

Role and Responsibility of oncology nurses from their point of view

Assel Markabayeva

Master's thesis

August 2019

Social services, Health and Sports

Degree Programme in Advanced Nursing Practice

Author(s) Assel Markabayeva	Type of publication Master's thesis	Date August 2019 Language of publication: English
	Number of pages 59	Permission for web publication: x
Title of publication Role ad responsibility of the oncology nurse from their point of view		
Degree programme Degree Programme in Advanced Nursing Practice		
Supervisor(s) Hopia Hanna Ospanova Dinara		
Assigned by		
<p>Nurses are one of the most important members of an interdisciplinary team in clinical practice, especially in the field of oncology. Despite this, in the Republic of Kazakhstan, there is a lack of clarity regarding the roles, responsibilities, and unique contributions of a oncology nurse.</p> <p>The role and responsibility of oncology nurse were studied in order to make visible their job to peers and Kazakhstan society with the aim of offering further recommendations for improving oncological services.</p> <p>In this qualitative study, 63 oncology nurses divided into the six focus group were selected. After data collection, all focus group interviews were transcribed and analyzed by using content analysis method.</p> <p>The roles and responsibilities of oncology nurse were identified in the six main categories: role in symptom assessment, monitoring of patients and their family members; the psychological role of supporting the patient; information giving and patient\relatives education; current responsibilities and nursing responsibilities management.</p> <p>Results showed that the nurses are an active participant in the management of an oncology patient and plays an important role in his care, treatment, and rehabilitation, but nurses have a limited role as an independent member of an interdisciplinary team. It is necessary to review the roles, responsibilities, training, career development, and capabilities of an oncology nurse in Kazakhstan</p>		
Keywords/tags (subjects) Oncology nurse; Nursing role; Nurse responsibilities; Qualitative research; Focus group		
Miscellaneous (Confidential information)		

Contents

1	Introduction.....	5
2	Theoretical Background.....	7
2.1	Worldwide Cancer Growth.....	7
2.2	The Role of the Oncology Nurse Worldwide.....	7
2.3	Cancer Growth in the Republic of Kazakhstan.....	9
2.4	Oncology Nursing in the Republic of Kazakhstan.....	10
2.5	The Responsibility of the Oncology Nurse in the Republic of Kazakhstan.....	12
2.6	Job Descriptions of Senior Nurses in the Oncology Department.....	12
2.7	Job Descriptions of the Procedural Nurse.....	13
2.8	Job Descriptions of a Ward Nurse.....	13
3	Purpose, Objectives and Research Questions.....	14
4	Methodology.....	15
4.1	Study Design.....	15
4.2	Focus Groups.....	16
4.3	Data Collecting Method.....	16
4.4	Participants.....	17
4.5	Data Analysis.....	18
5	Results.....	21
5.1	Participants Role.....	21
5.1.1	Role in Symptom assessment, monitoring.....	21
5.1.2	Relationship Based on Honesty.....	22
5.1.3	Empathic Concern.....	22
5.1.4	Approachability.....	23
5.1.5	Leadership.....	23

	2
5.2 Psychological Support Role	24
5.2.1 Closeness	24
5.2.2 Being Open in Communication	24
5.2.3 Self-control.....	25
5.2.4 Team Endorsement	25
5.3 Information Giving and Patient/Relatives Education	26
5.3.1 Patient Education	26
5.3.2 Patient Consultation	27
5.3.3 Personal Assistant	27
5.4 Participants Responsibility	28
5.4.1 Doctor's Decrees	28
5.4.2 Documentation Organization	29
5.4.3 Discipline.....	29
5.4.4 Departmental replenishment	30
5.4.5 Education process	30
5.4.6 Sanitary service	30
5.5 Nursing Responsibility Management.....	31
5.5.1 Accomplishments	31
5.5.2 Provider.....	31
5.5.3 Decision making	32
5.6 Summary of Findings.....	32
6 Research Ethics	33
7 Trustworthiness	35
8 Discussion	36
8.1 Role in Symptom Assessment and Monitoring of Patients and Their Families	37

8.2	Psychological Role of Patient Support	38
8.3	Providing Information and Education for Patients and Relatives	40
8.4	Current Responsibilities	40
8.5	Nursing Responsibilities Management	42
9	Recommendations.....	42
10	Conclusion	44
	References.....	46
	Appendices.....	51
	Appendix 1. Questions for conducting an interview with nurses.....	51
	Appendix 2. Cover letter.....	52
	Appendix 3. Informed consent.....	54
	Appendix 4. Arrangement.....	56
	Appendix 5. Research protocol	57

Tables

Table 1. Research process	15
Table 2. Participants' background characteristics	18
Table 3. An example of the analysis process.....	20

1 Introduction

In the near future, the quality of cancer treatment can be discredited due to problems associated with labor. Factors such as the aging population and the increase in the number of cancer survivors, will affect the workforce of the oncological service. (Coombs, Hunt & Cataldo 2016.) Worldwide, the proportion of people older than 60 years will increase by 21.5% or 2.09 billion people by 2050. This means that in the future, today's youth will become the largest group of elderly people in the history of mankind. (World Population Prospects 2017.)

In the population aging index in the republic of Kazakhstan for 2014–2016, the number of aging people over 65 years has increased by 25.9%. Although there are modifiable risk factors that contribute to the development of cancer such as smoking, viral radiation, and physical activity, aging is one of the main risk factors. As the number of elderly people steadily increases, the incidence of cancer and prevalence rates will also increase. (White, Holman, Boehm, Peipins, Grossman, & Henley 2014.)

According to the Analytical material extended college Ministry of Health of the Republic of Kazakhstan from 2017, 164,000 patients with various forms of malignant tumors have been registered, of whom 38,050 (23.3%) patients receive chemotherapy. At the same time, mortality from cancer decreased by 20%. Moreover, early detection and the improvement of cancer treatment increased life expectancy, resulting in an increase in the number of survivors after cancer (Macmillan Cancer Support 2011). Currently, there are 14.5 million people who have had cancer, and by 2024, this number will increase to 19 million (DeSantis 2014; Moor 2013).

Given the expansion of cancer control programs, the demand for health services will increase. Despite some successes in cancer prevention and early diagnosis in oncology, the number of patients with advanced forms of the tumor process remains stably high, accounting for about 30-40% of the total number of cancer patients. Increasingly relevant is the adequate organization of palliative and symptomatic treatment that provides an acceptable level of quality of life for cancer patients.

Despite the measures taken to organize cancer care, the deficit of oncologists, which currently stands at more than 40%, has a negative impact on care. (Afonin 2015.) The early resignation of doctors because of higher burnout levels in the workplace should also be taken into account (Iskakova, Abzalova, & Shalgumbaieva 2016). The number of nurses in the Republic of Kazakhstan in 2017 amounted to 132,500 and the number of doctors to 72,134 (Number of doctors and nurses per 10,000 people 2017).

Based on international experience, the lack of doctors in primary health care has been eliminated by using practicing nurses to fill the workforce gap. A similar model can succeed in oncology. (Coombs, Hunt, & Cataldo 2016.) Oncological nurses work in a variety of roles now and in conditions that were unheard of ten years ago but that are now becoming more commonplace. On an outpatient basis, oncological nurses work in medical clinics that provide services such as long-term follow-up of patients with cancer, pre-screening prior to chemotherapy, fatigue management, and general symptom management. (Iskakova et al. 2016.)

As the field of cancer genetics has evolved, so are the roles for advanced nurse practitioners in providing genetic counseling on cancer and risk assessment. Oncological nurses work in many managerial positions, such as senior officials, cancer managers, and admissions directors in hospitals and clinics. (Rieger & Yarbro 2003.) However, it is necessary to carefully study the role of the nurse as a provider between the healthcare system and cancer patients in Kazakhstan at the present stage. This is because there is currently no such work in Kazakhstan.

Knowledge in the oncology service in primary health care, inpatient care, hospice, mobile emergency palliative care team, and home care services, will help to identify the main shortcomings with the further development of new competencies and roles of the nursing staff, including the role of a nurse as an independent coordinator in assisting oncology patients. The purpose of this study is to explore the role and responsibilities of practitioner nurses who work as providers between oncology services and patients and to gain new information about their daily work with the

patients, and so make their role and responsible more visible to peers, other healthcare professionals, and the Kazakh society. Based on the results, recommendations and suggestions will be made for the providers of oncology services.

2 Theoretical Background

2.1 Worldwide Cancer Growth

In 2019, more than 1.7 million people who had had cancer lived in the United States (American Cancer Society 2019). The aging population of the United States also led to an increase in the total number of new cancer diagnoses and cancer deaths. Cancer was the main cause of death in 22 states in 2016 and is projected to catch up with cardiovascular diseases as the main cause of death by 2020 (Weir, Anderson, Coleman 2016).

Older people account for 60% of cancer cases and 70% of cancer deaths in Australia (Cancer in Australia 2014). Cancer disproportionately affects the elderly, in the age group over 65 years. In 2014, cancer surpassed cardiovascular diseases to become the first cause of death in Australia (Ye, Otahal, & Marwick 2018). For Canadians, cancer mostly affects people over 50 years: 89% of all new cases are diagnosed in people in this age group. For men and women, the average age of cancer diagnosis is 65 to 69 years (Canadian Cancer Statistics 2017).

2.2 The Role of the Oncology Nurse Worldwide

Based on international experience, the shortage of doctors in the field of primary health care has been eliminated with the help of practicing nurses to fill the gaps in the workforce; a similar model can succeed in oncology (Coombs, Hunt, & Cataldo 2016). Considering the increased complexity of oncological care and the growing number of cancer patients living with cancer who need this care, nurses can perform the basic functions of outpatient and inpatient settings (Hinkel, Vandergrift, Perkel, Waldinger, Levy, & Stewart 2010). On an outpatient basis, oncology nurses work in medical clinics that provide services such as the long-term follow-up of cancer

patients, pre-screening for chemotherapy, pain management, and general symptom management.

The role of a nurse in oncological practice includes: control of the underlying disease, comorbidity (pain, painful conditions, active medical support); psychological and social support; practical solutions to problems related to the disease, such as personal hygiene, daily toilet activities, prevention of ulcers and bedsores, washing, walking the patient, shopping in stores, as well as training and support at the death stage: farewell to the family, suffering in the last hours of death, preparation to the expected death, and confirmation of death. A nurse plays an important role in the lives of patients' relatives, providing physical and psychological support to those close to a seriously ill patient. (Rieger & Yarbrow 2003.)

