaction of employees arises exactly from the need to identify those subjective factors that explain the differences in behavior and performance of employees. Locke defines job satisfaction as a pleasant or positive emotional state resulting from the evaluation of someone’s work or work experience [3]. It can also be described as a phenomenon which is a result of complex interactions between work experience, organizational environment, and personal factors. This phenomenon is inextricably linked to work motivation, understood as “a reason that makes workers act in a certain way, striving to achieve personal and organizational goals” [4]. Neither job satisfaction nor motivation

are directly visible, but both are critical to the retention and performance of health professionals [5].

In the field of healthcare, health services and the nursing profession, satisfaction is one of the key determinants of job performance [6]. Performance is studied from different points of view. Some studies examine the impact of organizational characteristics (such as staff shortages, lack of equipment, etc.) on satisfaction [7]. Other researchers have assessed the impact of management and organizational situation factors on satisfaction [8]. Satisfaction is important and influences job performance and attitudes towards leaving the workplace [9]. Factors such as poor working conditions, ethical problems, or stress in the workplace lead to dissatisfaction and low labor productivity [10, 11, 12]. Studies show that job satisfaction directly affects the quality of health care and patient satisfaction [13]. The results of studies found that high levels of nurse burnout are associated with lower patient satisfaction [14].

Nurses’ satisfaction contributes directly to patients’ satisfaction with nursing care, which is an important performance indicator of the quality of care [15, 16]. Therefore, work motivation and satisfaction are factors, influencing the quality of health services, efficiency and commitment to the health organization and they directly affect the cost of healthcare

**Received • Примљено:**

June 9, 2021

**Revised • Ревизија:**

July 20, 2022

**Accepted • Прихваћено:**

August 3, 2022

**Online first:** August 4, 2022

**Correspondence to:**

Boryana LEVTEROVA  
Medical University of Plovdiv  
15A Vassil Aprilov Blvd.  
Plovdiv 4002, Bulgaria  
[boryana\\_levterova@abv.bg](mailto:boryana_levterova@abv.bg)

[6, 13]. The constant investigation of the most important factors influencing the motivation and job satisfaction of healthcare professionals is one of the ways to retain staff and increase the efficiency of health organizations.

The aim of this study was to examine the factors influencing the motivation and job satisfaction of hospital nurses in the Plovdiv region, Republic of Bulgaria.

## METHODS

A cross-sectional study in private and public hospitals of the Plovdiv region (the second largest region in Bulgaria), established as training and teaching bases for nurses, was conducted. Data was collected for the November 2019 – February 2020 period. The sample comprised nurses employed in internal wards, surgical wards, intensive care units, and neurology ward settings. It was an anonymous self-administered questionnaire survey on a voluntary basis. It contained a permission form, purpose of the research with brief description and guidelines on how to fill out the questionnaire. Data collection was performed using a questionnaire, designed by the authors of this study, and based on the theory by Herzberg et al. [4]. The study protocol was approved by the Ethics Committee of the Medical University – Plovdiv. Confidentiality and anonymity were assured to the participants, and they were informed of the right of withdrawal from the study.

All study participants received information on the study objectives and recruitment process. Three University hospitals in which nurses are trained in the Plovdiv region were selected at random. The inclusion criteria for this study required nurses to be: (a) full-time employees and (b) being hospital staff for at least six months. The sample size was obtained using a formula for cross-sectional studies [17]:

$$N = \frac{[Z^2 \times P \times (1-P)]}{D^2}$$

where, N = number of participants; Z = SD at 95% CI (1.960); D = amount of error we will tolerate =  $\pm 5\%$  P = 11.7% – obtained from a pilot study [18].

$$N = \frac{[1.960^2 \times 0.117 \times 0.883]}{0.05^2}$$

We used the modified Kish and Leslie equation to calculate available sample size [17]:

$$n = \frac{N}{1 + \frac{(N-1)}{K}}$$

where n is the sample size and K is the estimated overall population of the study population (approximately 1000 nurses). To cater for non-correspondents, 10% of the sample size was added to the calculated sample size. Therefore, the actual total sample size was 150 respondents. A total

of 95 questionnaires were completed and returned by the respondents, which represented 63.3% of the targeted nurses. Eighty-two valid questionnaires were included in the final analysis.

