jamk.fi

# Patients' experiences of emotional support provided by the health professionals while waiting for a cardiovascular operation

Zeinat Akhmejanova

Master's thesis
August 2019
Social services, Health and Sports
Degree Programme in Advanced Nursing Practice

Jyväskylän ammattikorkeakoulu
JAMK University of Applied Sciences

jamk.fi

**Description**

| Author(s) | Type of publication | Date |
|---|---|---|
| Akhmejanova Zeinat | Master's thesis | August 2019 |
| | | Language of publication: English |
| | Number of pages 41 | Permission for web publication: x |

Title of publication
Patients' experiences of emotional support provided by the health professionals while waiting for a cardiovascular operation

Degree programme
Degree Programme in Advanced Nursing Practice

Supervisor(s)
Hanna Hopia, Dinara Ospanova

Assigned by

Abstract

Background: It is a well-known fact that patients who are waiting for a heart surgery operation experience fear and anxiety, which raises the number of postoperative complications and also increases the postoperative pain.

Objective: To describe the experience of the emotional support provided by the health professionals while waiting for the cardiovascular operation in one private hospital in Kazakhstan.

Method: A qualitative approach was used with semi-structured interviews. Nineteen cardiac surgery patients were interviewed. An inductive content analysis was applied to capture their experiences. Patients were recruited from a private hospital in Kazakhstan.

Results: The data analysis identified four main categories: 1) Patient felt satisfied with the preoperative preparation, 2) Patient felt insufficient emotional support, 3) Firm believe in the staff's competence, and 4) Patient's supporting from various sources.

Conclusions: The results of this study can be used to train cardiac nurses to develop their knowledge and skills concerning how to give emotional support to patients. It is also possible to develop a set of questions for the nurses to help them assess the individual emotional state of each patient.
The next step of this thesis is to plan how to implement these results for nursing personnel working in similar units.

Keywords/tags (subjects)
Emotional support, health professionals, nurse, nursing, cardiac surgery, cardiovascular operation

Miscellaneous (Confidential information)

## Content

# 1 Introduction

What is emotional support in general? According to the Psychology Dictionary, emotional support is “the reassurance, encouragement, and understanding we or receive to a person.” In other words, this support is provided to us by people who understand, encourage, and reassure you. (Pam 2013.)

The emotional support provided by nurses is important for the topic of research. In Mosby's Medical Dictionary (2009), this is defined as a sensitive, understanding approach that helps patients to take and fight their diseases; report their anxieties and fears; get comfort from a gentle, responsive, caring person; and increase their ability to take care of themselves. Besides, Emotional support is included in a nursing intervention from the Nursing Interventions Classification (NIC) and is defined as providing reassurance, acceptance, and encouragement during stress (Bulechek, Butcher & Dochterman 2008). That is, we can conclude that in the world practice in nursing preoperation support, emotional support is provided by nurses, not doctors, as in Kazakhstan and other post-Soviet countries. Unlike a doctor who deals with the medical side of treatment, it is the nurses who spend most of their time with the patient and his family - from admission to the discharge itself, day and night. They know the patient more from his side, they know what psychological state he is in, they talk more with him, since they come to the ward several times a day. It is not without reason that "nursing care" is called, nurses in addition to medical functions are "care" the patient. That is why it is very important that emotional support is provided by nurses. In this study, a narrower area is being considered - it is emotional support just before open heart surgery.

According to Ascari, Neiss, Sartori, Silva, Ascari and Galli (2013), any operation is essentially a fact of aggression against the body of the patient. Therefore, anxiety, doubts, and fear of patients are natural companions of each surgical procedure. The preoperative period is especially emotionally difficult for the patient. This period is characterized by a feeling of uncertainty, helplessness, and fear of anesthesia, the operation, and its consequences. In this regard, it is of

particular importance to be sensitive and attentive to the patient on the part of healthcare professionals. Therefore, the preoperative emotional support of the patient is aimed at the well-being of the patient and reduces the level of stress and negative feelings concerning surgery. (Ascari, Neiss, Sartori, Silva, Ascari & Galli 2013.)

## 1.1 Coronary Artery Bypass Graft (CABG) and patient fear

According to a study by Dulega, Slusarsk and Koziej (2013) (as cited in Rosiek, Kornatowski, Rosiek-Kryszewska, Leksowski & Leksowski 2016), one of the numerous diseases in worldwide groups are heart and circulatory diseases, and cardiovascular diseases are considered the leading cause of death worldwide (World Health Organization, 2017). Although drug treatment and recent advances in new treatments have been effective in fighting coronary artery disease, surgery remains the only treatment option for many of these patients (Acton 2013). Cardiac surgery is the most effective way of treating ischemic heart disease, which helps to prevent the development of myocardial infarction (Khan, Islam, Ahmed, Bawany, Khan, & Arshad 2014). Such an operation is called aortocoronary bypass surgery.

Coronary artery bypass grafting (CABG) is one of the most common treatment options in patients with coronary heart disease (Woods, Froelicher, Motzer & Bridges 2010; Kulick 2016). This operation is complex and extensive, and according to the literature, most of the patients experience depression and anxiety both before and after the operation (Rymaszewska, Kiejna & Hadrý s 2003; McKinley, Fien, Riegel, Meischke, Aburuz, Lennie, Moser 2012; Rosiek et al. 2016). CABG is a very stressful operation (Leegaard & Fagermoen 2008), and according to Rymaszewska et al. (2003) and Krzych et al. studies (cited in Rosiek et al. 2016), the expectation of cardiac surgery causes more stress than other types of surgical interventions. Depression is noted in 14% to 47% (Roger, Go, Lloyd-Jones, Adams, Berry, Brown, Carnethon, Dai, de Simone, Ford, Fox, Fullerton, Gillespie, Greenlund, Hailpern, Heit, Ho, Howard, Kissela, Kittner, Lackland, Lichtman, Lisabeth, Makuc, Marcus, Marelli, Matchar, McDermott, Meigs, Moy, Mozaffarian, Mussolino, Nichol,

Paynter, Rosamond, Sorlie, Stafford, Turan, Turner, Wong & Wylie-Rosett 2010) and anxiety in 15% of patients who had the CABG operation (Tully, Cosh & Baumeister 2014).

Research by Tully and Baker (2012) suggests that depression and anxiety are associated with post-surgical complications, such as heart complications, function level and quality of life. Furthermore, increased preoperative anxiety can delay the postoperative recovery period (Mulugeta, Ayana, Sintayehu, Dessie & Zewdu 2018). Similarly, a high level of anxiety before surgery determines a high incidence of postoperative pain (Ali, Altun, Oguz, Ilhan, Demircan & Koltka 2013). a negative effect on the mood of the patient, and delayed hospitalization (Rasouli, Menendez & Sayadipour 2016).

Moreover, a systematic review of Stenman, Holzmann and Sartipy (2016) demonstrates an increase in all causes of death due to preoperative depression in four of the seven studies analyzed (Stenman et al. 2016). Also, the Blumenthal, Lett, Babyak, White, Smith, Mark, Jones, Mathew, Newman, and N.O.R.G. Investigators (2003) study showed that among the 817 patients who underwent CABG, the increased symptoms of depression before and after surgery were associated with an increase in the cause of death. Elevated anxiety symptoms before surgery were associated with increased mortality after surgery (Tully, Baker & Knight 2008; Cserep, Losoncz, Balog, Szili-Torok, Husz, Juhasz, Kertai, Gal & Szekely 2012)

## 1.2 Preoperative nursing care

In connection with the reasons described above, the question arises about the qualified preparation for the operation not only from the mechanical side (shave before the operation, to give soothing overnight, etc.) but also from the emotional side. Particularly, it is a confidential conversation, the manifestation of empathy to the patient to reduce fear and anxiety before surgery.

In terms of the development of medical care, as well as optimization, hospitalization periods have changed, and patients now spend less time in the hospital (Order of the Ministry of Health of Kazakhstan 29.09.2015 №761). In Kazakhstan, patients often go to the hospital just one day before surgery and are

discharged as soon as their vital functions are restored from a medical point of view.