In different countries, depending on the structure of education and practice, there are different types of nurses involved in the oncology service. There is the concept of specialized nurses involved in oncological management. Some nurses are called Nurse Practitioner (NP) oncology nurses, clinical nurse specialist clinics (CNS) clinical practitioners, or advanced nurse practitioner (APN) nurse practitioners. All these nurses have received special training and have certain areas of knowledge about oncology.

Nurse NP works mainly in hospitals but some of them provide home care. They can specialize in a particular form of cancer, such as breast, lung, head and neck cancer, or a specific drug, such as chemotherapy. Caregiver nurses / caregivers are those who spend a large amount of time caring for those in need. Some of them are specialist nurses, for example, for patients recovering from surgery, while others are for general nurses providing general care. Caregiver nursing responsibilities range from emotional support, personal care assistance (such as bathing and changing clothes), communication, and more. (Reinhard, Given, & Petlick 2008.)

A certified nurse can be much more expensive and usually visits the house once a week to check on the patient. Regular nurses are also less involved than a caregiver. A nurse caregiver works almost every day for the person she cares for. A caregiver may also be responsible for maintaining the home, preparing food, and transporting his patients. (Reinhard et al. 2008).

ARNP-oriented nurses justify the benefits of hospice and turn to advanced algorithms for the early stages of cancer to satisfy patients and their relatives, which leads to a tangible improvement in the patient's emotional and mental quality of life (Dyar, Lesperance, Sloan, & Colon-Otero 2012). Nurses can also take an active part in focused tasks (pain management) or more generally (case management). Evidence supporting independent practice is especially important in more remote areas where nurses can also play a crucial role in the supervision of public health (Schroeder & Lorenz 2018).

In the meta-ethnographic analysis of the NHS Foundation Trust, York, UK which included data from 25 articles, five key topics were highlighted: role assessment, practical role, relationships with patients and families, psychological support, and the ambiguity of roles. The concept of “expert-friend” nurses argues that positive relationships with district nurses, in contact with patients, underlie the provision of palliative care and deeply influence the nature of psychological support for oncological patients (Offen 2015). Today, receiving palliative care at home is becoming the most popular choice, and a study in Japan showed that about 60% of Japanese want to die at home, with the organization of high-quality palliative care provided by practitioners (Naruse, Yamamoto, Sugimoto, Fujisaki-Sakai, & Nagata 2017).

2.3 Cancer Growth in the Republic of Kazakhstan

In 2016, 164,000 patients with various forms of malignant tumors were registered of which 38,050 (23.3%) patients have received chemotherapy. At the same time, cancer mortality decreased by 20%. The mortality rate from malignant neoplasm's according to the Extended Analytical board by the Ministry of Health of the Republic of Kazakhstan was 88.79 against 92.0 per 100 thousand populations for the same period of 2015. (Analytical material extended college Ministry of health Republic of Kazakhstan 2017.)

Given the expansion of cancer control programs, the demand for medical services will grow. Practically, this means that oncologists will increasingly deal with patients with complex and life-threatening conditions (developed due to age, comorbidities, and depleting body reserves), many of which will need palliative and symptomatic

treatment. Despite some success in the field of cancer prevention and early diagnosis of cancer, the number of patients with advanced forms of the tumor process remains consistently high, which is about 30-40% of the total number of cancer patients. (Afonin, Kaidarova, Kaidarov, Shatkovskaya, Yerechshenko, Kunirova & Gatijatullin, 2016.) Adequate organization of palliative and symptomatic treatment, ensuring an acceptable level of quality of life for cancer patients, is becoming increasingly important.

Despite the measures taken to organize the detection and treatment of cancer, at the end of 2016 in the Republic of Kazakhstan, the need for specialists was 338 people, which is 25.6% lower compared to the same figures for 2015. The lack of young specialists and district oncologists at the level of primary health care in all regions of Kazakhstan and the failure of the palliative and rehabilitation system for patients with malignant neoplasms has a negative effect on the oncological service of the Republic of Kazakhstan. (The strategic plan of the Kazakh Research Institute of Oncology and Radiology 2017.) The early retirement of a physician should also be considered due to higher levels of burnout in the workplace (Khusainova & Kausova, 2016). As of 2017, the number of nurses in the Republic of Kazakhstan was 132.5 thousand and the number of doctors 72,134 (Analytical material extended collegy Ministry of health Republic of Kazakhstan 2017).

2.4 Oncology Nursing in the Republic of Kazakhstan

There are differences in professional equality in many Asian and other developing countries, predominantly within paternalistic cultures. Nurses are considered “secondary health workers” or medical assistants. Differences in basic nursing education creating different levels of practice can also explain the confusion about what nurses can do. (Kraft, Kästel, Eriksson, & Hedman 2017.)

A comparative analysis of the functional activities of health workers of primary health care organizations in Kazakhstan and the world determines the basic powers of a general practitioner nurse that a modern nurse should possess today (Utepbergenova, Kalmataeva & Kalmakhans 2016). Despite the sufficient regulation of nursing activities, which implies not only the autonomy and command of the process in the Republic of Kazakhstan, in practice the powers of the nursing staff are

limited (ibid.). In Kazakhstan, there is a shortage of nurses with higher education, while abroad, more than 40% of primary health care nurses have at least a bachelor's degree and provide independent "advanced" nursing care activities at the level of Primary Medical Sanitary Services (Shalkharova, Koikov & Baygozhina 2016).

The number of attached population per nurse with higher education is more than in Kazakhstan, these nurses are focused on clinical activities and patient education in managing their disease (ibid.). Currently, the Public Health of the Republic of Kazakhstan assigns a significant role to general practice nurses, who are called upon to transfer about 25% of the functions of general practitioners and to endow them with the functions of independent observation of patients (Analytical material extended board Ministry of health Republic of Kazakhstan 2017).

The Ministry of Health of the Republic of Kazakhstan is implementing a pilot project to develop and implement a new level of nursing in practical healthcare. This project was launched in August 2017. Seven higher medical colleges and twenty-nine pilot medical organizations of the RK became its participants. The goal of the project is to introduce a new model of nursing into medical organizations based on the international requirements for the nursing profession. (Analytical material extended college Ministry of health Republic of Kazakhstan 2017.)

Nursing specialists in 2016 from practical health organizations developed the methods and indicators for assessing the activities of nurses, in the context of the nursing reform in Kazakhstan (Shalkharova et al. 2016). In accordance with the regulatory documents in the field of health, the general nurse in Kazakhstan is designed to carry out: self-admission and examination of patients with an entry in an outpatient card within their competence, assess the patient's needs for nursing care (nursing diagnosis), draw up a survey plan, treatment and care of patients, adapt it and implement in accordance with the identified problems, assess the dynamics of the condition and the effectiveness of treatment, record the dynamics in the history of the disease, help patients at home, and refer patients for consultation to the doctors. In addition, each general nurse should also perform the following tasks: taking materials for laboratory tests; the accounting, storage, use and control of drugs; preparing patients for diagnostic studies; carrying out socio-psychological counseling, sanitary and educational work among patients and their relatives; and

keeping statistics and records. (Utepbergenova & Kalmataev, 2016) However, currently the role and responsibility of the oncology nurse, particularly from their point of view, has not been studied to gain a deeper understanding of the essence of their work.

2.5 The Responsibility of the Oncology Nurse in the Republic of Kazakhstan

To the position of a senior nurse in a department, in accordance with the approval of the Nomenclature of the positions of health workers, a person with a secondary medical education is accepted who has a certificate of a specialist in the relevant specialty, who are allowed in the prescribed manner to take the position of a senior nurse (Approval of the Nomenclature of positions of health workers 2009).

2.6 Job Descriptions of Senior Nurses in the Oncology Department

The head nurse of the oncology department conducts administrative and practical work in the department. Administrative work is related to the organization of work of the middle and junior medical personnel, ensuring conditions for the normal work of doctors and the general order in the department, scheduling work and vacations of the department employees for a year, the schedule of remuneration and accounting for the use of working time of the department employees, and conducting accounting in the department. (Approval of the Nomenclature of positions of health workers 2009.)

The senior nurse systematically replenishes the department with medical instruments and medicines, is responsible for the safety of property and medical equipment of the department, and oversees the timely repair of the equipment. Also, the senior nurse's job description includes monitoring and compliance with the aseptic and antiseptic rules and the anti-epidemic measures by the department staff. The nurse ensures the proper storage and registration of potent, toxic, narcotic, and especially scarce drugs. The head nurse collects information about the movement of patients, monitors the timely delivery of case histories of discharged patients, ensures timely receipt from the archive of case histories, and controls the

implementation of advanced training plans for middle and junior medical staff of the department. (Approval of the Nomenclature of positions of health workers 2009.)

2.7 Job Descriptions of the Procedural Nurse

A nurse with a practical experience of at least 5 years is appointed to the position of a procedural nurse. Basically, the work of a procedural nurse is to carry out the procedures prescribed by the doctor as well as controlling the medical treatment room and its preparations. The main point is given to the rules of asepsis and antisepsis of the treatment room and drugs. A nurse prepares requirements for the qualification of instruments, equipment, drugs, and dressings by attending special courses for nurses.

In all their work, nurses should be exemplary of discipline, cleanliness and accuracy; they should treat patients with caution and sensitivity, maintaining and strengthening their morale. They must accurately and timely follow all instructions of the doctors, after which they should paint leaflets at the point of destination, not refuse to perform any medical manipulations assigned to them and take care of the property of the medical institution. (Approval of the Nomenclature of positions of health workers 2009.)

2.8 Job Descriptions of a Ward Nurse

The nursing department also plays a very important role in caring for cancer patients. Nurses communicate with the patient 24 hours a day and their duties are varied, all associated with caring for the sick. The ward nurse helps the doctor in examining the patient during the bypass and examination, conducts medical manipulations, prepares the patient for diagnostic activities and organizes their timely examination, measures blood pressure, and provides care and monitoring of patients. The nurse is always near the patient, monitors his condition, physiological abnormalities, sleep, daily regimen, hygiene, and food intake.

The nurse should pay special attention to the sickly patients, conduct continuous monitoring of such patients, report on every change on the part of the body, follow the prescription and recommendations of the doctor as well as to provide support for the bedridden patient. If necessary, the medical ward nurse should be able to

provide emergency first aid. Also, in the duties of the ward nurse is the ability to perform the functionality of other nursing specialties.

At night, a ward nurse should enter the wards, paying attention to the seriously ill patients. During night duty, as well as on Sundays and public holidays, the ward nurse is the senior in the department; she must clearly and in time fulfill all the appointments of the doctor on duty, and all other staff of the department are fully subordinate to her. Like the other nurses of the department, the ward nurse is responsible for the sanitary and epidemic regime in the wards and the department. (Approval of the Nomenclature of positions of health workers 2009.)