The questionnaire consisted of two parts. The reliability coefficient measured by Cronbach  $\alpha$  was equal to 0.849. The first part of the questionnaire included socio-demographic characteristics and data related to the workplace. The second part of the tool contained 22 questions for self-assessment of work motivation and satisfaction. A five-point Likert scale was used to rate from 1 – “not important at all” / “does not satisfy me at all” to 5 – “very important” / “very satisfying.” Higher results correspond to higher work motivation and satisfaction with a specific factor. Five-point Likert scale was used to respond to all questions (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree).

The data was processed with the SPSS Statistics for Windows, Version 19.0 (IBM Corp., Armonk, NY, USA). The basic descriptive parameters were calculated (mean, standard deviation, number, and percentage). Univariate ANOVA was used to test the differences in the motivating factors according to age, position, and other characteristics. Verification of the hypotheses was conducted with  $p < 0.05$ .

## RESULTS

Most of the participants 55 (67.1%) work in public hospitals and 27 (32.9%) in private ones. All of the respondents were women with a mean age of  $50.57 \pm 11.6$  years. Older nurses are the majority in Bulgarian hospitals. Thirty-seven of the participants (45.1%) in the study have a bachelor's degree and only 17.1% (14 participants) have a master's degree. The highest number of all nurses having work experience between 21–30 years is 37 (45.1%), which implies significant experience in practicing the nursing profession, and only 6.1% have less than five years of experience. Most participants are married [63 (76.8%)]. The distribution of the sample, according to demographic and work-related variables, is shown in Table 1.

Table 2 provides the mean, the standard deviation, 95% confidence interval, and overall ranks of the 11 motivational factors for both hospital types. The ranking is based on the mean of the factors. The lowest mean value has the highest rank because the respondents were asked to rank with a most effective motivator, then with a second most effective motivator, and so on. For nurses working in both public and private hospitals, “payment” is the first most important motivational factor, followed by “job security.” These factors also receive the lowest mean value (3 and 4.44, respectively). The factor with least motivational importance is “responsibility at work” (Table 2).

Satisfaction from various investigated factors in the workplace are given in Table 3. Every other nurse is satisfied or very satisfied with her supervisor ( $n = 46$ , 56.1%); 12.2% of nurses working in private hospitals are dissatisfied with their job. Among persons working in public hospitals, this percentage reaches 28%. Most of the respondents are

**Table 1.** Socio-demographic and workplace characteristics of the respondents (n = 82)

Characteristic	Value	n	%	p
Age group	< 30	6	7.3	0.001
	31–40	9	11	
	41–50	26	31.7	
	51–60	23	28	
	over 60	18	22	
Marital status	lives alone	13	15.9	0.411
	married	63	76.8	
	unmarried, divorced, widowed	6	7.3	
Educational level	college	31	37.8	0.005
	bachelor	37	45.1	
	master	14	17.1	
Rank	head nurse	15	18.3	< 0.001
	nurse	63	76.8	
	nurse manager	4	4.9	
Form of ownership at the hospital	private	27	32.9	0.002
	public (state/municipal)	55	67.1	
Work experience (years)	< 5	5	6.1	< 0.001
	5–10	6	7.3	
	11–20	18	22	
	21–30	37	45.1	
	> 30	16	19.5	
Departments	internal medicine department	44	53.7	< 0.001
	surgical department	26	31.7	
	intensive care unit	3	3.7	
	neurology department	9	11	

satisfied with the “working hours” (n = 37, 45.1%) and with their “relationships with colleagues” (n = 33, 40.3%). On the other hand, almost three-quarters of nurses are dissatisfied or very dissatisfied with the “salary they receive” (n = 54, 65.8%) and with the “working conditions” (n = 52, 63.4%).

