

Research Article**Self-Perception of Nurses' Communication Skills
in their Work with Patients****¹Nevenka Tatković, ²Biljana Marković****and ³Sanja Tatković**¹PhD, full professor, Juraj Dobrila University of Pula, Croatia²Master of econ., General Hospital, Koprivnica, Croatia³Master of psych., Juraj Dobrila University of Pula, Croatia

[Received: 10/04/2019; Accepted: 30/04/2019; Published: 03/06/2019]

ABSTRACT

Communication as a dynamic process between a nurse and a patient is aimed at the patient's general well-being, health preservation and more quality health care. It has a significant role in the nursing practice, as it affects its quality and patient satisfaction, hence it is of the utmost importance to make it successful. In our research, we examined the manner in which nurses evaluate their own communication skills in their work with patients and whether there are statistically significant differences in their evaluation with respect to the years of work experience and qualification levels. We detected a statistically significant difference with regard to years of work experience (1-10, 11-20, 21 or more), whereby the majority of respondents who claimed to be capable of communicating with patients of various age groups (children, adolescents, youth, adults, elderly people) were in the group of 11-20 years of work experience. With respect to qualifications, we detected a statistically significant difference in the observed educational level (nurse, bachelor's degree in nursing, graduated nurse / master's degree in nursing): the respondents who claimed to use excessive technical language belong to the highest education level (graduated nurse / master's degree in nursing) (25%). We also detected a statistically significant difference with respect to the observed categories of qualifications in terms of their need for organised workshops for the improvement of communication skills: the majority of respondents who did not express the need for organised workshops for the improvement of their communication skills belong to the "nurse" category.

Key words: nurse, patient, communication skills, self-perception, education level, work experience**INTRODUCTION**

Communication is a social process and one of the most complex and interesting fields of human activity. It is a prerequisite for the construction of any community and the subject of interpersonal conduct and human activity (Weaver, as cited in Čerepinko, 2012). Every common activity of an individual is based on the adopted meanings transferred through communication (Kunczik and Zipfel, 2006). Communication directly affects interpersonal relationships, social relationships and the relationship between an individual and the society; it is a prerequisite for favourable collaboration and understanding. The way we

communicate within an organisation (...) shapes interpersonal relationships and affects individual and group development (Reardon, 1998). Communication occurs within the affective and behavioural context and is connected with people's emotions (Donohew, Sypher and Higgins, 2015, as cited in Tatković, N., Diković, Tatković, S., 2016); therefore, communication competence is vital for a nursing professional. Communication and interpersonal skills are particularly important in the professions centred around a person and the social environment, hence "the new approaches in health care psychology emphasise the significance of good

communication and cooperation of the health care professional and the patient during medical treatment, and provide numerous psychological techniques for the improvement of the patient's overall level of information and his/her communication with health care professionals during treatment. This is, in many cases, a considerably useful treatment procedure which indirectly affects the treatment efficiency." (Havelka, M., Lučanin, D. 2004:2).

A wide range of factors and activities, such as the quality of health care, quality of nurse-patient relationship, successful cooperation of nurses in the health care process, successful interdisciplinary teamwork of nurses and other health care professionals, and the possibility of publicly promoting the nurses' status and role in the society particularly depend on the quality of nurses' communication, knowledge and the skills of communication with the wider and immediate working environment (Komunikacija u sestriinstvu/Nursing communication, 2012). (<https://www.zvu.hr/arhiva/opatija/arhiva/2004/zbornik/zbornik.pdf>). Quality communication is a prerequisite for a professional approach in nursing (Fajta, M., 2004, Čukljek, 2005). Many authors have emphasised the necessity of acquiring communication skills through various trainings and life-long learning with the aim to establish stable, respectful and professional teamwork relationships, especially in terms of the nurse-patient relationships (Bulajić, M., Grba-Bujević, 2012), because, according to Sadić (2004:3), "there is no quality communication without the desire of complementing one's knowledge or acknowledging the limits of personal level of information and knowledge." The acknowledgement of opposing communication styles (complementarity) and the acceptance of equal communication styles (symmetry) may enrich communication and contribute to communication ethics (Brkljačić, M., 2013). One person's higher level of knowledge and expertise should not be an excuse for turning another person into a passive object. Failure to pay attention to what the patient is saying may be perceived by the patient as a sign of disrespect, disinterestedness and negligence,

whereas the health care professional may thus overlook many important information potentially useful for the treatment (especially in psychiatric patients) (Moro, Frančišković et al., 2011).

Communication quality

Research in the quality of nurses' communication competence confirmed that the development of communication skills requires continuous work and improvement in order to increase the treatment efficiency and the level of patients' satisfaction with the provided service. Benceković and Žanko (2004) examined the level of satisfaction with the information that patients obtain from nurses, quality of communication skills and potential confrontations, communication obstacles and possible ways to improve communication. The findings revealed that a substantial number of patients emphasised the importance of individual approach, the need for adequate engagement in a conversation and the assurance of a better communication environment. The patients prioritised the need for the acknowledgement of their mental state, instead of only focusing on their medical condition. Even though a high percentage of patients expressed satisfaction with communication (96%), the level of satisfaction was greater with long-time patients, people of higher socio-economic status and elderly patients. Satisfaction with the quantity and quality of information was more evident with the patients of lower educational level, elderly patients, long-time and first-time patients at the polyclinic. Lower degree of satisfaction was detected with the patients of higher educational level, young patients, and the patients who visited the polyclinic only several times. The patients emphasised that health care professionals were not sufficiently engaged in a conversation, and they emphasised the increased need for the availability of quality written materials, as well as the improvement of information quality due to receiving contradictory advice and instructions. The role of communication is not only to exchange information, thoughts and feelings but also to

achieve certain goals, persuade other people into accepting our own attitudes and ideas, or to request assistance. Whether other people will properly understand our message depends on our skills of communicating ideas and feelings, while the skills of listening and observing others enable us to understand their messages (Lučanin and Despot Lučanin, 2010). Therefore, the overcoming of communication obstacles is of the utmost importance in all professions, especially health care. If problems or obstacles occur within the communication process, it prevents the achievement of goals of any of the participants. That kind of communication is perceived as a source of stress (Arnold and Underman Boggs, 2003).