3 Purpose, Objectives and Research Questions

Purpose

The purpose of this study is to describe the role and responsibilities of nurses from their point of view, gaining new information about their daily work with the patients, and so make their role and responsibilities more visible to peers, other healthcare professionals, and the Kazakh society. Based on the results, recommendations and suggestions will be made for nursing in the oncology service.

Research questions

1. What is the role of oncology nurses in providing care for patients?
2. What is the responsibility of oncology nurses in providing care for patients?

Objectives

1. Determine the role and responsibility of the oncology nurse through interviews.
2. Make recommendations and suggestions for nursing in the oncology service.

4 Methodology

4.1 Study Design

This study had a qualitative, descriptive, and research design. To answer the research questions, focus group interviews were used to collect data. (Halkier 2010; Kreuger & Casey 2009.) The study includes six focus groups. The wording of the questions used in the interviews was very open, consisting of their daily tasks, routines, and responsibilities.

In focus groups, it is expected that participants' interventions will remind the rest of the group about topics that are relevant for everybody but might not be remembered otherwise (Wilkinson 2003). In Table 1 is shown the phases of the research process.

Table 1. Research process

Nº	Stages	Material	Methods	Research
1.	Search strategy	Search Findings 950	Search systematization 70 sources	Analytical
2.	Preparing for Interview	Open – ended questions 15	Volunteers 7	Pilot
3.	Conducting an Interview	Interview 50 – 60 min	Focus Group 6	Qualitative
4.	Interview Analysis 6 audio recordings	Transcripts 35 pages	Content - Analysis 20 subcategories 6 main categories	Descriptive

4.2 Focus Groups

Focus groups are less threatening to many research participants, and this environment is helpful for participants to discuss perceptions, ideas, opinions, and thoughts in whole group (Krueger & Casey 2000). Traditionally, focus group research is “a way of collecting qualitative data, which—essentially—involves engaging a small number of people in an informal group discussion, ‘focused’ around a particular topic or set of issues” (Wilkinson, 2004).

Focus groups enable participants to jointly develop ideas and are an effective method of creating data that is both deep and broad in scope. Following the research purpose, for the data collection, interviews with focus groups were used. (Krueger 2002.) Well-designed focus groups usually last between one and two hours (Morgan 1997) and consist of between 6 to 12 participants (Krueger 2002). The rationale for this range of focus group size stems from the goal that focus groups should include enough participants to yield diversity in information provided, yet they should not include too many participants because large groups can create an environment where participants do not feel comfortable sharing their thoughts, opinions, beliefs, and experiences (ibid.).

The study includes six focus groups. For the interviews, different days and times were offered. Participants who were free at this time were notified in advance and could take part in the interview. Interviews were conducted at their work for an hour. All interviews were recorded using a voice recorder. Each focus group included 10 to 12 participants. These were groups consisting of nurses from different departments, differing groups, and with different work experience.

4.3 Data Collecting Method

Data collection for this study occurred from September through December 2019. Six focus interviews were conducted with 63 nurses. All focus interviews were recorded on an audio recorder; after which they were reprinted in Word format. At the beginning of the study, oncology nurses from the oncology hospital who expressed a desire to participate in an interview were invited as a pilot project.

This pilot project was conducted for the purity of the questions to be used in further interviews. The pilot interview was conducted in a hospital where oncology nurses could attend. A total of 7 volunteer nurses were tested in 60 minutes. The researcher conducted the interview and took notes and made corrections in some issues. After the pilot interview, final questions about the daily routines, tasks, and responsibilities of oncology nurses were formulated and are presented in Appendix 2.

The pilot study interviews were conducted at the workplace at a convenient time for nurses, in a private room with each focus group for approximately 90 minutes to 2 hours. All interviews were audio-taped using a digital recorder with the permission of the participant. For the interview, open questions were used (Appendix 2). Using open questions and an interactive approach, each individual was asked to describe their daily nursing work. The questions focused on topics such as identifying the functions of their role and the responsibilities that the nurses face, what strategies they implement, what types of social support they use, what kind of documentation, their attitude towards patients and their relatives, relationship?

During each interview, the researcher remained involved and attentive to verbal and non-verbal behavior or other characteristics that could provide insight into the deeper meaning or significance of personal experience shared by the participant (van Manen 1990). At the end of the interview, each participant was asked to discuss anything else that in his opinion was related to oncological nursing care.

The interviews were transcribed into text. Each transcript was then read, simultaneously listening to the audio recording, and reading notes of the interview, after which corrections were made to ensure the accuracy of the text data. (Van Manen 1990). In the stories of the participants, attention was focused on 6 interviews, consisting of 35 pages with the font Calibri, 1,5-line spacing and 12 size words.

4.4 Participants

A target sample was used to facilitate the recruitment of participants from different departments of nursing care oncology. Altogether 63 nurses were interviewed, one male and 62 females. The participants were between 25 and 62 years old (Table 2). They had an average of 12 years' experience as nurses (variation from 1 to 35 years).

Table 2. Participants' background characteristics

Characteristic	Classification	Participants N = 63
		N (%)
Age Range:	25-35	5 (7.9)
	36-45	26 (41.2)
	46-55	25 (39.6)
	>55	7 (11.1)
Education level	Vocational	51 (80.9)
	Higher	12 (19.0)
	Applied Baccalaureate	-
Clinical Work Setting	Surgical department	35 (55.5)
	Therapeutic	22 (34.9)
	Policlinic	6 (9.5)
Clinical Work Experience	1 – 5	3 (4.7)
	6 -10	11 (17.4)
	11 – 20	25 (39.6)
	21 – 30	22 (34.9)
	> 31	2 (3.1)
Job title	Nurse	55 (87.3)
	Head nurse	8 (12.6)

4.5 Data Analysis

The research process outlined by Satu Elo, who described content analysis in clear instructions and figures. Content analysis includes open coding, creating categories

and abstractions. (Elo & Kyngäs 2008.) The process of abstraction continues as far as is reasonable and possible. With the help of the written material of the reading, as many headlines are again and again created as necessary to describe all aspects of the content of the narrative of the story. (Hsieh & Shannon 2005.) At this stage, categories are also created. Categories are then formulated into higher order headings (Burnard 1991).

The goal is to reduce the number of categories to provide descriptive means for improving understanding and generating knowledge (Cavanagh 1997). Data analysis is a dynamic process of disclosure in response to a research question. The stage of the investigation took place during repeated listening of each audio interview. Hearing the voice of each participant and taking note of the features of the expression of words and emotions and statements helped to recreate the details of the interview.

The field notes of the investigator, which were recorded during each interview, were also taken into account. The first step in the data analysis process was to reread each transcript several times in its entirety. The investigator reviewed the text as a whole, reflecting on the possible values expressed by the individual participant. Key messages, phrases, and ideas that seemed important to uncover aspects of specific issues and the responsibilities of caring for cancer patients were noted.

The investigator wrote notes in the transcript fields and highlighted important statements and phrases that seemed most important and informative to capture the meaning. The investigator read line by line each line of the transcript and checked each value in each statement regarding the text. After the interview was completed, the investigator plunged into reading, thinking, rereading and writing down personal ideas and intuitions about the participant's story. The themes and aspects of the narration have been identified. The essence of the story of each participant was described in the summary and representative quotes from their narrative for the subsequent description. In Table 3 is presented an example of the analysis process.

Table 3. An example of the analysis process

Interview Example	Units of meaning	Code	Subcategory	Main category
<p>My patient experienced very strong pain, painkillers were short-lived.</p> <p>From this pain and feelings of fear and hopelessness, she was very angry, grumbling, was unhappy with everything that happened around.</p> <p>And I was very sorry for her, I understood that it was because of her illness and she had no relatives with whom she could share her experiences.</p> <p>And I just walked over to her and hugged her ..She</p>	<p>Recognizing Strong pain Feelings of fear and hopelessness; Very angry, Grumbling, Understand patient situation Felt sorry for the patient Understood the problems of the patient Aware of the loneliness of the patient Nurse hugged patient Have a feeling of mutual understanding with the patient;</p>	<p>Symptom assessment Recognizing feelings of patients Being sympathetic Psychological Assistance Deep understanding of patient's situation Showing physical support to the patient Positive result in the end</p>	<p>Compassion with support Understandin g of patient's situation Providing emotional comfort for patient Providing physical comfort for patient Nurse showing caring</p>	<p>Empathic concern</p>

<p>burst into tears on my chest ... she cried for a very long time ... bitterly ... we understood each other with her, she did not act like that anymore ... ”</p>	<p>The patient calmed down.</p>			
--	-------------------------------------	--	--	--

5 Results

The experience of the participants was unique and diverse. However, three different intertwined themes describe the role of the participants in all situations: the role in symptom assessment, monitoring of patients and their family members; the psychological role of supporting the patient; and information giving and patient/relatives education. The two main themes describe the responsibilities of the participants which can be divided into two main groups: current responsibilities, and nursing responsibilities management.

In analyzing and determining the nature of the roles and responsibilities of cancer nurses, 20 subcategories and 5 main categories were identified.

5.1 Participants Role

The results highlighted in this research are described of the three key themes, as well as related topics. The stories of participants emphasized that genuine quality is the result of the integration of scientific knowledge and skills combined with a deep understanding of the human aspects of care.

5.1.1 Role in Symptom Assessment, Monitoring

During daily work, the study showed that nurses are involved in symptom assessment, monitoring and management, often using their experience, involvement

in the process and proximity to patients with cancer. Role in symptom assessment, monitoring includes: “Relationship based on honesty”, “Empathic concern”, “Approachability”, and “Leadership”.

5.1.2 Relationship Based on Honesty

Often in the text, there is information about the trust of patients to nurses. This is directly related to the trust of doctors to nurses. Doctors rely on nurses for medical manipulations, but the nurse links this with experience and professionalism in the workplace. One nurse shared her experience:

After 17 years you have experience, the patient sees your professionalism, and they see that the doctors trust you, respectively, the patient will trust you too. Therefore, performing those or manipulations of problems with the patient usually does not arise. (Group 2, participant 3)

Similarly, the trust was described by a nurse in the radiology department, who works with bedridden patients, and especially for children, it is very difficult to lay on the device in a state of immobility.

...She came and lay down herself and smiled. You understand that she trusted you! And even more I want to do for her, more, you feel increased responsibility. (Group 4, participant 1)

Demonstrating patient care based on trust, the nurses felt responsible and wanted to do their work with enthusiasm.