Married nurses have lower job satisfaction than unmarried ones (p < 0.05). Nurses with a college degree (mean rank = 52.79) report a higher level of job satisfaction than those with a master’s degree (mean rank = 44.62)

or a bachelor’s degree (mean rank = 32.68). There is a significant difference in the overall job satisfaction of the respondents depending on the educational level ( $\chi^2 = 8.59$ , p = 0.014). However, nurses with a master’s degree work more often in private hospitals (n = 23, 28%) and those with a bachelor’s degree in public hospitals (n = 14, 17%). Nurses working in private hospitals reported a higher overall level of job satisfaction (mean rank = 44.22) than those working in the public sector (mean rank = 40.16) ( $\chi^2 = 20.85$ , p < 0.001).

**DISCUSSION**

Work motivation is a proven factor which influence nurses’ intention to pursue the profession and job satisfaction [18, 19]. The practice of the nursing profession is influenced by the complex effect of various environmental factors – socio-economic, legal, political, demographic, cultural, as well as specific factors for the profession. The shortage of nurses is a challenge not only in Bulgaria but is a critical issue in many countries [6, 20, 21]. Nowadays, in Bulgaria, a number of nurses are leaving their profession to join other non-nursing fields or emigrate abroad [22]. In our country, shortage of hospital nurses is associated with factors such as increased migration of professional nurses, decreased number of nurse graduates, and ageing workforce [23, 24, 25]. Job satisfaction of healthcare professionals is a very important factor of the quality of health care and has a great impact on achieving good performance and efficiency in healthcare organization. Many studies have focused on job satisfaction through nurses because of its proven impact on patient safety and health outcomes [11, 25]. Therefore, this study set out to examine the nurses’ motivation and job satisfaction and factors associated with it in public and private hospitals in the region of Plovdiv.

As in a number of researches that suggested that, generally, nurses’ job satisfaction is usually moderate or low, our findings showed that only about 40.3% of nurses were satisfied with their jobs, which is an extremely low level [6, 14]. Overall, nurses in public hospitals were generally more dissatisfied than those working in private ones, although

**Table 2.** Ranking of motivators: a comparison between hospitals (public and private)

No.	Motivators	Mean		SD		95% confidence interval		Rank	
		public	private	public	private	public	private	public	private
1	opportunity for advancement and promotion	6.42	5.11	3.56	3.08	5.46–7.38	3.89–6.33	6	3
2	payment/salary	3.09	3.22	3.01	2.85	2.28–3.9	2.1–4.35	1	1
3	job security	4.44	4.11	2.35	1.52	3.8–5.07	2.33–1.53	2	2
4	working conditions	4.64	5.22	2.35	3.07	4–5.27	4.01–6.44	3	5
5	interesting job	4.71	5.19	2.52	3.56	4.03–5.39	3.58–6.59	4	4
6	working time / flexible working hours	5.98	6.67	2.69	3.34	5.24–6.69	5.35–7.99	5	7
7	additional benefits	6.93	5.37	2.48	2.86	6.26–7.6	4.24–6.5	8	6
8	co-worker relationship, teamwork	6.71	7.3	2.8	2.95	5.95–7.47	6.13–8.46	7	8
9	social position and prestige	7.22	8.07	3.03	2.29	6.4–8.04	7.17–8.98	9	10
10	job responsibility	8.44	8.3	2.34	1.77	7.8–9.07	7.6–9	11	11
11	supervisor support	8	7.44	2.7	2.97	7.27–8.73	6.27–8.62	10	9