Communication obstacles

Regardless of the experience in communication and adherence to the rules of successful communication, numerous unforeseeable obstacles may occur within communication. They may be overcome with certain rules and instructions, whereas some of them may even be anticipated (Glavočević, 2012). These are, for instance, social and cultural differences, limited understanding and memory, insufficient engagement in a conversation by the caregiver, or contradictory advice and recommendations provided by the competent person (Breakwell, 2001). Aggravated communication between health care professionals and patients may be expected in the event of communication with specific groups of patients; people under stress, people in crisis, people with impaired cognition, people with experiential and behavioural difficulties (aggression, anxiety, depression), people with impaired hearing and vision, people with impaired verbal ability, intensive care patients and hospitalised patients (Mojsović et al., 2005). In the communication process, a health care professional is an expert responsible for the course and result of the communication process. He/she should guide the course of communication and exhibit adequate flexibility in providing the patient with an opportunity to present his/her problems, needs and emotions (Mojsović et al., 2005). In terms of communication and relationships within a health

care team, it should be indicated that constructive communication requires focusing on the solution of the problem, respecting the interlocutor, acknowledging differences, tolerating opposing attitudes and opinions. Conversation within a team and with the patient should be open and tactful. However, research has shown that certain issues and difficulties may occur in practice. Benceković and Žanko (2004) discovered that the most common communication obstacles include: limited communication ability of patients (due to mental state, illness, excitement...), limited understanding and memory (due to technical terminology, patient's cognitive abilities...), and insufficient engagement in a conversation. The research has also shown that some of the most represented segments of nurses' communication skills include listening, assertiveness and empathy, whereas persuasion is the least represented. Cindrić (2004) emphasised that professional teams in health care institutions are inadequately trained, primarily in the field of communication skills, which has an unfavourable effect on the social climate within the institution, and hence requires more effort in terms of professional training of staff.

Communication issues in relation to the patients may arise from inadequate spatial conditions, as confirmed by the research on satisfaction with care, communication and social climate (conducted on the sample of 165 patients treated at the internal medicine ward). A large concentration of patients in overcrowded institutions implies work-related difficulties which have an unfavourable effect on the social climate within the institution (Cindrić, 2004). Recent statistics in Croatia reveal that the lack of medical professionals, especially nurses, is one of the underlying reasons for the existing problems in the health care system. Other authors (Despot Lučanin, Havelka, Kostović, Lučanin, Perković, Pukljak Iričanin, 2006) also indicated general communication environment conditions as the most important factors determining the success of the communication process, in addition to the patient's personal traits and current condition.

[II] MATERIALS AND METHODS

Anonymous survey was prepared and conducted for the purposes of this research. The aim of the research was to examine the self-assessment of nurses' communication skills in their work with patients, and to explore whether there are statistically significant differences with respect to the years of work experience and qualification levels of the respondents.

Chi-squared test

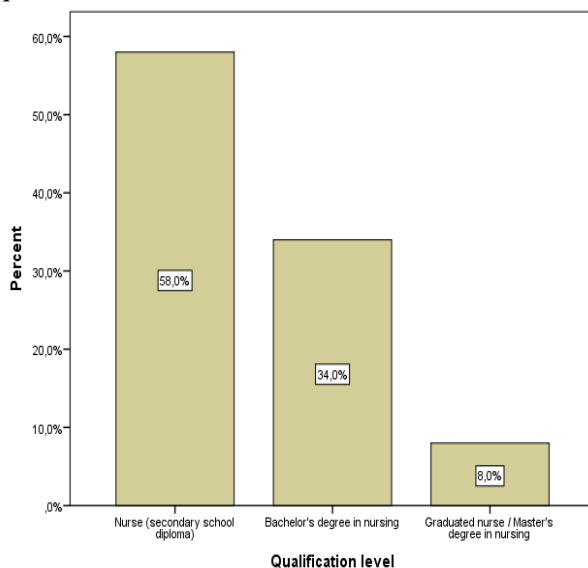
The findings of the Chi-squared test will be presented within the research. Chi-squared test is a non-parametric test based on the distribution of frequencies within the contingency table (and not on a variable), and the data are assumed to originate from a randomly selected sample. This test is used to determine whether certain obtained (detected) frequencies deviate from the frequencies expected under a certain hypothesis. The following hypotheses are made for the purpose of the research:

H0: There is no statistically significant difference in the parametric frequencies of observed respondents

H1: There is a statistically significant difference in the parametric frequencies of observed respondents

Sample description

The research was conducted in February 2019 in hospital of Koprivnica, Croatia. The intentional sample consisted of totally 100 nurses, with different years of work experience and qualification level.



If we look at data regarding the observed years of work experience, we can notice that 28,0% of respondents have 1-10 years of work experience; 27,0% have 11-20 years of work experience, while 45,0% have 21 or more years of work experience. Furthermore, in terms of qualification levels, we see that 58,0% of respondents have completed secondary education in nursing, 34,0% have a bachelor's degree in nursing, while 8,0% have a graduated as nurses, i.e. have a master's degree in nursing.

		N	%
Years of work experience	1 – 10	28	28,0%
	11 -20	27	27,0%
	21 or more	45	45,0%
	Total	100	100,0%
Qualification level	Nurse (secondary school diploma)	58	58,0%
	Bachelor's degree in nursing	34	34,0%
	Graduated nurse / Master's degree in nursing	8	8,0%
	Total	100	100,0%

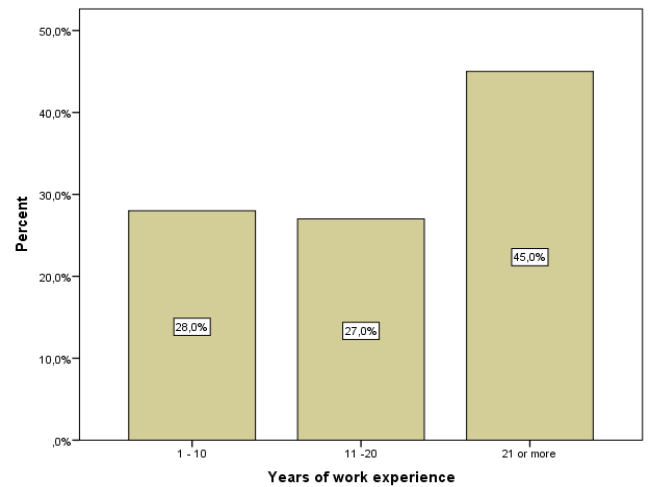


Table 2: Which of the following groups of patients do you feel unable to communicate well with

		N	%
Anxious/depressive	Yes	35	35,0%
	No	65	65,0%
	Total	100	100,0%
Mentally ill	Yes	47	47,0%
	No	53	53,0%
	Total	100	100,0%
Drug abusers	Yes	56	56,0%
	No	44	44,0%
	Total	100	100,0%
Elderly people with	Yes	18	18,0%

cognitive impairment	No	82	82,0%
	Total	100	100,0%
Cancer patients, seriously ill patients, deaf and mute patients	Yes	47	47,0%
	No	53	53,0%
	Total	100	100,0%
Patients with specific ethnic, language and cultural features	Yes	44	44,0%
	No	56	56,0%
	Total	100	100,0%

The answers to the question Which of the following groups of patients do you feel unable

to communicate well with indicate that the largest percentage of respondents find it the most difficult to communicate with drug abusers (56,0%), followed by cancer patients, seriously ill patients and deaf and mute patients (47,0%), while 47,0% have difficulties in communication with mentally ill patients.