In general, perioperative care is a term used to describe the various functions of nursing related to surgical experience. It consists of three stages: preoperative, intraoperative and postoperative (Spry 2005; AORN Guidance Statement: Perioperative Staffing 2005).

All phases play a big role in patient care, but the preoperative phase is the most important, as patients during this period are most vulnerable both physiologically and psychologically (Rief, Shedden-Mora, Meike, Laferton, Auer, Petrie, Salzmann, Schedlowski & Moosdorf 2017). During the preoperative phase, patients undergo various situations that cause psychological anxiety, and this can lead to stress during and after the surgical procedure (Alanazi 2014). According to studies, the expectation of cardiosurgery causes more stress than other types of surgical interventions (Rymaszewska et al. 2003)

Preoperative education helps the patient understand what the operation will be and mentally prepare for surgery, and also improves recovery in the postoperative period (Ramesh, Nayak, Pai, Patil, George, George & Devi 2016). Preoperative patient education implies the intervention of nurses, which includes providing information to patients about the forthcoming operation and includes answers to questions about what they expect after the operation, the possible outcomes and results, and also provide psychological and emotional support. To put it more simply, nurses help patients to reduce their anxiety and fear before the operation, which reduces the level of postoperative complications and leads to more rapid recovery after surgery (Kruzik 2009; O'Brien, Mckeough & Abbasi 2013; Alanazi 2014; Ping 2015). Therefore, and according to a systematic review by Alanazi (2014)**,** it can be concluded that preoperative activities reduce preoperative anxiety in patients scheduled for surgical procedures.

## 1.3 Situation in Kazakhstan

According to previous studies (Alanazi 2014; Ping 2015; Roziek et al. 2016)**,** the predetermined conversation and the emotional support comes from nurses,

which means that they play a big role in the patient's life during hospitalization. There is a limited amount of research concerning emotional or psychological support to patients before surgery in the context of nursing in Kazakhstan. There is not much research conducted and the ones that exist are written only from the doctors' or psychologists' perspective, so there is no example of participation of nurses.

According to Galina (2017) and Buribaeva (2008), in the '90s, after Kazakhstan separated from the USSR and became an independent state in medicine, there was a period of acute shortage of medical personnel, especially nurses. Therefore, many of the functions and responsibilities of the nurses was taken on by the doctor, and since then, it has remained unchanged. Now, the health sector in Kazakhstan has stepped forward in development, but the foundations and some rules remain the same (Ivanchenko, Pavlova, Martykenova, Yusupova & Kassieva 2014).

Delegating the duty of conversation and emotional support before surgery from the doctor to the nurse would help improve the patient's postoperative outcome. Since the doctor does not always have enough time for a preoperative conversation, not all patients receive emotional support in full.

Also, if this part of the functions could be carried out by a nurse, then the help would be the same for all patients. Moreover, all this will develop counseling skills, and a nurse will learn basic knowledge of cardiac surgery; that is, form the confidential relations with the patient and expand nurses' professional role. Reforms are necessary for further growth and development of nursing as an independent unit of health care. Therefore, it is crucial to discover what patients' experiences are before heart surgery. The findings of this study would be one of the steps to improve preoperative preparation, namely the emotional support of the patient before cardiac surgery.

# 2 Purpose, Objectives, and Research Questions

## 2.1 Purpose and Objective

The purpose is to study the patients' experiences of emotional support provided by the health professionals while waiting for cardiovascular operation in a private hospital in Kazakhstan.

Having conducted the study, it is possible to use the results for improving nursing counseling before surgery and expand nurses' professional role in preoperative care in nursing in Kazakhstan.

The objective is to describe the experience of the emotional support provided by the health professionals while waiting for cardiovascular operation in one private hospital in Kazakhstan.

## 2.2 Research question

What kind of experiences do patients have of emotional support provided by the health professionals while waiting for cardiovascular operation in a private hospital in Kazakhstan?

# 3 Method

A qualitative study was conducted because this type of research approach allows to obtain detailed data on the behavior, as well as the opinion, perception, or attitude to a particular issue of a very small group of individuals (Holloway & Wheeler 2010; Smith, Bekker & Cheater 2011). Much of the research in nursing and health care is focused on aspects of life, which can be regarded as a sensitive topic (Enosh & Buchbinder 2005). Emotional support is a sensitive topic, and therefore, it is better to ask patients to describe it. In addition, Kazakhstan does not have study results about patients' emotional support in cardiac surgery overall, and for that reason, it is important to have qualitative data from the patients' perspective. Hodge, Barr,

Bowen, Leeven, and Knox (2013) have successfully used the qualitative method when studying emotional support in patients with visual impairments. Findings of this study can be used further, for example, to create a questionnaire on the need for emotional support of different patient groups during their stay in the hospital.

Researchers mainly choose qualitative research for sensitive topics using in-depth interviews (Liamputtong 2007). Face-to-face interviews are the best way to collect data collection in the study of sensitive topics (Elmir, Schmied, Jackson & Wilkes 2011; Taylor, Martin, Dal Grande, Swannell, Fullerton, Hazell & Harrison 2011). An individual interview is better because the topic is quite sensitive, and people have different experiences, expectations, and opinions about emotional support. Finally, this study will aim to find out the level of emotional support overall in Kazakhstan from the patients' perspective.

# 4 Data

## 4.1 Data collection and participants

The criteria of inclusion into this project study was adult patients awaiting cardiovascular surgery in a medical facility. The criteria of exclusion were patients with cognitive disorders, complications after surgery, and children. The interviews were carried out from 8 November to 30 November in 2018. The study was approved by the ethics committee of KAZMUCE, Kazakhstan (see Chapter 6). Participants were recruited from a private hospital. All volunteers had a diagnosis of coronary heart disease, requiring surgical treatment. The age range was from 40 to 85 years of which nine were women and ten men, all of them married. The volunteers were interviewed on the fifth or sixth day after the surgery was conducted. During this period, the patient was rehabilitated after anesthesia. Interviews were not conducted before surgery as the interview could have increased the patient's anxiety and fear of surgery.

Three participants were hospitalized for the first time in a medical facility whereas 16 participants had a previous experience of hospitalization. Ten of these 16 were

hospitalized for the first time in the cardiac surgery department, and 6 participants of 16 already had experience of inpatient treatment for heart disease. Three volunteers already had stenting of coronary vessels in their background.

One day before the interview, patients were informed about the aim of the research and the rights of the subject, asked permission to use a recorder during the conversation, and that the participation in the study was completely voluntary. Before the interview, a patient signed a consent form. They were also provided a printed version of the explanation for a more detailed review. The interview was held individually in a separate room face-to-face going through their experience of emotional support before surgery. The duration of the conversation ranged from 30 minutes to one hour.

The interview was based on a semi-structured questionnaire. Each interview began with an open question: "Could you please describe your general experience of the care before your surgery?". Then followed questions revealing this subject more deeply. The interviews were digitally recorded and transcribed verbatim in Russian. After the study was finished, all records were kept in a personal computer with only access by the researcher. The research questions and the method of interviewing were based on previous studies (Ascari et al. 2013; Dempsey, Dowling, Larkin & Murphy 2016). A semi-structured interview was chosen because it could reveal rich descriptive data about the personal experience of the participants (Frances, Coughlan & Cronin 2009).

## 4.2 Data analysis

Content analysis is the systematic coding and categorization of approaches of the objectively analyzing of a large amount of textual information. Content analysis unobtrusively determines the trend and models of given words, their frequency, their relationships, structures, and discourses of communication. The content analysis aims to describe the characteristics of the document, having studied who is speaking, to whom, and with what effect (Holloway & Wheeler 2010).

The data from the interviews were analyzed using an inductive analysis inspired by Elo and Kyngäs (2008).

