

**D.M. Demeubaeva<sup>1\*</sup>**, **G.Zh. Kapanova<sup>1</sup>**, **A.M. Grijbovski<sup>2</sup>**,  
**S.A. Dikanbaeva<sup>3</sup>**, **N.E. Zhappargaly<sup>4</sup>**, **G.T. Tashenova<sup>4</sup>**

<sup>1</sup>Al-Farabi Kazakh National University, Almaty, Kazakhstan

<sup>2</sup>Northeastern Federal University named after M.K. Ammosov, Yakutsk, Russia

<sup>3</sup>Kazakh-Russian Medical University, Almaty, Kazakhstan

<sup>4</sup>Kazakh National Medical University named after S.D. Asfendiyarov, Almaty, Kazakhstan

\*e-mail: dinara.demeubayeva@gmail.com

## COOPERATION OF NURSING STAFF AND THEIR SATISFACTION WITH WORK IN THE HOSPITAL OF A MEDICAL ORGANIZATION

A “team” in healthcare is traditionally referred to as an interdisciplinary team. Studying this particular professional group is important to understand how teamwork exists among those who provide most of the patient care. Communication skills contribute to the development of interpersonal relationships. Improving the quality of communication between participants in the healthcare system is a global priority and can contribute to better diagnosis and treatment.

The purpose of the study: to study the relationship of interpersonal communication with the degree of job satisfaction of a nurse among nurses.

**Materials and methods.** Design is an observational cross-sectional study using analytical statistics methods. Data collection was carried out using a survey (using the on-line Google Form server), in one of the State Clinical Hospitals in Almaty, in 2023. 281 nurses participated in the study. The questionnaire developed by us is an assessment of the strategy of behavior of nurses in the event of a conflict situation) It was carried out using Pearson’s chi-square criterion and/or Fisher’s exact test, with the calculation of relative risk (RR), as well as binary logistic regression. In addition to these basic methods, the following tests were used for analysis: single-sample binomial criterion and single-sample chi-square criterion. The null hypothesis was rejected in the case of  $p < 0.05$ .

**Results and discussion.** In general, the proportion of nurses who were satisfied and dissatisfied with their work was 39.86% ( $n = 112$ ) and 60.14% ( $n = 169$ ), respectively. The asymptotic significance of a single sample binomial criterion was  $p = 0.001$ , which indicates the reliability of differences in proportions. Among the nurses dissatisfied with their work ( $n = 169$ ), the following prevailed: older sisters ( $\chi^2 = 40.645$ ,  $p \leq 0.001$ ), sisters with less work experience ( $\chi^2 = 90.941$ ,  $p \leq 0.001$ ) and sisters engaged in practical activities ( $\chi^2 = 83.568$ ,  $p \leq 0.001$ ). The results obtained indicate the presence of a statistically significant association of the level of satisfaction of nurses with work activities with such characteristics as “team cohesion” ( $RR = 8.050$ ,  $p \leq 0.001$ ), “the level of trust in the team” ( $RR = 3.470$ ,  $p \leq 0.001$ ), “friendly and business criticism in the team” ( $RR = 3.393$ ,  $p = 0.004$ ), “free expression of opinion in the team” ( $RR = 12.285$ ,  $p \leq 0.001$ ), “the emotional attitude with which you usually come to work” ( $RR = 4.442$ ,  $p = 0.003$ ) and “the moral and psychological climate in the team” ( $RR = 7.068$ ,  $p \leq 0.001$ ).

**Key words:** collaboration, job satisfaction, nurse.

### Introduction

The “team” in healthcare is traditionally perceived as an interdisciplinary team, and nursing teams are rarely considered in the literature. Studying this particular professional group is important to understand how teamwork exists among those who provide most of the patient care [1]. To date, there are few known studies that could provide a comprehensive analysis of teamwork typical of nurses [2]. There is information that teamwork increases the productivity of nursing, improves the satisfaction of nurses and significantly contributes to

the optimal quality of patient care [3]. Collaboration in the teamwork of nurses will be no exception, as it is known that the nurse and nursing work in the general medical work of the hospital is an important part of the clinical service [4]. It is cooperation that combines issues such as the exchange of experience, negotiation and understanding, trust, equality and respect. A fundamental component of collaboration is collegiality, in which communication and teamwork skills are considered key levers of successful team work. And the success of cooperation largely depends on mutual understanding, dedication to a common cause, interpersonal communication skills and

trust. Communication is considered one of the most important and effective tools, simple and accessible to use, which is based on mutual understanding, the ability to effectively negotiate, capable of improving the quality of teamwork and the quality of medical care [5].