Furthermore, Table 3 contains individual replies of the respondents to the question Please state an example of a pleasant or unpleasant communication experience with a patient.

Table 3: Please state an example of a pleasant or unpleasant communication experience with a patient

	Number
-	3
...	1
0	1
Patients often ask me about the duration of the surgical procedure, so when I explain to them that the (tentative) duration of the procedure includes the pre-operative preparation, inducement to anaesthesia, and that they are cared for by a team of nurses/technicians, an anaesthetist and at least one surgeon, they immediately feel more reassured. I have not had any negative experiences yet.	1
When the patient is scheduled for a procedure but is not familiarised with the procedure and the steps to be performed, because the physician failed to inform him/or about it	1
Unpleasant - patient with utter lack of personal hygiene; Pleasant - subsequent encounter with a cured person	1
Unpleasant – patient insulting the staff. Pleasant - when I can help someone with my knowledge and advice.	1
Explanation in relation to the hearing aid	1
The patient refuses the fact that certain things cannot be performed today and insists that they be performed	1
The patient is instructed to come for the recording of medical findings post-procedure but they fail to do so!	1
Preparing the patient for an invasive examination, describing the procedure, reducing fear and making the patient feel more at ease	1
I try to talk calmly to aggressive patients and avoid confrontations.	1
Aggressive patients; Cooperative patients	1
Every conversation without unnecessary interruptions where the person is certain that the other person properly understood the meaning and the message of the conversation is pleasant. In an unpleasant conversation, the other person fails to listen, exhibits aggressive behaviours.	1
A pleasant conversation about the examination and the test. Conflict due to lengthy waiting - no patience or acknowledgment for the patients who require urgent attention.	1
Pleasant: They are very pleased because I kindly explained the procedure with a smile on my face and fun examples. Unpleasant: The patient demands to know exactly when he/she will be next in line with an extremely aggressive and invasive tone of voice.	1
Pleasant: providing instructions to the patients for further treatment, unpleasant - impatience of the patient upon his/her return from x-ray scans for further examination at the physician	1
Pleasant communication follows a proper psycho-physical peri-operative preparation of the patient, whereas unpleasant communication often occurs due to inadequate preparation of the patient and overload in the performance of everyday activities.	1

Pleasant experience includes everything we offer to the patient which makes him/her satisfied, whereas negative experiences occur as a result of work overload when I feel that I do not have time to speak to the patient, which affects the quality of my work	1
Pleasant experience is when the patient leaves the clinic with a smile and satisfaction on his/her face, and unpleasant experience is when they complain about lengthy waiting for an examination, which is something that is out of our control	1
Pleasant: cooperative patient, unpleasant: drunk patient	1
Pleasant: the patient understands and accepts his/her medical condition after the informed conversation. Unpleasant - after the informed conversation, the patient fails to understand and refuses to accept suggestions and advice in relation to recovery.	1
Pleasant - the patient understands what is being explained to him/her, unpleasant: the patient refuses to cooperate	1
Verbal aggression of drunk patients, pleasant: talking, joking, laughing with patients	1
Having a satisfied patient is rewarding for a nurse but there are many unpleasant patients who lack patience to wait or listen	1

Analysis with regard to years of work experience.

The following pages will present test results with regard to years of work experience of

respondents and the observed questions. The analysis is conducted by means of a Chi-squared test.

Table 4: Do you consider yourself to be clear enough when talking to a patient about the need to perform certain medical procedures vs. years of work experience

		Years of work experience			Total	p*	
		1-10	11-20	21 or more			
Do you consider yourself to be clear enough when talking to a patient about the need to perform certain medical procedures	Yes	N	19	22	33	0,787	
		%	67,9%	81,5%	73,3%		74,0%
	Partially	N	8	4	11		23
		%	28,6%	14,8%	24,4%		23,0%
	No	N	1	1	1		3
		%	3,6%	3,7%	2,2%		3,0%
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 5: Would you say you use too many professional terms in your communication with patients vs. years of work experience?

		Years of work experience			Total	p*		
		1-10	11-20	21 or more				
Would you say you use too many professional terms in your communication with patients?	Yes	N	2	0	3	0,376		
		%	7,1%	0,0%	6,7%		5,0%	
	No	N	26	27	42		95	
		%	92,9%	100,0%	93,3%		95,0%	
	Total		N	28	27		45	100
			%	100,0%	100,0%		100,0%	100,0%

*Chi-squared test

If we examine test results presented in Tables 4 and 5, we notice that the level of significance of the Chi-squared test regarding questions Do you consider yourself to be clear enough when talking to a patient about the need to perform certain medical procedures, Would you say you use too many stručnih izraza in your

communication with patients? and the observed years of work experience categories (1–10, 11–20, 21 or more) is higher than 0,05 ($p > 0,05$), which means that there are no statistically significant differences regarding the observed variables.

Table 6: Do you think you pay enough attention to each patient vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you think you pay enough attention to each patient?	Yes	N	16	13	23	52	0,790
		%	57,1%	48,1%	51,1%	52,0%	
	No	N	12	14	22	48	
		%	42,9%	51,9%	48,9%	48,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 7: Do you often start to talk before your patient can finish his/her thought vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you often start to talk before your patient can finish his/her thought?	Always	N	1	0	1	2	0,575
		%	3,6%	0,0%	2,2%	2,0%	
	Sometimes	N	27	26	41	94	
		%	96,4%	96,3%	91,1%	94,0%	
	Often	N	0	1	3	4	
		%	0,0%	3,7%	6,7%	4,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

If we look at test results shown in Tables 6 and 7, we can notice that the level of significance of the Chi-squared test regarding questions Do you think you pay enough attention to each patient?, Do you often start to talk before your patient can

finish his/her thought? and the observed work experience categories (1–10, 11–20, 21 or more years) is not higher than 0,05 ($p > 0,05$); therefore, no statistically significant difference was identified regarding the observed variables.

Table 8: Do you schedule a time to talk with your patients vs. years of work experience

			Years of work experience			Total	p*
			1 - 10	11 - 20	21 i više		
Do you schedule a time to talk with your patients?	Yes	N	5	5	6	16	0,804
		%	17,9%	18,5%	13,3%	16,0%	
	No	N	23	22	39	84	
		%	82,1%	81,5%	86,7%	84,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

The level of significance of the Chi-squared test regarding the question Do you schedule a time to talk with your patients and the observed work experience categories (1–10, 11–20, 21 or

more years) is 0,804 ($p > 0,05$), which means that no statistically significant difference was identified for the observed variables.