Nineteen audio interviews of volunteers were decrypted into 43 papers (Calibri font, size 12). The questionnaire reflects the patients' experience of emotional support provided by health professionals while waiting for a cardiovascular operation in a medical facility. At the stage of preparing the audio recording, the interviews were first listened to several times to get acquainted with the data. Then all the interviews were transcribed verbatim.

The obtained and decrypted answers were read several times and then analyzed. Meaningful statements related to the study were coded. Briefly, this data was deeply studied word by word, and meaningful statements and phrases following the aim of the study were identified. The identified part of answers was separated by meaning units. Further, these units were organized as condensed meaning units which were then coded. The codes were classified and categorized into twenty sub-categories. These subcategories were grouped into twelve categories. Each category consists of the same general conclusions. The twelve categories were further grouped into four main categories. Hence, four main categories describe the general structure of the research (see Table 1).

# 5 The trustworthiness of the study

Some challenges were encounter during the interviews. Firstly, it was difficult to talk about emotions with older adults, especially with men. They consider it as a very intimate topic, experiencing embarrassment and reluctancy to talk about it with strangers, and especially with a woman. Some patients had to be approached several times and talked on abstract topics, but during the interview, they relaxed and began to trust the researcher.

Secondly, a violation of the cognitive abilities of patients after anesthesia appeared. In order not to increase the anxiety of the patient before the operation, it was decided to interview the patients 5-6 days after the operation. Therefore, patients could be in their clear mind on the day of the interview. However, in practice, there were difficulties with memory recovery in patients older than 65 years.

It should also be noted I that most of the participants were elderly people, and according to Brédart, Marrel, Abetz-Webb, Lasch, and Acquadro (2014), a survey of

elderly patients requires special attention. During the interview, they liked to talk about their disease for a long time and in detail. This was great because they trusted the researcher and wanted to share their stories. In order not to deviate from the main topic and at the same time not to offend the patient and not to interrupt the conversation, the leading questions were asked as gently as possible.

According to the Lynne study (2016), the confirmation of the trustworthiness of this study was made by the following procedures. First, the main investigator tested the recording device. Before the study, pilot questions were also checked, and if it was necessary, appropriate changes in the list of questions were made.

Secondly, the same interview questions were used for all participants in the study. All questions were reproducible in the same way. Interviews with patients were conducted individually in confidence only with the main investigator. Interview topics and questions were based on previous research on this topic (Ascari et al. 2013; Brédart et al. 2014)

Third, the methodology of the study was described in detail, including the literature reviews of worldwide practice. Transferability was provided by the fact that the interview questions were compiled clearly and based on numerous previous scientific studies with a literature review. The interview was taken and interpreted only by the main investigator. It was also applied to the principles of content analysis of data analyzing. The researcher of this study was aware of her position in the pilot clinic (as in her background, she is a perfusionist at this clinic) and tried to be objective as possible during the collecting and analyzing of the data.

# 6 Research ethics

The study was approved by the ethics committee of KAZMUCE, Kazakhstan. According to the Helsinki Declaration (World Medical Association 2013), informed consent has been developed for the study, which reflects the following points: 1. participation in the study is voluntary; and 2. sufficient information on objectives, methods, sources of financing, any possible conflicts of interest, membership of any organization, expected benefits and potential risks, an inconvenience that may arise from participation in the study, conditions in effect after the end of the study, and on

any other significant aspects of the study. The participants were informed of their right to refuse to participate in the study or withdraw his consent to participate at any time without any adverse consequences for themselves. In addition, all information for the patient, including informed consent, was provided in Kazakh and Russian.

According to Saunders, B., Kitzinger, J. and Kitzinger, C. (2015) the anonymity and confidentiality of the study participant is an important part of the research. Confidentiality and anonymity of participants are achieved by non-disclosure of the content of the answers, as well as the names of patients. Numeric identifiers are used instead of participant names. Participation in the study was is voluntary.

Audio recordings and all interview materials may not be shared with anyone and will only be used in a generalized form that reflects the views of all respondents. The audio recordings will be stored on the investigator's computer with a personal password. This means that access to patient data will be protected and will not be shared with other users. At the end of the whole study with the interview data, the researcher is responsible for the destruction of the interview materials and for their safe storage during the study.

# 7 Results

Four main categories were identified in the analysis of patient interviews: 1. the patient felt satisfied with the preoperative preparation, 2. the patient felt insufficient emotional support, 3. firm believe in the staff's competence, and 4. patient's support from various sources.

## 7.1 The patient felt satisfied with the preoperative preparation

This category includes some subcategories. First is a positive attitude to surgery.

This subcategory describes description of how patients learned from and were inspired by the experience and support of people who had already undergone heart surgery. Patients said that there was no fear of the operation, as they had already

known all the information about the procedure from the experience of their relatives or friends or acquaintances.

*“There was no fear. Maybe because I was ready? I believe that emotional support is necessary for patients who know nothing about the operation. I think that I do not need support from the staff, as I knew about the operation from the experience of my wife.”(P6)*

*“For me, it was a very big surprise that there would be an extensive operation. However, I have a friend who underwent bypass surgery, and I had already known how it all goes.” (P13)*

There were also patients who had confidence in the medical staff and a positive impression of the hospital on the previous positive experience of hospitalization in this medical institution. The respondents claimed that they had been satisfied with the staff's high professionalism during the previous hospitalization and, as a result, they chose this hospital again for their current hospitalization.

*“It is not my first time in a hospital X. I was here in 2014. Everything suits me here. All the guys are professionals. Contact and communication skills are very good...”(P3)*

*“I have been here twice. First time I got a stent. The second time they did coronary angiography and prescribed medicines. However, I already knew all the staff – doctors and nurses. There was absolute trust, and I was not worried” (P16)*

The next category of patients willingly shared that they were very happy with the attitude of medical staff to patients. According to patients, all medical staff were very friendly; they felt the care and sympathy of the staff. Doctors and nurses readily answered all the questions. Based on these feelings, patients went to the operation more confidently.

*“In general, I liked everything. The nurses all come in with a smile. I'm so pleased with the staff's attitude towards me. Love to come to the surgery” (P8)*

*“... All patients are treated very well. The treatment here is very good. Attitude to people is good. Constant observation, constant care...” (P2)*

Similarly, an important role was played by good reviews from other patients about this hospital. Patients heard the opinion of relatives, friends, and colleagues that in this hospital they liked the treatment, staff, and so on. Accordingly, it strengthened their faith in the positive outcome of the operation in the hospital.

*“I have heard good things. That all doctors are of the highest category who studied abroad. Moreover, patients praised the doctor here.” (P19)*

*“Here in Almaty I have a relative here in Almaty. She teaches at the Medical University. Moreover, in this hospital works its disciple. She recommended him, said he’s a good surgeon.” (P15)*

The following category describes that patients felt calm before surgery since the conversation and support of medical staff decreased fear and anxiety before heart surgery.

*“The doctors explained me everything in detail me and this calmed me down…” (P5)*
*“…Of course, the fear was present, but how could they fear this dispelled…” (P8)*

Mostly, all patients expressed much gratitude to the medical staff of the hospital.

*"So, the youth (younger medical staff) was very pleasant to me. I'm happy. Let them develop further. I wish them all health!" (P5)*

*"Excellent attitude to patients, thank you very much!" (P11)*

## 7.2 The patient felt insufficient emotional support

The second main category deals with the causes of patient dissatisfaction before surgery. Some patients felt the lack of support from the hospital staff and believed that it was necessary to talk more often with them, ask about their health, mood, and show more empathy. Patients thought that the staff was busy with other things, and they had no time.

*“They did not talk to me. Mechanically prepared and all. Passed all the tests and in the evening we went to the surgeon, he was very taciturn, the rounds pass quickly and I do not have time to ask my questions” (P12)*

*“I liked everything. However, I think you need to go to the room more often, talk more. And not only during a bypass to go in and try to speak and explain. To be asked how you are doing more often, how have you slept? I want to joke, to communicate” (P7)*

Some of the patients shared that they felt insufficient support from relatives, as relatives were frightened by the upcoming operation and felt fear and anxiety for the patient.

