

Nursing Interventions for Breast Cancer Patients with Postoperative Anxiety

Literature review

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<p>The overall purpose of this thesis is to discover how nursing interventions on postoperative anxiety for breast cancer patients effect, especially to make nurses' roles clear during the process of helping these patients to reduce their anxiety. The research question for this study is: what kinds of interventions can nurses apply to help breast cancer patients relieve their postoperative anxiety?</p> <p>The interpersonal nursing theory by Hildegard E. Peplau is used as the research theoretical framework. This study is a literature review and the method of analysis is qualitative inductive content analysis. Based on the ten selected research articles, the common themes of them were found and summarized into categories and then divided into different subcategories.</p> <p>The study findings show that nurses can offer breast cancer patients both indirect and direct nursing interventions in order to reduce the postoperative anxiety. The indirect nursing interventions are: to encourage the patients to attend therapies, to improve the patients' physical and social care environments, to give constructive suggestions to the patients' partners or family members for their needs to support them. Furthermore, nurses should also be aware of that their self-emotion can indirectly influence the patients' anxiety. The direct nursing interventions are: to be a consultant by giving informational education, to be a counsellor by offering coping strategies for the anxiety, to be an emotional and psychological supporter by talking and listening to the patients. The thesis finally points out that the communication between nurses and patients is extremely important in order to successfully apply these nursing interventions.</p>	
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<p>Det övergripande syftet av denna avhandling är att visa om hur omvårdningsingripande mot postoperativ ångest för bröstcancerpatienter fungerar, särskilt om att tydliggöra sjuksköterskeroll i denna process. Avhandlings frågeställningen är: vilka omvårdningsingripande kan tillämpas för att hjälpa bröstcancerpatienter lindra deras postoperative ångest?</p> <p>Det ”interpersonal nursing theory” av Hildegard E. Peplau används som ett teoretiskt ramverk. Denna studie är en litteraturstudie och analysmetoden är kvalitativ induktiv innehållsanalys. Baserat på tio utvalda vetenskapliga artiklarna, har de gemensamma temana funnits och sammanfattas i kategorier och olika underkategorier.</p> <p>Studiens resultat framgår att sjuksköterskor kan erbjuda bröstcancerpatienter båda indirekt och direkt omvårdningsingripande för att lindra deras postoperativa ångest. De indirekta omvårdningsingripande är: att uppmuntra patienter att delta terapier, att förbättra patienters fysiska och sociala omsorgsomgivning/vårdmiljö, att ge konstruktiva förslag till patienters partner eller närstående i fråga om behov av att stödja dem. Ytterligare ska sjuksköterskor vara medvetna om att sina egna känslomässiga stämningar kan indirekt påverka patienters ångest. De direkta omvårdningsingripande är: att spela som en informator genom att upplysa kunskap, att fungera som en rådgivare genom att erbjuda ångesthanterings strategier, att reagera som stödjande person genom att förklara och lyssna på patienters bekymmer. Avslutningsvis poängterar avhandlingen att kommunikationen mellan sjuksköterskor och patienter är oerhört viktig för att lyckas med tillämpande av dessa omvårdningsingripande.</p>	
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FOREWORD

I would like first to thank Arcada University of Applied Sciences for offering me the opportunity to accomplish my Bachelor degree in nursing, and to thank the oncologic polyclinic at Åland's Central Hospital for commissioning this thesis project. The university provides a humanized learning atmosphere and a well-designed curriculum of the program that allowed me to gain a systematic understanding of nursing. Arcada offered me as well opportunity for the Nordplus exchange program that helped me gain more learning experience. The Åland's Central Hospital gives me chances to both practice and improve my Swedish language as well as nursing knowledge while I worked there, especially my passion on oncological nursing was enhanced when I practiced there.

I would like then to acknowledge excellent teachers at Arcada. It would not have been successful to complete this thesis without the efforts from my supervisor, Pamela Gray. Especially, because of her professional supervision, advice, understanding and patience, I did improve the quality of my thesis. She also gave me enough time to work on this thesis, and understood my study schedule while I was studying as an exchange student outside of Arcada. I would also like to thank my reviewer also as my tutor teacher, Denise Villikka, and all my lovely classmates in nursing 12. They always made me feel at home.

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1 INTRODUCTION

The amount of clients diagnosed with breast cancer has increased globally. These breast cancer patients experience long-term suffering from different treatments, which includes the physical, psychological and social negative treatment-related complications on patients. These sufferings are partly manifested as anxiety. I have met these patients on different wards during my practical training internships and summer jobs. The patients usually display feelings of hopelessness when they are diagnosed with breast. Later on they also show fear before/after the operation, which can also cause related anxiety, such as stress.

What can nurses do to help breast cancer patients relieve their anxiety after a breast removal operation? With this question as my motivation, I conduct my degree thesis in nursing. I begin my study, in the background part, by introducing important information about breast cancer and related complications after the breast cancer operation. I chose a theoretical framework by Hildegard E. Peplau: the interpersonal nursing theory. The research articles have been collected from the databases EBSCO (Academic Search Elite and CINAHL), PubMed, Google Scholar and manual search. These articles describe different types of interventions in nursing on helping and supporting patients to relieve their postoperative anxiety. Further on, I analyzed research articles which are more related to nursing interventions. A qualitative inductive content analysis of research articles is made in the study. The results which are based on summarizing of presented nursing interventions in the chosen articles, are showed in different categorizes. The discussion on nursing interventions is completed by comparing the study findings with the chosen theoretical framework. As the conclusion of my study, I make some recommendations on how the nurse can help the patients relieve their anxiety after a breast cancer operation.

This study is commissioned by the oncologic polyclinic at Åland's Central Hospital. A short synopsis of the study can be found in appendix 2. Through the study, I would furthermore like to take advantages of the study results as a guideline for my future career.

2 BACKGROUND

2.1 Breast cancer

It is stated that the most common cancer in women worldwide is breast cancer. During the last few years, it has been increasing rapidly. The disease itself, the treatments and treatment-related complications can lead to severe psychological disorders for patients, such as anxiety (Lee et al., 2011).

According to previous studies on the prevalence of breast cancer, it has been showed that breast cancer is the second most common cause of death from cancer in women in the United States, after lung cancer. Currently, “more than 2.8 million women in the United States have been diagnosed with and treated for breast cancer” (ASCO, 2014). In 2014, there were about 232,670 women in the United States who were estimated to be diagnosed with invasive breast cancer, and about 62,570 women would be diagnosed with “in-situ” breast cancer. Meanwhile about 2,360 men in the United States were estimated to have breast cancer diagnoses. It was also predicted that 40,430 people (40,000 women, 430 men) would die from breast cancer, 2014 (ASCO, 2014). In Finland, the most common cancer deaths among females are breast cancer, even before lung cancer. Based on the statistics, in 2011, there were 30 000 patients who were new diagnosed as cancer patients in Finland, while nearly 4900 women were diagnosed by breast cancer (Finnish Cancer Registry, 2010).

In the Swedish Mesh medical dictionary, breast cancer is defined as tumours or cancer in the human breast (Swedish Mesh, 2015). The cancer itself can grow and change into different phases. It initially begins when normal cells change and grow uncontrollably. A tumour can be malignant or benign. A cancerous/malignant tumour can spread to other parts of the body, while a benign tumour will not spread. It is common for the tumours to spread through the regional lymph nodes, and it is also possible that the tumour spreads through the blood vessels and/or lymph vessels. The regional lymph nodes can be found under the arm, in the neck, under the chest bone, or just above the collarbone. Even worse, the tumour can spread to the bones, lungs, and liver as well to

the brain. Types of breast cancer vary depending on whether the tumour has spread outside of the duct/lobule. When the tumour has already spread outside of the duct into tissues nearby, it is called invasive breast cancer. While, if the breast cancer is located only in the duct or lobule, it would be named as “in-situ” breast cancer, meaning “in place”. Because of the developing of medical science and technologies, it has been possible to treat the cancer by using surgery or other treatments. However the truth is that the cancer may recur after the treatment either locally in the breast, skin or other tissues of the chest. Additionally it may occur in other places throughout the body (ASCO, 2014).