**Table 3.** Frequency and percentage of each item in the job satisfaction

No.	Items	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
		n (%)	n (%)	n (%)	n (%)	n (%)
1	opportunity for advancement and promotion	19 (23.2)	14 (17.1)	29 (35.4)	12 (14.6)	8 (9.8)
2	payment/salary	33 (40.2)	21 (25.6)	20 (24.4)	4 (4.9)	4 (4.9)
3	job security	7 (8.5)	12 (14.6)	33 (40.2)	18 (22)	12 (14.6)
4	working conditions	29 (35.4)	23 (28)	14 (17.1)	10 (12.2)	6 (7.3)
5	interesting job	17 (20.7)	16 (19.5)	37 (45.1)	10 (12.2)	2 (2.4)
6	working time/ flexible working hours	4 (4.9)	10 (12.2)	31 (37.8)	16 (19.5)	21 (25.6)
7	additional benefits	10 (12.2)	8 (9.8)	37 (45.1)	12 (14.6)	15 (18.3)
8	co-worker relationship, teamwork	6 (7.3)	6 (7.3)	37 (45.1)	18 (22)	15 (18.3)
9	social position and prestige	14 (17.1)	14 (17.1)	27 (32.9)	18 (22)	9 (11)
10	job responsibility	17 (20.7)	10 (12.2)	30 (36.6)	16 (19.5)	9 (11)
11	supervisor support	10 (12.2)	8 (9.8)	18 (22)	28 (34.1)	18 (22)

both sectors have identified “payment” and “working conditions” as important sources of dissatisfaction. According to Nantsupawat et al. [25], job dissatisfaction is a major cause of high nurse turnover, as well as increased absences. Another reason is the low nursing occupational prestige. These are demotivating factors that cause young people in Bulgaria to study nursing or to practice this humane profession.

The nurses in this study were females, most of them over the age of 50, married and with a bachelor’s degree. Masum et al. [26] revealed that married nurses have higher job satisfaction than unmarried ones, but we found the opposite results. The finding of the present study revealed that nurses with a master’s degree are most dissatisfied with their work, followed by nurses with a bachelor’s degree and those with a college degree. The cause could be that more educated staff have higher expectations, which healthcare organization are often unable to fulfill. Also, master’s degree nurses were less satisfied with their occupation, probably because the nurse salary structure in our country does not differentiate between groups.

The research results show that hospital nurses are dissatisfied with their job salary (65.8%), working conditions (63.4%), and their social position and prestige (40.2%). The respondents were least satisfied with “payment/salary.” The main motivator in both studied groups is “payment/salary,” but this factor is associated with the greatest dissatisfaction. Two-thirds of the study participants were least satisfied with their salary, which is consistent with studies in other countries [6, 14, 26–29]. Although the salary of nurses in Bulgaria has started to increase in recent years, this fact suggests that Bulgarian nurses may not be satisfied with the level of income they receive now. A low satisfaction score and high significance score of the factors show that there is a prospect to improve job satisfaction by increasing payment. However, satisfaction with material status may not be related to the amount of remuneration received as much as to the perception of remuneration being fair.

In our study, important factor influencing dissatisfaction is “working conditions.” Poor working conditions and limited resources reduce job satisfaction and motivation among nurses, which can affect service quality and

distress [6]. It has been found that less favorable working conditions such as heavy workload, lack of staff and extended working hours are negatively associated with job satisfaction. Physical working conditions, such as noisy environment, and poor living conditions can also reduce job satisfaction. Grujičić et al. [28] in a survey performed in healthcare centers in three districts of Vojvodina (Serbia) show that healthcare workers are more satisfied with a positive work environment.

Among the eleven items of job satisfaction, nurses collectively expressed high level of satisfaction with supervisor support (56.1%) and flexible working hours (45.1%). The results from this study are following the results of Masum et al. [26] and Labrague et al. [30], who identified “supervisor support” as an important factor of nurses’ job satisfaction. In our study, “relationships with colleagues” and “supervisor support” predict a nurse’s job satisfaction positively. This is consistent with studies done in hospitals in Slovenia and Serbia, where nurse-physician relationships had impact on nurse satisfaction [27, 29]. The collaboration between a doctor and a nurse is linked to positive job satisfaction [31]. When there are good work relationships, there is a sense of recognition and feeling of respect between them, which further brings satisfaction at work.