5.1.3 Empathic Concern

The nurse often witnessed the great suffering of patients and their families, while they tried to help those in need.

...After talking to her, it became easier for her, but not for a long period, then I talked to the doctor and we transferred her to another ward. She immediately felt better. (Group 1, participant 5)

The nurse admitted that she felt sympathy for patients of a particularly young age, with whom she was not indifferent, while she tried to maximally support the spirit of the patient.

These are young women, giving birth, not married. I understand that it is very difficult to have such a diagnosis. And sometimes you sympathize with them, you just want to hug the patient, put your hand on her knee, pat her shoulder, that is, things that help the patient understand that you are not indifferent. (Group 6, participant 1)

Understanding the patient's condition, the nurses took some action to alleviate these conditions.

5.1.4 Approachability

Indeed, the texts illustrate the variety of problems and struggles that research participants face not only in the workplace, but also in the context of helping the home. One/one nurse's/a nurse's comment displayed this reality:

Often patients become very close to us in several sessions of chemistry (3 - 9 times), just like their relatives. They ask for help in caring for the patient at home, so they feel relieved and calm. For example, the patient's wife admitted to me that she was afraid to be alone with him, she was afraid that he would die. (Group 5, participant 4)

Nurses described their roles as an assistant at home as an aid to the provision of quality services, bearing in mind the professional experience of working with fine veins when performing injections.

5.1.5 Leadership

The texts traced information regarding the leadership quality of nurses. Nurses are not afraid to take the initiative and responsibility for new solutions.

I think we need to trust more officially. Divide the functions of the doctor to us. And all this is worth paying for!! Then it will be normal medicine! (Group 4, participant 3)

The nurse does not feel the fear of the greatest responsibility for the patient to take on part of the doctoral functionality. In son on this is due to the great experience, knowledge, and good attitude in the team. Some nurses went through specialization abroad after which they improved their current work.

We have 3 vehicles for 17 million. But we saw experience in different countries, introduced two nurses into the practice for laying, we began to combine tags, align

the patient. Mobilization mattresses have appeared with us; we also spoke to administration. (Group 4, participant 1)

5.2 Psychological Support Role

Nurses provide the necessary psychological support to patients and their families throughout the entire period of cancer treatment.

Psychological support role includes five subcategories: “Closeness”, “Being open in communication”, “Self-control”, and “Team endorsement”.

5.2.1 Closeness

The nurse is in very close contact with an oncological patient in connection with her job descriptions. In this case, the nurse is available and talks in an understandable form with the patient, gaining the trust of the patient, thereby providing psychological support.

I am always next to him, I watch so that he eats, that he is clean, I also carry out appointments of doctors, relatives ask me for advice on care, I help. Therefore, we are getting closer. A few days later I already know the names of all the relatives, their professions, even pets, I know. (Group 4, participant 1)

Moreover, the nurses understood their closeness with the patient and tried to position him in the circumstances, thereby supporting him in this way.

5.2.2 Being Open in Communication

Being open in communication is one of the components that a nurse uses to position the patient to herself with subsequent psychological support. The nurse described her communication skills using verbal and non-verbal communication techniques.

One nurse, through her experience of communicating with patients and optimism, gave a personal example how to recognize and cheer up a patient in a difficult psychological state.

.. I say honey, I work here so much, already from your face I know who's bothering you. If you have a mother-in-law, you have a face like that! if the children, have a different face! and if you have a husband, then you have it now! (nurse, shows

different funny faces) She lets out a laugh! They need to know that they are not alone in these problems. (Group 1, participant 3)

Nurses understood that optimism, laughter, and jokes help support the patient.

5.2.3 Self-control

It is obvious from the texts that the nurses of an oncological profile have to go through difficulties with psycho-labile patients, sometimes to battling. However, in the situations described, the nurse herself controls her feelings and emotions, understanding that there is a sick person next to her.

I had a patient, I could see she was tired, it was hard and painful, and we tried to please her, because experience already allows such people to be identified, but still, when I put a mask on her face, she freaked out and threw at me! It seemed to her that I forcibly wanted to dress her and hurt her. I understand that this is a sick person. (Group 4, participant 8)

At such moments, the nurses are experiencing psycho-emotional stress, but empathize with the patient's tolerable illness.

A man in line was waiting. He was so tired of waiting that when his turn came, he began to shout at me, as if I was letting the others out! Case history threw at me! But I understand that in front of me is a sick person. (Group 4, participant 6)

At such moments, the nurses were not at ease/did not feel comfortable, as patients expressed/directed their anger/bad mood at them.

5.2.4 Team Endorsement

The texts demonstrate the very important role of the nurse in the team. The team is very important for the work of the nurse; it is the team who is one of the incentives for working in medicine in general. Moreover, the nurses pointed to help in difficult situations involving patients.

We value each other very much; we have a team here in which we all support each other. We help each other in difficult situations with patients. Sometimes you think you are tired, I can't work anymore, and you are physically exhausted, and you don't

see your family at home, you don't earn money, you think you're tired of leaving! But we have a good team! This is one of the reasons why we are not leaving. (Group 3, participant 1)

In a unified team, the trust between nurses affects their work.

We, as a team. We help young professionals, share experiences, advise. (Group 6, participant 1)

Many texts demonstrate the collective as recognition of a second family, especially where people have worked with each other for a long time.

5.3 Information Giving and Educating Patients and Their Relatives

Information giving and educating patients and relatives includes the next subthemes: "Patient education", "Patient consultation", and "Personal assistant".

Information giving is an integral part of the nurse's role in clinical practice. The nurses provided information to patients in postoperative care, at the time of getting chemotherapy or radiation. The texts demonstrate counseling patients with nurses on legal issues, too.

5.3.1 Patient Education

The participants in this study also emphasized the importance of providing care, treatment, and education for patients and their relatives, even after discharge from the hospital.

I tell them and their relatives how to monitor the wound, how to perform breathing exercises and prevention of pressure sores. They leave, and then they can call and ask me again what needs to be done. They ask when it is better to pass tests, when repeated consultations, different questions, I answer them, of course. (Group 1, participant 7)

Another nurse describes her role in the provision of health services as "the face of health care," describing the importance of her profession as an educator.

They look at us and evaluate what kind of medicine, oncology, health care, etc. we currently have. Therefore, we establish contact, we understand the problems of the patient, we try to help the patient with advice or deed, how to. (Group 5, participant 1)

Nurses tried to help patients by correctly explaining the role of caring for patients themselves and their relatives, shared tips with young nurse doctors, and acted as a secretary for patients.

5.3.2 Patient Consultation

In the text, there were examples of nurses who consulted patients on legal issues, based on the experience of previous patients.

We have a social worker who helps in such matters, but still we also know a lot, from our patients, doctors, from conferences, even if we give a direction. This is good when the people have Internet, and we have a chance to come with such a wilderness, it's not that the Internet is known, they don't even know what a computer is. This is the hardest thing! (Group 5, participant 5)

Despite the existence of a social worker, the nurses were aware of legal issues; they gave advice and referrals to patients.

5.3.3 Personal Assistant

The texts illustrate the role of the nurse as an assistant to the patient. Patients turn to the nurses in order to solve the difficulties encountered during the course of treatment. The nurses explain this behavior with the proximity and trust in themselves from the patients.

In principle, patients first come to us and then to the doctor. They have some kind of fear in front of doctors. Sometimes I tell them you write in the notebook all the questions you want to ask and ask a list. And then after the doctor, they come to us, they don't know what to do next, how to take it, and when to check it again. They trusted us more often than doctors. (Group 1, participant 6)

Sometimes patients call the nurse to arrange a meeting with the doctors or to make a diagnosis.

“At discharge, all patients are indicated when re-examined, when it is necessary to repeat the next course of chemistry (treatment?). But sometimes patients call us, ask if he can come earlier, or postpone the meeting, in connection with private matters because the doctor doesn’t answer the phone.” (Group 2, participant 3)

The patients called the nurses not only to ask them to fulfill the request, but also to congratulate them on a holiday or other significant event in the nurse's life.

5.4 Participants Responsibility

Responsibilities of the nurse is the implementation of their job descriptions. Depending on the department that the nurse works in, functionality has slight differences.

The analysis of the interview identified the main responsibilities of nurses of the oncology profile, which can be divided into two main groups: Current responsibilities and Nursing responsibilities management.

Current Responsibilities includes next subthemes: “Doctor's decrees”, “Documentation organization”, “Discipline”, “Departmental replenishment”, “Education process”, and “Sanitary service”.

Doctor’s Decrees

In addition to their basic duties, nurses submit to the doctor. The nurse can independently provide the first to medical care. However, all that concerns the appointment of the patient is directly dependent on the doctor.

Our actions are completely dependent on the doctor's prescriptions, 80% if not more. (Group 3, participant 3)

Usually, all appointments regarding the patient are indicated by the doctor in the appointment list which describes all the assignments necessary to perform.

In the prescription sheet, the doctor indicates that the patient needs something, something to drip, take tests, prepare for the procedure. (Participant 3, Group 4)

The relationship between doctors and nurses is more subordinate.

We work very closely with doctors, the attitude of doctors towards us is more subordinate. (Participant 1, Group 8)

In this case, the nurses noted that their work largely depends on the doctors.

5.4.1 Documentation Organization

The nurse, in addition to performing medical work and caring for the sick, manages medical documentation. It is presented for each nurse depending on the specialty. Documentation is provided in electronic and written form. The nurse is responsible for the correctness of filling out the documents. The main documentation concerns patients, drugs, dressings, sanitary, and hygienic processing. Many texts point to extensive documented work.

I have a lot of documents all the time, it takes so much time! I fill out 13 journals, in the bandaging room, 4 journals and in an examination room 3. Procedural nurse also fills 13 journals. Senior nurse generally fills 22 journals and this writing is endless and duplicate in electronic form. (Group 6, participant 3)

Another nurse pointed out that there is so much documented work that some nurses take home work to do it on time.

I am reading an email, answering emails. Per day, 25 letters arrive, after the holidays around 40. It is advisable to answer all letters immediately, sometimes I stay in the evening, I even answer from home at night. (Group 6, participant 8)

The nurses noted that the documentation took most of their time, so much so that they had to linger at work or take work home to complete work on time.

5.4.2 Discipline

Performing daily job descriptions, the nurse faces certain difficulties associated with problems of the oncological service as a whole, such as lack of personnel and technical breakdowns. However, the discipline of the nurse does not allow for easy working conditions.

