

# **Views of Physicians on the Profession of a Nurse in Kazakhstan**

Maimakova Akmaral

Master's thesis

December 2019

Social services, Health and Sports

Degree Programme in Advanced Nursing Practice

Author(s) Maimakova, Akmaral	Type of publication Master's thesis	Date December 2019 Language of publication: English
	Number of pages 47	Permission for web publication: x
Title of publication <b>Views of Physicians on the Profession of a Nurse</b>		
Degree programme Degree Programme in Advanced Nursing Practice		
Supervisor(s) Heikkila, Johanna Ospanova, Dinara		
Assigned by		
<p><b>Background.</b> In Kazakhstan, there is an objective need for the development and reform of nursing, as today there is an unproductive use of nursing personnel. Insufficient training of nurses is noted. Rationing the workload of a nurse requires improvement.</p> <p><b>Objective.</b> Describe how the physicians in Kazakhstan evaluate the image of nursing</p> <p><b>Methods.</b> Quantitative research approach was employed, and an electronic questionnaire was used for data collection. The participants consisted of 207 physicians. The Perceptions of Professional Nursing questionnaire, which measured perceptions of nursing Practice, Values, and Public Image, was used. The data was analyzed by using descriptive statistics. Open-ended questions were analyzed with thematic analysis.</p> <p><b>Results.</b> The perception of the nurse profession by physicians in Kazakhstan varied. 82% of the doctors agreed with the statement Nurses work hard. 87.4% doctors agreed that the nurse is an important member of the health care team. 75.4% of physicians agreed that nurses need to learn the skills of other healthcare providers and 83.2% agreed that most complications can be avoided if the job is done correctly. A certain part of doctors believed that nurses are important members of the medical team and carry out responsible work. Another part of the physicians thought that nurses are only executors of orders from doctors. However, all respondents believed that it is necessary to develop nursing in Kazakhstan. The ongoing reforms allowed physicians to be optimistic about the profession of a nurse. Physicians thought that the new issue of extended practice nurses would have a beneficial effect on nursing and, in general, would contribute to the development of the healthcare system in Kazakhstan and would have a good effect on the quality of medical care provided to patients. It was concluded that the profession of nursing in Kazakhstan is developing today and this specialty has a great future.</p>		
Keywords/tags ( <a href="#">subjects</a> ) Physician, nurse, image, profession of a nurse		
Miscellaneous ( <a href="#">Confidential information</a> )		

## Contents

<b>1</b>	<b>Introduction.....</b>	<b>4</b>
<b>2</b>	<b>General Information on Nurses and Physicians .....</b>	<b>5</b>
	2.1 International experience in relations between nurses and physicians .....	5
	2.2 The current status of nurses in Kazakhstan and their image among doctors	9
<b>3</b>	<b>Purpose, Objectives, and Research Questions.....</b>	<b>10</b>
<b>4</b>	<b>Methodology .....</b>	<b>11</b>
	4.1 Research Methodology .....	11
	4.2 Data Collection Method .....	11
	4.3 Data Collection .....	12
	4.4 Data Analysis .....	13
	4.5 Ethical Issues.....	13
	4.6 Validity and Reliability.....	14
<b>5</b>	<b>Results .....</b>	<b>15</b>
	5.1 Demographic Information of the Doctor Respondents .....	15
	5.2 Physicians' Perceptions of the Public Image of Nursing Profession .....	17
	5.3 Physicians' perceptions of the value of nursing profession in Kazakhstan 20	
	5.4 Physicians' perceptions of the practice of nursing profession in Kazakhstan.....	23
	5.5 Physicians opinions on the nursing profession in Kazakhstan .....	27
	5.5.1 Descriptions of physicians currently nurse status in their clinics .....	27
	5.5.2 Changes Necessary to Improve the Situation of Nurses in Kazakhstan 28	

5.5.3 Existing Opportunities for the Development of the Nurse Profession in Kazakhstan .....	28
5.5.4 Main barriers to increasing the authority of the nurse in Kazakhstan	29
5.5.5 Nurses with extended practice and international education can change the image of a nurse in Kazakhstan for the better .....	30
5.5.6 Physician opinions about what can be done "today" to improve the image of a nurse in the eyes of the public in Kazakhstan .....	31
<b>6 Discussion .....</b>	<b>31</b>
<b>7 Conclusion .....</b>	<b>34</b>
<b>References.....</b>	<b>36</b>
<b>Appendices.....</b>	<b>39</b>
Appendix 1. Questionnaire .....	39

## Figures

Figure 1. Doctors' perception on the public image of nursing profession (n=207).....	18
Figure 2. Doctors' perception on public opinion on the volume and nature of work of a nurse (n=207) .....	19
Figure 3. Doctors' perception on Public Opinion of importance and diversity nurse profession (n=207) .....	20
Figure 4. Doctors' perception on the nursing profession in the present (n=207) .....	21
Figure 5. Doctors' perception on the importance of the Nursing profession compared to other specialties (n=207).....	22
Figure 6. Doctors' perception on the value of the nurses (n=207) .....	23
Figure 7. Doctors' perception on the practice of the nurses (n=207) .....	24
Figure 8. Doctors' perception on collaboration and professional autonomy in the present (n=207) .....	25

## Tables

Table 1. General Cronbach's Alpha indicators.....	14
Table 2. Demographic Information of the Doctor Respondents (n=207).....	15
Table 3. Doctors' perception on the nursing profession from various factors (n=207) .....	16
Table 4. Doctors' perception on the nursing profession .....	17
Table 5. Doctors' perception on the value of nursing profession in Kazakhstan .....	20
Table 6. Doctors' perception on the practice of nursing profession in Kazakhstan....	23
Table 7. Doctors' perception on responsibilities of nurses in healthcare system at present .....	26

## 1 Introduction

The process of treating patients is largely determined by the nature of the interaction of physicians and nurses. In the absence of mutual understanding and coherence in work, this is negatively reflected in the quality of the medical service provided. The physician and nurse are a dominant couple that affects everything that happens in hospitals, which in turn affects patients. (Doctors and nurses. Interaction features 2012.)

Nurses are in contact with patients for a long time, during the day, so they are responsible for the medical and protective regimen, which contributes to convalescence. In various treatment and prevention organizations, patients undergo a certain physical and mental dissonance due to the treatment process itself and factors such as service and communication. Today, the reform of old views is marked. A nurse at the present stage of healthcare development is a real assistant, assistant and partner of a doctor. (Doctors and nurses. Interaction features 2012.)

The following options are possible for the nurse to participate in the treatment process. One of them, when a nurse performs a passive kind of behavior with a patient, does not care about the outcome of therapy, is not responsible, needs constant monitoring by a doctor, while she only formally implements the doctor's prescriptions, and sometimes not completely. Another type of work in which nurses perform auxiliary functions, supports the work of a doctor, takes the initiative as an active participant in a team who is interested in the result of treatment, experiences certain emotions about the patient's condition and is fully involved in the course of therapy as a necessary and responsible component. (Doctors and nurses. Interaction features 2012.)

At the present stage of development of medicine, the role of the nurse is increasing. The basis of the interaction between the doctor and the nurse is the rule of professional partnership, in which the effectiveness of the treatment process is determined by the harmony of the physician and the nurse. (Doctors and nurses. Interaction features 2012.)

Therefore, this study examined the thoughts of physicians and the profession of a nurse, and what, in the opinion of the doctors, needs to be done in Kazakhstan in order to improve the status of a nurse.

## **2 General Information on Nurses and Physicians**

### **2.1 International experience in relations between nurses and physicians**

Close communication between nurses and doctors promotes effective interactions and collaboration. One of the goals for nurses and doctors is the need to regulate different emotions that may arise during the treatment of patients. For example, doctors are able to express dissatisfaction with delayed implementation of their prescriptions or phone calls at “inappropriate” times, which can negatively affect individual activity and labor productivity and, ultimately, determine the negative perception of nurses. Novice doctors are more comfortable with nursing opinions about therapy and decision making. (Matziou, Vlahioti, Perdikaris, Matziou, Megapanou, & Petsios 2014.)

Moving tasks from doctors to nurses today is a common practice in most parts of the world. This trend shows the reality and feasibility of this transfer in various organized and funded health care structures. Political reforms and transformations in education contribute to the fact that the boundaries between the medical and nursing professions may undergo changes in the future. As more and more significant states invest in labor of the Nurse Practitioners / Advanced Practice Nurses (NP/APN), in order to make the most of it, sufficiently mobile regulatory and monetary structures are needed to adapt to changes in the labor force. (Maier & Aiken 2016.)

The literature indicates that the collaboration of doctors and nurses also includes such an aspect as the importance of the role of the nurse in training young qualified doctors in the workplace, as nurses take part in the professional socialization of young doctors. Non-formal education helps improve patient safety. (Burford, Morrow, Morrison, Baldauf, Spencer, Johnson, Rothwell, Peile, Davies, Allen, & Illing 2013.)

Partnerships between nurses and doctors can be strengthened by joint visits of patients, and this also helps to improve the relations between people who take part in caring for patients. Since all this leads to an increase in the safety of medical care itself, which is accompanied by an increase in the degree of patient satisfaction from the therapy process. It should be noted that close communication between doctors and nurses, their team interaction helps to strengthen the safety and quality of the provision of medical services to patients. (Burns 2011.)

At the present stage of the development of medicine, there is an expansion of the powers of nurses, including the task of prescribing drugs to nurses is to increase flexibility in the multidisciplinary team, which helps nurses to complete the cases of therapy, allows them to provide timely access to medicines, while maintaining continuity of treatment. This practice contributes to the implementation of medical services for an additional number of patients and to improve access to them for existing patients. (Bradley & Riley 2014.)

Some authors note that there are nurses who claim that doctors do not sufficiently value the importance of nurses. For example, individual nurses, particularly nurses in the intensive care unit, believe that they are treated like slaves. Also, most of the nurses say that they work under the supervision of doctors. Only a small proportion of nurses talk about the presence of collegial interaction with doctors. Nurses think that doctors are not fully aware of the importance and responsibility of nurses. Therefore, it is necessary to carry out certain activities aimed at the development and formation of closer relations between doctors and nurses. Perhaps one of the options that contribute to the development of collegiality between the above specialists is the strengthening of mentoring, which will help doctors and nurses better understand each other's values and responsibilities. It is also necessary to practice the organization of joint events, which will also favor the formation of relations between colleagues. Such events include quarterly dinners that will help team work and build relationships. (Johnson & Kring 2012.)

It must be emphasized that a good interaction between doctors and nurses favorably affects the condition of patients, the outcome of care and a sense of patient satisfaction. The results of effective contacts between doctors and nurses are such moments as reducing costs, improving patient care, reducing morbidity and mortality

of patients. At the same time, there is also an increase in communication between medical staff, an increase in the effectiveness of treatment, an increase in understanding of the significance of nurses and a decrease in the length of stay of patients in medical organizations. (Johnson & Kring 2012.)