Our study had some limitations. In this study, the sample size was relatively small and limited to nurses who were employed in private and public hospitals which are training and teaching bases in the Plovdiv region, Bulgaria. As it is a cross-sectional study, inferences on the cause–effect relationships could not be made. The information gained from participants is based upon their subjective perceptions.

## CONCLUSION

Motivation and job satisfaction studies play an important role in providing appropriate medical care in the healthcare sector. Low job motivation and job satisfaction have been found to reduce the quality of healthcare, to worsen patient satisfaction, and ultimately to increase healthcare costs. The findings of this study indicate that nurses with good job salary, good working conditions and co-worker support

tend to be more satisfied with their job. These findings can be used by hospital managers, professional associations, and health policy makers to develop strategies to increase income in this occupational group, improve working conditions, and safety. This will increase motivation and job satisfaction in hospitals and reduce the nurses' intention to leave the profession.

## REFERENCES

- Neff WS. *Work & human behavior* (3rd ed.). New York: Routledge; 2017. p. 360.
- Bowling NA, Khazon S, Meyer RD, Burrus CJ. Situational Strength as a Moderator of the Relationship Between Job Satisfaction and Job Performance: A Meta-Analytic Examination. *JBP*. 2015;30(1):89–104. [DOI: 10.1007/s10869-013-9340-7]
- Locke EA. What is job satisfaction?. *Organ Behav Hum Perf*. 1969;4(4):309–36. [DOI: 10.1016/0030-5073(69)90013-0]
- Herzberg F, Masner B, Sneyderman B. *The motivation to work*. New York: Routledge; 1993. p. 184. [DOI: 10.4324/9781315124827]
- Gupta J, Patwa MC, Khuu A, Creanga AA. Approaches to motivate physicians and nurses in low- and middle-income countries: a systematic literature review. *Hum Resour Health*. 2021;19(1):4. [DOI: 10.1186/s12960-020-00522-7] [PMID: 33407597]
- Lu H, Zhao Y, While A. Job satisfaction among hospital nurses: A literature review. *Int J Nurs Stud*. 2019;94:21–31. [DOI: 10.1016/j.ijnurstu.2019.01.011] [PMID: 30928718]
- van Loon N, Kjeldsen AM, Andersen LB, Vandenebeeke W, Leisink P. Only When the Societal Impact Potential Is High? A Panel Study of the Relationship Between Public Service Motivation and Perceived Performance. *Rev Public Pers Adm*. 2018;38(2):139–66. [DOI: 10.1177/0734371X16639111] [PMID: 29780203]
- Baek H, Han K, Ryu E. Authentic leadership, job satisfaction and organizational commitment: The moderating effect of nurse tenure. *J Nurs Manag*. 2019;27(8):1655–63. [DOI: 10.1111/jonm.12853] [PMID: 31454125]
- Jiang W, Chai H, Li Y, Feng T. How workplace incivility influences job performance: the role of image outcome expectations. *Asia Pacif J Hum Resour*. 2018;57(4):445–69. [DOI: 10.1111/1744-7941.12197]
- Hamama L, Hamama-Raz Y, Stokar YN, Pat-Horenczyk R, Brom D, Bron-Harlev E. Burnout and perceived social support: The mediating role of secondary traumatization in nurses vs. physicians. *J Adv Nurs*. 2019;75(11):2742–52. [DOI: 10.1111/jan.14122] [PMID: 31231845]
- Copanitsanou P, Fotos N, Brokalaki H. Effects of work environment on patient and nurse outcomes. *Br J Nurs*. 2017;26(3):172–6. [DOI: 10.12968/bjon.2017.26.3.172] [PMID: 28185485]
- Woo T, Ho R, Tang A, Tam W. Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *J Psychiatr Res*. 2020;123:9–20. [DOI: 10.1016/j.jpsychires.2019.12.015] [PMID: 32007680]
- Aiken LH, Sloane DM, Ball J, Bruyneel L, Rafferty AM, Griffiths P. Patient satisfaction with hospital care and nurses in England: an observational study. *BMJ Open*. 2018;8(1):e019189. [DOI: 10.1136/bmjopen-2017-019189] [PMID: 29326193]
- Brooks Carthon JM, Hatfield L, Brom H, Houton M, Kelly-Hellyer E, Schlak A, et al. System-Level Improvements in Work Environments Lead to Lower Nurse Burnout and Higher Patient Satisfaction. *J Nurs Care Qual*. 2021;36(1):7–13. [DOI: 10.1097/NCQ.0000000000000475] [PMID: 32102025]