Because of the various types of breast cancer, the cancer treatments are also different. The biology and behaviours of breast cancer tumours decide eventually the cancer treatment. “Some tumours are small but grow fast, while others are large and grow slowly” (ASCO, 2014). The primary treatment consists of surgeries, and is sometimes combined with adjuvant postoperative radiotherapy, chemotherapy, endocrine therapy or a combination of these treatments (Pålsson, 1995 p.9). In general if the tumour is small and at the initial stage, the patient can have more surgical options. The primary surgery includes lumpectomy and mastectomy two types. A lumpectomy is “the removal of the tumour and a small, cancer-free margin of normal tissue around the tumour” (ASCO, 2014). This method can save most of the breast so, it can also be called breast-conserving surgery, a partial mastectomy, quadrantectomy, or a segmental mastectomy. After the lumpectomy surgery, radiation therapy is highly recommended for patients with invasive breast cancer, in order to save the rest of the breast tissue. While a mastectomy is the removal of the entire breast. There are several types of mastectomies. One of them is called skin-sparing mastectomy which means skin is preserved. Another one is named a total skin-sparing mastectomy which means the skin and the nipples are preserved (ASCO, 2014).

After mastectomy or lumpectomy surgeries, the patients can experience both long-term and short-term complications. Short-term period means several days after the surgery, while long term complications can last for several months and up to years. Those complications can be seen through medical, physical, psychological and even psychosocial

perspectives. From a medical perspective, patients usually suffer from long-term complications, such as breathlessness, dry cough, chest pain, and risk for heart problem which is related with certain types of chemotherapy. From a physical perspective, patients can be affected by especially the short-term complications of a lumpectomy. For example the shape and/or size of the breast is changed, the area around the surgical site may become hardened, and the patients may have lymphoedema (ASCO, 2014). It is also stated that the patients can have long-term lymphoedema problems, and skin erythema (redness) after taking radiation therapy (Pålsson, 1995 p.9). From a psychological perspective, Pålsson (1995 p.9) explained that the patients can become afraid of cancer recurrence, have strong grief because of the truth of loss of the breast. They have consequently difficulties with their female identity, even more serious they can flounder in the acceptance of their new body configuration resulting in sexual dysfunction. From a psychosocial perspective, patients can have problems with their social life because of the changed body image and/or they are forced to wear prosthesis. As a result, relationships with their husband or partners can be worsen, and fears and/or anxiety can appear later in their social life (Pålsson, 1995 p.105; Arman, 2003 p.196).

2.2 Anxiety and breast cancer related anxiety

2.2.1 Anxiety

“Anxiety is an unpleasant and uncomfortable experience that most people try to avoid” (Stuart & Laraia, 2005 p.263). Anxiety is hardly seen as the simple feeling of anxious but also presented as other tolerable feelings. It is a combination of various negative emotions, such as “feeling of anger, boredom, contempt, depression, irritation, worthlessness, jealousy, self-depreciation, suspicion, sadness, or helplessness” (Stuart & Laraia, 2005 p.263).

Anxiety can be provoked by the unknown new life experiences such as encountering a sudden death or undergoing a serious disease. It can also occur when a person’s selfhood, self-esteem, or identity is threatened. The threat may be triggered when some cen-

tral elements in the person's personality or some essential components to the existence and security are in danger. It can be connected with "the fear of punishment, disapproval, withdrawal of love, disruption of a relationship, isolation, or loss of body function" (Stuart & Laraia, 2005 p.261).

Anxiety can be transferred interpersonally. For example, in a nurse-patient relationship, if a nurse is encountering a patient who is anxious, the nurse can also experience the felling of anxiety after few minutes. Similarly, if a nurse who is extremely anxious meets a patient, the anxiety will be communicated to the patient directly (Stuart & Laraia, 2005 p.260).

It is described that anxiety can appear in different levels, such as mild, moderate, severe, and panic levels. The increasing level of anxiety can lead to the narrowing of the person's focus of attention, and vice versa. However when the level of anxiety has become so high that the person cannot anymore manage the feeling, the person may lose attention on the ongoing process and cannot handle the whole situation (Forchuk, 1993 p.18). In some serious cases, the person's normal life may be affected negatively and his/her life will fall into a chaos. This can be explained by the effects of anxiety on the person from three aspects (see Table 1) (Stuart & Laraia, 2005 p.263).

Table 1 The effects of anxiety on the person (Stuart & Laraia, 2005 p.263)

Behavioural	Cognitive	Affective
*restlessness	*impaired attention	*impatience
*physical tension	*poor concentration	*tension
*tremors	*forgetfulness	*nervousness
*startle/sudden reaction	*errors in judgment	*fear
*hypervigilance	*blocking of thoughts	*frustration
*rapid speech	*decreased perceptual field	*helplessness
*lack of coordination	*reduced creativity	*alarm
*inhibition	*confusion	*jumpiness
	*self-consciousness	*numbing
	*fear of losing control	*guilt
	*fear of injury or death	*shame
	*nightmares	*helplessness

2.2.2 Anxiety for breast cancer patients

When patients are informed of a diagnosis of breast cancer, they seem to be forced to start a new life with unknown challenges. Patients usually show their feelings of shock in the form of a threat resulting in anxiety, which can affect their normal life, psychological well-being, self-image, female identity, social functioning and emotional stability. Moreover it can provoke existential questions for the patient in the initial phase of the disease (Pålsson, 1995 p.9). What's more, breast cancer often challenges patients with experiences of suffering. Physical suffering initiates with the breast cancer disease, and then is affected by the treatments of the cancer (Arman, 2003 p.1). For instance, according to Pålsson (1995 p.10), the cancer diagnosis itself was considered as the greatest postoperative concern for women who underwent lumpectomy and primary radiation. Besides that, fear that the cancer had already spread, and fear of dying were also identified as the concerns among women after the surgery. Psychological suffering means that patients suffer from anxiety and/or depression because of the strong fear of death. Social suffering means that patients experience the feelings of isolation, which are caused by tiredness and the fear of infection at any phase of the disease (Arman, 2003, p.18).

When it comes to the phase of recovering from breast cancer surgeries, patients may suffer from postoperative anxiety. It indicates that the patients may have fears of the disease recurrence, fears of death, or loneliness caused by the patients' changed social networks (Arman, 2003). Previous studies show that the prevalence of suffering from postoperative anxiety for breast cancer patients is high. A Swedish study showed that 17/58 of the women had increased anxiety and/or mood impairment five years after the primary treatment. In the study each breast cancer patient's postoperative psychological condition was compared to the condition before surgery. Similar findings were reported in an American study, where one third of the total 41 women complained about moderate to severe distress 18 months after breast cancer surgery. What's more, in England a study illustrated that 68 breast cancer patients out of 248 were assessed with anxiety 12 months postoperatively (Pålsson, 1995).

Anxiety is usually presented in combination of emotions, it is challenging for nurses to identify the anxiety and assess level of anxiety. It is more difficult when it comes to such a situation like during the postoperative phase for breast cancer patients. The patients who frequently suffer from postoperative anxiety have higher expectations of their professional care, thus nurses need to apply certain types of nursing interventions to support the patients (Freysteinson et al., 2012).

2.3 Nursing interventions for anxiety

Nursing interventions vary according to different levels of anxiety: severe and panic levels of anxiety, moderate level of anxiety. For severe and panic levels of anxiety, it is fundamental to establish an open, trusting relationship between nurses and patients. Nurses should then "be a good listener and encourage the patients to discuss their feelings of anxiety, hostility, guilt and frustration" (Stuart & Laraia, 2005 p.275). Nurses should also answer patients' questions directly with appropriate communication skills. Once a stable relationship has been built between the nurses and patients, it is extremely important for nurses to be aware of their own anxiety. The anxiety, fear and frustrations from nurses can be further transferred to patients, which can affect the nurse-patient

relationship (Stuart & Laraia, 2005 p.275). Within the relationship nurses should protect patients' safety and rights on self-decision making. Patients can determine the amount of stress that they can handle at the time, nurses can then give them help based on their needs. If the patients do not have abilities to cope with the severe level of anxiety, the nurses should not force the patients to face the current situation (Stuart & Laraia, 2005 p.276). In addition, nurses should cooperate with others to modify the care environment around patients, and to reduce certain stimulations for anxiety. The nurses should then encourage the patient's toward activities, which is a good way for the patients to release tension. It can also help the patients switch the attention to other things and eventually reduce the anxiety (Stuart & Laraia, 2005 p.277).