Communication skills are of particular importance in human-centered professions and nursing practice will be no exception. Effective communication has a number of positive aspects such as high-quality diagnostics, creation of an optimal working environment, time savings, a positive impact on work efficiency, effective workload management and reduction of errors committed by nursing staff, a positive effect on mood, satisfaction of both nurses and patients [6, 7].

And not enough high-quality communication skills of nurses in general teamwork can lead to confusion and a decrease and loss of trust among team members, along with stress, job dissatisfaction and emotional satisfaction [8]. Today, experts agree that effective teamwork ensures safe and effective care at various levels of the healthcare system [9].

The philosophy of nursing teaches that the basic principle of a mid-level medical professional is respect and dedication to their work. Nursing is unthinkable without the responsible formation of caring relationships between nurses. Cooperation issues, as an important component of teamwork, should be important for nursing and adhere to the principle of working harmoniously together with others. This issue is insufficiently covered in the available literature [10]. Several nursing associations, including the International Council of Nurses, consider the possibility of intra-professional cooperation as an important factor in a healthy work environment. Some studies have focused on the organizational characteristics of the nurses' work environment, which had a significant impact on their relationships and job satisfaction. And today, the work environment also plays an important role that promotes open, friendly teamwork and a positive perception of the well-being of nurses, as well as encourages nurses to work together to achieve high-quality and cost-effective care [11].

Thus, communication is one of the many mechanisms that creates a healthy work environment that can provide fertile ground for effective communication and can contribute to increased job satisfaction for nurses [12].

Most of the existing literature on the impact of workspace on teamwork is related to the office environment, although several studies have examined

environmental factors in medical institutions. Given the crucial role of teamwork and communication in the provision of medical care, knowledge about the interaction between teamwork and communication among nurses can provide valuable information for healthcare [13].

It is known from research that the quality of medical care is represented by an environment of practical activity, known as a climate, which can be hostile and in practice threaten the quality of nursing care provided by nurses. A favorable working climate is associated with less burnout and exhaustion of nurses, higher job satisfaction, fewer unwanted mistakes, and a higher level of quality of medical care provided by secondary medical personnel [14]. In turn, job satisfaction, workplace support, increased teamwork, as well as an improved spirit of cooperation can reduce staff turnover, which, today, is a significant problem for healthcare [15]. It should also be remembered that the relationship between the positive characteristics of the working environment of nurses with a high level of personal abilities creates a better working environment and contributes to favorable results regarding the health of patients [16].

No studies have been found in Kazakhstan that present results on the impact of various communicative competencies on job satisfaction among nurses, which indicates the relevance of our research aimed at studying the level of communication skills, working conditions of nurses in Kazakhstan, and their readiness to work in a team. The obtained results of this study will help in developing recommendations for improving the work of nurses in a team environment, which will contribute to improving the quality of medical services, organizing convenient conditions for high-quality, productive work of a nurse.

**The purpose** of this study was to study the relationship between various communication skills (interpersonal interaction) in a nursing team, the moral and psychological climate in the workplace and job satisfaction. And also to provide justification for the development of programs to improve communication skills, increase job satisfaction for better awareness of the peculiarities of interpersonal relations in the staff of nursing staff for the development of a high-quality nursing community and improve the quality of their services.

## Materials and Methods

Design is an observational cross-sectional study using analytical statistics methods. Data

collection was carried out using a survey (using the on-line Google Form server), in one of the State Clinical Hospitals in Almaty, in 2023. 281 nurses participated in the study. The calculated minimum required sample size in this study was 248 people, with a population size of 695 people (with a 95% confidence probability). Thus, the sample we are analyzing is representative. The survey model was characterized by the following features: voluntary and anonymous questioning, regional level, sample population, use of “closed-ended questions”. Having chosen the theoretical scheme of the study, we received a practical guideline for the selection of questionnaire questions. The questionnaire consisted of two parts: standard “passport” data (questions on clarifying the age of nurses, their type of activity and work experience) and direct questions on the study of communicative characteristics and the indicator of satisfaction with the work of nurses. The questionnaire developed by us was approved by the Ethics Commission of the Al-Farabi Kazakh National University (No. IRB-A637 dated June 22, 2023), and also registered with the patent office (Certificate of entry of information into the state register of rights to objects protected by copyright No. 36334 dated 05/29/2023). An informed consent was attached to the questionnaire, which outlined all the ethical characteristics of the study. The results were processed using statistical methods in the IBM SPSS Statistics program. The assessment of the associative relationship of the level of satisfaction of nurses with some of the studied characteristics (team cohesion, level of trust in the team, etc.), was carried out using Pearson’s chi-square criterion and/or Fisher’s exact test, with the calculation of relative risk (RR), as well as binary logistic regression. In addition to these basic methods, the following tests were used for analysis: single-sample binomial criterion and single-sample chi-square criterion. The null hypothesis was rejected in the case of  $p < 0.05$ .