Table 9: Do you adjust your communication to patients' cultural characteristics vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you adjust your communication to patients' cultural characteristics	Always	N	9	14	15	38	0,014
		%	32,1%	51,9%	33,3%	38,0%	
	Sometimes	N	17	10	15	42	
		%	60,7%	37,0%	33,3%	42,0%	
	Often	N	2	3	15	20	
		%	7,1%	11,1%	33,3%	20,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Furthermore, if we examine the level of significance related to the question Do you adjust your communication to patients' cultural

characteristics?, we can see that the Chi-squared test value is 0,014 ($p < 0,05$), which means that a statistically significant difference

was identified for the observed years of work experience (1–10, 11–20, 21 or more). The largest number of respondents who answered "Sometimes" belong to the 1–10 years group

(60,7%), while the largest number of those who answered "Always" belong to the 11–20 years group (51,9%).

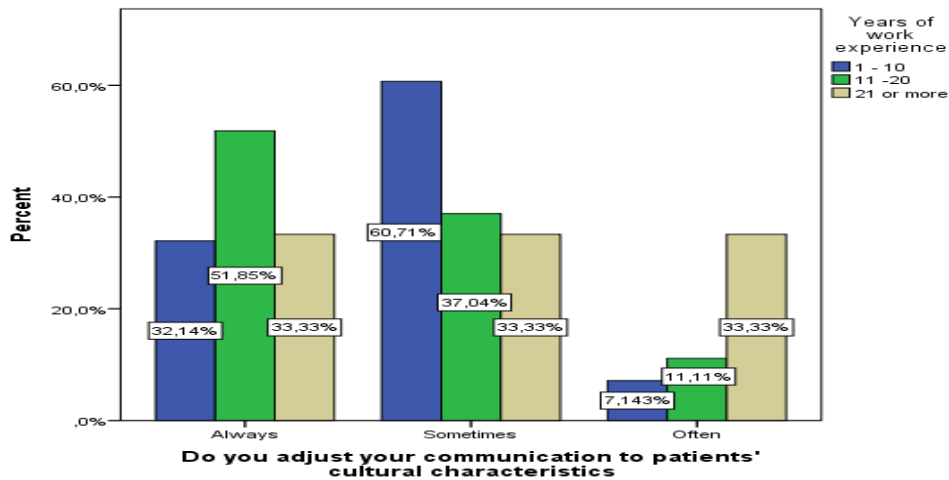


Table 10: Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people) vs. years of work experience

		Years of work experience			Total	p*	
		1-10	11-20	21 or more			
Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people)?	Yes	N	16	22	25	0,011	
		%	57,1%	81,5%	55,6%		63,0%
	Partially	N	7	4	19		30
		%	25,0%	14,8%	42,2%		30,0%
	No	N	5	1	1		7
		%	17,9%	3,7%	2,2%		7,0%
Total	N	28	27	45	100		
	%	100,0%	100,0%	100,0%	100,0%		

*Chi-squared test

Furthermore, if we examine the level of significance for the question Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people), we notice that the Chi-squared test value is 0,011 ($p < 0,05$), which means that there is a

statistically significant difference for the observed years of work experience (1–10, 11–20, 21 or more). Also, the largest number of respondents who answered "Yes" belong to the group with 11–20 years of work experience (81,5%).

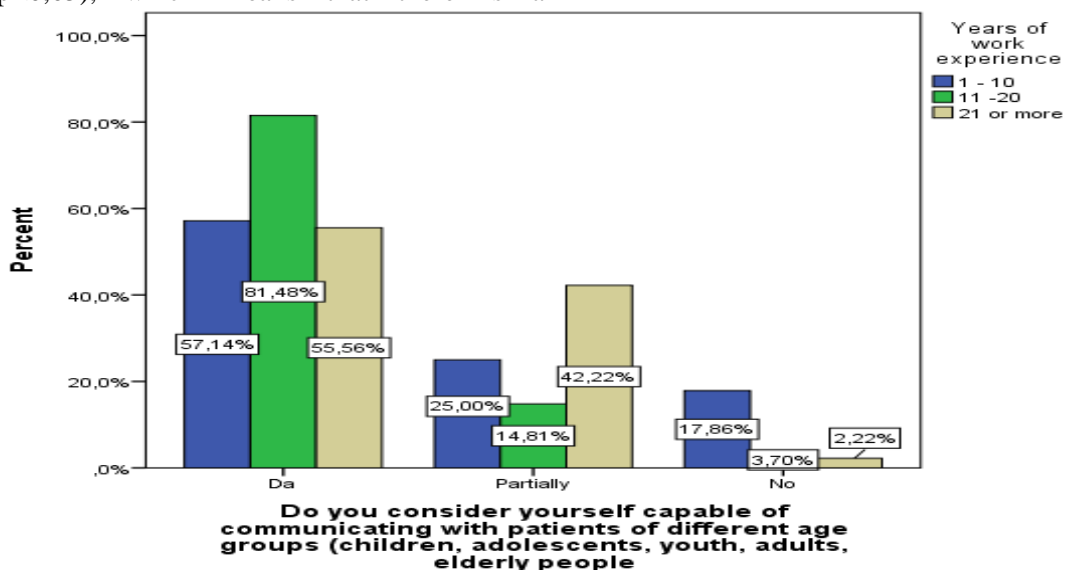


Table 11: Do you think you lack knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you think you lack knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work	Yes	N	8	1	5	14	0,065
		%	28,6%	3,7%	11,1%	14,0%	
	Partially	N	9	11	22	42	
		%	32,1%	40,7%	48,9%	42,0%	
	No	N	11	15	18	44	
		%	39,3%	55,6%	40,0%	44,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 12: Is it your practice to give written recommendations and reminders to patients vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Is it your practice to give written recommendations and reminders to patients	Yes	N	11	12	23	46	0,626
		%	39,3%	44,4%	51,1%	46,0%	
	Partially	N	6	6	12	24	
		%	21,4%	22,2%	26,7%	24,0%	
	No	N	11	9	10	30	
		%	39,3%	33,3%	22,2%	30,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

If we examine the test results shown in Tables 11 and 12, we notice that the level of significance of the Chi-squared test regarding questions Do you think you lack knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work?, Is it your practice to give written

recommendations and reminders to patients? and the observed work experience categories (1-10, 11–20, 21 or more years) is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference for the observed variables.