Unfortunately, the devices break often. The repair takes a long time, again depending on the part that is broken. If at least one fails, then the load on us is enormous. After

all, patients cannot wait for a course of treatment, it cannot be interrupted. And it is necessary to cover everyone, so the head nurse immediately draws up the schedule of work for the shift and we all start work in several shifts. Sometimes it happens until 12 am to one. (Group 4, participant 10)

5.4.3 Departmental replenishment

Performing job descriptions daily, the nurse is confronted with physical stress. It is obvious that many texts point to hard physical labor. Here is an example:

Almost every day we perform the function of a courier. For example, we carry boxes from one building to another, snapshots, analyzes. In winter, we go from building to building. If we put a pedometer on hand, we will beat all the runners in all records! Of course, by the end of the day we feel so tired that we don't feel our legs. (Group 3, participant 6)

5.4.4 Education process

The nursing responsibilities include a specialization enhancement function. It is obvious that each staff takes courses to increase specialization, moreover, some undergo additional advanced specialization in the profile.

In the department of radiology, we work without doctors, mostly on our own. We have secondary nursing education; in addition, we have passed specialization in radiology. We put the patient on the device by ourselves, set tags. (Group 4, participant 12)

The training process for nurses held a large and important role. Despite the fact that advanced training is the responsibility of the nurse, many of them showed a desire to continue learning. Some of the nurses complemented their education with an undergraduate degree.

5.4.5 Sanitary service

The nurse's responsibilities include cleaning work. Despite the fact that there are orderly nurses who independently do the cleaning of their workplace.

General cleaning is carried out as it should be once per week. Currently cleaning is performed 3 times daily in our department. After the appointment, the distribution of medicines, chemistry begins in the morning until the evening. It lasts 1-1.5 hours. (Group 4, participant 8)

Many nurses pointed out a shortage of cleaners' worker, and therefore there was an urgent need to fulfill the cleaning function of nurses when they were on vacations or going to sick leave.

5.5 Nursing Responsibility Management

Nursing responsibilities management includes the next subthemes:

"Accomplishments", "Decision making", and "Provider".

5.5.1 Accomplishments

The nurse explains the trust in patients and doctors not only by experience and professionalism, but also great importance is attached to the coherence of work in the team.

Of course, we do not take much on ourselves, we take responsibility for some manipulations, for example, to remove a spiral, we can take a biopsy. We have a team with doctors and other nurses. We trust each other. For example, I have a 200 percent understanding with my doctor. (Group 6, participant 5)

Rotation of nurses is included in the responsibilities of a nurse to increase knowledge and understanding of the specifics of the work of other departments.

Rotation is always in our department (admissions advisory department), we all know each other's work. Very often, girls (nurse) get sick or leave a double load on us. We have to work for two or three nurses. (Group 3, participant 4)

Rotation helped nurses not only to gain new knowledge but also helped in their career growth. Someone changed his/her specialization to a new one, but everyone understood the importance and specificity of the work of another department.

5.5.2 Provider

In some cases, the nurses described their responsibilities as a provider while understanding that the outcome of events depended on their actions.

We see that the patient needs deeper support, then we call a social worker, or a psychologist, we talk about this to the doctor, of course, we ourselves try to support him, and go in more often. Sometimes we ask housemates to watch them if there are no relatives. (Group 2, participant 7)

Some nurses were conductors between the patient's relatives and the patient himself.

Often there are such cases when relatives do not know how to behave with an oncology patient. I try to help the two parties. Basically it is of course advice, but after all they help to find out the reason and cope with it. (Group 3, participant 9)

By providing home care in some cases, responding to patient calls, representing the interests of the patient, the nurses tried to fulfill the role of a link between the doctor and the patient.

5.5.3 Decision making

Sometimes nurses make decisions about patients in emergency situations. In many ways, their actions are determined by experience, knowledge and trust on the part of the doctor.

It happens of course that the doctor has already left home, there is no pills in the list of appointments. The patient complains of pain, but I know I'm already working so much that he needs to make an injection, I call the doctor, I ask that in case I can't get through in the morning at five minutes meeting, I say that I made an injection, I inform him. He agrees with my action, he trusts me. Says: shook, did not have time! (Group 2, participant 9)

Sometimes nurses showed creative thinking in solving difficult situations that depended on them. This helped to reduce the patient's negative attitude towards medicine in general.

5.6 Summary of Findings

Altogether, 63 nurses in 6 focus group were interviewed. The participants were between 25 and 62 years old, one male and 62 females. They had an average of 12 years' experience as nurses (variation from 1 to 35 years).

The four main roles of a cancer nurse were identified in the study: the role in symptom assessment, monitoring of patients and their family members; the psychological role of supporting the patient; and information giving and educating patients and relatives.

Two responsibilities of cancer nurses were found in the study: Current responsibilities and nursing responsibilities management.

In analyzing and determining the nature of the roles and responsibilities of cancer nurses, 20 subcategories and six main categories were identified.

The first finding, role in symptom assessment and monitoring, includes four subcategories: "Relationship based on honesty", "Empathic concern", "Approachability", and "Leadership".

Nurses provide the necessary psychological support to patients and their families throughout the entire period of cancer treatment. Second psychological support role includes four subcategories: "Closeness", "Being open in communication"; "Self-control", and "Team endorsement".

Information giving and nurse's role of educating patients and relatives includes next subthemes: "Patient education", "Patient Consultation", and "Personal assistant".

Research analysis identified the main responsibilities of oncology nurses divided into two main groups: "Current responsibilities" and "Nursing responsibilities management". (Repetition)

Current responsibilities include six subthemes: "Doctor's decrees", "Documentation organization", "Discipline", "Departmental replenishment", "Education process", and "Sanitary service".

Nursing responsibilities management includes three subthemes: "Accomplishments", "Decision making", and "Provider".

6 Research Ethics

After approval of the plan and protocol of the study by the Local Ethics Commission, in order to agree on all ethical standards and rules for conducting research

participants, written consent to participate in the study was received from each participant, permission and cover letter to conduct a study in the institution with the administration (Appendix 3, 4, 5). To conduct interviews with nurses, it is necessary to obtain permission from the leadership on the basis of the study.

For this aim, agreement of cooperation was established between the researcher, the supervisor, and the host organization (Appendix 5). After receiving the formal consent for the study, the cover letters were sent to the head nurse to identify volunteer interviewers. This cover letter (Appendix 3) contains information about the aim of the study, the ethical aspects of this study, the safety of the information received, and the contact details of the researcher and his supervisors.

Each participant who voluntarily agrees to participate in the study signs an informed consent to participate in the study. Informed consent (Appendix 4) is a document in which the participant expresses his voluntary consent to participate in the study, familiarizes himself with his rights and obligations, and also gives consent to the interview and the use of data obtained for research purposes.

Participants must be fully informed about the purpose and objectives of the study, the form of interviews, methods of recording the received information, the rights of participants in the study, and the possibility of refusal to participate at any time. The consent of each participant (Appendix 4) is required for his/her involvement in the study, recording interviews in various ways and using the information obtained for data analysis. Each participant should be informed about the security measures of their personal data, as well as the right to terminate their participation in the study at any time at the request of the participant (Appendix 4).

The respondent may refuse to participate in the study at any time without disclosing the reasons. With a written agreement to collect and process data, the respondent will be interviewed, with the help of an audio recorder, as well as researcher's notes, in order to avoid losing any data and more in-depth study of the information received. The implementation of the principles of biomedical ethics in this study implies: non-disclosure of personal data and respect for nurses during an interview.

The entire collected data was collected on the hard drive of the researcher's computer. The researcher and his scientific leaders had access to the data. After

studying the material and completing the study, all data will be stored for 3 years with the researcher.

7 Trustworthiness

The trustworthiness of qualitative content analysis is often presented by using terms such as credibility, dependability, conformability, transferability, and authenticity. (Elo & Kaariainen 2014). The trustworthiness in this research determined during the preparation stages of a study and includes the trustworthiness of the data collection method, the sampling strategy, and the selection of appropriate unit of analysis.

The research question is suitable for achieving the goal, the chosen methodology is suitable for answering the research question, the design is valid for the methodology, the sample is representative, and data analysis is appropriate for the goals and research questions, and the results and conclusions are valid for the sample and context (Lincoln & Guba 1985). Authenticity refers to the degree to which researchers honestly and faithfully demonstrate a number of realities (Lincoln & Guba 1994; Polit & Beck 2012).

First, the trustworthiness of this study was confirmed by the approval of the plan and protocol of the study by the researcher and his two leaders, as well as by the group of the local ethical commission. Data collection is one aspect that provides the researcher's final argument regarding the trustworthiness of the study. (Rourke & Anderson 2004.) It is the appropriate data collection method that is essential to ensure the accuracy of the content analysis (Graneheim & Lundman 2004). The credibility of the data depends directly on the purpose of the study and how well the data collected correspond to the research question posed (Polit & Beck 2012).

Following this, the researcher in this study considered how to collect the most appropriate data for content analysis. After agreeing on the methods of collecting information, with two leaders, a suitable method was determined that answered the research questions of interest. Based on the purpose of the study, the data collected should be open. Preliminary interviews also helped determine if the interview questions are suitable for obtaining qualitative data that answer the proposed research questions.

In our study, all interviews were conducted by one person. So, reliability was achieved by interpreting the data, from the perspective of only one person, excluding the influence of prejudice and restrictions of different people. It was also planned to conduct a digital audio recording of the interview in order to collect and process information in detail. In addition, to ensure reliability, all non-identifiable records were offered for analysis by two study leaders. Sometimes other investigators suggested improvements. Subsequently, in a joint discussion, all divergent opinions were discussed, and amendments were made.

The content and structure of the concepts created using content analysis should be presented in a clear and understandable form. It is often useful to provide a figure to give an overview of the whole result (Elo & Kaariainen 2014). This study presents examples of categorization of phenomena in the form of a figure.

Researcher demonstrate accuracy in research reports to ensure the accuracy of the content analysis. Research reports facilitated a detailed description of the process of analyzing and using figures, tables, and applications to explain the categorization process. The researcher conducted interviews in terms of establishing eye contact in a friendly environment, which also leads to the reliability of the data.

An open-ended interview allows to achieve the required level of trust, since interview questions will be aimed at identifying certain aspects of people's lives related to their work experience. Examples of interview questions presented in Appendix 2 are based on the material studied and literature review.

8 Discussion

The purpose of this study was to describe the roles and responsibilities of nurses from their point of view, to obtain new information about their daily work with patients, to understand their roles and responsibilities and make them more understandable to their peers, other health workers, and Kazakhstani society. To achieve this goal, two main tasks were formulated that helped determine the role and responsibility of cancer nurses.