Nurses should strive for leadership, for this they must demonstrate initiative, take a leading role in the creation and implementation of reform measures. In order to successfully transition to a modern leadership model, it is necessary for individual nurse, in addition, organizations to direct their time and resources into leadership formation processes, such as mentoring, volunteering and advocacy. (Strech & Wyatt 2013.)

An important factor in implementing these efforts is the management of the nurses in making real decisions. It is necessary to overcome the historical and hierarchical structures that determine the importance of nursing in health care. The transformation from this role to equal partnership entails significant cohesion and effectiveness, which determines the benefits of attempts to reform the health system. (Strech & Wyatt 2013.)

At the present stage of development of medicine, there is an adequate recognition of the importance of the role of nurses and nurse practitioners in the implementation of patient education in order to attract them to the cancer treatment process and provide certain information about the different types of treatment for this condition (Tariman & Szubski 2015).

The practice of collegial collaboration between doctors and nurses is very important. Perception of the reasons for the interprofessional confrontation between these significant and ancient medical specialties allows us to understand how it is possible to turn to historical experience and optimally improve this interprofessional cooperation. Increasing interprofessional contact and socialization is of great importance, since the health service reflects on the changing needs of residents in the field of medicine and masters more modern models of joint activities in order to meet the increasing complexity of requests for patient care, such as therapy of chronic conditions, caring for the elderly persons and others. The impact in the initial stages, through timely interprofessional impacts on socialization, will help to remove

divided the historical barriers to interaction. Also, the promotion of interprofessional respect and cooperation during timely socialization must be introduced into the educational and practical fields of activity. The existing principles of different medical professions regarding each other and patient care, facilitating interprofessional contact, are able to improve career outcomes for future generations of medical employees. (Price, Doucet, & Hall 2014.)

The embodiment of the modern role of a nurse in the existing healthcare team is a rather complicated process, which is influenced by various factors, and this process is figuratively called by the authors of the article "A tortuous journey towards a partially unknown destination". Over the past few decades, a significant number of states have tested and used modern roles in the practice of nursing, in the implementation of which the emphasis is on improving patient care. What contributed to the expansion of the field of activity of nurses worldwide. Due to their higher skills in nursing and healthcare, experienced nurses have the practice to carry out duties that used to exceed the boundaries of the usual areas of competence of a large part of nurses. In a sufficient number of countries, highly qualified nurses operating today in interprofessional teams have increased responsibility for patients in the entire medical system. (Andregard & Jangland 2015.)

The Institute of Medicine indicates that non-functional teamwork can pose a risk to patient safety. The realities of the current moment require replacing the hierarchical approach with flexible teamwork between different professions. Interprofessional interaction can contribute to positive changes in the medical field. To do this, further research is needed to obtain evidence of the need and significance of inter-professional teamwork. (Andregard & Jangland 2015.)

It also follows from literary sources that the symptoms of poor psychosocial working conditions should be taken seriously to prevent difficulties associated with health and work, and dissatisfaction with the activities of nurses and doctors when initiating their professional careers. In the planned studies of stress among medical staff due to their activities, attention should be paid to the gender-specific features of working conditions, in order to create a more gender-sensitive analysis and increase gender equality at work. (Enberg, Sundelin, & Öhman 2013.)

## 2.2 The current status of nurses in Kazakhstan and their image among doctors

In Kazakhstan, nursing reform is underway. In particular, training is being carried out according to the applied undergraduate program, which involves a competency-based attitude and is aimed at real practical training of students for their independent activities, which can lead to the solution of a sufficient number of issues in the field of medicine, in particular, Kazakhstan's healthcare will receive a new generation of nurses who focused on a professional and independent solution to various situations related to sick people. A generation of the above nurses will be called upon to ensure the health of patients and improve their quality of life. Reform in the field of nursing, its development will determine the formation of nursing as an independent branch of the healthcare system in Kazakhstan. (Abdrakhmanova, Baygozhina, & Kalieva 2014.)

In their work, nurses can communicate with a specific group of patients who have any behavioral risk factors, such as smoking or drinking alcohol. In this regard, there is a real need to reduce the prevalence of negative habits among the population, which can be achieved by conducting systematic activities by nurses aimed at eliminating these habits. That is, nurses are obliged to expand their presentation and the list of their actions, while providing assistance not only to eliminate certain diseases, but also strive to prevent them by applying effective measures of a sanitary-educational orientation. (Belyatko, Nurgalieva, Derbisalina, & Batarbekova 2019.)

Today, in order to provide adequate medical services to the population, it is necessary to reorganize the nursing system, which is part of the entire health care system in Kazakhstan. This area of medicine needs professional nursing staff. Improving the system of education of nurses in medical educational institutions can lead to an increase in the qualification level of nurses in hospitals, clinics and various medical centers, which will contribute to a more complete implementation of the teaching side of the work of nurses and will help to implement targeted training for this profile, taking into account the requirements of the time and according to the

observed improvement trends in nursing. (Kasieva, Altynbekova, Ramazanova, Yusupova, & Te 2014.)

The importance of nursing for the cancer service is hard to overestimate. As human society is formed, oncological / palliative / hospice care is developing and is of great importance for nurses who work in the above area. The importance of nursing is to provide patient care and support for family members in the current environment. For this purpose, nurses need to possess highly professional knowledge of the clinic and practical skills. Nurses also need experience in monitoring interpersonal relationships and providing assistance to people with serious illnesses with the participation of his close circle. A nurse operating in the oncological healthcare sector is an important object in creating a high-quality oncological service. Today, Kazakhstan should study and develop the importance of cancer nurses, designate its functions and responsibilities in coordinating medical care for cancer patients by the health system. (Markabaeva, Alibaeva, Ospanova, & Hopia 2018.)

It is gratifying to note that the reforms of nursing in Kazakhstan are helping to improve the image of the nurse profession and to strengthen interprofessional cooperation between doctors and nurses. In this regard, it is necessary to note the timeliness and importance of introducing extended practice nurses into the practice of healthcare in Kazakhstan. Nurses with extended practice have the opportunity to carry out nursing examinations, make nursing diagnoses, plan certain nursing impacts on patients, observe nursing work in technical and vocational training, evaluate the effectiveness of the selected plan of nursing intervention in various medical fields at the level of primary health care and inpatient therapy, etc. (Order of the Health Minister of Kazakhstan No. KR HM - 43 on December 19, 2018.)

### **3 Purpose, Objectives, and Research Questions**

Purpose is to study of the image of the profession of a nurse in Kazakhstan from the point of view of physicians. The objectives are describing:

1. How the physicians in Kazakhstan evaluate the profession of a nurse and
2. What physicians in Kazakhstan think should be do to improve the status of a nurse.

Research questions are:

1. How the physicians in Kazakhstan describe the profession of a nurse?
2. What changes need to be made to improve the position of a nurse in Kazakhstan?
3. The main barriers to increasing the authority of the nurse?
4. What are the opportunities for the development of the nursing profession in Kazakhstan?

## **4 Methodology**

### **4.1 Research Methodology**

In this study, quantitative and qualitative methods were used. Quantitative methods allow the use of numerical data, which are subjected to statistical processing. This approach allows you to obtain objective and reliable data. (Topping 2015, 163.)

A qualitative approach was used to describe open-ended questions. The qualitative method is devoted to the analysis of the emotional manifestations of respondents. (Mandleko, Driver, & Larson 2012.)

### **4.2 Data Collection Method**

The survey is very effective in combination with other research methods, especially with various types of interviews. Questioning is an example of a quantitative method of collecting factual information in a large group of respondents, followed by counting, measuring, and statistical data analysis. Questionnaires can be either structured or unstructured or open. In the structured questionnaires, respondents tick off the corresponding answers, while unstructured questionnaires have several open-ended questions, and the answers should answer these questions. (Edwards, Roberts, Clarke, DiGuseppi, Wentz, Kwan, Cooper, Felix, & Pratap 2009.)

Questioning allows you to collect information for further analysis. Questionnaires are often used to gather information about facts, relationships, behaviors, activities, and

reactions to various events. This study used a questionnaire containing specific questions that are used to obtain information from survey participants. The questionnaire is a fairly convenient and effective form of collecting significant amounts of information from respondents. Application of the questionnaire is a convenient method for both the researcher and the survey participants. (Jones & Rattray 2015, 413 - 414.)

After collecting the questionnaires, the information received must be encoded and analyzed. The analysis reveals certain dependencies, patterns and categories, themes and anti-themes, sequences and inconsistencies. Any statistical information obtained should be in an accessible form, for example, in the form of tables, graphs, which are attached as annexes to the dissertation. (Edwards, Roberts, Clarke, DiGuseppi, Wentz, Kwan, Cooper, Felix, & Pratap 2009.)

In the process of analyzing the sources of the literature, a questionnaire was selected, the authors of which were requested and received permission to use their questionnaire in their work. Quantitative methods are used in the work. The questionnaire contains variants of answers that are ranked. Four open question were added to the questionnaire. Written information letters were written, in which a request was made for the participation of physicians in this study. Only after obtaining informed consent will physicians be involved in the study. Questionnaires were presented in three languages - Kazakh, Russian and English. The completed questionnaires were uploaded to the Webropol program in 3 languages with the prior informed consent of the participant.

### 4.3 Data Collection

The questionnaire "Perception of Professional Nursing Tool" (PPNT) by Kari E. Sand-Jecklin was used, which consists of 44 closed questions and four open ones. The questions dealt with three topics for practice (13 questions), for value (11 questions) and for public image (13 questions). In closed-ended questions, ranked answers were presented from strongly disagree to fully agree (five options). The questions relate to various aspects of the nurse profession. (Sand-Jecklin & Schaffer 2006.) In addition, several questions have been added as demographic questions. Instead of four open

questions proposed by the author, six open questions were used, which relate to the state of the studied problem in Kazakhstan. Questionnaires with answers of physicians about 207 (N=207) from various regions of Kazakhstan. These questionnaires were distributed among Kazakhstan's physicians with the involvement of Kazakh Medical University of continuing education. The opportunity through the department to distribute electronic versions of the questionnaire to those doctors who study at the University at the short term training.

#### 4.4 Data Analysis

Following the receipt of the questionnaire results, the participants' responses were processed quantitatively using statistical processing on a computer. Windows Statistical Pack for Social Sciences (SPSS) version 25 was used. Descriptive statistics and Cronbach Alpha have been performed. Reliability statistics demonstrate the internal consistency and reliability of the questionnaire. (Muijs 2004, 71.)