## Results and Discussion

The total number of nurses participating in the survey aged “under 30” was 64 people (or 22.78%), 143 people aged “30 to 50” (or 50.89%) and 74 people aged “over 50” (or 26.33%). Among all respondents, 15 people (or 5.34%) have professional experience in the healthcare system up to 1 year, 115 people (or 40.93%) – from 1 year to 10 years, 122 people (or

43.42%) – from 10 years to 30 years and 29 people (or 10.32%) – from 30 years and more. More than 2/3 (234 people or 83.27%) of the surveyed nurses indicated that they were engaged in practical medical activities, 10 nurses (or 3.56%) were administrators (chief nurses) and 37 of the surveyed nurses (or 13.17%) reported other functional activities in the questionnaire.

In general, the share of nurses satisfied and dissatisfied with their work was 39.86% (112 people) and 60.14% (or 169 people), respectively. The asymptotic significance of the single-sample binomial criterion was  $p=0.001$ , which indicates the reliability of differences in proportions. Among the nurses dissatisfied with their work ( $n=169$ ), the following prevailed: older sisters ( $\chi^2=40.645$ ,  $p\leq 0.001$ ), sisters with less work experience ( $\chi^2=90.941$ ,  $p\leq 0.001$ ) and sisters engaged in practical activities ( $\chi^2=83.568$ ,  $p\leq 0.001$ ). Table 1 presents the results of an analysis to assess the associative relationship between the level of satisfaction of nurses and some of the studied characteristics. The results obtained indicate the presence of a statistically significant association of the level of satisfaction of nurses with work activities with such characteristics as “team cohesion” ( $RR=8,050$ ,  $p\leq 0.001$ ), “the level of trust in the team” ( $RR=3,470$ ,  $p\leq 0.001$ ), “friendly and business criticism in the team” ( $RR=3.393$ ,  $p=0.004$ ), “free expression of opinion in the team” ( $RR=12.285$ ,  $p\leq 0.001$ ), “the emotional attitude with which you usually come to work” ( $RR=4.442$ ,  $p=0.003$ ) and “the moral and psychological climate in the team” ( $RR=7.068$ ,  $p\leq 0.001$ ).

Teamwork in healthcare is considered a difficult task. It is based on the premise that professionals with their own interests are willing to work together. Teamwork brings tremendous benefits to team members, patient care, and healthcare systems. Thus, cooperation occupies a prominent place in many aspects of health care in both low- and high-income countries[17].

Communication in the hospital environment is complex and dynamic due to the huge flow of information, various teams of professionals and numerous complex relationships [18]. The role of nurses is important in the development of teamwork in the healthcare system, capable of influencing both teamwork and interpersonal interaction to improve treatment outcomes in relation to patient health [19].

**Table 1** – Communication skills of nurses in teamwork, taking into account their level of job satisfaction

Evaluation of characteristics from 1 to 5 points		Nurses' satisfaction with their work		p-value
		Completely satisfied	Not satisfied and/or partially satisfied	
Team cohesion	score 4-5 points	111	151	p≤0,001
	score 1-3 points	1	18	
The level of trust in the team	score 4-5 points	108	141	p≤0,001
	score 1-3 points	4	28	
Friendly and constructive criticism in the team	score 4-5 points	109	148	p=0,004
	score 1-3 points	3	21	
Free expression of opinion in the team	score 4-5 points	111	142	p≤0,001
	score 1-3 points	1	27	
Adequacy of the management style of senior employees	score 4-5 points	65	91	p=0,489
	score 1-3 points	47	76	
Mutual assistance among employees	score 4-5 points	63	89	p=0,555
	score 1-3 points	49	80	
Adequate acceptance of the responsibility of colleagues for the actions performed	score 4-5 points	65	93	p=0,619
	score 1-3 points	47	76	
The emotional attitude with which you usually come to work	score 4-5 points	110	150	p=0,003
	score 1-3 points	2	19	
Professional qualities of the majority of the team members	score 4-5 points	71	107	p=0,989
	score 1-3 points	41	62	
Personal qualities of the majority of the team members	score 4-5 points	70	102	p=0,718
	score 1-3 points	42	67	
The moral and psychological climate in the team	score 4-5 points	110	139	p≤0,001
	score 1-3 points	2	30	