Table 13: Do you think communication with patients via mobile applications (sending medical reports, medical advice and similar) might facilitate communication with patients in healthcare vs. years of work experience

			Years of work experience			Total	p*	
			1-10	11-20	21 or more			
Do you think communication with patients via mobile applications (sending medical reports, medical advice and similar) might facilitate communication with patients in healthcare	Yes	N	13	9	14	36	0,392	
		%	46,4%	33,3%	31,1%	36,0%		
	No	N	15	18	31	64		
		%	53,6%	66,7%	68,9%	64,0%		
	Total		N	28	27	45		100
			%	100,0%	100,0%	100,0%		100,0%

*Chi-squared test

Table 14: Are you sufficiently familiar with communication techniques with regard to age groups of respondents vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Are you sufficiently familiar with communication techniques with regard to age groups of respondents	Yes	N	13	12	15	40	0,762
		%	46,4%	44,4%	33,3%	40,0%	
	Partially	N	12	13	24	49	
		%	42,9%	48,1%	53,3%	49,0%	
	No	N	3	2	6	11	
		%	10,7%	7,4%	13,3%	11,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

If we observe the test results shown in Tables 13 and 14, we notice that the level of significance of the Chi-squared test regarding the questions Do you think communication with patients via mobile applications (sending medical reports, medical advice and similar) might facilitate communication with patients in healthcare?, Are

you sufficiently familiar with communication techniques with regard to age groups of respondents? and the observed work experience categories (1–10, 11–20, 21 or more years) is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 15: Do you think you spend enough time in a non-formal conversation with patients on a daily basis vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you think you spend enough time in a non-formal conversation with patients on a daily basis?	Yes	N	12	12	10	34	0,079
		%	42,9%	44,4%	22,2%	34,0%	
	No	N	16	15	35	66	
		%	57,1%	55,6%	77,8%	66,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 16: Do you think that by talking to patients you might contribute to reducing doctors' workload vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you think that by talking to patients you might contribute to reducing doctors' workload?	Yes	N	6	12	15	33	0,257
		%	21,4%	44,4%	33,3%	33,0%	
	Partially	N	15	9	24	48	
		%	53,6%	33,3%	53,3%	48,0%	
	No	N	7	6	6	19	
		%	25,0%	22,2%	13,3%	19,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Upon examination of the test results shown in Tables 15 and 16, we notice that the level of significance of the Chi-squared test regarding questions Do you think you spend enough time in a non-formal conversation with patients on a daily basis?, Do you think that by talking to

patients you might contribute to reducing doctors' workload? and the observed work experience categories (1–10, 11–20, 21 or more years) is higher than 0,05 ($p > 0,05$); therefore there is no statistically significant difference regarding the observed variables

Table 17: Do you consider yourself to be competent enough to communicate with the members of a patient's family vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Do you consider yourself to be competent enough to communicate with the members of a patient's family?	Yes	N	9	8	18	35	0,773
		%	32,1%	29,6%	40,0%	35,0%	
	Partially	N	16	15	24	55	
		%	57,1%	55,6%	53,3%	55,0%	
	No	N	3	4	3	10	
		%	10,7%	14,8%	6,7%	10,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 18: Are you familiar with the techniques of delivering bad news (about a deterioration of a patient's health or about the death of a patient) to the members of their families vs. years of work experience

			Years of work experience			Total	p*
			1-10	11-20	21 or more		
Are you familiar with the techniques of delivering bad news (about a deterioration of a patient's health or about the death of a patient) to the members of their families?	Yes	N	6	5	8	19	0,989
		%	21,4%	18,5%	17,8%	19,0%	
	Partially	N	17	16	27	60	
		%	60,7%	59,3%	60,0%	60,0%	
	No	N	5	6	10	21	
		%	17,9%	22,2%	22,2%	21,0%	
Total		N	28	27	45	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Furthermore, if we look at the test results shown in Tables 17 and 18, we can see that the level of significance of the Chi-squared test regarding questions Do you consider yourself to be competent enough to communicate with the members of a patient's family?, Are you familiar with the techniques of delivering bad news

(about a deterioration of a patient's health or about the death of a patient) to the members of their families? and the observed work experience categories (1–10, 11–20, 21 or more years) is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 19: Would you say that the quality of patient care largely depends on your manner of communicating with a patient vs. years of work experience

			Years of work experience			Total	p*	
			1-10	11-20	21 or more			
Would you say that the quality of patient care largely depends on your manner of communicating with a patient?	Yes	N	24	24	34	82	0,302	
		%	85,7%	88,9%	75,6%	82,0%		
	No	N	4	3	11	18		
		%	14,3%	11,1%	24,4%	18,0%		
	Total		N	28	27	45		100
			%	100,0%	100,0%	100,0%		100,0%

*Chi-squared test

Table 20: Do you think it is necessary to organize workshops to improve your communication skills vs. years of work experience

			Years of work experience			Total	p*	
			1-10	11-20	21 or more			
Do you think it is necessary to organize workshops to improve your communication skills?	Yes	N	17	20	32	69	0,648	
		%	63,0%	74,1%	71,1%	69,7%		
	No	N	10	7	13	30		
		%	37,0%	25,9%	28,9%	30,3%		
	Total		N	27	27	45		99
			%	100,0%	100,0%	100,0%		100,0%

*Chi-square test

Furthermore, if we look at the test results presented in Tables 19 and 20, we notice that the level of significance of the Chi-squared test regarding questions Would you say that the quality of patient care largely depends on your manner of communicating with a patient?, Do you think it is necessary to organize workshops to improve your communication skills? and the observed work experience categories (1–10, 11–20, 21 or more years) is higher than 0,05

($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Analysis with regard to respondents' qualification levels The following pages will present results of the conducted test with regard to respondents' qualification levels and the observed questions. The analysis is conducted by means of a Chi-squared test.

Table 21: Do you consider yourself to be clear enough when talking to a patient about the need to perform certain medical procedures vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you consider yourself to be clear enough when talking to a patient about the need to perform certain medical procedures?	Yes	N	43	24	7	74	0,470
		%	74,1%	70,6%	87,5%	74,0%	
	Partially	N	12	10	1	23	
		%	20,7%	29,4%	12,5%	23,0%	
	No	N	3	0	0	3	
		%	5,2%	0,0%	0,0%	3,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

The level of significance of the Chi-squared test regarding the question Do you consider yourself to be clear enough when talking to a patient about the need to perform a certain medical

procedure? and the observed qualification levels is 0,470 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables

Table 22: Would you say you use too many professional terms in your communication with patients vs. education level

			Level of education			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Would you say you use too many professional terms in your communication with patients?	Yes	N	3	0	2	5	0,014
		%	5,2%	0,0%	25,0%	5,0%	
	No	N	55	34	6	95	
		%	94,8%	100,0%	75,0%	95,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Furthermore, if we examine the level of significance regarding the question Would you say you use too many professional terms in your communication with patients?, we notice that the Chi-squared test value is 0,014 ($p < 0,05$), which means that there is a statistically significant

difference regarding the observed qualification levels. Also, the largest number of respondents who answered "Yes" have the qualification of a graduated nurse / master's degree in nursing (25,0%).