After analyzing the data, five key areas of the role and responsibilities of the oncology nurse were identified: The role in assessing symptoms and monitoring patients and their families; The psychological role of patient support; Providing information and education for patients and relatives; Current duties; and Nursing Management.

8.1 Role in Symptom Assessment and Monitoring of Patients and Their Families

During the actual introduction of cancer patients, the study found that nurses are involved in symptom assessment, monitoring, and management, often using their skills in relationships based on trust, empathic involvement, proximity to the patient, and leadership qualities. Similar studies have shown that relationships based on trust between a nurse and a patient are an important factor in managing a cancer patient. (Carter 2009; Erichsen, Danielsson, & Friedrichsen 2010; Rohani, Kesbakhi, & Mohtashami 2018.)

These studies characterized that indicators such as reliability, truthfulness, confidentiality, best care, a holistic view of the patient and his position, perception of patient problems, acceptance of their culture and beliefs without judgment, and the provision of high-quality counseling can improve confidence. Cancer patients are mostly in a tough situation and need emotional support from medical professionals. However, there are patients so sick that they do not always reveal their problems.

This study demonstrated the empathic involvement of a nurse in the patient's condition in order to uncover the deepest feelings associated with his/her state of health. At the same time, the nurses described that empathy appeared to be verbal and non-verbal communication skills that they used during attempts to understand and solve the patient's problems. They described the affection in facial expression. (O'hagan et al. 2014; Langewitz et al. 2010; Fleischer et al. 2009; Rohani et al. 2018.)

No wonder that the comments were those where study participants indicated that they were not afraid to take on the greatest responsibility for the patient and to take on part of the doctor's functions. The participants associated such a desire not only with great experience, knowledge and good attitude in the team and the trust of doctors, but also with the implementation of such work in practice. In the research

Scully concluded: “good nurse leaders help to provide good care and are not afraid to take on more responsibility”. (Scully 2015.) At the same time, in the BMJ magazine, the issue between the functionality of doctors and nurses does not define and do not describe care, but this research shows that nurses do the work of doctors (White 2000; Beecham 2000).

8.2 Psychological Role of Patient Support

Nurses provide the necessary psychological support to patients and their families throughout the entire period of cancer treatment. In the study of Kohara & Inoue (2010), the nurses supported patients by explaining to them what might be important in life, while trying to find ways to be as satisfactory as possible. Similar studies were obtained in our study, when nurses supported patients and their families based on intimacy with the patient, their openness, and the ability to control their emotions and teamwork.

The understanding of closeness in our study means that the nurse is in close contact with the patient throughout the entire period of treatment and care, and also, in a form that is understandable and accessible to the patient, speaks with him/her, thereby evoking his confidence. This study showed that the patient's mood may change for the better, thereby the nurse affects the patient's psychological state.

It is consistent with a study that demonstrates the same results, showing that proximity is an important basis for care and is of particular importance in the care of cancer patients and their relatives (Iranmanesh, Axelsson, Sävenstedt, & Häggström 2009). This nursing skill, according to Peplau (1969), derives from the personal and professional experience of nurses in their own life stories.

Considering the Briggs study conducted in the UK, scientists assume that open communication is necessary for high-quality nursing care, the nurses of this study provided psychological support to patients through open communication (Briggs 1982). This statement confirms a study conducted in Iran, where similar subcategories were obtained, while the authors believe that (Rohani et al. 2018).

In the course of their practice, cancer nurses often encounter patients in a state of irritability due to the burden of the disease and the associated treatment. At the

same time, the study showed that even at such moments the nurses are able to control their behavior, thereby expressing an understanding of the patient's condition. (Rohani et al. 2018.) In a study conducted in China, the concept of a nurse-patient partnership was central to patient self-control and responsibility for managing their symptoms (Dong 2015). In contrast, a study in Turkey showed that nurses working in oncology institutions, when communicating and supporting patients emotionally, demonstrating actions such as self-control and escape are ineffective ways to cope with this situation (Kamisli, Yuce, Karakilic, Kilickap, & Hayran 2019).

However, the texts of this study demonstrate, based on the experience and understanding of the patient's condition, the nurses found ways out of these situations. At the same time, they themselves experienced frustration. The interdisciplinary team in this study also plays an important role in providing adequate care to the patient and his family at the time of psychological support and the entire period of cancer treatment. Similar results were reported in a study conducted in Israel, where both personal and clinical qualifications of team formation play an important role. The study states that, ideally, team members should share personal characteristics necessary for good interpersonal relationships; along with appropriate clinical qualifications to ensure excellence in various clinical areas, thus being able to complement each other, as was shown in our study (Silbermann, Pitsillides, Al-Alfi, Omran, Al-Jabri, Elshamy, & El-Shamy 2013).

The nurses indicated the team as the main key to success in providing not only patient care, but also the main reason for supporting the desire to continue working. In this case, the nurses shared information, experiences with each other, doctors, as well as novice nurses. This proves that nurses play a role in gathering information about the patient, during close contact with him/her, and make the information more visible to other nurses, doctors creating an interdisciplinary team that selects the best options for not only care, but also treating a patient with cancer. The same data were obtained in the study of an interdisciplinary approach in the UK, Israel, which shows that the nurses gathering information about the patient, during close contact with the patient. (Wood et al. 2008; Silbermann et al. 2013.)

8.3 Providing Information and Education for Patients and Relatives

Information giving is part of the nurse's role in clinical practice, also at the time of getting chemotherapy or radiation. Training, patient counseling, and work as a personal assistant were identified in this study. Nursing plays a role that is not unimportant as this study showed that patients primarily turn to nurses, and then to doctors; other studies in the world showed the same result. (Freund 2015; Kooienga 2015; Newhouse 2011; Rashidian 2013; Laurant 2018.)

Symptom-focused training conducted by nurses in the oncology department can help patients to take better care of themselves. This is similar to results in the USA, China, UK (Williams et al. 2011; Wood et al. 2008; Molassiotis et al. 2009). Moreover, the nurses of this study advised patients on legal issues, acting as counselors and lawyers for the patient, representing his/her interests in order to receive state assistance. Similar studies in Belgium and the United States described the role of a nurse not only as a consultant and lawyer, but also as an adviser to whom patients turn to in difficult situations (Bryon et al. 2008; Tee et al. 2013).

In our study, the oncology nurse's subcategory was defined as "personal assistant". It is not surprising that this category sounds different in world sources. In the US, it is a navigator as well as a certified nursing assistant, or CNA, who is a nurse's assistant whereas in Europe it is a provider, but the navigator and provider have their own job descriptions compared to the role of personal assistant that was found in this study. In our study, the personal assistant of the patient implies an assistant in the personal affairs of the patient related to the organization of the treatment process. Most likely, this category appeared due to the simplicity of communication, the proximity of the patient with the nurse, as well as friendly relations built during the period of treatment and care.

8.4 Current Responsibilities

Based on the results of our research, the oncology nurse is responsible for many different tasks in order to fulfill her primary responsibility in providing medical care to patients undergoing treatment for cancer. This study identified six basic actions that are described above. Drawing an analogy with the data obtained in the study and the basic standards described in European sources, there are differences. This is

not surprising, since the functional responsibilities of a nurse in Kazakhstan, its hierarchy and status are significantly different from European and Western standards that were described earlier.

The main part of the duties of a nurse is the performance of doctors' appointments. A nurse can provide emergency first aid. In this case, the nurse took care of the patient, trying to make appointments as painlessly and conveniently as possible, understanding the patient's condition. The same actions were described by an Israeli study (Monas, Toren, Uziely, & Chinitz 2017).

Although nurses in the UK are more independent of doctors, as a nurse practitioner at the clinic, the nurse also works closely with doctors, specialists, and other health care providers to provide patients with short-term and long-term care (Department of Health 2005). High-quality documentation and monitoring of sanitary hygienic standards in the workplace is a necessary and integral aspect of the work of oncological nurses. This study demonstrates the document work of a nurse sometimes as burdensome and even as a distraction from patient care. Similar data was demonstrated in a study conducted in India, where nurses were burdened with clerical work. (LeBaron, Palat, Sinha, Chinta, Jamima, Pilla, & Beck 2017.)

When completing daily job descriptions, the nurse faces certain difficulties associated with problems of the oncology service in general, such as staff shortages, technical problems, and lack of consumables. However, the discipline of the nurse does not allow him/her to work easily. Questions regarding staff shortages were examined in a study conducted in the UK (Flynn & MCKeown 2009) another study showed similar problems associated with a shortage of consumables (LeBaron 2017). However, despite the above problems, nurses perform their job descriptions daily.

The process of training in nursing takes place regularly, it is spelled out as regulatory documents, so training takes place in an interdisciplinary workplace environment. The study showed that nurses understand the importance of continuing education, to provide the best treatment and care for patients.

8.5 Nursing Responsibilities Management

The management of nursing responsibilities is the process of managing to take responsibility and make decisions and to coordinate actions between the patient and the doctor.

The nursing achievements in this study were defined as trust by the doctors and were manifested by the nurses as an independent ability to produce some of the functional responsibilities of the doctors.

At the same time, both the nurse and the doctor understood that they were performing teamwork in order to provide quality support to the patient during treatment and care. In many states, practicing nurses are allowed to practice and prescribe medications without medical supervision, which increases the number of autonomous primary care providers, as well as reduces healthcare costs. (Traczynski, & Udalova 2018.)

Performing a provider-to-doctor function, as well as the ability to make a decision to provide the best management in nursing, was demonstrated in an Israeli study where the nursing coordinator provides emotional support, patient guidance, and coordination for patient care (Monas et al. 2009). Similar data was obtained in this study.

9 Recommendations

For future research:

It is necessary to complete patient satisfaction surveys and evaluate their role in terms of patient outcomes.

It is necessary to study the role of nurses with great experience and higher education in the treatment and care of cancer patients.

Recommendations for Oncology Nurses:

Strive to fulfill the various nursing roles associated with making decisions for the care and treatment of cancer.

Use care interventions and improve interdisciplinary cancer treatment based on evidence-based medicine to improve patient outcomes.

Assess the needs of cancer patients in the decision-making process and provide individualized care interventions based on the needs of the patient.

Nursing leaders can become role models in collegiate, interdisciplinary collaboration between different nursing groups in the hospital, as well as with doctors.

It strives to increase the skill set and leadership potential for its professional development, conduct research at its workplace, share its knowledge not only with colleagues but also with Kazakhstan and the international community, to highlight its activities and attract international cooperation in the field of oncology.