For moderate level of anxiety, nurses can help patients by teaching them how to cope with the anxiety via using problem-solving methods. To help patients understand the causes of the anxiety and learn new ways of controlling the anxiety are the key points in the followed nursing interventions. Firstly, nurses can provide nursing education to patients by identifying the patients' teaching needs and then helping them to meet the needs with individual plans. The core aim in each plan is that nurses should increase patients' knowledge about their own stressors and coping resources. Patients should also "be told that anxiety disorders can be successfully treated by a variety of evidence-based treatments" (Stuart & Laraia, 2005 p.278). Secondly nurses can help patients recognize anxiety by helping them explore underlying feelings with such questions as "are you feeling anxious now?" or "are you uncomfortable?" (Stuart & Laraia, 2005 p.278). Thirdly nurses can help patients gain insight into the anxiety by asking the patient to describe the situations and interactions that can immediately trigger the anxiety. The nurses and patients can together analyse the causes of anxiety and then summarize the previous effective ways on relieving the anxiety (Stuart & Laraia, 2005 p.279). Lastly nurses can help patients promote their relaxation responses and enhance their independence on practicing exercises. For example, the nurses can supervise the patients several times through deep muscle relaxation and through tension-relaxation exercise, which can cultivate their abilities to perform the exercise by themselves (Stuart & Laraia, 2005 p.281).

3 THEORETICAL FRAMEWORK

In this study, the interpersonal nursing theory by Hildegard E. Peplau (1991) is used as the theoretical framework. The theory consists of the interpersonal process and intrapersonal process in nursing. While the focus of the theory is the interpersonal process and therapeutic relationship (Forchuk, 1993 p.7). It is stated that the therapeutic nurse-client relationship plays an important role in nursing, and it develops between the nurse and the client through time. The theory highlights one of the important principles in nursing, which is to “doing with” the clients instead of “doing to” (Forchuk, 1993 p.41).

3.1 Interpersonal process

According to Forchuk (1993 p.7), the nurse-client relationship, communication, pattern integration, and the roles of the nurse are described in the interpersonal process in Peplau’s theory.

The nurse-client relationship is the first aspect of this theory and includes orientation, working and resolution phases.

- 1) The initial phase, orientation phase, is the period where the nurse and client meet each other for the first time as strangers, and then start to consider each other as a unique individual, meanwhile the client begins to trust the nurse. Depends on the client’s physical and social conditions, it may take up to months to establish the relationship. But it is essential for the nurse to start to assess the patient’s health condition during their first meeting (Peplau, 1991).
- 2) The second phase, working phase, consists of the identification and the exploitation phases. In the identification phase, the client is supported by nurses to identify problems and to gain feelings of belongings. Enhancing a patient's confidence on solving problems can help the patient decrease the feeling of helplessness and hopelessness (Peplau, 1991). During this phase, a nursing care plan based on the patient’s situation and goals can be formulated (Nursing theories, 2013).

During the exploitation phase, the patient takes advantages of the professional assistance to solve earlier identified problems. The nurse does not solve the problems on the client's behalf, but rather support the client with available resources to solve problems independently. The initial problems may be worked through in this phase, and some new concerns may be noticed for further processing (Peplau, 1991).

- 3) The final phase, the resolution phase. It is the termination of the nurse-patient relationship because the patient's needs have been fulfilled through the cooperation between the nurse and patient. Any ties between them must be dissolved in the end. But if the patient has become psychologically dependent on the nurse, it can be difficult for both patient and nurse to terminate the therapeutic relationship. This phase is also regarded as the evaluation period of the nurse-client relationship. Both the patient and the nurse can reflect on the whole process by reviewing the initial goals and the working results (Nursing theories, 2013).

Communication is the next aspect of this theory and includes both verbal and non-verbal communication. According to Forchuk (1993), the verbal communication is an essential component of the nurse-client relationship. "By talking with patient about their issues and concerns, the nurse can offer the patient an alternative to express worries and examine possible solutions" (Forchuk, 1993 p.11). While communicating with the patient, the nurse should try to first explore, understand, and then adequately deal with the underlying problems with help of interview techniques. The nurse should avoid deciding everything for the patient, instead he/she should keep the patient's autonomy in decision making even it is unstable (Peplau, 1991).

When it comes to nonverbal communication, it can be understood differently in various cultures or social backgrounds. The nurse therefore needs to pay attentions to the issues aroused by deviated interpretations of nonverbal communication when encountering a patient with a different cultural background. The nurse also needs to be aware of his/her own personal and cultural nonverbal patterns that may affect the developing of nurse-client relationship. Through self-reflection and clinical supervision, the nurse can gradually adapt his/her cultural behaviours to the patient (Forchuk, 1993 p.13).

The third aspect of Peplaus' theory deals with the different roles of a nurse. The nurse has mainly six roles which are mentioned in Hildegard E. Peplau's theory. The nurse can act as a stranger, teacher, resource person, counsellor, surrogate, and leader to the patient (Peplau, 1991). When the nurse and patient meet for the first time, they are like strangers to each other. The nurse has no preunderstandings on patient's interests or concerns. But the nurse should in principle treat the patient as he is, and the nurse should create a safe environment that can ease to build the trust between them. Once a trustful nurse-patient relationship has been built, the nurse can act as a teacher and tries to educate the patient to understand the ongoing procedure. Meanwhile the nurse can gain professional knowledge and understandings on the patient through teaching experiences. The nurse also, as a recourse person, gives specific information about the given treatment and related complications to help the patient relieve his/her negative feelings. The nurse can send the knowledge to the patient in connection with the needs or interests of the patient. furthermore, the nurse can be a counsellor for the patient, in a way to help the patient understand and integrate the meaning of current life situations, as well as help him/her make life changes by providing guidance and encouraging. In addition, like an advocate, the nurse can help the patient explain and distinguish from the meanings of dependence, interdependence and independence (Forchuk, 1993).

What's more, the roles of a nurse include leader, technical expert, consultant, tutor, socializing and safety agent, environment manager, record observer, and researcher, in order to take responsibility for helping the patient meet his/her caring goals (Nursing theories, 2013).

3.2 Intrapersonal process

Not only is the nurses' role important when caring for patients but also intrapersonal process. The intrapersonal process occurs within the person instead of between two persons. The intrapersonal process and the interpersonal process can be connected with each other through that "intrapersonal structures, processes, and changes develop through interpersonal activity" (Forchuk, 1993 p.16). The main intrapersonal concepts in Peplau's theory are anxiety, learning, thinking and competencies. Since the concept

of anxiety has already been mentioned in the background, the concepts of learning, thinking and competencies are going to be described briefly below.

First there is the learning process. The learning process consists of eight phases: observing, describing, analyzing, formulating, validating, testing and integrating as well as utilizing. "Each stage is considered a competence, which indicates that while one is following the learning process, his/her competencies are increasing" (Forchuk, 1993 p.19). What's more, the nurse needs to decide the patient's current stage, so that appropriate comments can be given in order to assist the client go further into the next stage of the process (Forchuk, 1993 p.19).

Thinking is the next stage. It is stated that "thinking is an internal cognitive process. The thoughts of another person can only be interpreted through observation of language and behavior" (Forchuk, 1993 p.19).

Developed thinking process for both nurse and client may make efforts on the developing of nurse-client relationship. The process consists of two phases, preconceptions and self-understanding. Preconceptions is the first impression made by both the nurse and client during their first meeting. "It can be formed through stereotyping, gossip, or past experiences which can be applied in the new situation" (Forchuk, 1993 p.20).

"Self-understanding is considered to be a critical attribute of the nurse" (Forchuk, 1993 p.20). Through self-understanding, the nurse can make reflections on his/her own problems and behaviors which can influence the nurse-client relationship. After the therapeutic interaction with the client, the nurse's and client's self-understanding will be enhanced. However in the nurse-client therapeutic relationship, it is more important for the patient to receive professional supports and solve problems instead of improving the self-understanding.

Next is competency development. "Competencies are skills that have evolved through practice. The nurse-client relationship provides a venue for the development of capacities into competencies" (Forchuk, 1993 p.21). Compared to clients' competencies in the nurse-client relationship, it seems easier for the nurse to develop his/her competencies than the client. The nurse can simply improve his/her competences via practices on performing a single nursing skill, such as administering medications. The client's compe-

tencies can also be developed, but it seems not the main goal for the patient in the therapeutic relationship (Forchuk, 1993 p.21).