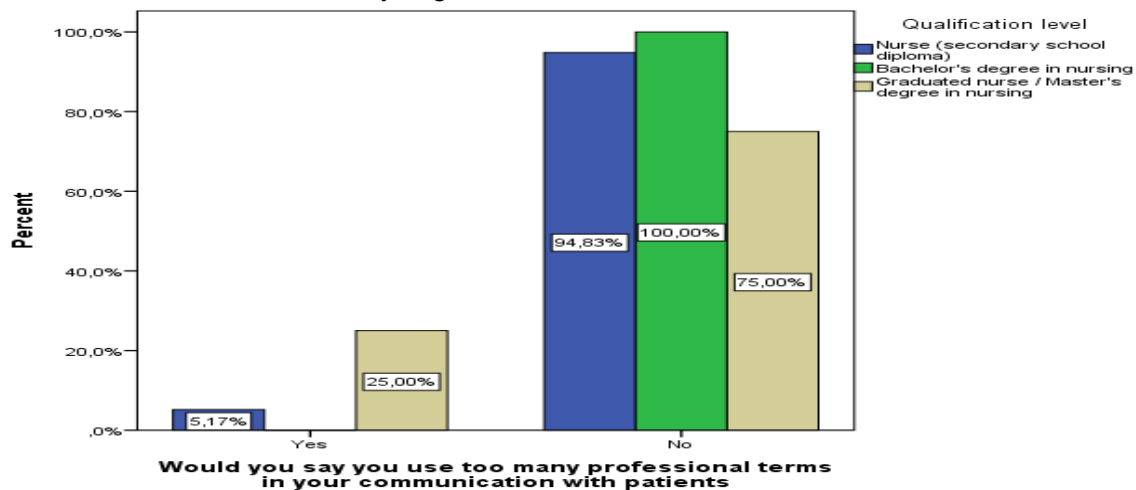


Table 23: Do you think you pay enough attention to each patient vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you think you pay enough attention to each patient?	Yes	N	29	18	5	52	0,795
		%	50,0%	52,9%	62,5%	52,0%	
	No	N	29	16	3	48	
		%	50,0%	47,1%	37,5%	48,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 24: Do you often start to talk before your patient can finish his/her thought vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you often start to talk before your patient can finish his/her thought?	Always	N	2	0	0	2	0,328
		%	3,4%	0,0%	0,0%	2,0%	
	Sometimes	N	52	34	8	94	
		%	89,7%	100,0%	100,0%	94,0%	
	Often	N	4	0	0	4	
		%	6,9%	0,0%	0,0%	4,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Furthermore, upon examination of test results shown in Tables 23 and 24, we notice that the level of significance of the Chi-squared test regarding questions Do you think you pay enough attention to each patient?, Do you often

start to talk before your patient can finish his/her thought? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 25: Do you schedule a time to talk with your patients vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you schedule a time to talk with your patients?	Yes	N	9	6	1	16	0,927
		%	15,5%	17,6%	12,5%	16,0%	
	No	N	49	28	7	84	
		%	84,5%	82,4%	87,5%	84,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 26: Do you adjust your communication to patients' cultural characteristics vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you adjust your communication to patients' cultural characteristics?	Always	N	25	11	2	38	0,772
		%	43,1%	32,4%	25,0%	38,0%	
	Sometimes	N	23	15	4	42	
		%	39,7%	44,1%	50,0%	42,0%	
	Often	N	10	8	2	20	
		%	17,2%	23,5%	25,0%	20,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Furthermore, if we examine test results shown in Tables 25 and 26, we notice that the level of significance of the Chi-squared test regarding questions Do you schedule a time to talk with your patients?, Do you adjust your

communication to patients' cultural characteristics? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 27: Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people) vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people)?	Yes	N	37	20	6	63	0,443
		%	63,8%	58,8%	75,0%	63,0%	
	Partially	N	15	13	2	30	
		%	25,9%	38,2%	25,0%	30,0%	
	No	N	6	1	0	7	
		%	10,3%	2,9%	0,0%	7,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 28: Do you think you lack knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you think you lack knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work?	Yes	N	8	5	1	14	0,944
		%	13,8%	14,7%	12,5%	14,0%	
	Partially	N	23	16	3	42	
		%	39,7%	47,1%	37,5%	42,0%	
	No	N	27	13	4	44	
		%	46,6%	38,2%	50,0%	44,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

If we examine the test results shown in Tables 27 and 28, we notice that the level of significance of the Chi-squared test regarding questions Do you consider yourself capable of communicating with patients of different age groups (children, adolescents, youth, adults, elderly people)?, Do you think you lack

knowledge and communication skills to work with those groups of patients which you most frequently encounter in your work? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 29: Is it your practice to give written recommendations and reminders to patients vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Is it your practice to give written recommendations and reminders to patients?	Yes	N	24	17	5	46	0,315
		%	41,4%	50,0%	62,5%	46,0%	
	Partially	N	14	10	0	24	
		%	24,1%	29,4%	0,0%	24,0%	
	No	N	20	7	3	30	
		%	34,5%	20,6%	37,5%	30,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 30: Do you think communication with patients via mobile applications (sending medical reports, medical advice and similar) might facilitate communication with patients in healthcare vs. qualification level

			Qualification level			Total	p*	
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing			
Do you think communication with patients via mobile applications (sending medical reports, medical advice and similar) might facilitate communication with patients in healthcare?	Yes	N	19	15	2	36	0,437	
		%	32,8%	44,1%	25,0%	36,0%		
	No	N	39	19	6	64		
		%	67,2%	55,9%	75,0%	64,0%		
	Total		N	58	34	8		100
			%	100,0%	100,0%	100,0%		100,0%

*Chi-squared test

If we examine the test results shown in Tables 29 and 30, we notice that the level of significance of the Chi-squared test regarding questions Is it your practice to give written recommendations and reminders to patients?, Do you think communication with patients via mobile applications (sending medical reports,

medical advice and similar) might facilitate communication with patients in healthcare? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 31: Are you sufficiently familiar with communication techniques with regard to age groups of respondents vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Are you sufficiently familiar with communication techniques with regard to age groups of respondents?	Yes	N	24	12	4	40	0,780
		%	41,4%	35,3%	50,0%	40,0%	
	Partially	N	28	17	4	49	
		%	48,3%	50,0%	50,0%	49,0%	
	No	N	6	5	0	11	
		%	10,3%	14,7%	0,0%	11,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 32: Do you think you spend enough time in a non-formal conversation with patients on a daily basis vs. qualification level