Communicative interaction in the form of high-quality cooperation related to the exchange of information, where mutual respect, the desire to help another plays a primary role, capable of influencing patient safety, professional and personal characteristics of nurses, since they are considered one of the international goals in the field of patient safety established by the World Health Organization [20].

Studies by other researchers have studied the peculiarities of interaction skills between nurses and doctors in various departments, as well as between nurses and patients, relatives of patients. Nevertheless, information that can clarify the structural links between them from all sides and how they affect the satisfaction of nurses remains insufficiently studied [21].

It is known that hospitals do not have any systematic tools or programs to evaluate and improve

professional communication and communication values of staff. Accordingly, the present study aims to identify the relationships between the main attributes of interpersonal interaction that correlate with job satisfaction in the nursing team [22]. Thus, this study provides the data needed to develop programs to improve nursing activities or nursing interaction. And we hope that a better understanding of this issue will allow us to develop strategies for the leadership of healthcare organizations, teachers of medical universities and colleges to create conditions for effective teamwork that promotes joint treatment of patients.

Our study showed that more than 60.14% (or 169 people) were dissatisfied with the work of nurses than 39.86% (112 people) were satisfied.

Among the nurses who were dissatisfied with their work (n=169), older sisters, sisters with less work experience and sisters engaged in practical

activities prevailed. Most likely, this is due in older nurses to (the perception of) a higher workload over many years of work, which is associated with fatigue due to prolonged psychological and physical exertion, stressful working conditions, and in nurses with less work experience, emotional stress and higher workload pressure also causes a stressful state, but to which they have not yet got used to the latter- nurses engaged in practical activities experience greater stress in terms of strength associated with assigning multiple work responsibilities to one person and high workload, as well as high demands on the activities of nurses and significant responsibility, which can negatively affect job satisfaction and lead to emotional burnout, as well as not effective enough interactions between medical staff in this cohort.

Job satisfaction has a great impact on most healthcare organizations, as well as on nurses [23]. Job satisfaction can be defined as a person's general attitude towards their work, this applies not only to activities or tasks, but also to aspects such as the work environment, which is often very stressful and emotionally manifested in attitude and commitment to work [24]. The work environment affects several factors, such as the quality of care and patient safety, absenteeism, and an increased intention to leave work. In addition, dissatisfaction with the work of nurses is a serious problem due to the negative effects of nurse turnover and the fact that the number of nurses worldwide is declining [25]. There is evidence that nurse retention is an ongoing problem related to job satisfaction [26]. Research shows that job satisfaction has decreased in developing countries and therefore it is important to better understand the factors associated with job satisfaction [27]. Since our country is also among the developing countries.

Low satisfaction with the work of nurses is due to many factors, including interaction with colleagues. And it should be noted that only a few studies have studied how communication skills affect job satisfaction [28]. Communication is one of the many mechanisms that can determine how a positive work environment for nurses can contribute to nurses' job satisfaction and their intention to stay. Improving communication between nurses is a potential strategy to increase job satisfaction and the intention to stay in it [29].

In a study by Harris & Blackhall et al 2016; Sheehan et al, 2017, the collaboration of nurses when interacting with each other was positively correlated with job satisfaction. When collaboration was insufficient, job satisfaction decreased.

It should be noted that only a limited number of studies on nurse collaboration can be found in the literature. Moreover, when researchers Durmuş SÇ et al, Ekici D et al, 2018 studied the literature on healthcare in Turkey, several studies were conducted regarding the cooperation of nurses and doctors; In studies aimed only at collaboration between nurses, there was not much done.<sup>2</sup> In a study conducted by Durmush et al., Ekici D et al., 2018, it was noted that job satisfaction is more and primarily related to reciprocity, but separately such attributes of cooperation as trust, goodwill, cohesion could not be considered in their study. They proposed to continue the study with the inclusion of these attributes included in interpersonal interaction. But our study differs in that we examined the impact of the components of interpersonal interaction/cooperation on job satisfaction separately. What was not carried out in the study of these authors.