3.3 Justification for the chosen theoretical framework

According to Peplau's theory (1991) of interpersonal relations, it is indicated that the core of nursing is to help patients identify their felt difficulties, and "the responsibility of nursing is to apply principles of human relations to the problems that arise during any phases of experiences" (Nursing Theories, 2013). When it comes to the postoperative anxiety for breast cancer patient, it is natural to consider the anxiety as an obstacle in the patient's life. Nurses, therefore, have the responsibilities to help the patient explain and face the current problem, instead of hiding it. It is also stated that "nursing care is a therapeutic process which acts as a healing art, and can support an individual who is sick or in need of health care" (Nursing Theories, 2013). Helping the breast cancer patient alleviate her anxiety is an important aspect for patients' quality of life and the quality of nursing care. Through the cooperation and interaction between the patient and the nurse, both of them become mature and knowledgeable in understanding the anxiety. The nurse can play different roles in the process of reducing the postoperative anxiety for the patient. The nurse can guide, educate, and influence the patient by certain nursing interventions. In the end of the interpersonal process, they can achieve a common goal to reduce the anxiety for the patient. It is said in Peplau's theory (1991) that "nursing is an interpersonal process because its interaction between two or more individuals is built on a common goal" (Nursing Theories, 2013).

4 RESEARCH AIM AND QUESTION

Aim:

The aims of this study are to reflect on the nurses' roles in taking care of breast cancer patients who suffer from postoperative anxiety, and to examine the types of nursing interventions which could relieve the postoperative anxiety for breast cancer patients.

Research question:

What kinds of interventions can nurses apply to help breast cancer patients relieve their postoperative anxiety?

5 METHODOLOGY

In a qualitative research, methodology brings about the information of collected data and data analysis methods and processes (Taylor & Francis, 2013). In this section, the method and process on both how the data were collected and analysed are presented. It includes also brief descriptions of the selected articles for the study (see Appendix 1).

5.1 Literature Review

In this study, a literature review is made with the support of an inductive content analysis of collected data with 10 scientific articles. A literature review covers not only a brief summary of each scientific article, but also a critical analysis of the relationships among different studies on a specific topic or area. Literature review is a method used to analyse previous research articles that are selected according to certain criteria. The form of the literature review can be such as a thesis that provides a foundation for a research study. The aim of the literature review is to catch a full overview of previous researches on the study filed, which can then aid future research activities. By reconsidering the strengths and weaknesses of the previous studies, the researcher can get new ideas on the same study area. In addition, the researcher may gain new knowledge through the literature review study (Mongan-Rallis, 2014).

5.2 Data collection

The study related articles were collected from the databases EBSCO (Academic Search Elite and CINAHL), PubMed and Google Scholar. One research article was collected by using the 'snowball sampling' manual search method. The searching words used in data collection are: breast cancer, nursing, nursing interventions, nursing roles, anxiety, mastectomy, after mastectomy. Then these key words are made into combinations in order to gather as much related data as possible. Final research articles were selected from total 78 results (after limitations) on the databases and Google scholar with the help

from Arcada's Nelli Portal. More detailed information about data collecting process can be found in appendix 1.

The combination of search words were,

- 1, Mastectomy AND anxiety AND nursing interventions (Academic Search Elite, EBSCO)
- 2, Mastectomy AND anxiety AND nursing (Academic Search Elite, EBSCO)
- 3, Breast cancer AND anxiety AND nursing roles (CINAHL, EBSCO)
- 4, after mastectomy AND anxiety AND nursing (Google Scholar)
- 5, Breast cancer AND nursing interventions (Academic Search Elite, EBSCO)
- 6, Reduced anxiety AND radical mastectomy AND nursing interventions (Google Scholar)
- 7, Nursing education AND breast cancer patients with postoperative anxiety (PubMed)

Table 2 below illustrates the criteria for choosing relevant articles. Moreover, in order to limit the ranges and focus the study results, the collected articles were mostly targeted to the group of breast cancer patients who underwent mastectomy surgery.

Table 2 Inclusion and exclusion criteria

Inclusion	Exclusion
Only full text articles Year range: 2004-2015 Scientific articles from academic databases Source type: academic journals	Articles with only abstracts Articles from websites, books or e-books Source type: magazines, dissertations

In appendix 1, there can be found a listing of the 10 articles that were chosen for this study. Included is the research purpose, method, and main findings from each article. This is considered in order to simplify the process of data analysis in this study.

5.3 Data analysis

In this study, the qualitative inductive content analysis is used to analyze collected data. According to Hsieh (2005), content analysis is one of the most common used qualitative research methods for analyzing text data. It can be used to analyze either qualitative or quantitative data, either in an inductive or a deductive approach. Basically it is the process of organizing and combining collected data guided by the chosen themes and concepts (Polit & Beck, 2013). It also allows the researcher to test the hypotheses with specific data. The purpose of content analysis is to “provide knowledge, new understandings, a reconstruction of facts and a practical guide to future clinical studies” (Hsieh, 2005).

Choosing the analysis approach depends on the purpose of the study. The inductive approach is suitable when there is no enough knowledge related to the study area. The categories are summarized from collected data. To analyze data in an inductive way means to conduct the process moving from specific observations to theories in a wider field. It begins with selecting some common themes from all the collected data, and then finding out related categories, formulating some hypotheses which can be tested later, and in the end making certain conclusions or theories (Elo & Kyngäs, 2008).

Generally, three main phases can be followed as a guideline while analyzing the data, they are preparation, organizing and reporting phases. There are actually no systematic rules for analyzing data. “The core feature of all content analysis is that many words of the text are classified into much smaller content categories” (Elo & Kyngäs, 2008).

In the preparation phase, it is fundamental to choose the unit of analysis which can be a word or a theme. It is also important to decide the target of analysis, the circumstance when analyzing the data before selecting the unit of analysis. What’s more, before starting the analysis, it is necessary to decide on which level the data would be analyzed, in a manifest content level or a latent content level. “The latent contents’ aim is to find out the deeper or hidden meaning of a sentence, it requires more self-reflection on the article or certain sentences. While the manifest content is the direct reflection in an object” (Polit & Beck, 2013 p.35). If the content involves text, the manifest content consists of the actual words and their original ideas. If the content has images, analysis should be

based on the observable features, such as shapes, colours or styles of images (Polit & Beck, 2013). After choosing the analysis level, the researcher needs to become familiar with the collected data, which could be done by reading articles with these questions: “who is telling? Where is this happening? When did it happen? What is happening? Why?” (Elo & Kyngäs, 2008). The organizing phase, in inductive content analysis, means the collected data is organized with categories and abstraction. For example, the collected articles are read through many times in advance, and the main useful information from each article is noted and then grouped into different categories. The reporting phase is aimed to report the study findings (Elo & Kyngäs, 2008).

As earlier mentioned, the collected data is analyzed in an inductive way. After reading through each article, the author found that indirect nursing interventions are mainly described in several articles, while direct nursing interventions are focused in the rest of the articles. Therefore the articles are firstly sorted into two types, articles about indirect nursing interventions and articles about direct nursing interventions. These two categories are then considered as the common themes of the collected data. After that, sub-categories are selected and summarized from each article, based on various nursing interventions/nursing roles on reducing postoperative anxiety for breast cancer patients (see Table 3 in the result chapter).

5.4 Ethical considerations

In this study, a literature review was conducted so that the research did not harm anyone. In addition, the author followed the ethical principles and attempted to use critical thought while collecting and analyzing the data. According to Arcada’s thesis writing guidelines, the right form of references were made in order to avoid plagiarism and to respect the collected data. Since this study is commissioned by the oncologic polyclinic at Ålands’ Central Hospital, a consent form was filled in order to get the commissioned party’ permission.