The open questions contained in the questionnaire are also research questions. Thematic analysis contains several steps. Firstly, there is an introduction to the respondents to the questionnaire. You also need to study all the opinions of the respondents. To do this, carefully read the entire text several times. Designate semantic units. Next, the coding of the presented material is performed, which should be done carefully enough so as not to distort the content. Following this stage, there is a selection of subcategories, categories and topics. And finally, an analysis is made of the indicated categories, those that do not allow the repetition and distortion of the thoughts of respondents. (Mandleko, Driver, & Larson 2012; Topping 2017, 150.)

#### 4.5 Ethical Issues

This study was conducted as part of a master's thesis in nursing at Kazakh Medical University of Continuing Education (KazMUCE). Ethics has been reviewed, verified, and approved by the Local ethics committee of KazMUCE (Protocol # 1 on the 20-th of April 2018). The participation of doctors in this study was voluntary. All personal information about the participants will be encrypted and saved on the computer

with a password. After the completion of the work, all information will be destroyed. Full confidentiality is guaranteed. Strategies for carrying out these studies include balancing potential deficiencies. Participation in studies should include probable benefits for participants, minimizing the risk of harm to participants, formal ethical review of research proposals, and individual responsibility. (Johnson & Long 2015, 31.) The ethical considerations in this study followed the Helsinki Declaration regarding human research (World Medical Association (WMA) Declaration of Helsinki – Ethical principles for medical research involving human subjects 2018).

#### 4.6 Validity and Reliability

During the implementation of quantitative research, it is necessary to determine the reliability and authenticity of the study. The implementation of the reliability and validity of the questionnaires is a certain complex process, therefore, if possible, it is necessary to use questionnaires with established reliability and validity. (Heale & Twycross 2015.) The work provides information on the reliability of the construction of scales of the questionnaire - PPNT (subscales Practice, values, and public image). In addition, Cronbach's factor analysis and alpha (for reliability) was determined.

Cronbach's Alpha is a criterion of internal consistency, which indicates how closely a set of items in the group are interconnected. Its value varies from 0 to 1. This parameter is estimated as an indicator of the reliability of the scale (Tavakol & Dennick 2011). The indicator Cronbach Alpha was calculated (see Table 1).

Table 1. General Cronbach's Alpha indicators

<b>Cronbach's Alpha</b>
Total (of items 37) - 0,920
Public image (of items 13) – 0.929
Value ( of items 11) – 0.815
Practice (of items 13) – 0.795

## 5 Results

### 5.1 Demographic Information of the Doctor Respondents

Among the respondents - doctors participating in the survey, the distribution by gender: women - 75.4%, men - 24.6%. Marital status: more than half-55.1% had a family, unmarried -38.6%, divorced-5.8%, widows-0.5%. By age - 78.7%; the age composition of doctors younger than 25 years old is 22.3%, from 26-35 years old it is 49.7%, 36-50-20.3, over 50 years old-7.7 Average age-32.62 SD-9.3 (See table 2).

Table 2. Demographic Information of the Doctor Respondents (n=207)

Indicator	Answer Options	Frequency	Percent
	Female	156	75.4
	Male	51	24.6
Marital status	Single	80	38.6
	Married	114	55.1
	Separated/divorced	12	5.8
	Widow / widower	1	0.5
Age	25 years or younger	46	22.3
	26-35 years	103	49.7
	36-50 years	42	20.3
	51 years or older	16	7.7
Education	High School Diploma	74	35.8
	Certificate of Residency	101	48.8
	Master's Degree	22	10.6
	PHD r's Degree	10	4.8
Specialization	Syrgerly	125	60.3
	Therapy/general practitioner (GP)	31	15.0
	Pediatricians	23	11.1
	Rehabilitation	8	3.9
	Diagnostics	12	5.8
	Public Health Specialists	8	3.9
Total		207	100.0

**By level of education.** With higher education -74 people (35.8), after graduation 101 doctors (48.8%), masters -22 (10.6%), doctors of science-10 people (4.8%). Out of

207 respondents, 133 doctors (64.2%) have specialized professional training in residency, master's and doctoral programs.

**According to the profile of medical activity.** Surgery-125 doctors (60.3%), therapy / GP -31 doctors (15.0%), Pediatrics -23 (11.1%). Rehabilitation is carried out by -8 doctors (3.9%), diagnostics 12 (5.8%), public health specialists-8 (3.9%). Of the 207 doctors, 179 people (86.5%) are engaged in clinical activities, in which the role of a nurse occupies an important place in patient care. Accordingly, 60.3% of doctors work in clinics and at the primary care level 15%.

147 doctors (71%) have relatives and friends working in the healthcare sector. 104 doctors (50.3%) do not want children to acquire the profession of a nurse and 1.9% categorically do not want, 11.6% of doctors believe that children themselves should decide on the choice of a profession of a nurse. 171 doctors (79.5%) rely on their personal experience of working with nurses in the professional assessment of the activities of nurses, 24 doctors (11.6%) note the influence of the media. 105 doctors (50, 7%) agree that it is necessary to respect the profession of a nurse with respect, of which 14.0% fully agree, have not decided on the position of -57 people (27.5%) and do not respect the activities of modern nurses stage 16 doctors (7.4%). Other health professionals (social workers, psychologists) 116 people (56.3%) agree that the profession of a nurse requires respect, 6.3% certainly agree. 70 specialists (33.8%) did not decide on their opinion. 14 specialists (6.8%) do not respect the professional activities of nurses, 7 specialists (3.4%) strongly disagree with the opinion that the profession of a nurse requires respect (see table 3).

Table 3. Doctors' perception on the nursing profession from various factors (n=207)

Indicator	Answer Options	Frequency	Percent
Do you, your significant other, a family member, or a close friend work in healthcare?	Yes	147	71.0
	No	60	29.0
Do you want to your children to become nurse	Yes	4	1,9
	No	104	50.3
	Sometimes	75	36.2
	They decide yourself	24	11.6
	Media	24	11,6
	Role models	8	3,9

What has had the most influence over your perceptions of nurses and the nursing profession?	Personal health care experiences	171	82,6
	Other	4	1,9
Doctors respect the nursing profession with due respect.	Strongly Disagree	5	2,4
	Disagree	11	5,3
	Undecided	57	27,5
	Agree	105	50,7
	Strongly Agree	29	14,0
Other health care professionals (e.g., physicians, social workers, physical therapists, etc.) respect for the nursing profession.	Strongly Disagree	7	3,4
	Disagree	14	6,8
	Undecided	70	33,8
	Agree	103	49,8
	Strongly Agree	13	6,3
Total		207	100.0

## 5.2 Physicians' Perceptions of the Public Image of Nursing Profession

According to a survey of 43.4% of respondents (Mean-3.35 SD-0.916) believes that the public considers nurses to be professionals, while 37.7% doubt this position. 44.6% of respondents have an opinion about a positive image of a nurse in society, respectively 33.0% do not have their own position on this issue. 50.4% of respondents (Mean-3.61 SD-0.943) consider the nurse an important member of the patient care team and 11.3% do not share this point of view. 44.8% of respondents consider nursing a difficult and useful career in healthcare, 35.3% are undecided on this issue and 18.10% disagree (see table 4 and Figure 1).

Table 4. Doctors' perception on the nursing profession

#	PPNT	Mean	Std. Deviation
1.	Patients select a hospital based on nursing care	4,15	,816
2.	The public has a positive image of nursing.	3,92	,905
3.	The public considers nursing care to be as valuable as physical therapy.	3,59	,914
4.	The public believes that nurses work hard.	3,49	,881
5.	The public thinks of nurses as professionals.	3,35	,916
6.	The public respects the profession of nursing as much as the profession of law.	3,17	1,003

7.	The public understands the complexity of nursing.	3,23	,904
8.	The public perceives nursing as a rapidly changing profession.	3,05	,880
9.	The public believes nurses are organized.	3,19	,875
10.	The public believes the nurse to be an important member of the healthcare team.	3,61	,943
11.	The public perceives nursing to be a diverse profession that contains many different career possibilities.	3,26	,964
12.	The public sees nursing as a challenging and rewarding healthcare career.	3,30	,960
13.	The public values the intelligence and creativity of nurses.	3,41	,981

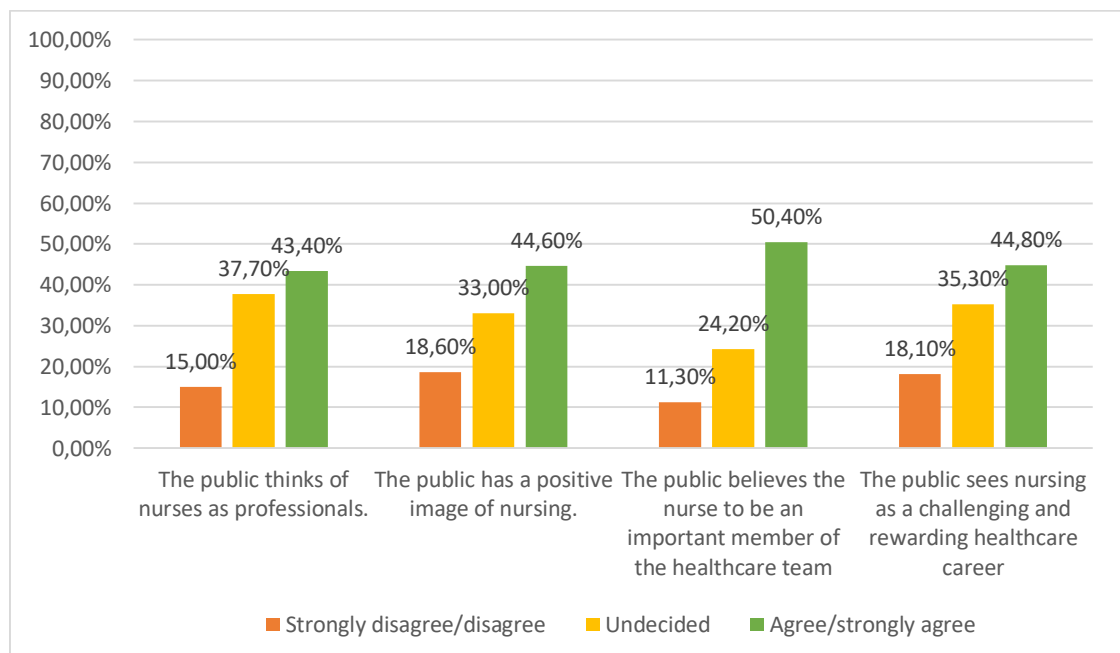


Figure 1. Doctors' perception on the public image of nursing profession (n=207)

52% of respondents say that society believes that nursing care is as valued as physiotherapy. In the opinion of 51% of the respondents the public believes that nurses work a lot and 32.6% did not decide on this issue. 48.4% of respondents perceive that the public appreciates the intelligence and creativity of nurses and, accordingly, 31.2% do not have an opinion on this issue. In the opinion of 51% of the nurse's respondents, they work a lot and 32.6 did not decide on this issue. 48.4% of

respondents - the public appreciates the intelligence and creativity of nurses and, accordingly, 31.2% do not have an opinion on this issue (see Figure 2).