According to the results of the study, the nurse pointed out that the higher the cohesion in the team, the trusting and friendly relationships in which they can freely express their opinions without fear of condemnation or being misunderstood, as well as a positive emotional attitude create a favorable working environment, which is characterized by a healthy moral and psychological climate that affects high satisfaction hard work. Among the satisfied there are not enough or not at all satisfied nurses, the number of which may grow every year if appropriate measures are not taken to improve communication skills among the middle level of medical staff and not increase the number of nurses satisfied with their work, which may lead to a continued outflow of this group by a health worker and exacerbate the current shortage of nurses even more. Similar results were obtained in a study by DiMeglio, K., et al. (2018), where group cohesion contributes to increased nurse satisfaction.

In a study by Apker et al. 2006; Karamanoglu et al. 2009, it was confirmed that teamwork, cohesion in the nursing team increased job satisfaction and even prevented confrontations. And it was also determined that effective communication in a team is a vital aspect of a positive nursing practice environment, and identified four sets of communication skills that nursing professionals demonstrate: cooperation, trust, compassion and coordination.

In our study, benevolence showed a high statistical association with job satisfaction. Employees with a significant level of this trait in their character are able to feel the need for a positive solution to any conflict situation at the interpersonal level. It should be noted

that everyone has their own opinion and individual differences are related only to strengthening it, which can lead to awareness of the need to improve their communication skills. As for the aspect of mutual trust, which is more often associated with competencies such as respect, politeness, the results of this study show that nurses consider this aspect important, which also affects job satisfaction, and this conclusion is consistent with the Esmailpur-Bandboni study et al. 2017. Moreover, the American Nurses Association has identified criteria that are necessary for a healthy working environment: relationship, trusting interaction, cohesion, a good and friendly emotional attitude in the department of the organization and interaction, in our study demonstrated a high correlation with job satisfaction, which can create a friendly working environment for nurses [30]

Nurses who work in conditions considered friendly to the profession, with high convenience and mutual respect, show good results of their activities and good and effective patient care. And there is also evidence that cohesion, friendly professional relationships between nurses, and trust are fundamental attributes of communication skills that can in turn improve professional practice, guarantee greater job satisfaction, and contribute to a better quality of care provided to patients in inpatient settings [31].

Nevertheless, there are no studies in Kazakhstan evaluating these favorable conditions, the peculiarities of the professional practice of nurses, which justifies the development of this study. Thus, interpersonal communication plays an important role in fulfilling this mission. In work situations in which nurses are constantly subjected to physical and psychological stress, environmental factors are perceived with discontent and without effective coping mechanisms, which may indicate burnout. Which subsequently requires the development of measures to improve communication, mutual assistance and friendly relationships.

### Conclusion

Teaching such communication skills of relationships is the most effective method of eliminating emotional burnout of nurses, as well as increasing satisfaction with their work. But insufficient communication between nurses can lead to job dissatisfaction and emotional burnout, as well as a decrease in trust between team members

[32]. It is also known that nurses in most cases are concerned about both their own problems and the problems of patients, which contributes to the creation of an increased socio-psychological burden. Statistics show that their nervous system and overall health are weaker than those of workers in other professions, which is most likely due to high emotional, mental and physical overloads. And we see that there is a need to take measures to reduce stress in nurses. It is also important to develop and implement measures in a timely manner that are aimed at preventing the occurrence of conflict situations, increasing the availability of medical care for people and its quality. An analysis of the results of our research has shown us that the problem of interpersonal interaction and collaboration in a team is very pressing and requires a speedy solution. The results of the study show the importance and necessity of active development of communication skills among nursing staff, contributing to cohesion, strengthening and strengthening the spirit of teamwork in the team.

The first conclusion is that nursing staff should be open to interpersonal interaction characterized by honesty, through an adequate interpretation of the thoughts, feelings and relationships of another person.

The analysis of the results of the survey made it possible to draw the following conclusions:

1. Our research has shown that low indicators of emotional mood, goodwill, trust, cohesion, and business criticism before work deserve special attention, since they prevail in most cases among the dissatisfied.

2. Older nurses, sisters with less work experience, as well as sisters engaged in practical activities (tend to give a lower assessment of job satisfaction) made up the majority of those dissatisfied with work.