			Qualification level			Total	p*	
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing			
Do you think you spend enough time in a non-formal conversation with patients on a daily basis?	Yes	N	22	9	3	34	0,522	
		%	37,9%	26,5%	37,5%	34,0%		
	No	N	36	25	5	66		
		%	62,1%	73,5%	62,5%	66,0%		
	Total		N	58	34	8		100
			%	100,0%	100,0%	100,0%		100,0%

*Chi-squared test

If we examine the test results shown in Tables 31 and 32, we notice that the level of significance of the Chi-squared test regarding questions Are you sufficiently familiar with communication techniques with regard to age groups of respondents?, Do you think you spend

enough time in a non-formal conversation with patients on a daily basis? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 33: Do you think that by talking to patients you might contribute to reducing doctors' workload vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you think that by talking to patients you might contribute to reducing doctors' workload?	Yes	N	19	10	4	33	0,550
		%	32,8%	29,4%	50,0%	33,0%	
	Partially	N	26	18	4	48	
		%	44,8%	52,9%	50,0%	48,0%	
	No	N	13	6	0	19	
		%	22,4%	17,6%	0,0%	19,0%	
Total		N	58	34	8	100	
		%	100,0%	100,0%	100,0%	100,0%	

*Chi-squared test

Table 34: Do you consider yourself to be competent enough to communicate with the members of a patient's family vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you consider yourself to be competent enough to communicate with the members of a patient's family?	Yes	N	18	13	4	35	0,536
		%	31,0%	38,2%	50,0%	35,0%	
	Partially	N	32	19	4	55	
		%	55,2%	55,9%	50,0%	55,0%	
	No	N	8	2	0	10	
		%	13,8%	5,9%	0,0%	10,0%	
Total	N	58	34	8	100		
	%	100,0%	100,0%	100,0%	100,0%		

*Chi-squared test

Furthermore, if we examine the test results shown in Tables 33 and 34, we notice that the level of significance of the Chi-squared test regarding questions Do you think that by talking to patients you might contribute to reducing doctors' workload?, Do you consider yourself to be competent enough to communicate with the

members of a patient's family? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

Table 35: Are you familiar with the techniques of delivering bad news (about a deterioration of a patient's health or about the death of a patient) to the members of their families vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Are you familiar with the techniques of delivering bad news (about a deterioration of a patient's health or about the death of a patient) to the members of their families?	Yes	N	9	6	4	19	0,177
		%	15,5%	17,6%	50,0%	19,0%	
	Partially	N	37	21	2	60	
		%	63,8%	61,8%	25,0%	60,0%	
	No	N	12	7	2	21	
		%	20,7%	20,6%	25,0%	21,0%	
Total	N	58	34	8	100		
	%	100,0%	100,0%	100,0%	100,0%		

*Chi-squared test

Table 36: Would you say that the quality of patient care largely depends on your manner of communicating with a patient vs. qualification level

			Qualification level			Total	p*
			nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Would you say that the quality of patient care largely depends on your manner of communicating	Yes	N	44	31	7	82	0,167
		%	75,9%	91,2%	87,5%	82,0%	
	No	N	14	3	1	18	

with a patient?		%	24,1%	8,8%	12,5%	18,0%
Total		N	58	34	8	100
		%	100,0%	100,0%	100,0%	100,0%

*Chi-squared test

Furthermore, if we examine the test results shown in Tables 35 and 36, we notice that the level of significance of the Chi-squared test regarding questions Are you familiar with the techniques of delivering bad news (about a deterioration of a patient's health or about the death of a patient) to the members of their

families?, Would you say that the quality of patient care largely depends on your manner of communicating with a patient? and the observed qualification levels is higher than 0,05 ($p > 0,05$), which means that there is no statistically significant difference regarding the observed variables.

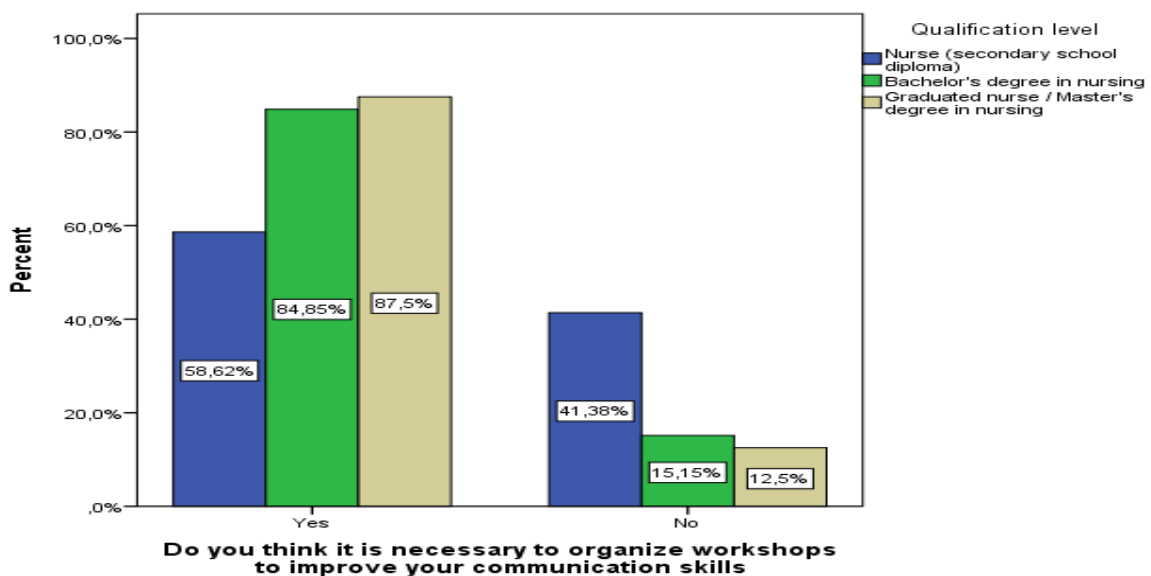
Table 37: Do you think it is necessary to organize workshops to improve your communication skills vs. qualification level

		Qualification level			Total	p*
		nurse (secondary school diploma)	bachelor's degree in nursing	graduated nurse / master's degree in nursing		
Do you think it is necessary to organize workshops to improve your communication skills?	Yes	N	34	28	7	0,017
		%	58,6%	84,8%	87,5%	
	No	N	24	5	1	
		%	41,4%	15,2%	12,5%	
Total		N	58	33	8	99
		%	100,0%	100,0%	100,0%	100,0%

*Chi-squared test

If we examine the level of significance regarding the question Do you think it is necessary to organize workshops to improve your communication skills?, we notice that the Chi-square test value is 0,017 ($p < 0,05$), which means that there is a statistically significant

difference regarding the observed qualification levels, whereby the largest number of respondents who answered "No" have the qualification level of a nurse (secondary school diploma) (41,4%).