*“…the children were crying and did not want me to go to surgery…” (P15)*

In the past, the patient had had deaths of relatives with a similar disease, and this caused fear for their lives. Therefore, the patient did not wish to delay the operation.

*“At that time, I was thinking about how to save a life, because, in the male lineage, all men die before they reach the age of 50 from heart attack... So, I knew that someday it would touch me. So I went. It was a chance" (P1)*

There were patients who had had a negative experience in other clinics. They believed that the care and support in this clinic were significantly different and better in comparison to other clinics where they had experienced treatment. According to the interview answers, in a pilot hospital, the attitude toward patients was more attentive and caring.

*“I have never seen such hospitals. There is such good care. Here I feel like with my family or as at the home of friends” (P9)*

*“…it is not the first time I was hospitalized in the hospital, and it is not comparable to the conditions of previous hospitals. The situation itself is different, and people are different.” (P19)*

There were also patients without any experience of hospitalization and could not compare the conditions of patient care.

*“I cannot compare your hospital because I have not been hospitalized before to another one. I'm very happy about the hospital staff’s care” (P1)*

## 7.3 The firm believe in the staff's competence

The third pillar describes a strong belief in the competence of the staff. Firstly, patients felt confident in the professionalism of the staff. They noted that there was no fuss and panic; each of the staff knew their job and performed its functions with confidence that instilled confidence in the patient.

*"Very good professionalism of doctors. I do not regret that I came here" (P2)*

*"Everything was done without any panic; everyone knows their job. Everyone can be responsible for their support. It is tuning in. Everyone gives 150 %. Everybody performed with professionalism. Even injections were made with confidence; everybody explained what they were doing…" (P3)*

The next category says that patients felt the support of the attending doctor and had confidence in him. According to the patient, the attending physician was likable and credible during the conversation; there was support and participation from the doctor. This gave confidence in the positive outcome of the operation.

*"…the surgeon talked to me before the procedure. Moreover, I do not know if there is any magic in a person that I immediately felt trusting of him. Then another surgeon was smiling at me – it lifted the mood…" (P9)*

The patient's anxiety decreased when doctors talked in detail about the patient's disease and the possible conditions before, during, and after the operation. That was a preoperative education carried out.

*"For me, it was the first operation in my life, and he told in detail about everything – what happens, how it would happen, and the answers to the questions were also clarified. And my decision was strengthened even more, and I realized that I had made the right choice" (P2)*

Some patients noted that the preoperative education deal only with the doctors *"…nurses went by all the time, but did not talk about the operation…" (P13)*

The next category of patients spoke about the encouraging support of nurses and other medical staff. They told about the attitude of nurses; nurses were kind and

caring. Patients felt very strong support from them, everyone coming into the hospital ward was asked about the state of health, mood, and so on.

*“I was shocked by the support and encouragement. Everyone is busy, but they find the time and talk to me. Moreover, this is even easier than pills! Moreover, it is not just a doctor! Even cleaning service staff asked and said, "Good morning! How did you sleep?" The kitchen staff was also so supportive; they said every day "Hello! How are you feeling? Enjoy your meal!"... Everybody supported me with words, I do not feel scared; everything is good. The attitude of all staff was very careful. Everyone visited me with a smile; everyone talked to me. In general, there was no time to be afraid...” (P9)*

Also, patients talked about the methods of emotional support and preparation for surgery. First, the support and preoperative education that was carried out by doctors during the conversation decreased the fear. Moreover, such conversations motivated the patients to have a belief in a positive outcome.

*"After talking with the doctor there is some confidence, they have good diction. Usually, they say that from the doctor's half-word, you recover" (P3)*.

Secondly, very often in conversations with a patient, the staff used humor. All these emotional ~~manipulations~~ interactions with a patient reduced anxiety before the operation.

“*…It is not an injection neither a tablet that is the most important but communication, the positive attitude of the medical worker. This greatly affects the patient. I'm here with the nurses and with those who bring food constantly talking, and they are talking to me, joking. That is nice…” (P5)*

The patients expressed their opinion about the ways of informing about their illness. Some patients thought that it would be useful if each patient were provided by a flyer with information of the disease and recommendations on how to behave before and after surgery.

*“I read in your hall the information bulletins. I liked it; I think it would be useful to spread such information in our wards. However, the conversation calms more” (P18)*

However, some patients noted that too much information increases the level of anxiety and fear. These patients preferred to talk with a doctor.

*"…I do not need booklets and videos or other additional information, I think it will be worse if I see the information about the disease. However, when I talk to the doctor, I have more confidence. I feel his confidence and professionalism, and it influences me. Of course, I would not get through reading the papers and booklets." (P10)*

## 7.4 Patient's support from various sources

In the fourth main category, patients talked about the support from other patients and from family members.

There was emotional support between patients of the cardiac surgery department; all patients willingly communicated and motivated each other to a positive outcome of the operation. Experiences were shared by those who had already undergone surgery with the patients who were waiting for the operation.

"*I had an experience with coronary stenting in 2014, and I was describing my experience and encouraged those patients who are going to do this surgery for the first time. I shared my experience; I wanted to calm them down. Because I am already an experienced person. We need each other for support...*" *(P5)*

Also, patients noted that the desire to help another patient arises due to the good attitude of medical staff.

"*...There was a woman here in the next room who came and was crying, afraid, and I cheered her up, although I did not even know her name. And it all comes from the general attitude to the patients here, I also wanted to help and support…*" *(P9)*

When it comes to emotional support from family members, relatives played an important role in the support and psychological training of patients. Patients noted how their wives, children, brothers, and sisters helped them to overcome all the difficulties related to the surgery.

*"Without my daughter's help, I do not know what I would do. My wife insisted on this operation. You know, at some point there was a desire to get dressed and leave the hospital. But then my wife said to me "no, you have waited for six months for this*

*surgery". My daughter took sick leave to take care of me. My relatives and family supported me very well. Relatives called, even if they did not come, but it was very nice. Well, my daughter was with me every day and I was very grateful to her" (P2).*

# 8 Discussion

The major aim of this thesis was to study and describe the experience of patients' emotional support provided by the health professionals in a private hospital focused on cardiovascular surgery in Kazakhstan. According to the interviews, it was revealed that the support, emotional, and psychological status play not a minor role in the treatment (Ehrenreich, Fairholme, Buzzella, Ellard & Barlow 2007). Hence, we deeply analyzed the answers and highlighted four categories that is the most important for a patient.

*The first category: the patient felt satisfied with the preoperative preparation*

According to Donabedian (2005) and Schoenfelder, Schaal, Klewer, and Kugler (2014), patient satisfaction is an important element of quality of care. A patient's feedback could be used to improve the quality of the health care provided in a medical facility. Therefore, based on the studies of Rubin, Gandek, Rogers, Kosinski, McHorney, and Ware (1993); Finkelstein, Singh, Silver, Neuhauser, and Rosenthal (1998); and Schoenfelder et al. (2014), patient satisfaction is increasingly seen as an important tool for examining the quality of care and evaluating the performance of health personnel, hospitals, and general health care.

The first category expresses the excitement of patients with whom other patients who had already had heart surgery shared their positive experience. In their interviews, patients noted that they had already come prepared for the operation, as they had already known about the operation from relatives, friends, or colleagues. The stories of experienced patients also reassured patients who were waiting to undergo heart surgery. The neighbors in the ward who had already had a positive outcome also encouraged and motivated the patients who were waiting for the

surgery. It could be explained that patients wanted to listen to a positive outcome and maybe they would like to transmit others' positive outcome onto themselves. Earlier studies by Ivarsson, Larsson, and Sjoberg (2004), Rakoczy (1977), and King (1985) have already found that for patients, it was important to meet other people who had heart surgery. They need to talk and listen to these experienced people. The research found out that after such communication, the level of fear decreased. (Lamarche, Taddeo & Pepler, 1998).