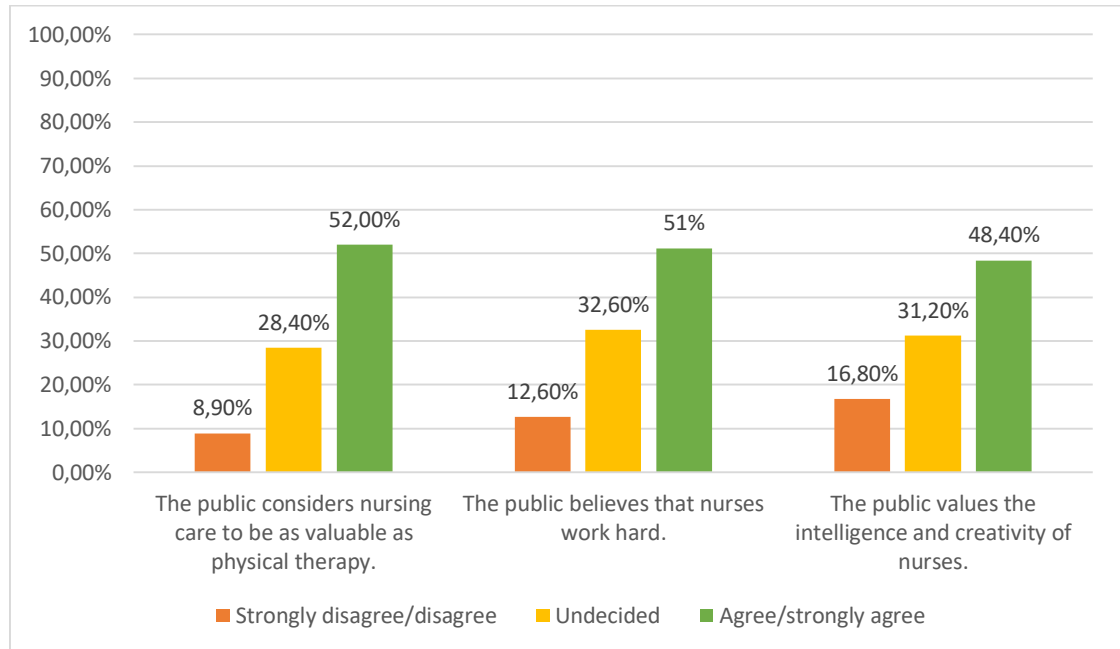


Figure 2. Doctors' perception on public opinion on the volume and nature of work of a nurse (n=207)

20.0% of doctors believe that patients choose a hospital based on patient care (Mean 4.15, SD-0.816). 35.1% of doctors (Mean-3.29 SD-1.041) note that in the society they respect the profession of a nurse in the same way as the profession of a lawyer, 40.5% do not have an opinion on this issue. 41.0% of doctors agree with the opinion that in society they perceive patient care as a diverse profession, which has many different career opportunities (see Figure 3).

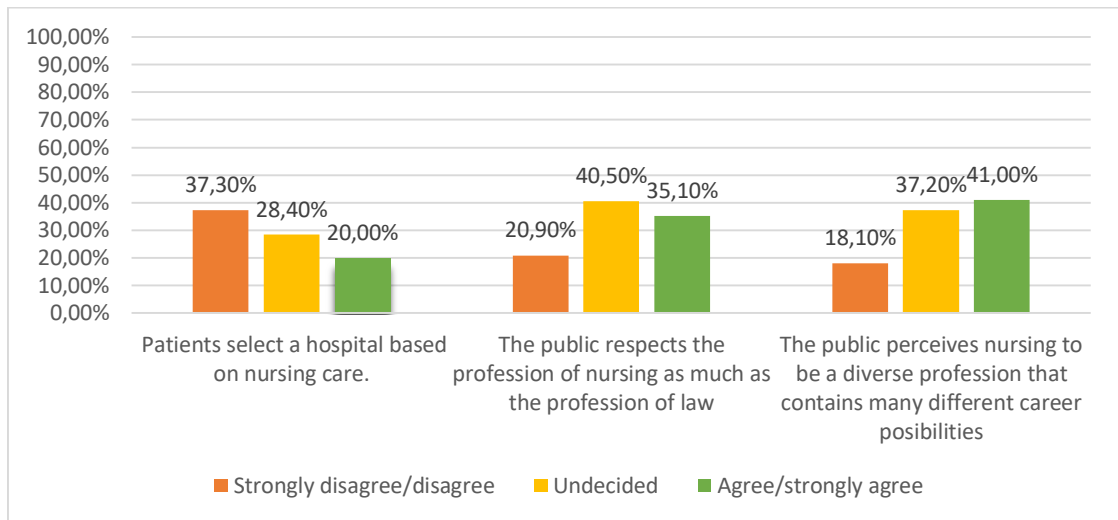


Figure 3. Doctors' perception on Public Opinion of importance and diversity nurse profession (n=207)

### 5.3 Physicians' perceptions of the value of nursing profession in Kazakhstan

Figure 4 shows 78.9% of doctors (Mean-3.65 SD-1,068) agree with the following statements: nursing is a profession and 34.4% (Mean-3.65 SD-1,068) perceives care as a fast-changing profession, which, as noted by 78.3%, has many different career opportunities. 79.2% of doctors (Mean-3.95 SD-0.755) agree with the opinion that the profession "Nursing" is a difficult and useful job (see table 5).

Table 5. Doctors' perception on the value of nursing profession in Kazakhstan

#	PPNT	Mean	Std. Deviation
1	Nursing care is as important as physical therapy.	3,45	1,105
2	Nurses work hard.	4,25	,850
3	Nursing is a profession	3,65	1,068
4	I respect the profession of nursing as much as the profession of law.	3,29	1,041
5	Nursing is very complex.	3,96	,838
6	Nursing is a rapidly changing profession.	2,84	1,019
7	Nurses are very organized.	4,34	,746
8	The nurse is an important member of the health care team.	3,61	,993

9	Nurses make key decisions regarding their patients' care.	3,73	,860
10	Nursing is challenging and rewarding.	3,95	,755
11	Nurses are intelligent and creative.	3,44	,917

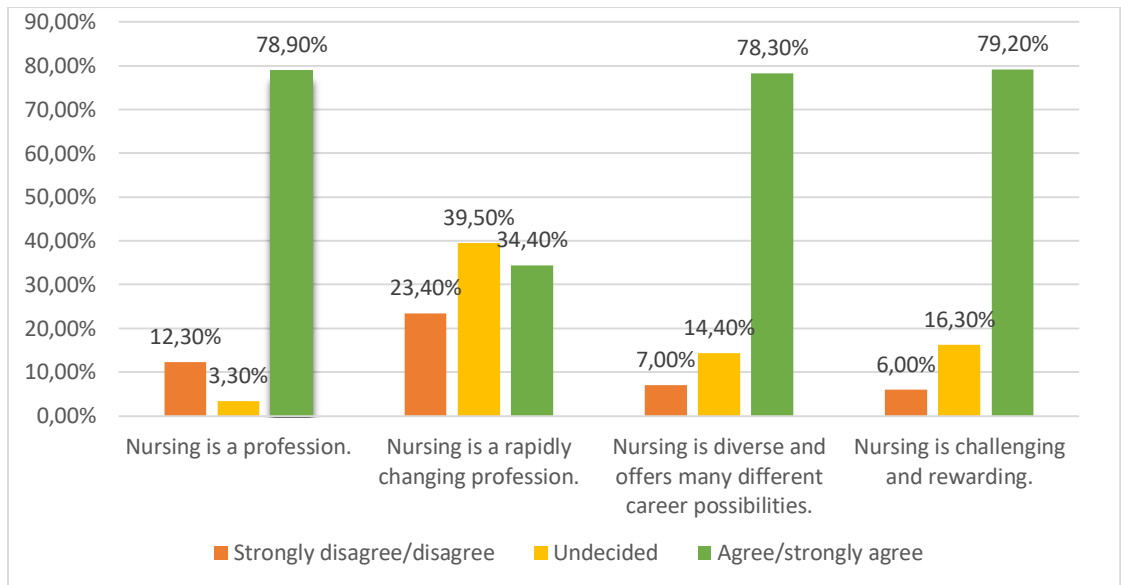


Figure 4. Doctors' perception on the nursing profession in the present (n=207)

As can be seen from Figure 5, 74% of doctors (Mean-3.96 SD-0.833) agree that nursing care is very difficult, 14%% could not decide on this issue. 84% of doctors (Mean-3.45 SD-1.105) agree that patient care is just as important as physiotherapy. 74.8 correspondents (Mean-3.29 SD-1.041) respect the profession of a nurse in the same way as the profession of a lawyer, 13.4% against this opinion.

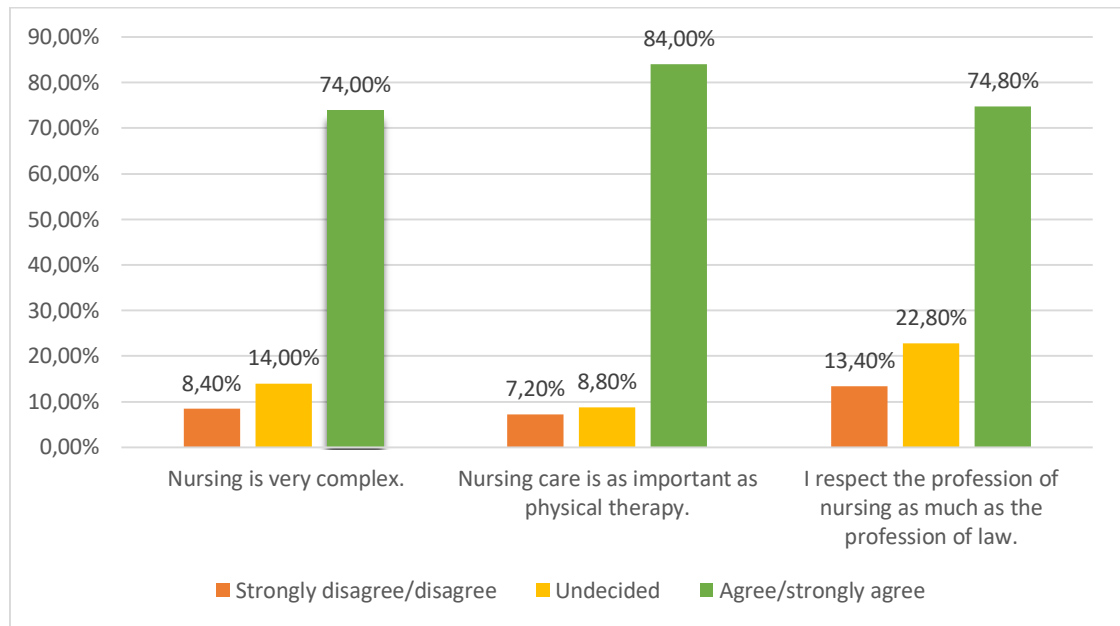


Figure 5. Doctors' perception on the importance of the Nursing profession compared to other specialties (n=207)

The Figure 6 demonstrates that 82% (Mean 4.25; SD 0.850) of the doctors agree with the statement Nurses work hard, say 6, 2% /. But only 45.3% of the doctors (Mean 3.44; SD-0.917) think that Nurses are intelligent and creative and 36.3% were undecided on this issue and only 48.3% of doctors (Mean 4.34; SD-0.746) consider that Nurses are very organized, and 34.4% were undecided on this issue. 13.5% disagree. Most doctors 87.4% (Mean 4.18; SD 0.880) agree that the nurse is an important member of the health care team.