Based on the above, it can be concluded that the department needs to carry out active and purposeful work in order to develop and strengthen the communication skills of nurses. To do this, we have developed the following recommendations for medical:

1. It is necessary to organize the training of nurses in the basics of communicative interaction, which will help to increase cohesion and improve the socio-psychological climate in the team.

2. It is necessary to develop and implement programs for training nurses in communication styles and the development of personal competencies related to communication skills. These competencies

should improve the accuracy of communication and, consequently, improve the climate of personal and professional relationships in the workplace. It is necessary to develop and implement training programs for the development of personal competencies related to communication skills.

### References

1. Kaiser JA, Westers JB. Nursing teamwork in a health system: A multisite study. *J Nurs Manag* [Internet]. 2018 Jul 1 [cited 2024 May 13];26(5):555–62. Available from: <https://pubmed.ncbi.nlm.nih.gov/29336502/>
2. Fernández-Basanta S, Coronado C, Bondas T, Movilla-Fernández MJ. Primary healthcare midwives' experiences of caring for parents who have suffered an involuntary pregnancy loss: a phenomenological hermeneutic study. *Midwifery* [Internet]. 2021 Jan 1 [cited 2024 May 12];92. Available from: <https://pubmed.ncbi.nlm.nih.gov/33130341/>
3. Bowen R, Lally KM, Pingitore FR, Tucker R, McGowan EC, Lechner BE. A simulation based difficult conversations intervention for neonatal intensive care unit nurse practitioners: A randomized controlled trial. *PLoS One* [Internet]. 2020 [cited 2024 May 12];15(3):e0229895. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0229895>
4. Pan N, Luo YY, Duan QX. The Influence of PDCA Cycle Management Mode on the Enthusiasm, Efficiency, and Teamwork Ability of Nurses. *Biomed Res Int* [Internet]. 2022 [cited 2024 May 14];2022. Available from: <https://pubmed.ncbi.nlm.nih.gov/35845933/>
5. Gokoglan E, Ozen Bekar E. The relationship between nurse managers' personality traits and their conflict management strategy preferences. *J Nurs Manag* [Internet]. 2021 Jul 1 [cited 2024 May 18];29(5):1239–45. Available from: <https://pubmed.ncbi.nlm.nih.gov/33474784/>
6. Panczyk M, Iwanow L, Zarzeka A, Jaworski M, Gotlib J. Communication skills attitude scale: a translation and validation study in a sample of registered nurses in Poland. *BMJ Open* [Internet]. 2019 May 1 [cited 2024 May 12];9(5). Available from: <https://pubmed.ncbi.nlm.nih.gov/31072864/>
7. Yamani N, Taleghani F, Alizadeh M, Khabaz-Mafinejad M. Determining the Expected Competencies for Oncology Nursing: A Needs Assessment Study. *Iran J Nurs Midwifery Res* [Internet]. 2018 [cited 2024 May 12];23(3):188–92. Available from: <https://pubmed.ncbi.nlm.nih.gov/29861756/>
8. Goktas S, Gezginci E, Kartal H. The Effects of Motivational Messages Sent to Emergency Nurses During the COVID-19 Pandemic on Job Satisfaction, Compassion Fatigue, and Communication Skills: A Randomized Controlled Trial. *J Emerg Nurs* [Internet]. 2022 Sep 1 [cited 2024 May 12];48(5):547–58. Available from: <https://pubmed.ncbi.nlm.nih.gov/35864005/>