Addressing ethical issues is necessary when research involves human beings or animals. In nursing research, “ethical concerns are especially obvious because of the occasional

unclearness between the expectation of nursing practice and the data collection methods” (Polit & Beck, 2013). It is stated that there are three fundamental ethical principles for human research: beneficence, respect for human dignity, and justice. Firstly, beneficence means minimizing harm and maximizing benefits of research data. In human research, it is necessary to produce benefits for participants, and other individuals or society as a whole. Participants involved in the research should not be placed at a disadvantage. The participations and information provided by the participants should not be used against them. Secondly, “the researcher should respect participants’ dignity, which means both the right to self-determination and the right to full disclosure” (Polit & Beck, 2013). The participants have the right to decide by themselves whether to take part in the research process or not, the right to ask questions, to refuse the given information and to withdraw from the research. Thirdly, participants have right to ask for equal treatment and respect, which are emphasized under the ethical principle statutes. The researcher should distribute equally benefits and loads of research to the participants. The selection of participants should be fair enough, which is based on the research requirements not on individuals’ vulnerabilities. What’s more, participants who are willing to withdraw from the study should be fairly accepted without any prejudices. It is also important to maintain and respect participants’ privacy during the study. Participants have the rights to require the confidentiality on the information they provided (Polit & Beck, 2013).

6 RESULTS

In this section, the research results are presented to answer the research question (what kinds of interventions can nurses apply to help breast cancer patients relieve their post-operative anxiety?). Two main categories are defined, which makes this section more structural and easy to follow. Under the main categories, several sub-categories are divided (see Table 3), with the intention of better presenting and interpreting the findings.

Table 3 Data categorization

Category	Sub Category
Indirect nursing interventions	1 Encouraging patients to attend therapies 2 Improving the care environment 3 Supporting patient's partner/family members 4 Nurses' self-awareness
Direct nursing interventions	1 Informational consultant 2 Counsellor 3 Emotional and psychological support
Communication	Communication competence

6.1 Indirect nursing interventions

Based on the research articles, the possible nursing interventions on postoperative anxiety for breast cancer patients consists of two main types. They are direct nursing care during nurse-patient interactions, and indirect nursing interventions. Indirect nursing interventions mean that nurses could intervene other factors in patient's circumstances, such as postoperative therapies, care environment and patient's relations with others, to indirectly make effects on patients' anxiety (Zhou et al., 2015; Drackley et al., 2012; Liu et al., 2008; Remmers et al., 2010; Badger et al., 2004).

6.1.1 Encouraging patients to attend therapies

According to the research articles, “the prevalence of the postoperative anxiety for breast cancer patients is significantly higher than the corresponding prevalence of anxiety in a population of health women” (Zhou et al., 2015). In order to improve the patient’s quality of life and reducing the anxiety, two types of interventions have been performed in patients with breast cancer immediately following radical mastectomy, such as music therapy and muscle relaxation training exercise. Zhou et al. (2015) studied and examined the positive effects of music therapy and progressive muscle training on patients’ anxiety. By encouraging the patients to do muscle relaxation parallel with music therapy, the patients’ postoperative anxiety and length of hospital stay were lower and shorter. Drackley et al. (2012) stated as well in their studies that massage therapy can help patients who following mastectomy reduce postoperative pain, anxiety and feel better overall. The patients reported the significant effect of combination of routine nursing care and massage therapy on reducing their anxiety. What’s more, according to Liu et al. (2008), the symptom of postoperative anxiety can be reduced effectively by body-mind-spirit group therapy. The Body-mind-spirit therapy combines important concepts and practices from Western medicine (such as psychology and forgiveness therapy), traditional Chinese medicine and the Eastern philosophies of Buddhism, Taoism and Confucianism. The body-mind-spirit therapy consists of eight elements, they are imparting of information, interpersonal learning output, catharsis, universality, group cohesiveness, altruism, instillation of hope and existential factors (see Table 4). During the body-mind-spirit therapy, the patients received the benefits of physical exercise and relaxation which were encouraged by nurses. “When I feel nervous, I play the relaxation CD you gave us to help me relax” (Liu et al., 2008 p.2544).

Table 4 Domains and themes in the study (Liu et al., 2008 p.2545)

Domains	Themes
Imparting of information	Learning information about appropriate diet Learning information about treatment and care of breast cancer Learning about how to monitor physical condition Learning to exercise Learning to practise relaxation Learning to reframe cognitive distress Learning to practice forgiveness
Interpersonal learning output	Having more interpersonal interactions Obtaining support from group members
Catharsis	Understanding the impact of suppressing emotions on holistic well-being Sharing sufferings with group members Learning to use projective methods to express feelings
Universality	Learning that I am not the only one who suffers from cancer Learning that personal characteristics are the common cause of cancer
Group cohesiveness	Having a sense of belonging
Altruism	Using one's own successful experience to help others
Instillation of hope	Sharing positive experiences of treatment outcomes contributing to a sense of hope
Existential factors	Practicing self-love Learning to view misfortune positively

6.1.2 Improving the care environment

The care environment can be physical items or the decorations in hospitals, it can also be the patients' social environment. According to Remmers et al. (2010), patients with a breast ablation suffer more traumatic level of stress/anxiety than patients who have only lost a part of their breast. These patients expressed highly expectations on the external conditions of care, for example, they wished a comfortable, friendly atmosphere in hospitals. It was stated that the decoration of various areas of the hospital made the patients feel welcome and enhanced the feeling of belonging. It was also important for the patients to have the possibility to withdraw from anxious situation. To have a room to

withdraw and allow times of privacy was often helpful for the patients' anxiety. "(...) for me, it was really good that I could sometimes go down to the chapel and find some peace" (Remmers et al., 2010 p.15).

In addition, the anxiety among outpatients with breast cancer can be reduced in the warm atmosphere of the therapy group. The anxiety came from the sense of isolation caused by feelings of not belonging. In the body-mind-spirit group therapy, the patients had experiences on having senses of belonging and suffering less through happiness and encouragement from each other in the group (see Table 4) (Liu et al., 2008).

6.1.3 Supporting patient's partner/family members

Family members play an important role in supporting breast cancer women who go through the experience. They act potentially as a vital source of social support to the patients. Sometimes the patients state that they worry more about their family members than themselves (Remmers et al., 2010; Badger et al., 2004). Understanding patients' cancer treatment-related emotional distress is impossible without consideration of their association with the key interpersonal relationships in their life. While the patient, who was described in Badger et al.'s (2004) case study, received chemotherapy after the surgery to breast cancer, both the patient and her partner suffered from anxiety and uncertainty about the details of the cancer treatment. However both of them then felt lightened after telephone counseling with the nurse. They reported positive changes in their own psychological distress, in their relationships with each other and with their children. Through the telephone counseling to support the patient's partner, to answer his questions, to provide education and supportive counseling, the couples could cope with anxiety and other cancer treatment-related side effects (Badger et al., 2004).

6.1.4 Nurses' self-awareness

It is important for nurses to professionally deal with their own unpleasant or negative feelings. "Regardless of how the patient is, (...) it is their job and they're just being so

silly, I think, that as a nurse they've got to have that under control" (Remmers et al., 2010 p.14). Nurses should bring their positive feelings and personal sides into the relationship with the patients. Thus sometimes nurses become a positive figure of identification if they are bright, positive, female and attractive (Remmers et al., 2010).

6.2 Direct nursing interventions

Breast cancer women who suffered from impaired body image, anxiety and emotional distress also experienced the increased risk of mortality (Hsu et al., 2010). According to the research articles, nurses play different roles on helping patients to reduce their post-operative anxiety, such as informational consultant and counsellor. They can as well give patients psychological and emotional support.