Some patients were previously hospitalized in this hospital, and since they liked the care and treatment, they returned when they needed heart surgery. Some patients have already had experience of treatment in this pilot hospital. In the previous hospitalization, in addition to the professionalism of doctors and nurses, they liked the caring attitude of the staff. Based on these considerations, when they needed heart surgery, they turned again to this clinic. The support and general satisfaction was one of the main points in patients' treatment and why patients chose the hospital. This is confirmed by the study Yardan, Genc, Baydin, Aydincal, and Sunter (2012), which states that overall patient satisfaction is an important predictor of the probability of readiness for return. Moreover, improving patient communication skills, the care process, and environmental factors will increase patient satisfaction and increase the likelihood of their willingness to return (Yeh & Nagel 2010).

The next category of patients noted that they are very pleased with the good attitude of medical staff to patients. According to Price (2015), it was noted that a nurse's attitude to the patient is crucial in care. Patients noted that even the nurse's smile or questions such as "How are You? How are you feeling?" brought them relief and a good mood.

*The second category: the patient felt insufficient emotional support*

Some patients mentioned that they had received insufficient support from the medical staff. Patients felt that everyone was busy, and the staff did not have enough time to support them. Patients also had a strong mind that they were insufficiently informed about the disease.

For this situation, it would be a good idea to have a paper booklet or perhaps a website so that the patient has at least a minimal idea of the procedure. According to the literature, a well-informed patient is more confident in a positive outcome (Adams R. J. 2010).

Some patients mentioned insufficient support from relatives. However, this could be biased as in some cases relatives were dissuaded from the operation. Their decision, they explained, was out of fear for the patient. In these situation, emotional support and preoperative education for relatives needs to be applied. According to the study of Leikkola, Helminen, Paavilainen, and Åstedt-Kurki (2014), the well-informed patients and their relatives need the information and preoperative education as it will decrease the fear and tension before the operation. However, the negative experience of relatives due to deaths or side effects influenced patients' decision to be hospitalized and operated as soon as possible. This can only be explained with human nature and the fear of death.

*The third category: firm believe in the staff's competence*

Many patients noted that the professionalism of the staff is the most important point. Patients mentioned that the confident handling by nurses, their beautiful work clothes that give them a professional appearance, and the conversation with a confident doctor all influence the quality of support from staff. However, the conversation with the doctor is the most significant factor in supporting the patient. This point was already studied and published by Sari, Prabandari, and Claramita (2016). Hence, it could be concluded that communication with the medical staff is very important for the patient. The doctor-patient relationship is an important part of the health care delivery process (Suarez-Almazor, 2004). After talking with the doctor, the patients became confident in their decision to go ahead with the operation. According to studies by Skea, Harry, Bhattacharya, Entwistle, Williams, MacLennan, and Templeton (2004) and Ha and Longnecker (2010), effective communication between the doctor and patient could be a source of motivation, incentive, confidence, and support.

Also, patients noted that preoperative education greatly facilitates the waiting for surgery. The feeling of fear decreases if the patient knows what will happen to him during the operation and how to behave after it. Preoperative training refers to several preoperative interventions that occur before surgery to prepare patients for increased physical and psychological requirements (Papanastassiou, Anderson, Barber, Conover, & Castellvi, 2011). Many studies are proving the beneficial effects of preoperative education on postoperative recovery, reducing the incidence of postoperative complications and in older patients, the length of hospital stay (Snowdon, Haines, & Skinner, 2014; Ertürk & Münlü, 2018; Burgess, Arundel, & Wainwright, 2019).

However, it should be noted that some respondents said that excessive knowledge of the upcoming operation causes an increase in the level of fear and anxiety. This suggests that the approach to each patient should be based on his behavior, which is confirmed by Block, Gatchel, Deardroff, and Guyer (2003) as well as Burgess et al. (2019).

The next component of support according to the patient is the support of nurses and other medical personnel. Health workers play an important role in the psychological support in the perioperative period (Lee, Park, Ha, Cho, Bak & Kim, 2015). According to Westbrook, Duffield, Li, and Creswick (2011), nursing staff at hospitals, unlike doctors, work more closely with patients and provide more compassion, care, and attention. In this study, patients focused on the warm and caring attitude of nurses and other medical personnel. A study by Martin and Turkelson (2006) found that proper patient preparation, combined with the skills and empathy of the medical staff during the preoperative phase, increases the likelihood of a positive outcome for the patient.

Hence, some methods of supportive therapy were revealed.

Firstly, the patients mentioned a sympathetic attitude from the staff; the patient felt positive and supportive mood from doctors, nurses, and other staff.

The second method of support that volunteers mentioned was preoperative education and conversation. All support was based on conversation. However, some patients did not mind if they were given booklets with a description of the disease

and recommendations on how to behave before and after the operation and how to live with a disease. But this opinion was not shared with other patients. Some patients did not want to be too informed since they related the stress of surgery with the information about their condition and possible negative outcome. Based on these data, it can be concluded that patient support should be individual, depending on the psychological status of the patient.

*The fourth category: Patient's support from various sources*

In the first place was important emotional support between patients. Patients tried to support each other as much as possible, showed empathy and sympathy, and adjusted to a favorable outcome. This played an important role in preparation for the operation, and based on interviews with many patients, this support was necessary. This phenomenon can be considered as a spontaneous in-hospital support group. I think it is important to be involved in such groups as it decreases the level of tension, fears, and anxiety, which was confirmed by the study of Callus and Pravettoni (2018). People could share their emotions and fear. That is why such groups, for example, groups of anonymous alcoholics or people who live with HIV or other diseases, are very supportive. These are patients who are experiencing or have experienced heart surgery, who share experiences and accordingly motivate each other to overcome fear and anxiety before surgery (Lamarche, Taddeo & Pepler, 1998).

# 9 Conclusion

Emotional support for patients before cardiac surgery is an important stage of the preoperative preparation. Patients have mentioned great importance of the preoperative preparation and included it in the component of treatment and recovery.

According to the results of this study, most of the patients received emotional support from the staff. However, a small part of the investigated patients mentioned that preoperative support was not sufficient. The preoperative support or education played a huge role before the operation and after it. Hence all the investigated patients included the preoperative education in emotional support. Therefore, the

patients considered that emotional support consists of preoperative education. According to their preoperative education expresses as a conversation with medical stuff or could be other information and support from the family, or their fellow suffers who had already faced the same medical problem.

Summarizing the findings, I conclude that the emotional support and information on a possible medical procedure play a major role in decreasing fear level, anxiety, and have a positive outcome on patients recovery. Moreover, I could say that all possible information in different ways as a conversation with medical stuff, and information on papers or peer-groups on the same problem is necessary. However, the main point that the given information should be dosed and should be given according to the psychological acceptance of a patient.

In conclusion, I could say that currently, the Health Care in Kazakhstan transforms from the Post Soviet type into the Western. The Health Care system highlighted such directions for developing as nursing, the emotional status of the patient, and the availability of a doctor. In my thesis, for the first time in Kazakhstan, I did the investigation on the outcome of the emotional support and showed the importance of the emotional support and available information in the treatment of a patient. Hence, the results of this study could be used to train cardiac nurses to develop their knowledge and skills concerning the emotional support of patients. Moreover, the results of my study could be a basis for developing a set of questions for the nurses to help them assess the individual emotional state of each patient. The results of my study could be a useful tool for the emotional support of patients for all nurses in all medical facilities Kazakhstan. Hence, the results of my study improve the nursing system of the Health Care of Kazakhstan and could be implemented in the medical facilities of Kazakhstan.

The next step of this thesis is to plan how to implement these results for nursing personnel working in similar units.

## References

Adams R. J. 2010. Improving health outcomes with better patient understanding and education. *Risk management and healthcare policy*, *3*, 61–72. doi:10.2147/RMHP.S7500

Alanazi, A. 2014. Reducing anxiety in preoperative patients: a systematic review. *British Journal of Nursing,* 23(7), 387-393.