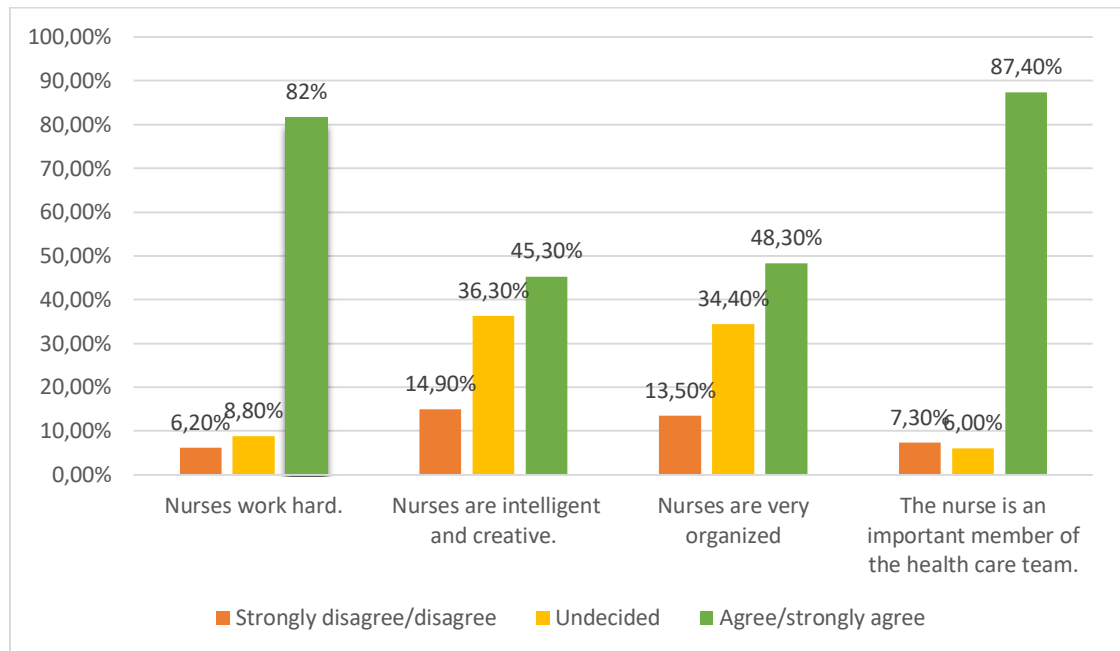


Figure 6. Doctors' perception on the value of the nurses (n=207)

#### 5.4 Physicians' perceptions of the practice of nursing profession in Kazakhstan

As follows from the figure 8 only 40% of doctors (Mean 4.07; SD 0.836) agree that nurses should question medical orders that, in their opinion, may be incorrect, 34% of doctors do not agree, and 22, 3% were undecided on this issue. Most 75.4% of physicians (Mean 4.10; SD 0.6836) agree that nurses need to learn the skills of other healthcare providers and 83.2% (Mean 4.07; SD 0.836) agree that most complications can be avoided if the job is done correctly (see table 6 and Figure 7).

Table 6. Doctors' perception on the practice of nursing profession in Kazakhstan

#	PPNT	Mean	Std. Deviation
1	Patients select a hospital based on nursing care	4,15	,816
2	Teaching health promotion and disease prevention in the community is as much a nursing responsibility as are other nursing roles in patient care.	4,03	1,016

3	Nurses have considerable autonomy in their practice	3,01	1,176
4	Nurses are directly responsible for positive outcomes in patients' health (e.g., prevention of secondary infections, fewer post-surgical complications, shorter hospital stays, etc.).	4,10	,686
5	Nurses should question medical orders that they judge to possibly incorrect	4,07	,836
6	Nurses need to learn skills that overlap with other healthcare staff skills (e.g., respiratory therapy, physical therapy, social work, etc.).	4,10	,686
7	Optimum nursing care requires regular patient assessment.	4,02	,824
8	Patient education is an important part of nursing practice	4,24	,818
9	Most patient complications are avoided when nurses do jobs correctly.	4,07	,836
10	Nurses improve the quality of patient care by planning the care specific to each patient and carrying out the identified plan	4,43	,808
11	Physician/nurse collaboration improves health outcomes for patients.	3,43	1,117
12	Nurses make key decisions regarding their patients' care	3,73	,860
13	If possible, nurses should care for the same patients every day	3,38	,927

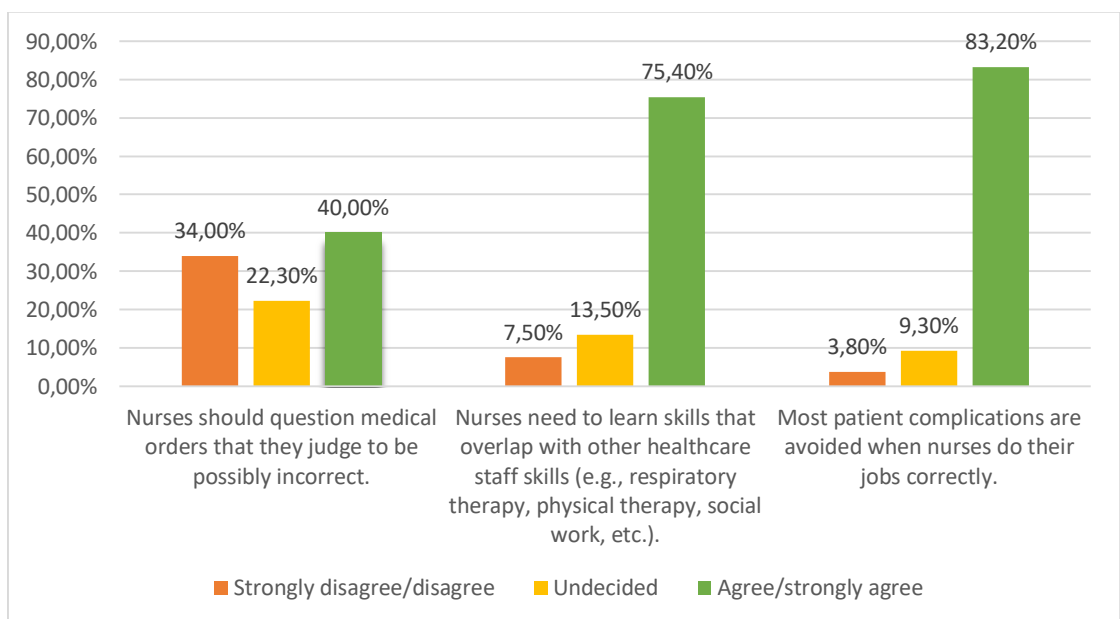


Figure 7. Doctors' perception on the practice of the nurses (n=207)

As can be seen from the figure 8 most doctors -88.4% (Mean 3.43; SD 1.117) agree that cooperation between the doctor and the patient improves the health status of patients. But only 24.6% of doctors (Mean 3.43; SD 1.117) agree that nurses are autonomous in their practice, while the majority 34.1% disagree and 37.7% are undecided on this issue.

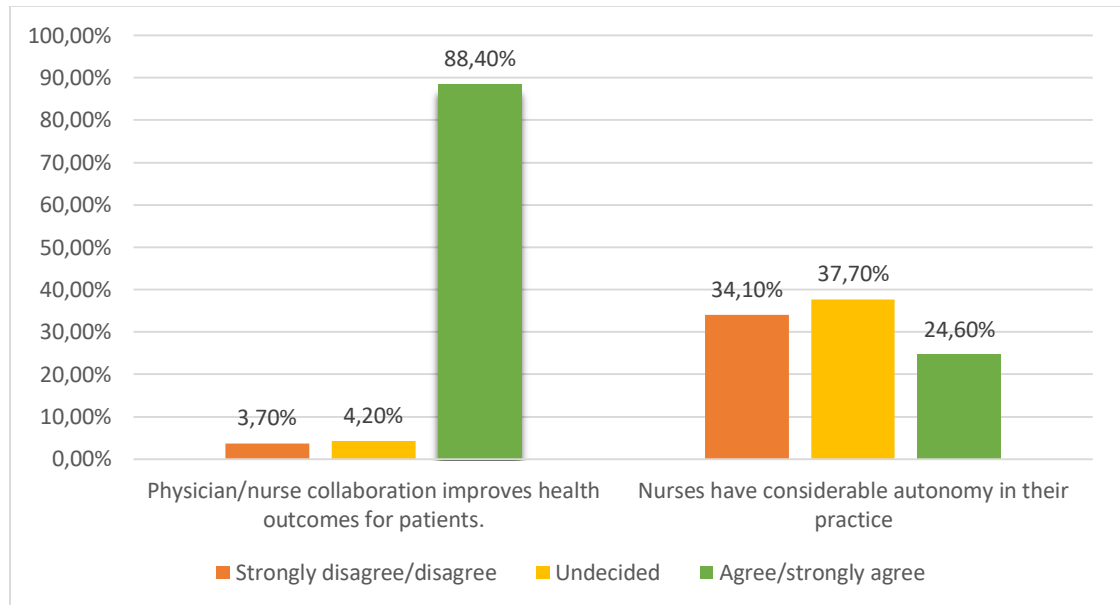


Figure 8. Doctors' perception on collaboration and professional autonomy in the present (n=207)

As the table 7 shows the majority of doctors 89.3% (Mean -4.10; SD 0.686) agree that nurses are directly responsible for the positive results in relation to the health of their patients and 91.7% of doctors (Mean -4.43 ; SD 0.808) agree with the opinion that nurses improve the quality of patient care by planning care for each patient and implementing a specific plan, as well as the consent of 84.1% of doctors (Mean -4.02; SD 0.824, that optimal care requires regular evaluation patient condition.