DISCUSSION

Due to the conducted research, a statistically significant difference with regard to the

observed years of work experience (1-10, 11-20, 21 or more) was identified, whereby the largest number of respondents who say that they are

capable of communicating with patients of various age groups (children, adolescents, youth, adults, elderly people) belongs to the group of respondents with 11-20 years of work experience. In terms of qualification levels, we have noticed a statistically significant difference regarding the observed qualification levels (nurse, bachelor's degree in nursing, graduated nurse / master's degree in nursing): respondents who said they used too many professional terms are also the ones with the highest qualification levels (graduated nurse / master's degree in nursing) (25%). We have also identified a statistically significant difference with regard to the observed qualification level categories regarding the need to organize workshops to improve communication skills: the largest number of respondents who do not think it is necessary to organize such workshops have the qualification level of a nurse (secondary school diploma). In terms of other variables, we have not identified any statistically significant differences with regard to years of work experience and qualification levels.

CONCLUSIONS

Communication with patients – building a therapeutic rapport is an important and integral part of patient treatment. The obtained research results are a significant indicator of self-assessment of nurses' communication skills in their work with their patients, and a good indicator of what should be done regarding nurses' communication with patients in order to improve not only communication, but quality of work in general. Changes in the nursing profession are a prerequisite for the establishment of high-quality communication in a healthcare team. They will ensure a positive social-emotional climate and better interpersonal relationships, and contribute to the patients' confidence in getting the best possible quality of healthcare.

Exchange of individual professional communication experiences among nurses, as well as communication skills training courses would certainly help improve communication for the benefit of both the patient and the nurse in certain situations and institutions. This would

contribute not only to a general professional satisfaction and successful performance of nurses in their practice, but also to a better status and a wider role of the nursing profession in Croatian society.

REFERENCES

1. Arnold, E.C., Underman Boggs, K. (2003). *Interpersonal Relationships: Professional Communication Skills*. St. Louis: Elsevier.
2. Benceković, Ž., Žanko, J., (2004). Koliko su pacijenti zadovoljni komunikacijom s medicinskim sestrama na endokrinološkoj poliklinici? u: *Komunikacije u sestrinstvu*. Zbornik radova, Visoka zdravstvena škola, Zagreb; Hrvatska udruga Viših medicinskih sestara; Hrvatska udruga medicinskih sestara. Opatija, '20. – 22. svibnja 2004. Available at: <https://www.zvu.hr/arhiva/opatija/arhiva/2004/zbornik/zbornik.pdf> (February, 04. 2019.)
3. Breakwell, G.M. (2001). *Vještine vođenja intervjuja*. Jastrebarsko: Naklada Slap.
4. Brkljačić, M. (2013). Etički aspekti komunikacije u zdravstvu, *Medicina fluminensis*, 49(2), 136-143.
5. Bulajić, M., Grba-Bujević, M. (2012). Komunikacija i komunikacijske vještine u medicini. *Medix*, 92/93, 64-68.
6. Cindrić S. (2004). Kvaliteta njege, komunikacije i zadovoljstva bolesnika na internom odjelu. u: *Komunikacije u sestrinstvu*. Zbornik radova, Visoka zdravstvena škola, Zagreb; Hrvatska udruga Viših medicinskih sestara; Hrvatska udruga medicinskih sestara. Opatija, '20. – 22. May, Kunczik, 2004. Available at: <https://www.zvu.hr/arhiva/opatija/arhiva/2004/zbornik/zbornik.pdf> (March, 04. 2019)
7. Čerepinko, D. (2012). *Komunikologija: Kratki pregled najvažnijih teorija, pojmova i principa*. Varaždin: Veleučilište u Varaždinu.
8. Čukljek, S. (2005). *Osnove zdravstvene njege*. Zagreb: Zdravstveno veleučilište.
9. Despot Lučanin, J., Havelka, M., Kostović, M., Lučanin, D., Perković, L., Pukljak Iričanin, Z. (2006). *Komunikacijske*

- vještine – zbirka nastavnih tekstova. Zagreb: Zdravstveno veleučilište
10. Fajta, M. (2004). Dobra komunikacija / Preduvjet profesionalizmu, Komunikacije u sestrinstvu. Opatija: Hrvatska udruga viših medicinskih sestara, Visoka zdravstvena škola.
 11. Glavočević, A. (2012). Prepreke u komuniciranju. Available at: <https://www.scribd.com/doc/114890879/Prepreke-u-komunikaciji> (Februari, 04.2019)
 12. Havelka, M., Lučanin, D. (2004). Komunikacija s bolesnikom – pravo bolesnika, ali i način liječenja. u: Komunikacije u sestrinstvu. Zbornik radova, Visoka zdravstvena škola. Zagreb; Hrvatska udruga Viših medicinskih sestara; Hrvatska udruga medicinskih sestara. Opatija, '20. – 22. svibnja 2004. Available at: <https://www.zvu.hr/arhiva/opatija/arhiva/2004/zbornik/zbornik.pdf> (February, 04. 2019)
 13. Lučanin, D., Despot Lučanin, J. (2010). Komunikacijske vještine u zdravstvu. Jastrebarsko: Naklada Slap
 14. Mojsović, Z. i suradnici (2005). Sestrinstvo u zajednici. Zagreb: Visoka zdravstvena škola.
 15. Moro, Lj., Frančišković, T. i suradnici (2011). Psihijatrija. Zagreb: Medicinska naklada.
 16. Reardon, K.K (1998). Interpersonalna komunikacija: gdje se misli susreću. Zagreb: Alinea.
 17. Sedić, B.(2004). Komunikacija sestre i drugih članova stručnog tima. u: Komunikacije u sestrinstvu. Zbornik radova, Visoka zdravstvena škola, Zagreb; Hrvatska udruga Viših medicinskih sestara; Hrvatska udruga medicinskih sestara. Opatija, '20. – 22. svibnja 2004. Available at: <https://www.zvu.hr/arhiva/opatija/arhiva/2004/zbornik/zbornik.pdf> (February, 05. 2019).
 18. Sindik i M. Vučković Matić: Komuniciranje u zdravstvu (zbirka nastavnih tekstova)
 19. Available at: http://web.unidu.hr/datoteke/172izb/Komuniciranje_u_zdravstvu_-_J._Sindik_i_M._Vuckovic_Matic.pdf (March, 02. 2019)
 20. Tatković, N., Diković, M., Tatković, S.(2016). Pedagoško psihološki aspekti komunikacije. Pula: Sveučilište Jurja Dobrile u Puli