9. Schmutz JB, Meier LL, Manser T. How effective is teamwork really? The relationship between teamwork and performance in healthcare teams: a systematic review and meta-analysis. *BMJ Open* [Internet]. 2019 Sep 1 [cited 2024 May 14];9(9). Available from: <https://pubmed.ncbi.nlm.nih.gov/31515415/>
10. Vermeir P, Blot S, Degroote S, Vandijck D, Mariman A, Vanacker T, et al. Communication satisfaction and job satisfaction among critical care nurses and their impact on burnout and intention to leave: A questionnaire study. *Intensive Crit care Nurs* [Internet]. 2018 Oct 1 [cited 2024 May 14];48:21–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/30033213/>
11. Ylitörmänen T, Kvist T, Turunen H. Perceptions on nurse-nurse collaboration among registered nurses in Finland and Norway. *Scand J Caring Sci* [Internet]. 2019 Sep 1 [cited 2024 May 12];33(3):731–40. Available from: <https://pubmed.ncbi.nlm.nih.gov/30866079/>
12. Al-Hamdan Z, Banerjee T, Manojlovich M. Communication With Physicians as a Mediator in the Relationship Between the Nursing Work Environment and Select Nurse Outcomes in Jordan. *J Nurs Scholarsh an Off Publ Sigma Theta Tau Int Honor Soc Nurs* [Internet]. 2018 Nov 1 [cited 2024 May 14];50(6):714–21. Available from: <https://pubmed.ncbi.nlm.nih.gov/30043513/>
13. Thumm EB, Flynn L. The Five Attributes of a Supportive Midwifery Practice Climate: A Review of the Literature. *J Midwifery Womens Health* [Internet]. 2018 Jan 1 [cited 2024 May 12];63(1):90–103. Available from: <https://pubmed.ncbi.nlm.nih.gov/29377534/>
14. Nikkhah-Farkhani Z, Piotrowski A. Nurses' turnover intention a comparative study between Iran and Poland. *Med Pr* [Internet]. 2020 [cited 2024 May 12];71(4):413–20. Available from: <https://pubmed.ncbi.nlm.nih.gov/32421012/>
15. Sillero-Sillero A, Zabalegui A. Safety and satisfaction of patients with nurse's care in the perioperative. *Rev Lat Am Enfermagem* [Internet]. 2019 [cited 2024 May 12];27. Available from: <https://pubmed.ncbi.nlm.nih.gov/31038636/>
16. Sbordoni E de C, Madaloni PN, de Oliveria GS, Fogliano RRF, Neves VR, Balsanelli AP. Strategies used by nurses for conflict mediation. *Rev Bras Enferm* [Internet]. 2020 [cited 2024 May 12];73(suppl 5). Available from: <https://pubmed.ncbi.nlm.nih.gov/33338161/>
17. Mayaki S, Stewart M. Teamwork, Professional Identities, Conflict, and Industrial Action in Nigerian Healthcare. *J Multidiscip Healthc* [Internet]. 2020 [cited 2024 May 12];13:1223–34. Available from: <https://pubmed.ncbi.nlm.nih.gov/33116567/>
18. Petry L, Diniz MBC. Communication between teams and the care transfer of critical patients. *Rev Rene* [Internet]. 2020 Mar 18 [cited 2024 May 14];21:e43080–e43080. Available from: <http://www.periodicos.ufc.br/rene/article/view/43080>
19. Valentim LV, de Luz RA, Santos LSC, da Silva Noca CR. PERCEPÇÃO DOS PROFISSIONAIS DE ENFERMAGEM QUANTO AO TRABALHO EM EQUIPE. *Rev Baiana Enfermagem* [Internet]. 2020 Oct 7 [cited 2024 May 14];34. Available from: <https://periodicos.ufba.br/index.php/enfermagem/article/view/37510>
20. Brás CP da C, Ferreira MMC, de Figueiredo MDCAB. Construction and validity of the Interprofessional Communication in Health Scale. *Rev Bras Enferm* [Internet]. 2023 [cited 2024 May 12];76(3). Available from: <https://pubmed.ncbi.nlm.nih.gov/37556693/>