AORN Guidance Statement: Perioperative Staffing. 2005. *AORN Journal*, 81(5), 1059–1066. doi:10.1016/s0001-2092(06)60474-2

Ascari, R.A., Neiss, M., Sartori, A.A., Silva O.M., Ascari T.M. & Galli KSB 2013. Perceptions of surgical patient during preoperative period concerning nursing care. *Journal of Nursing UFPE*, 7 (4), 1136-1144.

Acton, Q. 2013. Coronary Heart Disease: New Insights for the Health- care Professional. Scholarly Editions.

Ali, A., Altun, D., Oguz, B. H., Ilhan, M., Demircan, F., & Koltka, K. 2013. The effect of preoperative anxiety on postoperative analgesia and anesthesia recovery in patients undergoing laparascopic cholecystectomy*. Journal of Anesthesia, 28(2), 222–227.* doi:10.1007/s00540-013-1712-7

Brédart, A., Marrel, A., Abetz-Webb, L., Lasch, K., & Acquadro, C. 2014. Interviewing to develop Patient-Reported Outcome (PRO) measures for clinical research: eliciting patients' experience. *Health and quality of life outcomes*, 12(15) DOI:10.1186/1477-7525-12-15

Bulechek, G., Butcher, H. & Dochterman, J. 2008. Nursing interventions classification (5th ed.), Mosby Elsevier

Buribayeva, Z. K. 2008. Theoretical and methodological bases of nursing's development at the primary medico-sanitary care's level. *Medical science doctor's dissertation.* (in Russian)

Burgess, L., Arundel, J. & Wainwright, T. 2019. The Effect of Preoperative Education on Psychological, Clinical and Economic Outcomes in Elective Spinal Surgery: A Systematic Review. *Healthcare*, 7(1). doi:10.3390/healthcare7010048

Block, A.R., Gatchel, R.J., Deardroff, W.W. & Guyer, R.D. 2003. Chapter 9: Preparing for spine surgery: Cognitive behavioural interventions. In The Psychology of Spine Surgery; American Psychological Association: Washington, DC, USA,

Blumenthal, J.A., Lett, H.S., Babyak, M.A, White, W., Smith, P.K., Mark, D.B., Jones, R., Mathew, J.P., Newman, M.F. & N.O.R.G. Investigators. 2003. Depression as a risk factor for mortality after coronary artery bypass surgery. *Lancet,* 362, 604-609.

Callus, E., & Pravettoni, G. 2018. The Role of Clinical Psychology and Peer to Peer Support in the Management of Chronic Medical Conditions – A Practical Example With Adults With Congenital Heart Disease. *Frontiers in Psychology*, 9*.* doi:10.3389/fpsyg.2018.00731

Cserep, Z., Losoncz, E., Balog, P., Szili-Torok, T., Husz, A., Juhasz, B., Kertai, M.D., Gal, J. & Szekely, A. 2012. The impact of preoperative anxiety and education level on longterm mortality after cardiac surgery. *Journal of Cardiothoracic Surgery*, 7(86) doi:10.1186/1749-8090-7-86.

Donabedian, A. 2005. Evaluating the quality of medical care. 1966. *The Milbank quarterly*, *83*(4), 691–729. doi:10.1111/j.1468-0009.2005.00397.x

Dempsey, L., Dowling, M., Larkin, P., & Murphy, K. 2016. Sensitive Interviewing in Qualitative Research. *Research in Nursing & Health*, 39(6), 480–490. doi:10.1002/nur.21743

Ehrenreich, J. T., Fairholme, C. P., Buzzella, B. A., Ellard, K. K., & Barlow, D. H. 2007. The Role of Emotion in Psychological Therapy. *Clinical psychology : a publication of the Division of Clinical Psychology of the American Psychological Association*, *14*(4), 422–428. doi:10.1111/j.1468-2850.2007.00102.x

Ertürk, E. B., & Ünlü, H. 2018. Effects of pre-operative individualized education on anxiety and pain severity in patients following open-heart surgery. *International journal of health sciences*, 12(4), 26–34.

Elmir, R., Schmied, V., Jackson, D., & Wilkes, L. 2011. Interviewing people about potentially sensitive topics. *Nurse Researcher*, 19(1), 12–16.

Enosh, G. & Buchbinder, E. 2005. The interactive construction of narrative styles in sensitive interviews: The case of domestic violence research. *Qualitative Inquiry*, 11(4), 588–617. doi: 10.1177/ 1077800405275054

Finkelstein, BS., Singh, J., Silvers, JB., Neuhauser, D. & Rosenthal, GE. 1998. Patient and hospital characteristics associated with patient assessments of hospital obstetrical care. *Medical Care,* 36(8), 68–78

Frances, R., Coughlan, M. & Cronin, P. 2009. Interviewing in qualitative research. *International Journal of Therapy and Rehabilitation*, 16(6), 309-314. doi: 10.12968/ijtr.2009.16.6.42433.

Galina, G.F. 2017. Medical staff training system development in the Republic of Kazakhstan (90s). *Uchenye Zapiski Kazanskogo Universiteta. Seriya Gumanitarnye Nauki*, 159(4), 960–971. (In Russian) Retrieved 19.04.2019 https://cyberleninka.ru/article/n/formirovanie-sistemy-podgotovki-meditsinskih-kadrov-v-kazahstane-90-e-gody-xx-veka

Ha, J. F., & Longnecker, N. 2010. Doctor-patient communication: a review. *The Ochsner journal*, 10(1), 38–43.

Holloway, I., Wheeler, S. 2010.Qualitative Research in Nursing and Healthcare. Wiley-Blackwell publishing, 3th edition, Oxford, UK.

Hodge, S., Barr, W., Bowen, L., Leeven, M. & Knox, P. 2013. Exploring the role of an emotional support and counselling service for people with visual impairments. *British Journal of Visual Impairment*, 31 (1), 5-19.

Ivarsson, B., Larsson, S. & Sjoberg, T. 2004. Patients' experiences of support while waiting for cardiac surgery. A critical incident technique analysis. *European Journal of Cardiovascular Nursing,* 3, 183–191. doi:10.1016/j.ejcnurse.2004.03.001

Ivanchenko, N.N., Pavlova, A.A., Martykenova, D.S., Yusupova, N.S., Kassieva, B.S. 2014. The analysis of nursing reform in the Republic of Kazakhstan. *Vestnik KazNMU*, 2(4), 135-137 (in Russian) Retrieved 23.04.2019

https://cyberleninka.ru/article/v/analiz-reformirovaniya-sestrinskogo-dela-v-respublike-kazahstan

Khan, M. S., Islam, M. Y., Ahmed, M. U., Bawany, F. I., Khan, A., & Arshad, M. H. 2014. On pump coronary artery bypass graft surgery versus off pump coronary artery bypass graft surgery: a review. *Global journal of health science*, *6*(3), 186–193. doi:10.5539/gjhs.v6n3p186

King KB. 1985. Measurement of coping strategies, concerns, and emotional response in patients undergoing coronary artery bypass grafting. *Heart Lung*, 14, 579–86.

Kruzik, N. 2009. Benefits of preoperative education for adult elective surgery patients. *AORN Journal*, 90(3), 381-387.

Kulick, DL. 2016. Coronary Artery Bypass Graft Surgery (CABG) Medical review in MedicineNet.com Retrieved 12.06.2019

Lamarche, D., Taddeo, R. & Pepler, C. 1998. The preparation of patients for cardiac surgery. *Clinical Nursing Research*, 4, 390–405.

Leikkola, P., Helminen, M., Paavilainen, E., & Åstedt-Kurki, P. 2014. Staff Support for Back Surgical Patients and Family Members*. Orthopaedic Nursing,* 33(6), 352–358.doi:10.1097/nor.0000000000000099

Lee, JS., Park, YM., Ha, KY., Cho, SW., Bak, GH. & Kim, KW. 2015. Preoperative anxiety about spinal surgery under general anesthesia. *European Spine Journal*, 25(3), 698-707. doi: 10.1007/s00586-015-3788-2

Leegaard, M. & Fagermoen, MS. 2008. Patients' key experiences after coronary artery bypass grafting: a synthesis of qualitative studies. *Scandinavian Journal of Caring Sciences,* 22(4), 616–628.