6.2.1 Informational consultant (nursing education)

According to Liao et al. (2014), nursing education can significantly lower the levels of anxiety for breast cancer patients over three months after surgery, and meanwhile it can effectively improve the unmet supportive care needs of these patients. The education strengthened patients' knowledge about the illness and risk factors, treatment and side effects, surgery-related symptom management, as well as sexual attractiveness and relationship information, instructions for self-care (including nutrition and diet, problems with appearance changes and loss of energy). Patients who received preoperative education experienced increased knowledge about the disease, which could then improve breast cancer patients' recoveries from mastectomy (Cho et al., 2012). This was also confirmed by Palmer (2007) in a random experimental study to evaluate the effects of a preoperative patient education program on decreasing the anxiety levels during the postoperative recovery period. In addition, in the study by Cho et al. (2012), patients who got the education on cancer knowledge and specialized post-mastectomy care stated improved outcomes on daily activities. What's more, to provide information about the disease, the treatment and prognosis and the functions of the breast, the issues of

body image after surgery and meanwhile to offer postoperative care can both immediately and latterly give positive influences on anxiety and positive improvements in body image and emotional distress, as well as the concerns over sexuality in daily life (Hsu et al., 2010; Remmers et al., 2010). In another study conducted by Stephens et al. (2008), it was highlighted that most of the patients with breast cancer after surgery gave positive comments about the Breast Health Patient Education Manual that was designed by the hospital system. The information from the Manual about such as transportation, exercise, breast cancer surgery and sexuality/intimacy, lymphedema, support groups and mastectomy resources were given via telephone and sometimes via mail. “The manual is excellent as well as the other information. I have tons information and I feel more knowledgeable now” stated by one patient in the study (Stephens et al., 2008 p.255). Another study made by Liu et al. (2008), showed that information from nurses about the treatment, appropriate diet and postoperative care of breast cancer had positive effects on patients’ emotional distress such as anxiety and fear. “Now when I have any problem, I can ask them for help, which make me feel calm” (Liu et al., 2008 p. 2544), stated by one of the breast cancer outpatients from departments of surgery.

6.2.2 Counsellor

Counselling and advice about coping with anxiety/stress is one of the most important components in the nursing intervention programme mentioned in Liao et al.’s (2014) study. Advice includes the expression of emotions to help manage feelings and to inform their children and family about their health conditions. The similar findings were shown in Badger et al.’s study. According to Badger et al. (2004), telephone interpersonal counselling for women with breast cancer and their partners could give both of them positive changes in their psychological distress and the relationships between each other and with their children. During the telephone interpersonal counselling, nurses took advantage on a range of interpersonal counselling techniques to help the patients and their partners’ manage their psychological distress. These techniques include encouraging them to express feelings, to help them review symptoms of the distress, to discuss with them about the strategies on dealing with physical and psychological side

effects of cancer treatment, to help them understand and accept their sick roles, as well as to provide education about effective relaxation exercise for reducing the negative effects of stress/anxiety. In addition, the patient's partner could get anxiety caused by concerning about his wife's condition and reaction over cancer treatment. The counselor can help breast cancer patient's partner lower the anxiety by addressing his concerns so that the partner can continue to support the patient. In the end, the partner's role in supporting his wife can be enhanced.

6.2.3 Emotional and psychological support

The nursing emotional consultation intervention is suggested to reduce the anxiety for breast cancer patients who underwent mastectomy after both short- and long-periods. To provide systematic individualized emotional consultation and to begin the consultation before surgery are helpful for the patients to prevent the progression of postoperative anxiety (Hsu et al., 2010; Remmers et al., 2010). Based on the study made by Liu et al (2008), the patients' anxiety which had arisen from spiritual distress can be released through expressing their emotions and explaining the meaning of their suffering to others. The patients' anxiety related to failure of coping with emotional distress can be released by sharing their emotions with others who had similar experiences of the illness. By getting emotional support from others and learning that they are not alone as they struggle with the cancer, the patients feel less anxious (Liu et al., 2008). What's more, the psychological support can effectively improve the unmet supportive care needs of breast cancer patients after surgery, and reduce their levels of anxiety and symptoms of distress (Zhou et al., 2015). According to Liao et al., (2014), the patients' anxiety can be reduced by provided stress-free time and space where they can explain their uncertainties and express their thoughts. By achieving psychological and emotional support and by receiving needed referral service can make the patients feel less anxious.

6.3 Communication

Communication is a basic element for nurses to successfully apply these above mentioned interventions. Through communication with nurses, the needs of breast cancer patients who underwent surgery are identified and treatments are discovered. Later on, professional breast cancer nurses can evaluate patients' needs and provide counselling based on their needs (Stephens et al., 2008). Good communication between nurses and patients can ultimately give the patients feelings that they are receiving the best care (Remmers et al., 2010).

The communication can be conducted through different approaches, such as via telephone or face to face interview. Patients are satisfied with the information provided via telephone, mail and face to face at the time of the interview (Stephens et al., 2008; Badger et al., 2004). During the conversations, it is important that nurses take the interview or communicating time to fulfill patients' wishes, so that they do not need to wait for information and answers for a long time.

Furthermore, it is crucial for patients to have dialogs with professions in a cooperative, continuous, caring and concerned atmosphere, which means to encourage the patients to ask questions and to let them feel comfortable with the dialog. It is helpful to answer patients' questions in an understandable way not with technical terms used by doctors. With the present and encouragement of nurses, the patient's anxiety level are lowered. In addition, the nurse should be gentle, quiet and considerable when they contact the patients. In this way, the patients have chance to appear vulnerable and weak to the nurses. To take time and listen can give patients security from nurses, which can establish a trustful relationship between them. A trustful relationship develops between nurses and patients during the short period of hospitalisation is essential for patient's well-being (Remmers et al., 2010).

7 DISCUSSION

7.1 Discussion of findings

Breast cancer women who underwent the surgical treatment, especially mastectomy, experienced postoperative anxiety and emotional distress. In order to help these patients reduce their postoperative anxiety, nurses provide the patient with both direct and indirect nursing interventions that take various therapies into consideration. It is also vital for nurses to provide proper educational interventions for breast cancer women before/during postoperative phase to prevent the postoperative anxiety. Based on the research articles, the study findings are discussed as followed.

First of all, nurses can encourage patients toward postoperative therapies, such as music therapy, muscle training and massage therapy. The nurses should encourage and increase patients' interest in activities which could effect their anxiety level. This is a good way to help the patient switch the attention to other things (Stuart & Laraia, 2005 p.277). Nurses can teach patients deep muscle relaxation through tension-relaxation exercise (Stuart & Laraia, 2005 p.281). The music therapy and progressive muscle training have positive effects on reducing anxiety for breast cancer patients. Through the muscle relaxation parallel with music therapy, the patients' postoperative anxiety can be lightened and the length of hospital stay can be shortened (Zhou et al., 2015). Massage therapy can also help the patients following mastectomy lower their postoperative anxiety levels (Drackley et al., 2012). This effect can be even more obvious by a combination of routine nursing care and massage therapy. In addition, through the body-mind-spirit group therapy (see Table 4) the patients can get information and encouragement on the physical exercise and relaxation, and furthermore they can benefits from the effects of the therapy on reducing anxiety (Liu et al., 2008).

What's more, through modifying and improving patients' care environment, the patients' anxiety can be relieved during their hospital-stay. The care environment can be physical items or the decorations in hospitals, it can also be social environment around the patient. The nurses can refer to patients' needs on the surroundings to adjust and

improve the environment in order to reduce the anxiety stimulations. Some physical methods such as warm baths, massage can be helpful (Stuart & Laraia, 2005 p.277). Breast cancer patients who suffer from traumatic level of stress/anxiety have high expectations on the external conditions of care, for example, they wish a comfortable, friendly atmosphere in hospitals, and wish private rooms to withdraw if they are so anxious that they want to have peace (Remmers et al., 2010). When it comes to the social environment, it can be an atmosphere around the patients or the patients' social networks, such as partners/family members. Since anxiety can come from the sense of isolation caused by non-belonging feelings, the patients can suffer less when the patients have experiences of having a sense of belonging (Liu et al., 2008). It is also necessary to support the patients' partners/family members and help them to cope with the threat. Patients with breast cancer who underwent mastectomy surgery have more concern for their families than themselves (Remmers et al., 2010; Badger et al., 2004.). To help both patients and patients' family members gain insights into the anxiety can provide them understandings of the patients' current situation and other factors which can immediately trigger the anxiety (Stuart & Laraia, 2005 p.279). Nurses can also support the patients' partners via telephone or face to face counselling. For example, the nurses can answer the partners' questions about the cancer treatment via a phone call. As the results, it can lighten the stressed relationships among the patients, their partners and children, which can in turns reduce the patients' anxiety and enhance the partners' special roles on supporting the patients (Badger et al., 2004).

7.2 Findings related to the theoretical framework

The theoretical framework used in this study is the interpersonal nursing theory by Hildegard E. Peplau. The interpersonal and intrapersonal processes are the key points in the theory. In this section, the research findings are discussed by comparing and reflection on the chosen theory.