21. Kim AY, Sim IO. Communication Skills, Problem-Solving Ability, Understanding of Patients' Conditions, and Nurse's Perception of Professionalism among Clinical Nurses: A Structural Equation Model Analysis. *Int J Environ Res Public Health* [Internet]. 2020 Jul 1 [cited 2024 May 12];17(13):1–14. Available from: <https://pubmed.ncbi.nlm.nih.gov/32645992/>
22. Yeganeh S, Torabizadeh C, Bahmani T, Molazem Z, Doust HY, Dehnavi SD. Examining the views of operating room nurses and physicians on the relationship between professional values and professional communication. *BMC Nurs* [Internet]. 2022 Dec 1 [cited 2024 May 12];21(1). Available from: <https://pubmed.ncbi.nlm.nih.gov/35031042/>
23. Zborowska A, Gurowiec PJ, Młynarska A, Uchmanowicz I. Factors Affecting Occupational Burnout Among Nurses Including Job Satisfaction, Life Satisfaction, and Life Orientation: A Cross-Sectional Study. *Psychol Res Behav Manag* [Internet]. 2021 [cited 2024 May 12];14:1761–77. Available from: <https://pubmed.ncbi.nlm.nih.gov/34744464/>
24. Al-Qahtani AH, Stirling B, Forgrave D. The impact of job satisfaction on nurses' work lives: A literature review. *QScience Connect* [Internet]. 2020 Feb 28 [cited 2024 May 18];2020(Issue 1):1. Available from: <https://www.qscience.com/content/journals/10.5339/connect.2020.1>
25. Chen YC, Guo YLL, Chin WS, Cheng NY, Ho JJ, Shiao JSC. Patient-Nurse Ratio is Related to Nurses' Intention to Leave Their Job through Mediating Factors of Burnout and Job Dissatisfaction. *Int J Environ Res Public Health* [Internet]. 2019 Dec 1 [cited 2024 May 12];16(23). Available from: <https://pubmed.ncbi.nlm.nih.gov/31795420/>
26. Nantsupawat A, Wichaikhum OA, Abhichartitubtra K, Kunaviktikul W, Nurumal MS Bin, Poghosyan L. Nurses' knowledge of health literacy, communication techniques, and barriers to the implementation of health literacy programs: A cross-sectional study. *Nurs Health Sci* [Internet]. 2020 Sep 1 [cited 2024 May 12];22(3):577–85. Available from: <https://pubmed.ncbi.nlm.nih.gov/32115835/>
27. Akbari M, Bagheri A, Fathollahi A, Darvish M. Job satisfaction among nurses in Iran: does gender matter? *J Multidiscip Healthc* [Internet]. 2020 [cited 2024 May 12];13:71–8. Available from: <https://pubmed.ncbi.nlm.nih.gov/32021236/>
28. Huaman N, Morales-García WC, Castillo-Blanco R, Saintila J, Huancahuire-Vega S, Morales-García SB, et al. An Explanatory Model of Work-family Conflict and Resilience as Predictors of Job Satisfaction in Nurses: The Mediating Role of Work Engagement and Communication Skills. *J Prim Care Community Health* [Internet]. 2023 Jan 1 [cited 2024 May 12];14. Available from: <https://pubmed.ncbi.nlm.nih.gov/36718818/>
29. Alabi MA, Ishola AG, Onibokun AC, Lasebikan VO. Burnout and quality of life among nurses working in selected mental health institutions in South West Nigeria. *Afr Health Sci* [Internet]. 2021 [cited 2024 May 14];21(3):1428–39. Available from: <https://pubmed.ncbi.nlm.nih.gov/35222608/>
30. Putra KR, Andayani T, Ningrum EH. Job satisfaction and caring behavior among nurses in a military hospital: A cross-sectional study. *J Public Health Res* [Internet]. 2021 [cited 2024 May 12];10(2). Available from: <https://pubmed.ncbi.nlm.nih.gov/33855409/>
31. Delak B, Širok K. Physician-nurse conflict resolution styles in primary health care. *Nurs open* [Internet]. 2022 Mar 1 [cited 2024 May 12];9(2):1077–85. Available from: <https://pubmed.ncbi.nlm.nih.gov/34907657/>
32. Molero Jurado MDM, Herrera-Peco I, Pérez-Fuentes MDC, Oropesa Ruiz NF, Martos Martínez Á, Ayuso-Murillo D, et al. Communication and humanization of care: Effects over burnout on nurses. *PLoS One* [Internet]. 2021 [cited 2024 May 12];16(6):e0251936. Available from: <https://pubmed.ncbi.nlm.nih.gov/34111138/>

**Information about authors:**

*D.M. Demeubaeva – Almaty, Kazakhstan, e-mail: dinara.demeubayeva@gmail.com*

*G.Zh. Kapanova – Al-Farabi Kazakh National University, Almaty, Kazakhstan, e-mail: g.kapanova777@gmail.com*

*A.M. Grjibovski – Northeastern Federal University named after M.K. Ammosov, Yakutsk, Russia, e-mail: Andrej.grjibovski@gmail.com*

*S.A. Dikanbaeva – Kazakh-Russian Medical University, Almaty, Kazakhstan, Email: dikanbayeva.s@mail.ru*

*N.E. Zhappargaly – Kazakh National Medical University named after S.D. Asfendiyarov, Almaty, Kazakhstan, e-mail: zhnurken@mail.ru*

*G.T. Tashenova – Kazakh National Medical University named after S.D. Asfendiyarov, Almaty, Kazakhstan, e-mail: talipovna68@gmail.com*

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