- Specchia ML, Cozzolino MR, Carini E, Di Pilla A, Galletti C, Ricciardi W, et al. Leadership Styles and Nurses' Job Satisfaction. Results of a Systematic Review. *Int J Environ Res Public Health*. 2021;18(4):1552. [DOI: 10.3390/ijerph18041552] [PMID: 33562016]
- De Simone S, Planta A, Cicotto G. The role of job satisfaction, work engagement, self-efficacy and agentic capacities on nurses' turnover intention and patient satisfaction. *Appl Nurs Res*. 2018;39:130–40. [DOI: 10.1016/j.apnr.2017.11.004] [PMID: 29422148]
- Gaskill BN, Garner JP. Power to the People: Power, Negative Results and Sample Size. *J Am Assoc Lab Anim Sci*. 2020;59(1):9–16. [DOI: 10.30802/AALAS-JAALAS-19-000042] [PMID: 31852563]
- Levterova B. Motivation and job satisfaction of healthcare professionals. *Scientific works of the Union of Scientists in Bulgaria – Plovdiv Series G. Medicine, Pharmacy and Dental Medicine*. 2019;23:327–30. (in Bulgarian)
- Holland P, Tham TL, Sheehan C, Cooper B. The impact of perceived workload on nurse satisfaction with work-life balance and intention to leave the occupation. *Appl Nurs Res*. 2019;49:70–6. [DOI: 10.1016/j.apnr.2019.06.001] [PMID: 31375315]
- Han RM, Carter P, Champion JD. Relationships among factors affecting advanced practice registered nurses' job satisfaction and intent to leave: A systematic review. *J Am Assoc Nurse Pract*. 2018;30(2):101–13. [DOI: 10.1097/JXX.0000000000000006] [PMID: 29757821]
- Alexandrova-Karamanova A, Todorova I, Montgomery A, Panagopoulou E, Costa P, Baban A, et al. Burnout and health behaviors in health professionals from seven European countries. *Int Arch Occup Environ Health*. 2016;89(7):1059–75. [DOI: 10.1007/s00420-016-1143-5] [PMID: 27251338]
- Dragusheva S, Petleshkova P, Panova G. Incentives Motivating Mentors and Criteria for Selecting Mentors in the Pre-Graduation Traineeship of Future Registered Nurses. *Open Access Maced J Med Sci*. 2019;7(19):3294–7. [DOI: 10.3889/oamjms.2019.714] [PMID: 31949533]
- Dimova A, Rohova M, Koeva S, Atanasova E, Koeva-Dimitrova L, Kostadinova T, et al. Bulgaria: Health System Review. *Health Syst Transit*. 2018;20(4):1–230. [PMID: 30277214]
- Dragusheva S, Torniyova B, Bakova D, Petleshkova P, Nasteva, Duran N. Students reasons for choosing the profession of registered nurse. *KIJ*. 2018;22(5):1375–9.
- Nantsupawat A, Kunaviktikul W, Nantsupawat R, Wichaikhum OA, Thienthong H, Poghosyan L. Effects of nurse work environment on job dissatisfaction, burnout, intention to leave. *Int Nurs Rev*. 2017;64(1):91–8. [DOI: 10.1111/inr.12342] [PMID: 27882573]
- Masum AK, Azad MA, Hoque KE, Beh LS, Wanke P, Arslan Ö. Job satisfaction and intention to quit: an empirical analysis of nurses in Turkey. *PeerJ*. 2016;4:e1896. [DOI: 10.7717/peerj.1896] [PMID: 27168960]
- Lorber M, Skela Savič B. Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian Hospitals. *Croat Med J*. 2012;53(3):263–70. [DOI: 10.3325/cmj.2012.53.263] [PMID: 22661140]
- Grujičić M, Jovičić-Bata J, Novaković B. Work motivation and job satisfaction of doctors and nurses in Vojvodina, Serbia. *Srp Arh Celok Lek*. 2018;146(1–2):48–54. [DOI: 10.2298/SARH170210130G]
- Kuburović NB, Dedić V, Djurčić S, Kuburović V. Determinants of job satisfaction of healthcare professionals in public hospitals in Belgrade, Serbia – Cross-sectional analysis. *Srp Arh Celok Lek*. 2016;144(3–4):165–73. [PMID: 27483561]
- Labrague LJ, McEnroe-Petitte DM, Tsaras K. Predictors and outcomes of nurse professional autonomy: A cross-sectional study. *Int J Nurs Pract*. 2019;25(1):e12711. [DOI: 10.1111/ijn.12711] [PMID: 30426592]
- Yılmaz G, Kiran Ş, Bulut HK. The mediating role of nurse-physician collaboration in the effect of organizational commitment on turnover intention. *J Interprof Care*. 2022;1–7. Online ahead of print. [DOI: 10.1080/13561820.2021.2004099] [PMID: 34978245]