Nurses can become more qualified, comprehensively developed and legally literate when they are rotated to other departments and nursing groups of hospitals that provide cancer care to patients. It is imperative to learn from the international example of assistance in interdisciplinary oncology clinics.

For Health, Hospital Administrations and Medical Staff:

It is necessary to create training programs for the training of nurse's oncology, based on international experience.

It is necessary to create the Republican Association of Oncological Nurses with further promotion of training and career, understanding and contribution to the science of oncology of nursing, clarifying long-term strategic goals for the development of oncological service in Kazakhstan.

It is necessary to review the roles and responsibilities of the oncology nurse, with the subsequent encouragement and encouragement of nurses by the hospital management and the participation of senior medical staff, to practice their full training and capabilities.

Empower cancer nurses by promoting and promoting the accountability of professional knowledge.

It is necessary to give more time to nurses in the existing system for patient care by revising the type and amount of documentation required, and delimiting these

responsibilities due to the possible delegation of this work to less qualified personnel.

Nurses who demonstrate a desire to improve their skill set and leadership potential should be determined by the hospital administration, given greater decision-making power with the opportunities and financial support for professional development.

Provide interdisciplinary education with the help of nursing leaders, who can become role models in collegiate, interdisciplinary collaboration between different nursing groups in the hospital, as well as with doctors.

Provide interdisciplinary education through an international collaboration between oncology clinics, which can be role models between international nursing groups in oncological care hospitals.

Hospital leaders in a hospital can jointly involve nurses in joint patient management, for effective interdisciplinary communication and interaction between the patient and the healthcare provider based on the developed official standards, with subsequent financial support.

It is necessary to create an interdisciplinary hospital with a palliative and admissions consultative department, which will not only expand the capabilities of oncology patients but also improve the interdisciplinary approach between doctors and nurses after their rotation.

10 Conclusion

An oncology nurse, in the treatment of cancer, is an active member of an interdisciplinary team and provides specialized medical care to patients in various diagnostic groups and at different stages of their treatment plan. They fulfill their calling as an oncology nurse in all evaluated areas. Many nurses had extensive work experience, were engaged in continuous professional development and were treated by patients and other specialists as knowledgeable specialists in their field who support the care of cancer patients. However, it is worth noting the limitations of the role of the nurse as an independent member of an interdisciplinary team. It is

necessary to review the roles, responsibilities, training, career development, and capabilities of a cancer nurse in Kazakhstan.

References

- Analytical material extended college Ministry of health Republic of Kazakhstan. Ministry of health care Republic of Kazakhstan. Astana 2017. Accessed on 15 March 2018. Retrieved from <http://www.rcrz.kz/docs/broshura.pdf>
- American Cancer Society. Cancer Facts & Figures 2019. Atlanta: American Cancer Society. Accessed on 15 March 2018. Retrieved from <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2019/cancer-facts-and-figures-2019.pdf>
- Afonin, G.A., Kaidarova, D.R., Kaidarov, B.K., Shatkovskaya, O.V., Yerechshenko, S.S., Kunirova, G. Zh., & Gatijatullin, I.M. 2013. Infrastructural needs in the process of integration of medical oncology and palliative medicine. repository.kaznmu.kz/ Accessed on 15 March 2018. Retrieved from <https://cyberleninka.ru/article/n/potrebnosti-infrastruktury-v-protsesse-integratsii-palliativnoy-pomoschi-v-onkologicheskuyu-praktiku>
- Burnard, P. 1991. A method of analyzing interview transcripts in qualitative research. *Nurse Education Today*, 11, 461–466. doi:10.1016/0260-6917(91)90009-y
- Beecham L. (2000). UK health secretary wants to liberate nurses' talents. *BMJ (Clinical research ed.)*, 320(7241), 1025.
- Competence framework for nurses – Caring for Patients Living with and Beyond Cancer 2017.be.macmillan.org.uk/Downloads/ResourcesForHSCPs/MAC14735.CompetencyframeworkReportWeb.pdf.
- Cancer in Australia 2014. Facts and Figures. Cancer Council Australia, viewed 15 April. Accessed on 15 March 2018. Retrieved from <http://www.cancer.org.au/about-cancer/what-is-cancer/facts-and-figures.html>>
- Canadian Cancer Society's Advisory Committee on Cancer Statistics. 2017. Canadian Cancer Statistics. Toronto, ON: Canadian Cancer Society; Available at: cancer.ca/Canadian-CancerStatistics-2017-EN.pdf
- Cavanagh, S. 1997. Content analysis: concepts, methods and applications. *Nurse Researcher*, 4, 5–16. doi: 10.7748/nr.4.3.5.s2.
- Carter, M. A. 2009. Trust, Power, and Vulnerability: A Discourse on Helping in Nursing. *Nursing Clinics of North America*, 44, 393–405.doi: 10.1016/j.cnur.2009.07.012
- Coombs, L. A., Hunt, L., & Cataldo, J. 2016. A scoping review of the nurse practitioner workforce in oncology. *Cancer Medicine*, 5, 1908–1916. doi:10.1002/cam4.769
- Dyar, S., Lesperance, M., & Shannon, R. 2012. A nurse practitioner directed intervention improves the quality of life of patients with metastatic cancer: results of a randomized pilot study. *Journal of Palliative Medicine*, 15, 890–895.
- Competences for the Care of People with Long-term Conditions. 2005. Department of Health. Case Management.

- DeSantis, C. E., Lin, C. C., Mariotto, A. B., Siegel, R. L., Stein, K. D., Kramer, J. L., & Jemal, A. 2014. Cancer treatment and survivorship statistics. *Cancer Journal for Clinicians*, 64, 252–271. doi:10.3322/caac.21235
- Devitt, B., Philip, J., & McLachlan, S. A. 2010. Team dynamics, decision making, and attitudes toward multidisciplinary cancer meetings: health professionals' perspectives. *Journal of oncology practice*, 6, e17–e20. doi:10.1200/JOP.2010.000023
- De Moor, J.S., Mariotto, A.B., Parry C., Alfano, C.M., Padgett, L., Kent, E.E., Forsythe, L., Scoppa S., Hachey, M., & Rowland, J.H. 2013. Cancer Survivors in the United States: Prevalence across the Survivorship Trajectory and Implications for Care. doi: 10.1158/1055-9965.EPI-12-1356
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. 2014. Qualitative content analysis: A focus on trustworthiness. *Sage Open*, 4, 2158244014522633.
- Elo, S., & Kyngäs, H. 2008. The qualitative content analysis process. *Journal of Advanced Nursing*, 62, 107–115. doi:10.1111/j.1365-2648.2007.04569.x
- Erichsen, E., Danielsson, E.H., & Friedrichsen, M. 2010. A phenomenological study of nurses' understanding of honesty in palliative care. *Nursing Ethics*, 17, 3950. doi:10.1177/0969733009350952
- Flynn, M., & MCKeown, M. 2009. Nurse staffing levels revisited: a consideration of key issues in nurse staffing levels and skill mix research. *Journal of Nursing Management*, 17, 759–766. doi:10.1111/j.1365-2834.2009.01023.x
- Gadamer, H.G. 2008. *Philosophical Hermeneutics*. Berkeley, Los Angeles, London: University of California Press.
- Graneheim, U.H., & Lundman, B. 2004. Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105-112. DOI: 10.1016/j.nedt.2003.10.001
- Hinkel, J.M., Vandergrift, J.L., Perkel, S.J., Waldinger, M.B., Levy, W., & Stewart, F.M. 2010. Practice and productivity of physician assistants and nurse practitioners in outpatient oncology clinics at national comprehensive cancer network institutions. *Journal of Oncology Practice*, 6, 182–187.
- Hsieh, H.F. & Shannon, S. 2005. Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277–1288. doi.org/10.1177/1049732305276687
- Hancock, H.C. & Easen, P.R. 2006. The decision-making processes of nurses when extubating patients following cardiac surgery: An ethnographic study. *International Journal of Nursing Studies*, 43, 693–705. doi:10.1016/j.ijnurstu.2005.09.003
- Iskakova, A.M., Abzalova, R.A., Shalgumbaieva, G.M., Yuodaite-Rachkauskene, A., Akhmetova, A.K., Sundeieva, E.A., & Kuluspaiev, E.S. 2016. The implementation of new nursing technologies in the republic of Kazakhstan. *Problems of social hygiene and the history of medicine*, 3, 182-185.

Kamisli, S.D., Karakilic, B., Kilickap, S., & Hayran, M. 2019. Cancer patients and oncology nursing: Perspectives of oncology nurses in Turkey. *Nigerian Journal of Clinical Practice*, 20, 1065-73. Available from:
<http://www.njcponline.com/text.asp?2017/20/9/1065/217239>

Krueger, R.A. & Casey, M.A. 2000. Focus groups: A practical guide for applied researchers. (3rd ed.). Thousand Oaks, CA: Sage.

Khusainova, I.R., & Kausova, G.K. 2016. Psychological support of medical personnel in an oncological hospital. *Bulletin of the Kazakh National Medical University*, 3, 68-70. Doi: <https://cyberleninka.ru/article/n/psihologicheskoe-soprovozhdenie-meditsinskogo-personala-v-onkologicheskom>

Kraft, M., Kästel, A., Eriksson, H., & Hedman, A.M.R. 2017. Global Nursing-a literature review in the field of education and practice. *Nursing Open*, 4, 122–133. doi:10.1002/nop2.79

Lucatorto, M.A., Thomas, T.W., & Siek, T. 2016. Registered Nurses as Caregivers: Influencing the System as Patient Advocates. *The Online Journal of Issues in Nursing*, 21, Manuscript 2. doi: 10.3912/OJIN.Vol21No03Man02

Lincoln, S.Y. & Guba, E.G. 1985. Naturalistic inquiry. Thousand Oaks, CA: Sage.

LeBaron, V.T., Palat, G., Sinha, S., Chinta, S.K., Jamima, B., Pilla, U.L. & Beck, S.L. 2017. Recommendations to Support Nurses and Improve the Delivery of Oncology and Palliative Care in India. *Indian journal of palliative care*, 23, 188–198. doi:10.4103/IJPC.IJPC_153_16

Living After Cancer, Median Cancer Survival Times. 2011. A research briefing paper by Macmillan Cancer Support. Accessed on 15 March 2018. Retrieved from <https://www.macmillan.org.uk/documents/aboutus/newsroom/livingaftercancermediancancersurvivaltimes.pdf>

Malloy, P., Boit, J., Tarus, A., Marete, J., Ferrell, B., & Ali, Z. 2017. Providing palliative care to patients with cancer: Addressing the needs in Kenya. *Asia Pacific Journal of Oncology Nursing*, 4, 45-9. doi: 10.4103/2347-5625.199073.