67.7% of doctors% (Mean -3.73; SD 0.860) agree that nurses make key decisions regarding the care of their patients. But only 46.9% of doctors% (Mean -3.38; SD -0.927) agree that nurses should take care of the same patients every day whenever possible, 37.7% of doctors did not decide on this issue. It is also necessary to educate patients to improve care in the healthcare system. 81.1% of doctors% (Mean -4.03; SD1.016) agree that education on health promotion and disease prevention in

society is the same responsibility for nurses as other nursing roles in caring for patients and 86.5%% (Mean -4.24; SD-0.818) that patient education is an important part of nursing practice.

Table 7. Doctors' perception on responsibilities of nurses in healthcare system at present

PRACTICE	Strongly disagree f (%)	Disagree f (%)	Undecided f (%)	Agree f (%)	Strongly agree f (%)
Teaching health promotion and disease prevention in the community is as much a nursing responsibility as are other nursing roles in patient care.	8/3,9	12/5,8	19/9,2	94/45,4	74/35,7
Nurses are directly responsible for positive outcomes in patients' health (e.g., prevention of secondary infections, fewer post-surgical complications, shorter hospital stays	1/0,5	6/2,9	15/7,2	134/64,7	51/24,6
Nurses improve the quality of patient care by planning the care specific to each patient and carrying out the identified plan	3/1,4	5/2,4	9/4,3	74/35,7	116/56,0
Optimum nursing care requires regular patient assessment	3/1,4	10/4,8	20/9,7	121/58,5	53/25,6
Patient education is an important part of nursing practice	2/1,0	6/2,9	20/9,7	91/44,0	88/42,5
Nurses make key decisions regarding their patients' care	4/1,9	12/5,8	51/24,6	108/52,2	32/15,5
If possible, nurses should care for the same patients every day	6/2,9	26/12,6	78/37,7	77/37,2	20/9,7

## 5.5 Physicians opinions on the nursing profession in Kazakhstan

### 5.5.1 Descriptions of physicians currently nurse status in their clinics

There were two main descriptions of the role of the nurse - "Assistant Physician" and "Dear Member of the Medical Team". The main theme of "Assistant Physician" consisted of two categories: "Irresponsible robots" and "Status of personnel". The main theme "Dear Member of the Medical Team" consisted of the next two categories: "Highly qualified nurse" and "Professionals".

Respondents noted that nurses do not take the initiative, they work strictly according to the doctor's instructions, they need to be constantly taught, they don't improve their professional level. Some of them said:

*"The nurses of our clinic are currently not professionally organized, proactive, active medical workers."*

*"The status of a nurse in a clinic is evaluated by doctors only as an assistant, her opinion is not always taken into account by doctors; her valuable comments on the patient's condition are left without due attention; It is forbidden to independently provide assistance to the patient without the advice of a doctor",*

*"Medical Assistant or Executive",*

*"Gray mice".*

Respondents noted that nurses are an integral part of the team, very responsible, hardworking, know their job. For example, in oncologic clinics also provide psychological assistance to patients. Some of them said:

*"With us, all nurses have the highest category, they constantly receive information about innovative technologies",*

*"Important unit",*

*"Key link in treating and monitoring the patient ".*

### 5.5.2 Changes Necessary to Improve the Situation of Nurses in Kazakhstan

The respondents defined two topics “Improving the financial situation of nurses” and “Education Opportunities”. The first theme consisted of two categories: “Salary increase” and “Providing Social Programs”. The second theme consisted of two categories: “Improving education and training” and “Further training in ethics, organization of work”.

Physicians believe that there is a real need to increase the salaries of nurses, help them with housing, and provide various social services. Creating opportunities for advanced training, providing affordable quality education, developing various videos for the purpose of training. Some of them said:

*“Salary increase, public status increase”,*

*“Increase staff and salary”.*

Respondents think that nurses should receive a better education, be motivated for their work, and constantly improve their professional level. Some of them said:

*“It is important to improve the quality of education of nurses in educational institutions where they study and receive diplomas of secondary medical education. There are a lot of medical colleges in cities and regions that do not correspond to the quality of the educational level, this is especially evident in the level and quality of work of nurses from regional hospitals who graduated from medical colleges in the state language. They do not possess practical, communicative skills and many manipulations. The main task is to improve the quality of education in colleges”,*

*“Give theoretical training with the development of basic knowledge skills”.*

### 5.5.3 Existing Opportunities for the Development of the Nurse Profession in Kazakhstan

There were two main topics: “Improving financial standing” and “Education improvement”. The main theme of “Improving financial standing” consisted of two categories: “Increasing Material Interest of Nurses” and “Improving the image of a nurse profession”. The main theme of “Education improvement” consisted of two

categories: “Continuous development of professional skills” and “Exchange of experience with foreign clinics”.

Physicians consider that nurses should receive adequate remuneration for their work, be financially motivated to perform such difficult work. It is also necessary to expand the powers of nurses and increase their professional capabilities. There should be career opportunities for nurses. Some of them said:

*“Health care reform. Possibilities of carrying out active purposeful work on the revival of the nursing profession, its importance”,*

*“There are opportunities! it is necessary to prescribe functional responsibilities, increase salaries according to the results of testing and examinations (report, application, portfolio) and possession of practical skills”.*

Respondents believe that for nurses should be provided opportunities for training in leading clinics of the world, receiving continuous free and high-quality education.

Some of them said:

*“Free tuition in developed countries”,*

*“Continuous training and improvement, exchange of experience with foreign experts”,*

*“Continuous development of professional skills”.*

#### 5.5.4 Main barriers to increasing the authority of the nurse in Kazakhstan

The respondents defined two topics: “Economic barriers” and “Social barriers”. The first theme “Economic barriers” consisted of two categories: “Low budget” and “Low salary”. The second theme consisted of next two categories: “Consumer attitudes towards nurses” and “Low image of the profession of a nurse”.

Respondents think nurses receive a small salary, which is not enough for a decent life, which does not contribute to interest in this profession. Some of them said:

*“Given the discredit of medical workers over the past decade, time is needed to rehabilitate the status of both a doctor and nurses. In addition, the very low*

*salary of nurses makes it completely unattractive. Therefore, they enter the profession not by vocation, but by hopelessness”,*

*“Low salary, big load”.*

Physicians consider that public opinion as a whole tends not to underestimate the full significance of the profession of a nurse, the attitude of patients is observed on the part of patients, and the leadership of medical organizations does not really appreciate nurses. Some of them said:

*“A barrier to professionalization is the underestimation of representatives of this profession by the state and society, which prevents the social status of the nursing profession from rising”,*

*“Lack of due respect for this specialty”,*

*“The prevailing stereotypes and leadership approach to this profession”.*

#### 5.5.5 Nurses with extended practice and international education can change the image of a nurse in Kazakhstan for the better

There was the main topic: “Nurse profession development”. This theme consisted of two categories: “New Generation Nursing Work” and “Sharing experience with other nurses”. Respondents believe that nurses with extended practice and international education can with their direct participation in the treatment process, the patient can teach other nurses the latest technologies, certain skills in work, and share their best practices with them. And, in general, by their own personal example, to promote the development of the nurse profession in Kazakhstan and increase the image of this specialty. Some of them said:

*“Introduce something new (the right model of behavior) good practice at the international level of education can change the image of a nurse in Kazakhstan”,*

*“A nurse with higher education and extended practice will definitely improve the quality of work”,*

*“They can share experience with patients and doctors. They will be able to demonstrate their knowledge and practical skills”.*

### 5.5.6 Physician opinions about what can be done "today" to improve the image of a nurse in the eyes of the public in Kazakhstan

There was the main topic: "Nurse profession image development". This theme consisted of two categories: "Economic methods of developing the image of a nurse" and "Social methods of developing the image of a nurse". Respondents think that it is necessary to increase the salaries of nurses, to motivate them with financial means, that is, to raise the material interest of nurses. In addition, it is necessary to create conditions for quality education, continuous improvement of the qualification level, and provide the opportunity to study abroad. In the media to promote the profession of a nurse, talk about worthy representatives of this specialty. Some of them said:

*"To increase the image of a nurse, there is a need to inform through the media about the importance of a nurse's work in healthcare, it can be in the form of short motivating videos about nurses, about the difficulties in their work, publication about the activities of nurses in reputable and well-known publications, training in foreign countries for employer or state account",*

*"Send to study abroad, exchange experience with colleagues from foreign countries, improve their qualification category",*

*"Have a good practice, keep a trusting relationship with patients".*

## 6 Discussion

The main objective of the study was to evaluate how physicians in Kazakhstan evaluate the profession of a nurse and the proposals of doctors to increase the image of a nurse in the Republic of Kazakhstan and to acquire the skills of a nurse to conduct an independent nursing practice. The respondents were mainly physicians of clinical specialties who evaluated the work of a nurse based on personal experience. The age structure of respondents was mainly up to 37 years old (72%), which is a positive factor, as this age contingent will actively participate in the reform of nursing in Kazakhstan.

Most of the doctors participating in the survey had mostly postgraduate education (graduated from a residency, master's degree, doctor's degree), are engaged in clinical activities (86%), constantly interacting with medical personnel. Thus, the assessment of physicians as experts was supported by appropriate qualifications.

The attitude of medical workers: as doctors, as well as other health professionals, to the profession of a nurse is approximately the same: Half of the respondents in both groups respect the profession of a nurse, about a third of medical workers are undecided on this issue. Thus, unconditional respect for the profession of a nurse by health professionals. according to the study failed to identify.

This is confirmed by previous research by Dr. Mervat (2018), which note that most families have a negative attitude towards the choice of children as a nurse and consider it an obstacle to career growth. In our country, most doctors also do not want children to become a nurse.

Sanad and Awadhalla (2016) believe that it is difficult to change the public perception of the work of nurses, which for many years was perceived as simply auxiliary to the work of doctors. This is confirmed by our research, less than half of the respondents believe that the society has a positive image of a nurse and that nurses are professionals, only a third of doctors agree with the opinion that in society they respect the profession of a nurse as a legal profession. The doctors perceive that 20% of patients choose a hospital based on nursing care.

At the same time, most physicians praise the importance of the nursing profession by doctors and perceive care as a rapidly changing profession, which has many different career opportunities. Compared to the legal profession, the value of the nurse profession is also significant, in contrast to the image of the nurse profession in a society that is less attractive. This is consistent with the previous study, which notes the important role of nurses. in the planning, development, implementation and organization of the health work process, although they often go unnoticed by patients, family members and health workers. Most doctors agree that the nurse is an important member of the health care team. (McKay & Narasimhan 2012.)