## ACKNOWLEDGEMENTS

The authors would like to give their gratitude to all the nurses who participated in the study.

**Conflict of interest:** None declared.

## Радна мотивација и задовољство болничких медицинских сестара у Бугарској – студија пресека

Борјана Ангелова-Левтерова<sup>1</sup>, Јорданка Георгијева-Борукова<sup>2,3</sup>

<sup>1</sup>Медицински универзитет у Пловдиву, Одељење за здравствени менаџмент и здравствену економију, Пловдив, Бугарска;

<sup>2</sup>Медицински универзитет у Пловдиву, Факултет јавног здравља, Пловдив, Бугарска;

<sup>3</sup>Универзитетска болница Каспела, Пловдив, Бугарска

### САЖЕТАК

**Увод/Циљ** Конкурентно тржиште здравствене заштите оријентисано је на квалитетне здравствене услуге, а потрага за ефикасним методама за побољшање квалитета ових услуга стални је изазов за менаџере у здравству. Утврђено је да задовољство радом медицинских сестара директно утиче на квалитет неге и задовољство болесника.

Циљ ове студије био је да испита факторе који утичу на мотивацију и задовољство послом медицинских сестара.

**Методe** Спроведена је студија пресека у приватним и јавним болницама регије Пловдив (други по величини регион у Бугарској), које су базе за обуку и наставу за медицинске сестре. Узорак је обухватио медицинске сестре које раде на интерним одељењима, хируршким одељењима, јединицама интензивне неге и неуролошким одељењима.

**Резултати** Већина учесника, 55 (67,1%), ради у јавним болницама, а 27 (32,9%) у приватним болницама. Сви испитаници су жене просечне старости  $50,57 \pm 11,6$  година. Само 40,3% медицинских сестара је задовољно својим радом, а особље јавних болница обично је незадовољније, иако оба сектора наводе плату и услове рада као важне изворе незадовољства.

**Закључак** Студије о мотивацији и задовољству послом играју важну улогу у пружању одговарајуће медицинске заштите у здравственом сектору. Резултати ове студије показују значај добре плате на радном месту, добрих услова рада и подршке колега за задовољство послом.

**Кључне речи:** студија пресека; мотивација за посао; задовољство послом; медицинске сестре; здравствена заштита