7.2.1 Interpersonal process

In this theory, the nurse-client relationship develops through orientation, working and resolution phases. Part of the study findings can be related to Peplau's statements during the working phase. When breast cancer patients are struggling with postoperative anxiety, they come to professionals seeking help and support. When the nurse act as a counsellor to the patient, the goals are not to bring direct resolutions to the problems but rather to initiate dialogues where the patient can be open to the nurse and some possible solutions (Badger et al., 2004). This indicates that nurses should "give the clients opportunity to explore options and possibilities within the context of the relationship rather than directly solve the problem for patients" (Forchuk, 1993 p.9).

Also, in the interpersonal nursing theory, Peplau emphasised the importance of communication in the nurse-client relationship. Both verbal and non-verbal communication are mentioned in the theory, while in the research findings verbal communication was mainly highlighted. It is regarded as one of the basic elements to ease the process of decreasing breast cancer patient's postoperative anxiety. By talking with the patients about their concerns, the patients have opportunities to express feelings and can figure out possible solutions to the issues (Forchuk, 1993). During the conversation, the nurse can explore, understand the underlying problems for the patient, and then adequately help him/her deal with the problem. Good communication between nurses and patients can eventually give the patients feelings that they are receiving the best care, and it is safe to build a relationship between them (Remmers et al., 2010). Good communication competence such as listening actively and giving patients understandable answers or response can give patients feelings of security. Then the patients have chance to share their vulnerability and weakness to the nurse professional. That is also the reason why nurses should be a good active listener and encourage them to discuss their negative feelings, such as anxiety, hostility, guilt and frustration (Stuart & Laraia, 2005 p.275).

In addition, the role of the teacher in nursing is also important. The nurse have responsibility to educate patient about ongoing procedures, given treatment and related complications. The nurse sends the knowledge to the patient in connection with the needs or interests of the patient. In order to help breast cancer patients to reduce their postopera-

tive anxiety, it is necessary to provide information about the disease, the treatment and prognosis, and the functions of the breast, the issues of body image after surgery and postoperative recovery. This information can also positively improve the patients' understanding in body image and emotional distress as well as the concerns over sexuality in daily life (Hsu et al., 2010; Remmers et al., 2010).

The role of resource person/consultant is interpreted as informational consultant in the research findings, which means nurses provide specific information needed by the patients that can help them reduce the anxiety. For example, the nurses can provide information and guidance about music therapy, muscle relaxation training exercise, and massage therapy as well as body-mind-spirit group therapy (Zhou et al., 2015; Drackley et al., 2012; Liu et al., 2008).

Nurses as counsellors help breast cancer clients to decrease the levels of their postoperative anxiety by explaining to the patients about the meaning of current life situations, as well as, by providing guidance and encouragement for future changes. On the one hand, through interpersonal counselling, such as encouraging the expressions of feelings, reviewing symptoms of distress, discussing the strategies to deal with physical side effects of cancer treatment, the patients can easily accept their sick roles and better understand the importance of received specific information about effective relaxation exercises to reduce the negative effects of anxiety (Liao et al., 2014; Badger et al. 2004). On the other hand, the fact that some breast cancer patients after surgery are more worried about their family members and children than about themselves, it is also necessary to offer counselling for the patient's partner and family members. If the partner gets anxiety or suffers from psychological and emotional distress, these negative feelings can, in turn, affect the patient. More serious the relationship among the patients and their partners and children can be problematic. Therefore the counsellor can help breast cancer patient's partner by addressing his concerns and anxiety (caused by his wife's health condition and reaction over the cancer treatment), so that the partner can better understand the current family situation and give the patient essential social support (Badger et al., 2004).

According to Peplau's interpersonal theory (1991), a nurse can be an environment manager by influencing the patient's physical environment during their hospitalisation. As noted in the research findings, indirect nursing intervention such as modifying the care environment can give positive effects on reducing the postoperative anxiety for breast cancer patients. These patients have a high expectation of care. For example, they wished for a comfortable, friendly atmosphere in the hospital. In this way, they can feel being involved in the postoperative caring process and feel welcome and safe in the hospital. This indicates that good external environment can contribute to the trustful nurse-client relationship and further influence the patients' anxiety in a positive way. "To give patients possibility to withdraw and allow times of privacy can help patients calm down" (Remmers et al., 2010 p.15).

7.2.2 Intrapersonal process

In Peplau's theory (1991), the main concepts for the intrapersonal process are anxiety, learning, thinking and competencies. Peplau's self-understanding theory (mentioned in the thinking concept) and the study finding about "nurses' self-awareness" support each other. Through self-understanding, the nurse can figure out his/her own problems and behaviours which are affecting the nurse-client relationship (Peplau, 1991). With the fact that nurses can transfer their negative feelings to patients, which can affect the nurse-patient relationship negatively, the nurses should be aware of these feelings. When the nurses bring their positive feelings to work, it can more or less affect patients' anxiety level positively (Remmers et al., 2010). "Parallel to the nurse's development of self-understanding, the nurse's competencies develop as beneficial side effect of the therapeutic relationship" (Forchuk, 1993 p.21). The patient's competencies, especially on managing postoperative anxiety, develop as a goal of the therapeutic relationship.

8 CONCLUSION

Breast cancer is a worldwide health issue that affects women in both developed and developing countries (Liao et.al, 2014). It is possible to treat breast cancer by the primary surgical treatment, such as mastectomy or mastectomy combined with other treatments. However, the prevalence of suffering from postoperative complications has been increasing for breast cancer patients after the operations. Postoperative anxiety is one of the most severe complications. With this literature review study based on the research articles, the author uncovered the information about how nurses can help breast cancer patients reduce their postoperative anxiety. Meanwhile nurses' roles on these interventions were summarized from the research articles, and then reflected on the used theoretical framework. This would help nurses in the future understand their roles on supporting the breast cancer patients with postoperative anxiety. This study indicates that breast cancer patients with postoperative anxiety have strong needs regarding nursing care and nursing support informationally, emotionally and psychologically. Nurses should take care of these patients and help them reduce their anxiety by influencing the care environment, encouraging them to attend therapies, and by giving support to their partners/family members. Furthermore, nurses should also be aware of their self-emotion that can indirectly influence the patients' anxiety. Nurses can also help the patients directly by educating, giving them needed information, and giving them emotional and psychological support. In order to successfully apply these interventions into practice, a good nurse-patient relationship based on good communication between them is needed. Good communication can ease the process of building a trustful relationship between the nurse and the patient (Remmers et al., 2010). Good communication skills include active listening. Also, giving patients understandable answers or responses may give patients increased levels of security during conversations. In the end, it is necessary for nurses to genuinely understand the importance of nursing support for the breast cancer patients who suffer from postoperative anxiety. In addition, it is recommended that nurses should think critically and evaluate the effectiveness of each method by following the nursing process.

8.1 Critical analysis and recommendations

In a qualitative content analysis, it is essential to ensure the data quality in order to achieve trustworthiness for the research. Data quality can be interpreted by the data validity, reliability and generalizability. “Validity is an important criterion for evaluating methods to measure variables” (Graneheim & Lundman, 2004). For example, the researcher acts as the measure instrument to evaluate whether collected data is suitable for the research topic and questions. “Reliability is used to evaluate the accuracy and consistency of the collected data in the study. It is a prerequisite for validity” (Graneheim & Lundman, 2004). Generalizability is usually used in quantitative studies but nowadays it has become common in qualitative researches in order to widen the knowledge in the study field (Polit & Beck, 2013). In this literature review study, all selected research articles were internationally published in the field of nursing research. The results of the study are based on general groups rather than one group. In addition, credibility shows the research methods are realistic enough to use, and interpretations of the study are trustful and accurate. “Credibility in research results part focus on how well the categories cover the used data” (Polit & Beck, 2013).

In this study, the author tried to divide the collected data into reasonable categories and sub-categories which could cover as much information as possible. The writer attempted take neutral insights on each article, and tried to avoid bias and pre-understanding of the research topic during data collection and data analysis phases. A clear description of data collection (see in Appendix 1) and process of data analysis were shown in the methodology part. Several convincing statements from the collected articles were quoted in order to improve the level of credibility in the study. In a word, this study was conducted in an objective way that readers could use alternative interpretations to their future studies.

This study however faced several limitations. First, some useful scientific articles which are related to the study could not be accessed from the available databases at Arcada. Second, twelve research articles were expected to be found in the beginning of data collection phase, while it was a bit difficult to find appropriate articles exact for the research topic or to answer the research question, in the end ten research articles were used in the study.