This is also confirmed by studies by Amudha and colleagues (2018), which believes that in order to improve care and the whole process of treating patients, collegiality

in relations between doctors and nurses should be strengthened. Today, there is a tendency for the development of cooperation between physicians and nurses. It is necessary to adequately assess the contribution of nurses in achieving effective results of medical care for the population.

The role of nurses in the health system in improving patient care was also praised. Most doctors note the responsibility of nurses for positive results regarding the health of their patients, which is achieved by improving the quality of patient care. The nurse should plan patient care and regularly evaluate the patient's condition.

Therefore, physicians believe that nurses should expand their skills and the proper performance of their duties, which reduces the number of complications. But at the same time, they do not support the opinions about the independence of judgments of nurses and their right to question medical orders, a third part the doctor rejects this possibility. This indicates a lack of understanding by doctors of the new role of the nurse and the delegation of functions from the physician to the nurse. Therefore, only a quarter of doctors recognize the autonomy of a nurse in their practice, and a significant part of doctors rejects the independence of nursing.

This is confirmed by research (Maier, Aiken, & Busse 2017), which believes that there should be changes in the nursing profession that will require significant investments in the training of highly qualified nursing practitioners. According to the survey, a significant part of doctors is confident that the cooperation between the doctor and the nurse improves the health status of patients.

However, the prevailing opinion is that it is necessary to strengthen the interaction between physicians and nurses, strengthen collegial relations, cooperation between doctors and nurses will increase the efficiency of medical care and, ultimately, will have a beneficial effect on the condition of patients and reduce the cost of treating patients. These thoughts are consistent with literature. (Amudha, Hamidah, Annamma, & Ananth 2018.)

## 7 Conclusion

The attitude of physicians to nurses is varying. Some of the doctors believe that nurses are important and integral members of the medical team that help physicians in their work. These same doctors say that nurses have a high professional level and work competently, contributing to the recovery of patients. However, there is another part of the physicians, whose representatives believe that nurses are only doctors' assistants who have no independence. Also, a certain cohort of physicians assesses the level of qualification of nurses as very low, they think that they need to work hard on themselves, to learn in order to meet the requirements of the time. Doctors also say that nurses today have very low wages, while nurses have a lot of work to do.

Physicians believe that there is a real need for economic stimulation of nurses, that nurse salaries should be increased, housing should be provided for them, certain social programs should be created for them, nurses should be able to receive a quality education and constantly improve their professional level at various trainings, all data events should be free of charge. Doctors offer to provide nurses with the opportunity to study abroad and have access to nursing experience in countries where nursing is more developed. Physicians express the opinion that, in general, the society does not have a very high judgment on the profession of a nurse in Kazakhstan. Therefore, it is necessary to use the media to promote the profession of a nurse, to talk widely about those representatives of the nurse profession who occupy advanced positions. In general, the relationship between doctors and nurses is quite important, collegial relations and the expansion of cooperation between the two professions will help in providing quality care to patients.

Almost all the physicians interviewed agree with the need to develop and improve nursing in Kazakhstan. Therefore, they are optimistic that a reform of nursing is currently underway in the Republic of Kazakhstan, and this process was launched in 2014 with the participation of employees from the universities of applied sciences JAMK and LAMK, Finland. Doctors believe that nurses with an applied bachelor's level can significantly improve the state of nursing in Kazakhstan. Physicians associate their hopes for better nursing with this new generation of nurses. Physicians are sure

that the ongoing reforms in the nursing system will help to improve the quality of medical care in Kazakhstan, which means significantly improving the level of health care provided to the population of the country.

### **Recommendations**

Based on the results of the study, the following recommendations were formulated:

1. Create conditions for material interest of nurses in their work.
2. Introduce more objective and optimal volumes of loads on nurses at their workplaces.
3. Provide nurses with training opportunities and continuous training.

## References

- Abdrakhmanova, A., Baygozhina, Z., & Kalieva, M. 2014. The ways of formation of new generation of nurses in Kazakhstan. *Journal Clinical medicine of Kazakhstan*, 4, 34, 5-9. Accessed on 25 May 2018. Retrieved from <http://oaji.net/articles/2017/235-1521177447.pdf>
- Amudha, P., Hamidah, H., Annamma, K., & Ananth, N. 2018. Effective Communication between Nurses and Doctors: Barriers as Perceived by Nurses. *Journal of Nursing & Care*, 7, 1-6. doi: 10.4172/2167-1168.1000455
- Andregard, A. & Jangland, E. 2015. The tortuous journey of introducing the Nurse Practitioner as a new member of the healthcare team: a meta-synthesis. *Scandinavian Journal of Caring Sciences*, 29, 3-14. doi: 10.1111/scs.12120
- Belyatko, A., Nurgalieva, N., Derbisalina, G., & Batarbekova, Sh. 2019. Methods of working with nurses with patients with behavioral risk factors (smoking, alcohol): literature review. *Science & Healthcare*, 21, 60-71. Accessed on 5 September 2019. Retrieved from <https://cyberleninka.ru/article/n/metody-raboty-meditsinskih-sester-s-patsientami-imeyuschimi-povedencheskie-factory-riska-kurenie-alkogol-obzor-literatury/viewer>
- Bradley, E. & Riley C. 2014. Continuing professional development: The role of nurse prescribers in the multidisciplinary team. *Nurse Prescribing*, 11, 1-5. <https://doi.org/10.12968/npre.2013.11.3.CPD2>
- Browall, M., Henoch, I., Melin-Johansson, C., Strang, S., & Danielson, E. 2014. Existential encounters: Nurses' descriptions of critical incidents in end-of-life cancer care. *European Journal of Oncology Nursing*, 18, 1-9. DOI: <https://doi.org/10.1016/j.ejon.2014.06.001>
- Burford, B., Morrow, G., Morrison, J., Baldauf, B., Spencer, J., Johnson, N., Rothwell, C., Peile, E., Davies C., Allen, M., & Illing, J. 2013. Newly qualified doctors' perceptions of informal learning from nurses: implications for interprofessional education and practice. *Journal Interprofessional Care*, 27, 394–400. DOI: 10.3109/13561820.2013.783558
- Burns, K. 2011. Nurse-Physician Rounds: A Collaborative Approach to Improving Communication, Efficiencies, and Perception of Care. *Medsurg Nursing Official Journal of the Academy of Medical-Surgical Nurses*, 20, 194-199. PMID:21941931
- Doctors and nurses. Interaction features 2012. Your health. Accessed on 9 June 2019. Retrieved from <https://www.vz.kiev.ua/vrachi-i-medsestry-osobennosti-vzaimodejstviya/>
- Edwards, P., Roberts, I., Clarke, M., DiGuseppi, C., Wentz, R., Kwan, I., Cooper, R., Felix, L., & Pratap, S. 2009. Methods to increase response to postal and electronic questionnaires. *The Cochrane Database of Systematic Reviews*, 8. doi: 10.1002/14651858.MR000008.pub4.
- Enberg, B., Gunnevi, S., & Öhman, A. 2013. Work experiences among nurses and physicians in the beginning of their professional careers – analyses using the effort–

- reward imbalance model. *Scandinavian Journal of Caring Sciences*, 27, 36-43. doi: 10.1111/j.1471-6712.2012.00997.x
- Heale, R. & Twycross, A. 2015. Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18, 66-67. DOI: 10.1136/eb-2015-102129
- Johnson, S. & Kring, D. 2012. Nurses` Perceptions of Nurse-Physician Relationships: Medical-Surgical vs. Intensive Care. *Medsurg Nursing Official Journal of the Academy of Medical-Surgical Nurses*, 21, 343-347. PMID:23477026
- Johnson, M. & Long, T. 2015. Research ethics. In: *The Research Process in Nursing*. Edit. Lathlean, J. & Gerrish, K. Chichester, UK: John Wiley & Sons, Ltd. 31 - 41. Accessed 16 September 2018. Retrieved from <https://www.wiley.com/en-us/The+Research+Process+in+Nursing%2C+7th+Edition-p-9781118522585>
- Jones, M. & Rattray, J. 2015. Questionnaire Design. In: *The Research Process in Nursing*. Edit. Lathlean, J. & Gerrish, K. Chichester, UK: John Wiley & Sons, Ltd. 412 - 425. Accessed 16 September 2018. Retrieved from <https://www.wiley.com/en-us/The+Research+Process+in+Nursing%2C+7th+Edition-p-9781118522585>
- Kasieva, B., Altynbekova, M., Ramazanova, M., Yusupova, N., & Te, N. 2014. Optimization of training of nursing managers in the context of healthcare reform. *Bulletin of KazNMU*, 2, 215-217. Accessed on 22 March 2019. Retrieved from <https://cyberleninka.ru/article/n/optimizatsiya-podgotovki-sester-menedzherov-v-usloviyah-reformirovaniya-zdravoohraneniya/viewer>
- Mandleko, B., Driver, M., & Larson, D. 2012. Critical Evaluation of Scientific Research in Nursing: Qualitative Research. *Bulletin of the Association of nurses of Russia*, 5, 12-30. Accessed on 8 February 2019. Retrieved from [http://www.medsestre.ru/files/file/rna\\_t\\_b\\_library/research\\_critique\\_qualitative.pdf](http://www.medsestre.ru/files/file/rna_t_b_library/research_critique_qualitative.pdf)
- Maier, C. & Aiken, L. 2016. Task shifting from physicians to nurses in primary care in 39 countries: a cross-country comparative study. *European Journal of Public Health*, 26, 927–934. doi:10.1093/eurpub/ckw098
- Maier, C., Aiken, L., & Busse, R. 2017. Nurses in advanced roles in primary care: policy levers for implementation. Organisation for Economic Co-operation and Development (OECD) Health Working Paper No. 98, 39-44. Accessed on 08.02.19. Retrieved from [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA/HEA/WD/HWP\(2017\)8&docLanguage=En](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DELSA/HEA/WD/HWP(2017)8&docLanguage=En)
- Markabaeva, A., Alibaeva, G., Ospanova, D., Hopia, H. 2018. The role of the oncological nurse in the world. *Vestnik AGIUV*, 4, 6-12. Accessed on 25 March 2019. Retrieved from <https://cyberleninka.ru/article/n/rol-onkologicheskoy-medsestry-v-mire-obzor/viewer>
- Matziou, V., Vlahioti, E., Perdikaris, P., Matziou, T., Megapanou, E., & Petsios, K. 2014. Physician and nursing perceptions concerning interprofessional communication and collaboration. *Journal of Interprofessional Care*, 28, 526–533 DOI: 10.3109/13561820.2014.934338
- McKay, K. & Narasimhan, S. 2012. Bridging the gap between doctors and nurses. *Journal of Nursing Education and Practice*, 2, 1-4. DOI: 10.5430/jnep.v2n4px