Monas, L., Toren, O., Uziely, B., & Chinitz, D. 2017. The oncology nurse coordinator: role perceptions of staff members and nurse coordinators. *Israel journal of health policy research*, 6, 66. doi:10.1186/s13584-017-0186-8

Morgan, D.L. 1997. Focus groups as qualitative research (2nd ed.). Thousand Oaks, CA: Sage.

Naruse, T., Yamamoto, N., Sugimoto, T., Fujisaki-Sakai, M., & Nagata, S. 2017. The association between nurses' coordination with physicians and clients' place of death. *International Journal of Palliative Nursing*, 23, 136–142. doi:10.12968/ijpn.2017.23.3.136

Nevidjon, B., Rieger, P., Miller, Murphy, C., Rosenzweig, M.Q., McCorkle, M.R., & Baileys, K. 2010. Filling the gap: development of the oncology nurse practitioner workforce. *Journal of Oncology Practice*, 6, 2–6.

Offen, J. 2015. The role of UK district nurses in providing care for adult patients with a terminal diagnosis: a meta-ethnography. *International Journal of Palliative Nursing*, 21, 134–141. doi:10.12968/ijpn.2015.21.3.134

Polit, D.F. & Beck, C.T. 2012. Nursing research: Principles and methods. Philadelphia, PA: Lippincott Williams & Wilkins.

Positions approval of the Nomenclature of the health workers 2009. The Acting Minister of Health of the Republic of Kazakhstan No. 775 - 791 dated November 26. "On Approval of Qualification Characteristics of Health Career Positions". Accessed on 15 March 2018. Retrieved from

Richards, H.M. & Schwartz, L.J. 2002. Ethics in qualitative research: are there special issues for health services research? *Family Practice – An International Journal*, 19, 135–139. DOI: 10.1093/fampra/19.2.135

Rieger, P.T. & Yarbrow, C.H. 2003. Role of the Oncology Nurse. In: D.W. Kufe, R.E. Pollock, R.R. Weichselbaum et al., editors, *Holland-Frei Cancer Medicine*. 6th edition. Hamilton (ON): BC Decker; <https://www.ncbi.nlm.nih.gov/books/NBK13570/>

Reinhard, S.C., Given, B., & Petlick, N.H. 2008. Supporting Family Caregivers in Providing Care. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); Chapter 14. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK2665/>

Rourke, L., & Anderson, T. 2004. Validity in quantitative content analysis. *Educational Technology Research & Development*, 52, 5-18. Doi. org/10.1007/BF02504769

Rohani, C., Sedaghati Kesbakhi, M., & Mohtashami, J. 2018. Clinical empathy with cancer patients: a content analysis of oncology nurses' perception. *Patient preference and adherence*, 12, 1089–1098. doi:10.2147/PPA.S156441

Shalkharova, J.S., Koikov, V.V. & Baygozhina, Z.A. 2016. Methods and indicators for evaluating the activities of nursing professionals in medical organizations. Guidelines. Astana. Accessed on 15 March 2018. Retrieved from

Silbermann, M., Pitsillides, B., Al-Alfi, N., Omran, S., Al-Jabri, K., Elshamy, K., & El-Shamy, M. 2013. Multidisciplinary care team for cancer patients and its implementation in several Middle Eastern countries. *Annals of oncology: official journal of the European Society for Medical Oncology*, 24, vii41–vii47. doi:10.1093/annonc/mdt265

Schroeder, K. & Lorenz, K. 2018. Nursing and the Future of Palliative Care. *Asia-Pacific journal of oncology nursing*, 5, 4-8. doi: 10.4103/apjon.apjon_43_17

Traczynski, J. & Udalova, V. 2018. Nurse practitioner independence, health care utilization, and health outcomes. *Journal of Health Economics*, 58, 90–109. doi:10.1016/j.jhealeco.2018.01.001

Utepbergenova, J.M., Kalmataeva, J.A. & Kalmakhans, S.B. 2016. A new formation of the professional activity of primary nurses in Kazakhstan and the world. *Bulletin of the Kazakh National Medical University*, 1, 674 - 678.

Doi:<https://cyberleninka.ru/article/n/novaya-formatsiya-professionalnoy-deyatelnosti-meditsinskih-sester-pervichnogo-zvena-v-kazahstane-i-mire>

United Nations, Department of Economic and Social Affairs, Population Division 2017. World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP/248. Accessed on 15 March 2018. Retrieved from <https://population.un.org/wpp/>

Van Manen, M. 1990. Researching lived experience: Human science for an action sensitive pedagogy. London, ON, Canada: Althouse Press.

Weir, H.K., Anderson, R.N., & Coleman King, S.M. 2016. Heart Disease and Cancer Deaths - Trends and Projections in the United States, 1969-2020. *Chronic Diseases journal*, 13, E157, doi:10.5888/pcd13.160211

Wilkinson, S. 2004. Focus group research. In D. Silverman (ed.), *Qualitative research: Theory, method, and practice*. Thousand Oaks, CA: Sage. 177–199.

White, M.C., Holman, D.M., Boehm, J.E., Peipins, L.A., Grossman, M., & Henley, S.J. 2014. Age and cancer risk: a potentially modifiable relationship. *American Journal Preventive Medicine*, 46, S7–S15.

Ye, Y., Otahal, P., Marwick, T.H., Wills, K.E., Neil, A.L., & Venn, A.J. 2018. Cardiovascular and other competing causes of death among patients with cancer from 2006 to 2015: An Australian population-based study. *Cancer*. doi:10.1002/cncr.31806

Appendices

Appendix 1. Questions for conducting an interview with nurses

1. How you spend your usual working day?
2. Could you describe it?
3. Tell me more about diagnose and identify patient problems?
4. Tell me please what kind of support do you give to patients with pain syndrome?
5. What kind of manipulations do you have for the patient?
6. What does it depend on?
7. Which role of your actions depends on the doctor's appointments?
8. Tell us what psychological or spiritual support you give to the patient?
9. Tell me how you can influence the patient's adaptation to his illness? What about social life?
10. Share an example of what documentation do you use in your practice?
11. What do you think about your role between the patient and the health care system?
12. What functions in the workplace do you perform?
13. What do you know about the legal support of the patient by the health care service?
14. What role does your work team have on you?
15. What do you think about job satisfaction\burnout?

Appendix 2. Cover letter

Dear nurse,

I would kindly ask you to take part in the study: Role and responsibility of oncology nurses from their point of view. The purpose of this study is to describe the role and responsibilities of oncology nurses from their point of view who are providing nursing care, for oncology patients, in order to make their work more visible and suggest recommendations for improvement oncology health system. The aim of the study is to identify the role and responsibilities of oncology nurses in the care of patients who are receiving care for their patients.

Your participation in this research project is completely voluntary. The research material will be supplemented by an interview. In the interview, we want to get information on the experiences of nurses about their role at oncology care for oncology patients. The choice of interviewed nurses will made on volunteers, who have consented to this form, to whom they will personally contact during spring 2019. The interview takes place as group interview, which takes about one hour. The interview situation will be recorded. The interview is designed to gather information about: The role & responsibilities of the oncology nurse at oncology care system.

The study material collected from nurse documents is classified by codes, so that the information of nurses is not visible at any time, and nurses cannot be identified. 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 thesis and articles will be published in international scientific journals. The research material will be lost by cutting appropriately after the studies have been completed.

If you agree to participate in this project, please tell us about your relationship in the interview as best as possible. This will take approximately (40 - 60 minutes) to complete.

If you have any questions about this project, do not hesitate to contact the researcher in contact information.

Thank you for your help in this important matter.

Sincerely,

Assel Markabayeva, Researcher

Email as.markabaeva@mail.ru

Tel. mobile +7 777 9783332

Appendix 3. Informed consent

Nurse's consent to participate in the study

Title of the study: Role and responsibility of oncology nurses from their point of view

Purpose of this study is to describe the role and responsibilities of nurses from their point of view, gaining new information about their daily work with the patients and so make their role and responsibilities more visible to peers, other healthcare professionals, and the Kazakh society. Based on the results, recommendations and suggestions will be made for nursing in the oncology service.

Full name.

Respondent: _____

1. Respondents fully explained the purpose of the study, the procedure for the study and what he / she should do.
3. The Respondent consents to full cooperation with the researcher and takes an active part in it
4. The respondent is aware that he can at any time refuse to participate in the study and that such a refusal will not in any way affect his further investigation.
5. It is assumed that no reports on this study will indicate the name of the respondent or are not disclosed to third parties. The respondent will not be authorized in any way to restrict the use of the results of this study. In particular, the respondent agrees to communicate the results to medical institutions.

By signing this form, I do not lose any rights that belong to me by law. I had the opportunity to ask questions that answered the answers that satisfied me.

I received a signed copy of the Information for the patient and the patient's consent to participate in the study.

I voluntarily agree to participate in the study

Full name (Signature of respondent) _____

Full name (Signature of Investigator) _____

Date _____

Appendix 4. Arrangement

To the Chairman
Of Oncology Department

Dear Director!

We ask you to allow research work to be carried out within the framework of the joint Kazakh Master's thesis on nursing on the topic " The role and responsibilities of oncology nurses from their point of view ". The subject of the study will be medical nurses providing oncology care, for oncological patients. The method of collecting information will be interviewing 60 nurses, for 40-60 minutes. All collected data will be collected with the consent of the participants themselves, whose personal data will be strictly confidential.

Scientific researcher

Markabayeva AA

Appendix 5. Research protocol

№	Indicator	Comments
1	The relevance of research	Nurses are one of the most important members of an interdisciplinary team in clinical practice, especially in the field of oncology. Despite this, in the Republic of Kazakhstan, there is a lack of clarity regarding the roles, responsibilities, and unique contributions of a cancer nurse.
2	The title of the research topic	Role and responsibility of the oncology nurses from their point of view
3	Scientific novelty	For the first time, the role and responsibility of a cancer nurse from the point of view of a nurse will be described.
4	Practical significance	Recommendations will be given to the oncology service in order to improve the oncology services provided.
5	Targets and goals	Examine the role and responsibility of practicing oncology nurses to obtain information about their daily work in order to make the work of nurses visible to health workers and Kazakhstan society and offer further recommendations for improving the cancer services provided.
6	Design Research	Qualitative, descriptive, one-step (interviewing), prospective, analytical Research.
7	Number of references used, depth of study	2000 - 2018. 1000 sources