Liamputtong, P. 2007. Researching the vulnerable: A guide to sensitive research methods. London: Sage Publications.

Lynne, M. C. 2016. Trustworthiness in Qualitative Research. *MEDSURG Nursing*, 25(6), 435-436.

Martin, C. G., & Turkelson, S. L. 2006. Nursing Care of the Patient Undergoing Coronary Artery Bypass Grafting. *The Journal of Cardiovascular Nursing*, 21(2), 109–117. doi:10.1097/00005082-200603000-00006

Mosby's Medical Dictionary, 9th edition. 2009. Elsevier. Retrieved 6.2.2019 https://medical- dictionary.thefreedictionary.com/emotional+support

McKinley, S., Fien, M., Riegel, B., Meischke, H., Aburuz, ME., Lennie, TA. & Moser, DK. 2012. Complications after acute coronary syndrome are reduced by perceived control of cardiac illness. *Journal of Advanced Nursing*, 68(10), 2320–2330.

Mojalli, M., Karimi Moonaghi, H., Khosravan, S., & Mohammadpure, A. 2014. Dealing with coronary artery disease in early encountering: a qualitative study. *International cardiovascular research journal*, 8(4), 166–170.

Mulugeta, H., Ayana, M., Sintayehu, M., Dessie, G., & Zewdu, T. 2018. Preoperative anxiety and associated factors among adult surgical patients in Debre Markos and Felege Hiwot referral hospitals, Northwest Ethiopia. *BMC anesthesiology*, *18*(1), 155. doi:10.1186/s12871-018-0619-0

O'Brien, L., Mckeough, C. & Abbasi, R. 2013. Pre-surgery education for elective cardiac surgery patients: A survey from the patient's perspective. *Australian Occupational Therapy Journal*, 60(6), 404-409.

Order of the Ministry of Health of Kazakhstan 29.09.2015 №761. Retrieved 20.04.2019 http://adilet.zan.kz/rus/docs/V1500012204 (in Russian)

Papanastassiou, I., Anderson, R., Barber, N., Conover, C. & Castellvi, A.E. 2011. Effects of preoperative education on spinal surgery patients. *SAS Journal*, 5, 120–124. doi: 10.1016/j.esas.2011.06.003

Pam, N. M.S. 2013. EMOTION in PsychologyDictionary.org. Retrieved 5.2.2019 https://psychologydictionary.org/emotional-support/

Ping, G. 2015. Preoperative education interventions to reduce anxiety and improve recovery among cardiac surgery patients: a review of randomised controlled trials. *Journal of Clinical Nursing*, 24, (1-2), 34-46.

Price, B. 2015. Understanding attitudes and their effects on nursing practice*. Nursing Standard,* 30(15), 50–60.doi:10.7748/ns.30.15.50.s51

Ravven, S., Bader, C., Azar, A., & Rudolph, J. L. 2013. Depressive symptoms after CABG surgery: a meta-analysis. *Harvard review of psychiatry*, *21*(2), 59–69. doi:10.1097/HRP.0b013e31828a3612

Rakoczy, M. 1977. The thoughts and feelings of patients in the waiting period to cardiac surgery: a descriptive study. *Heart Lung*, 6, 280–7.

Rief, W., Shedden-Mora, Meike C. J., Laferton, A. C., Auer, C., Petrie, K. J., Salzmann, S., Schedlowski, M. & Moosdorf, R. 2017. Preoperative optimization of patient expectations improves long-term outcome in heart surgery patients: results of the randomized controlled PSY-HEART trial. *BMC Medicine*, 15(4), 1-13.

Roger, V. L., Go, A. S., Lloyd-Jones, D. M., Adams, R. J., Berry, J. D., … Brown, T. M., Carnethon, M.R., Dai, S., de Simone, G., Ford, E.S., Fox, C.S., Fullerton, H.J., Gillespie, C., Greenlund, K.J., Hailpern, S.M., Heit, J.A., Ho, P.M., Howard, V.J., Kissela, B.M., Kittner, S.J., Lackland, D.T., Lichtman, J.H., Lisabeth, L.D., Makuc, D.M., Marcus, G.M., Marelli, A., Matchar, D.B., McDermott, M.M., Meigs, J.B., Moy, C.S., Mozaffarian, D., Mussolino, M.E., Nichol, G., Paynter, N.P., Rosamond, W.D., Sorlie, P.D., Stafford, R.S., Turan, T.N., Turner, M.B., Wong, N.D. & Wylie-Rosett, J. 2010. Heart Disease and Stroke Statistics-2011 Update: A Report From the American Heart Association. *Circulation*, 123(4), e18–e209. doi:10.1161/cir.0b013e3182009701

Rosiek, A., Kornatowski, T., Rosiek-Kryszewska, A., Leksowski, A. & Leksowski, K. 2016. Evaluation of Stress Intensity and Anxiety Level in Preoperative Period of Cardiac Patients. *BioMed Research International*, 2016 (4), 1-8, http://dx.doi.org/10.1155/2016/1248396.

Rubin, HR., Gandek, B., Rogers, WH., Kosinski, M., McHorney, CA. & Ware, JE. 1993. Patients' ratings of outpatient visits in different practice settings. *JAMA,* 270, 835–840

Rymaszewska, J., Kiejna, A. & Hadrý s, T. 2003. Depression and anxiety in coronary artery bypass grafting patients. *European Psychiatry*, 18(4), 155-160.

Ramesh, C., Nayak, S., Pai, V. B., Patil, N. T., George, A., George, L. S. & Devi, E. S. 2017. Effect of Preoperative Education on Postoperative Outcomes Among Patients Undergoing Cardiac Surgery: A Systematic Review and Meta-Analysis. *Journal of Perianesthesia Nursing*, 32 (6), p 518–529, doi:10.1016/j.jopan.2016.11.011.

Rasouli, M. R., Menendez, M. E. & Sayadipour, A. 2016. Direct cost and complications associated with total joint arthroplasty in patients with preoperative anxiety and depression. *Journal of Arthroplasty*, 31(2), 533-36.

Sari, M. I., Prabandari, Y. S., & Claramita, M. 2016. Physicians' professionalism at primary care facilities from patients' perspective: The importance of doctors' communication skills. *Journal of family medicine and primary care*, *5*(1), 56–60. doi:10.4103/2249-4863.184624

Spry, C. Essentials of Perioperative Nursing. 3rd ed. Jones & Bartlett Publishers. 2005.

Schoenfelder, T., Schaal, T., Klewer, J. & Kugler J. 2014. Patient satisfaction and willingness to return to the provider among women undergoing gynecological surgery. *Archives of Gynecology and Obstetric*, 290(4), 683-90. doi: 10.1007/s00404-014-3248-y.

Snowdon, D., Haines, T. & Skinner, E. 2014. Preoperative intervention reduces postoperative pulmonary complications but not length of stay in cardiac surgical patients: a systematic review. *Journal of Physiotherapy*, 60 (2), 66-77

Stenman, M., Holzmann, M.J. & Sartipy, U. 2016. Association between preoperative depression and long-term survivalfollowing coronary artery bypass surgery - a systematic review and meta-analysis. *International Journal of Cardiology,* 222, 462-466.

Saunders, B., Kitzinger, J., & Kitzinger, C. 2015. Anonymising interview data: challenges and compromise in practice. *Qualitative research : QR*, 15(5), 616–632. doi:10.1177/1468794114550439

Smith, J., Bekker, H. & Cheater, F. 2011. Theoretical versus pragmatic design in qualitative research. *Nurse Researcher*, 18(2), 39-51.

Suarez-Almazor, M. E. Patient-physician communication. 2004. *Current opinion in rheumatology*, 16(2), 91–95.