- Mervat, E.A., Dahshan, E.I., Hanan, A., & Youssef, M. 2018. Nursing Students' Perception about Nursing as a Professional Career Choice at Taif University, Saudi Arabia. *International Journal of Novel Research in Healthcare and Nursing*, 5, 407-420. Accessed 07 June 2019. Retrieved from <http://www.noveltyjournals.com/download.php?file=Nursing%20Students%27%20Perception-1583.pdf&act = book>
- Muijs, D. 2004. Doing quantitative research in education with SPSS. First edition. Gateshead, Tyne & Wear, Ltd, Great Britain. Accessed on 10 February 2019. Retrieved from <https://trove.nla.gov.au/work/11379339>
- Order of the Health Minister of Kazakhstan № KR HM – 43 on December 19, 2018 “On introducing changes and amendments to some regulatory legal acts of the Ministry of Health of the Republic of Kazakhstan”. Accessed on 8 February 2019. Retrieved from [http://pharmnews.kz/ru/legislation/prikaz-mz-rk--r-dsm-43-ot-19-dekabrya-2018-goda\\_2606](http://pharmnews.kz/ru/legislation/prikaz-mz-rk--r-dsm-43-ot-19-dekabrya-2018-goda_2606)
- Price, S., Doucet, S., & Hall, L. 2014. The historical social positioning of nursing and medicine: implications for career choice, early socialization and interprofessional collaboration. *Journal Interprofessional Care*, 28, 103-109. DOI: 10.3109/13561820.2013.867839
- Sanad, H. & Awadhalla, M. 2016. Bahraini Nursing Students Perceptions of the Nursing Profession as a Career of Choice. *International Journal of Nursing Education*, 8(4), 18-23. doi: [10.5958/0974-9357.2016.00116.1](https://doi.org/10.5958/0974-9357.2016.00116.1)
- Sand-Jecklin, K. & Schaffer, A. 2006. Nursing students` perceptions of their chosen profession. *Nursing Education Perspectives*, 27, 130-135. ISSN: 1536-5026
- Strech, S. & Wyatt, D. 2013. Partnering to Lead Change: Nurses' Role in the Redesign of Health Care. *Association of periOperative Registered Nurses Journal*, 98, 260-266. <http://dx.doi.org/10.1016/j.aorn.2013.07.006>
- Tariman, J. & Szubski, K. 2015. The Evolving Role of the Nurse During the Cancer Treatment Decision-Making Process: A Literature Review. *Clinical Journal of Oncology Nursing*, 19, 548-556. doi: 10.1188/15.CJON.548-556.
- Tavakol, M. & Dennick, R. 2011. Making sense of Cronbach's alpha. *International Journal of Medical Education*, 53-55. Accessed on 01 April 2019. Retrieved from <https://www.ijme.net/archive/2/cronbachs-alpha.pdf>
- Topping, A. 2015. The Quantitative-Qualitative Continuum. In: *The Research Process in Nursing*. Edit. Lathlean, J. & Gerrish, K. Chichester, UK: John Wiley & Sons, Ltd. 150-171. Accessed on 16 September 2018. Retrieved from <https://www.wiley.com/en-us/The+Research+Process+in+Nursing%2C+7th+Edition-p-9781118522585>
- World Medical Association (WMA) Declaration of Helsinki – Ethical principles for medical research involving human subjects 2018. Accessed on 7 February 2019. Retrieved from <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>

## Appendices

Appendix 1. Questionnaire



### THE IMAGE OF THE PROFESSION OF A NURSE IN KAZAKHSTAN

Dear Doctor,

The purpose of this study is to study the image of the profession of a nurse in Kazakhstan from the point of view of doctors. It is important to get information about the nurse's perspective and the present situation to be able to enhance the professional image. A comprehensive plan for the development of nursing in the Republic of Kazakhstan until 2020 sets a goal to increase the efficiency of the health care system of the Republic of Kazakhstan through the reform of nursing and the creation of a nursing specialist for the new formation in accordance with the modern challenges of society and international requirements. In the process of fulfilling the tasks of health care reform, including the delegation of powers from a doctor to nurses, strengthening the role and potential of nursing staff, as a result of which the goal of this reform in 2020 will be to establish the independent role of a nursing specialist as an equal partner of a doctor at all levels health care systems. The aim of the study is to support the development of nursing in Kazakhstan.

I would kindly ask for your consent to study your opinion on the image of the profession of a nurse in Kazakhstan. Participation in the study is completely voluntary, and the refusal will in no way affect you.

The research material is kept in a locked closet, only the researcher has the key. The researcher undertakes to comply with the existing guidelines for retention of research material and data protection legislation. The results of the research will be master's dissertations and articles will be published in international scientific journals. The research material will DESTROYED after the study have been completed.

Sincerely,

Akmaral Maimakova, Researcher  
e-mail: akmar72@mail.ru  
Tel: +7 777 090 22 93

Johanna Heikkilä, PhD  
Senior Advisor, JAMK University of Applied Sciences  
e-mail: Johanna.Heikkila@jamk.fi

Dinara Ospanova, as.professor, DmedSc, PhD  
Head of Department of Public Health, KazMUCE, Kazakhstan  
e-mail: dinara.ospanova@mail.ru  
Tel: +7701-7101549

### Demographic Information

**1. Gender \***

- a. Female  
 b. Male

**2. Age \***

present age \_\_\_\_\_

**3. Marital status \***

- a. Single  
 b. Married  
 c. Divorced/separated  
 d. Leaving with partner  
 e. Widower/widower

**4 LEVEL OF EDUCATION IN MEDICINE?**

- 1 Higher  
2 Bachelor  
3 Residentura  
4 Master of medicine  
5 Master of public health  
6 PH.D

**5 PROFILE OF YOUR MEDICAL ACTIVITY**

- 1 Surgery  
2 Therapy  
3 Pediatrics  
4 Rehabilitology

- 5 Diagnostics
- 6 Public Health

**6 PRACTICING AT THE MOMENT MAINLY AT**

- 1 Clinical Field: hospital
- 2 Clinical field: primary care
- 3 Teaching
- 4 Research
- 5 Administration

**7 You are STUDENT OF KAZMUCE IN**

- 1. Course of professional development
- 2. Course of specialization (retraining)
- 3. Shortcourse (seminar, master class)
- 4. Master programme
- 5. Ph.D programme

**8. What has had the most influence over your perceptions of nurses and the nursing profession? \***

- a. Media
- b. Role models
- c. Personal health care experiences
- d. Other

\_\_\_\_\_

**9. Do you, your significant other, a family member, or a close friend work in healthcare? \***

- a. Yes
- b. No

**10. Physicians have respect for the nursing profession. \***

- a. Strongly Disagree
- b. Disagree
- c. Undecided
- d. Agree
- e. Strongly Agree

**11. Other health care professionals (e.g., social workers, physical therapists, etc.) have respect for the nursing profession. \***

- a. Strongly Disagree
- b. Disagree
- c. Undecided
- d. Agree
- e. Strongly Agree

**12.** Where do you think the public gets its information to form their images or opinions of nursing? \*

- a. Media
- b. Role models
- c. Personal health care experiences
- d. Other  
\_\_\_\_\_

**13.** Do you want to your children to become nurses? \*

- a. Yes
- b. No
- c. Sometimes
- d. They decide yourself
- c. H ave no children

**14. Directions: Please use the following definitions to select the best response to the following questions. Please think about the image of the nursing profession at this moment for your point of view as a doctor. \***

	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
1. Patients select a hospital based on nursing care.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Nursing care is as important as physical therapy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Nurses with a bachelor's degrees are better prepared to the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

nursing profession  
than nurses who  
graduated from  
college (TaVE).

4. Nurses work  
hard.

5. Nursing is a  
profession.

6. I respect the  
profession of  
nursing as much  
as the profession  
of law.

7. The public has a  
positive image of  
nursing.

6. I respect the  
profession of  
nursing as much  
as the

8. Nursing is very  
complex.

9. Nursing is a  
rapidly changing  
profession.

10. Teaching  
health promotion  
and disease  
prevention in the  
community is as  
much a nursing  
responsibility as  
are other nursing  
roles in patient  
care.

11. Nurses have  
considerable  
autonomy in their  
practice.

12. Nurses are  
directly  
responsible for

positive outcomes in their patients' health (e.g., prevention of secondary infections, fewer post-surgical complications, shorter hospital stays, etc.).

**15.** Directions: Please use the following definitions to select the best response to the following questions. Please think about the image of the nursing profession for your point of view as a doctor. \*

	STRONGLY DISAGREE	DISAGREE	UNDECIDED	AGREE	STRONGLY AGREE
13. Nurses should question medical orders that they judge to be possibly incorrect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Nurses need to learn skills that overlap with other healthcare staff skills (e.g., respiratory therapy, physical therapy, social work, etc.).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Optimum nursing care requires regular patient assessment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Patient education is an important part of nursing practice.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Most patient complications are avoided when	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

nurses do their jobs correctly.

18. Nurses improve the quality of patient care by planning the care specific to each patient and carrying out the identified plan.

19. Physician/nurse collaboration improves health outcomes for patients.

20. Nurses make key decisions regarding their patients' care.

21. If possible, nurses should care for the same patients every day.

22. Nurses are very organized.

23. The nurse is an important member of the health care team.

24. Nursing is diverse and offers many different career possibilities.

**16. Directions:** Please use the following definitions to select the best response to the following questions. Please think about the image of the nursing profession for your point of view as a doctor. \*

STRONGLY DISAGREE    DISAGREE    UNDECIDED    AGREE    STRONGLY AGREE

25. Nursing is challenging and rewarding.
26. Nurses are intelligent and creative.
27. The public considers nursing care to be as valuable as physical therapy.
28. The public believes that nurses work hard.
29. The public thinks of nurses as professionals.
30. The public respects the profession of nursing as much as the profession of law.
31. The public understands the complexity of nursing.
32. The public perceives nursing as a rapidly changing profession.
33. The public believes nurses are organized.
34. The public believes the nurse to be an important member of the healthcare team.

35. The public perceives nursing to be a diverse profession that contains many different career possibilities.

36. The public sees nursing as a challenging and rewarding healthcare career.

37. The public values the intelligence and creativity of nurses.

Please answer the following open questions:

**17.** From your point of view, as a doctor, describe briefly your words about the status of nurses at this moment in your clinic?

---



---



---

**18.** What changes are need to be made to improve the position of a nurse in Kazakhstan?

---

**19.** What are the opportunities for the development of the nursing profession in Kazakhstan?

---

**20.** How nurses with extended practice and international level of education will be able to raise the image of nursing in Kazakhstan?

---

**21.** What do you think can be done to improve the public's image of nursing?

---

**22.** What are the main barriers to improving the image of the nursing?

---

---

---

Please click the Submit button below!