Skea, Z., Harry, V., Bhattacharya S., Entwistle, V., Williams, B., MacLennan, G. & Templeton, A. 2004. Women's perceptions of decision-making about hysterectomy. *BJOG*, 111(2), 133–142.

Taylor, A. W., Martin, G., Dal Grande, E., Swannell, S., Fullerton, S., Hazell, P., & Harrison, J. E. 2011. Methodological issues associated with collecting sensitive information over the telephone— Experience from an Australian non-suicidal self-injury (NSSI) prevalence study. *BMC Medical Research Methodology*. 11(20), 20. doi: 10.1186/1471-2288-11-20

Tully, P.J., Baker, R.A., & Knight, J.L. 2008. Anxiety and depression as risk factors for mortality after coronary artery bypass surgery. *Journal of Psychosomatic Research*, 64, 285-290.

Tully, P.J. & Baker, R.A. 2012. Depression, anxiety, and cardiac morbidity outcomes after coronary artery bypass surgery: a contemporary and practical review. *Journal of Geriatric Cardiology*, 9 (2), 197-208.

Tully, P.J., Cosh, S.M. & Baumeister, H. 2014. The anxious heart in whose mind? A systematic review and meta-regression of factors associated with anxiety disorder diagnosis, treatment and morbidity risk in coronary heart disease. *Journal of Psychosomatic Research*, 77(6), 439-448.

Woods, SL., Froelicher, ESS., Motzer SA. & Bridges EJ. 2010. Cardiac Nursing. Wolters Kluwer Health/Lippincott Williams & Wilkins.

World Medical Association. 2013. Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. *Journal of the American Medical Association*, 310 (20), 2191-2194.

World Health Organization. 2017. Cardiovascular diseases (CVDs). Retrieved 25.05.2019 https://www.who.int/en/news-room/fact-sheets/detail/cardiovascular-diseases-(cvds)

Westbrook, J., Duffield, C., Li, L. & Creswick, N. 2011. How much time do nurses have for patients? A longitudinal study quantifying hospital nurses' patterns of task time distribution and interactions with health professionals. *BMC Health Services Research*, 14(1), 319. doi: 10.1186/1472-6963-11-319.

Yardan, T., Genc, S., Baydin, A., Aydinkal, E., & Sunter, A. 2012. Determinants of Patient Satisfaction with an Emergency Department Observation Unit. *Hong Kong Journal of Emergency Medicine*, *19*(3), 151-161. https://doi.org/10.1177/102490791201900301

Yeh, J., & Nagel, E. E. 2010. Patient Satisfaction in Obstetrics and Gynecology: Individualized Patient-centered Communication. *Clinical Medicine Insights: Women's Health*, 3, CMWH.S5870. doi:10.4137/cmwh.s5870

# Appendices

Appendix 1. Table 1. Example of an analysis

| Code | Sub-category | Category | Main category |
|---|---|---|---|
| The positive experience of a relative who had heart surgery<br>The positive experience of another patient who had heart surgery | The positive experience from former heart-surgery patients and relatives | Positive attitude to the surgery | The patient felt satisfied with the preoperative preparation |
| Patient's experience of support from health professionals in the previous hospitalization in this hospital<br>The patient felt trust in health professionals from previous hospitalization experience | Patient's previous hospital experience was positive | | |
| The positive attitude of the patient before surgery<br>Positive feedback from the patient about preoperative preparation<br>Positive opinion about the care | The positive attitude of stuff | | |
| The patient felt trust because he heard good reviews about the hospital | Good feedback about the hospital from other people | | |
| The patient felt calm in the preoperative period<br>The patient felt reducing anxiety in the preoperative period<br>The patient had no fear of surgery | Patients felt peace of mind | Patients felt peace of mind | |
| The positive attitude of the | | | |

patient before surgery

| | |
|---|---|
| The patient's felt fear before surgery, but decrease after support | Negative emotions before surgery |
| The patient's felt anxiety before surgery, but decrease after support | |

Appendix 2. COVER LETTER FOR HOSPITAL

Zeinat Akhmejanova

Almaty

Baytursynov street 161

Z_ismailova@inbox.ru

Phone: +77771707172

Murat Kairbayev

Director, SEMA hospital

Nauryzbai batyr 31

Date: 15/10/2018

Dear Mr. Kairbayev,

My name is Zeinat Akhmejanova I am a master's student at the KazMUNO and JAMK University and I would like to permission to interview patients in SEMA hospital.

The purpose is to study the patients' experiences and expectations of emotional support provided by the health professionals while waiting for the cardiovascular operation in one private hospital in Kazakhstan.

Having conducted the study, it is possible to use the results for improving nursing counseling before surgery and expand nurses professional role in preoperative care in a private hospital.

Objective

To describe the experience of the emotional support provided by the health professionals of emotional support provided by the health professionals while waiting for the cardiovascular operation in one private hospital in Kazakhstan.

Research question

What kind of experiences patients have of emotional support provided by the health professionals while waiting for the cardiovascular in one private hospital in Kazakhstan.

Patients can be from cardiovascular department.

Number of participants -19 patients after cardiac surgery

The study is scheduled to start in autumn 2018

The duration of the interview is 3-4 months

The interview will be conducted in a separate chamber of the Department of cardiac surgery

All ethical standards will be observed. The interview will be confidentiality and anonymity, participation in the study will be voluntary.

My supervisors:
Hanna Hopia, PhD
Principal Lecturer in Nursing
JAMK University of Applied Sciences, Finland
Hanna.Hopia@jamk.fi
Tel:

Dinara Ospanova, as.professor, DmedSc, Ph.D.,
Head of Department of Public Health,
KazMUCE, Kazakhstan
dinara.ospanova@mail.ru
Tel: +7 701 7101549

Yours Sincerely,

Zeinat Akhmejanova.

Appendix 3. LETTER TO PARTICIPANTS

Dear Patient

My name is Zeinat Akhmejanova I am a master's student at the KazMUNO and JAMK University and am conducting a research project.

The purpose of this research is to study the patients' experiences of emotional support provided by the health professionals while waiting for the cardiovascular operation in one private hospital in Kazakhstan.The study aims to develop the use of the results for improving nursing counseling before surgery and expand nurses professional role in preoperative care in Kazakhstan.

I would kindly ask for your consent to participate in the individual interview for this study. Participation in the study is completely voluntary and refusal to participate does not affect the treatment you receive.

In the interview, I want to get information about your experiences and expectations regarding emotional support provided by healthcare professionals. The interview is held as an individual interview, which takes about an hour. Recorded the situation with the interview.

The study material collected from patient documents is classified by codes so that the information of a single patient is not visible at any time, and patients can not 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 the retention of research material and data protection legislation. According to the results of the research will be published master's thesis and articles in international scientific journals. The research material will be lost by deleting all records appropriately after the studies have been completed.

Sincerely,

Zeinat Akhmejanova, Researcher
e-mail: z_ismailova@inbox.ru
Tel: +7 777 1707172

My supervisors:
Hanna Hopia, PhD
Principal Lecturer in Nursing
JAMK University of Applied Sciences, Finland
Hanna.Hopia@jamk.fi
Tel:

Dinara Ospanova, as.professor, DmedSc, Ph.D.,
Head of Department of Public Health,
KazMUCE, Kazakhstan
dinara.ospanova@mail.ru

Appendix 4. INFORMED CONSENT FORM

I have been asked to give my consent to participate in the individual interview. The purpose of this research is to study the patients' experiences of emotional support provided by the health professionals while waiting for the cardiovascular operation in one private hospital in Kazakhstan. I have read the information about the research and I have been understood the purpose of the investigation. I have had the opportunity to ask additional questions related research and I have received a satisfactory answer to them. I understand that my participation in research is voluntary, and refusing to participate or withdrawing consent does not affect my treatment in health care.

By signing this consent letter, I will voluntarily provide my consent to the recording of my interview and for their use for research purposes.

Name:_____
Date of birth:_____
Address:_____
Date and Location:_____

Signature_____

Clarification of signature_____---