Finally, it is recommended that further research on the same topic should be done in a more concrete level. For example, the primary surgical treatment for breast cancer should be limited only to mastectomy. The ages of targeted breast cancer patients should be between, for example, 18 and 50 years old. Or the research topic/question could be studied from a cultural perspective by comparing the nursing interventions from different countries. Interviews would be recommended as a research method to gain new ideas and other nursing interventions on reducing the postoperative anxiety for breast cancer patients.

LIST OF REFERENCES

American Society of Clinical Oncology (ASCO), (2014) *Breast Cancer*. [online] Available at: <http://www.cancer.net/cancer-types/breast-cancer> [Accessed 27 Dec. 2014].

Arman, M. (2003). *Lidande och existens i patientens värld*. Åbo: Åbo Akademis förlag.

Badger, T., Segrin, C., Meek, P., Lopez, A. and Bonham, E. (2004). A Case Study of Telephone Interpersonal Counseling for Women With Breast Cancer and Their Partners. *Oncology Nursing Forum*, Vol. 31, no.5, pp.997-1003.

Cho, H., Davis, G., Paek, J., Rao, R., Zhao, H., Xie, X., Yousef, M., Fedric, T., Euhus, D. and Leitch, M. (2012). A randomised trial of nursing interventions supporting recovery of the postmastectomy patient. *J Clin Nurs*, Vol. 22, no.7-8, pp.919-929.

Drackley, N., Degnim, A., Jakub, J., Cutshall, S., Thomley, B., Brodt, J., VanderLei, L., Case, J., Bungum, L., Cha, S., Bauer, B. and Boughey, J. (2012). Effect of Massage Therapy for Postsurgical Mastectomy Recipients. *Clinical Journal of Oncology Nursing*, Vol.16, no.2, pp.121-124.

Elo, S. and Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, Vol. 62, no.1, pp.107-115.

Finnish Cancer Registry, (2010) *Finland - Cancer Society of Finland*. [online] Available at: <http://www.cancer.fi/syoparekisteri/en/statistics/cancer-statistics/koko-maa/> [Accessed 18 Feb. 2015].

Forchuk, C. (1993). *Hildegard E. Peplau. Interpersonal nursing theory*. Newbury Park, Calif.: Sage Publications.

Freysteinson, W., Deutsch, A., Lewis, C., Sisk, A., Wuest, L. and Cesario, S. (2012). The Experience of Viewing Oneself in the Mirror after a Mastectomy. *Oncology Nursing Forum*, Vol. 39, no.4, pp.361-369.

Graneheim, U. and Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), pp.105-112.

Hsieh, H. (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research*, Vol.15, no.9, pp.1277-1288.

Hsu, S., Wang, H., Chu, S. and Yen, H. (2010). Effectiveness of Informational and Emotional Consultation on the Psychological Impact on Women With Breast Cancer Who Underwent Modified Radical Mastectomy. *Journal of Nursing Research*, Vol.18, no.3, pp.215-226.

Lee, K., Chao, Y., Yiin, J., Hsieh, H., Dai, W. and Chao, Y. (2011). Evidence That Music Listening Reduces Preoperative Patients' Anxiety. *Biological Research for Nursing*, Vol. 14, no.1, pp.78-84.

Liao, M., Chen, S., Lin, Y., Chen, M., Wang, C. and Jane, S. (2014). Education and psychological support meet the supportive care needs of Taiwanese women three months after surgery for newly diagnosed breast cancer: A non-randomised quasi-experimental study. *International Journal of Nursing Studies*, Vol. 51, no.3, pp.390-399.

Liu, C., Hsiung, P., Chang, K., Liu, Y., Wang, K., Hsiao, F., Ng, S. and Chan, C. (2008). A study on the efficacy of body-mind-spirit group therapy for patients with breast cancer. *Journal of Clinical Nursing*, Vol.17, no.19, pp.2539-2549.

Mongan-Rallis, H (2014). *Guidelines for writing a literature review*. [online] Available at: <http://www.duluth.umn.edu/~hrallis/guides/researching/litreview.html> [Accessed 6 Jan. 2015].

Nursing Theories, (2013). *A companion to nursing theories and models*. [online] Available at: http://currentnursing.com/nursing_theory/interpersonal_theory.html [Accessed 14 Dec. 2014].

Palmer, J. (2007). Decreasing Anxiety Through Patient Education. *Plastic Surgical Nursing*, Vol.27, no.4, pp.215-220.

Peplau, H. (1991). *Interpersonal relations in nursing*. New York: Springer.

Polit, D. and Beck, C. (2013). *Essentials of nursing research*. 8th ed. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.

Pålsson, M. (1995). *Support for women with breast cancer, and for the district and hospital nurses involved*. Umeå, Sweden: Dept. of Advanced Nursing, Umeå University.

Remmers, H., Holtgräwe, M. and Pinkert, C. (2010). Stress and nursing care needs of women with breast cancer during primary treatment: A qualitative study. *European Journal of Oncology Nursing*, Vol.14, no.1, pp.11-16.

Stephens, P., Osowski, M., Fidale, M. and Spagnoli, C. (2008). Identifying the Educational Needs and Concerns of Newly Diagnosed Patients with Breast Cancer after Surgery. *Clinical Journal of Oncology Nursing*, Vol.12, no.2, pp.253-258.

Stuart, G. and Laraia, M. (2005). *Principles and practice of psychiatric nursing*. St. Louis: Elsevier Mosby.

Swedish Mesh, (2015). *Breast Neoplasms*. [online] Available at: http://mesh.kib.ki.se/swemesh/show.swemeshtree.cfm?Mesh_No=C04.588.180&tool=karolinska [Accessed 30 Nov. 2015].

Taylor, B. and Francis, K. (2013). *Qualitative research in the health sciences*. Abingdon, Oxon: Routledge.

Zhou, K., Li, X., Li, J., Liu, M., Dang, S., Wang, D. and Xin, X. (2015). A clinical randomized controlled trial of music therapy and progressive muscle relaxation training in female breast cancer patients after radical mastectomy: Results on depression, anxiety and length of hospital stay. *European Journal of Oncology Nursing*, Vol.19, no.1, pp.54-59.

APPENDICS:

APPENDIX 1: DESCRIPTION OF THE DATA COLLECTION

The study used ten scientific articles that are presented according to different combinations of the search words.

1, Database: Academic Search Elite (EBSCO)

Searching words: mastectomy AND anxiety AND nursing interventions

Result (after limitation): 1

Chosen *article 1*: Hsu, S., Wang, H., Chu, S. and Yen, H. (2010). Effectiveness of Informational and Emotional Consultation on the Psychological Impact on Women With Breast Cancer Who Underwent Modified Radical Mastectomy. *Journal of Nursing Research*, 18(3).

Study Purpose: A study to evaluate the nursing intervention of informational and emotional consultation on body image, anxiety and emotional distress in female breast cancer patients after modified radical mastectomy (MRM).

Method: A quasi-experimental design with the help of questionnaires to collect data (the experimental group and the control group)

Main findings: 1 Nursing informational and emotional consultation intervention had positive effect on patients' anxiety.

2 Reflected nursing roles: recourse person and consultant

2, Database: Academic Search Elite (EBSCO)

Searching words: mastectomy AND anxiety AND nursing

Results (after limitation): 10

Chosen two articles:

Article 2: Palmer, J. (2007). Decreasing Anxiety through Patient Education. *Plastic Surgical Nursing*, 27(4).

Study Purpose: A study to evaluate a patient education program with the aim to reduce anxiety levels in patients who had mastectomy operations with reconstruction.

Method: A random experimental design to test patients' post-operative anxiety by using the State Trait Anxiety Inventory scale (STAI).

Main findings: 1 The nursing pre-operative educational program for patients could help reduce anxiety during the pre-operative and the post-operative stages.

2 Nursing roles: recourse person and educator

Article 3: Zhou, K., Li, X., Li, J., Liu, M., Dang, S., Wang, D. and Xin, X. (2015). A clinical randomized controlled trial of music therapy and progressive muscle relaxation training in female breast cancer patients after radical mastectomy: Results on depression, anxiety and length of hospital stay. *European Journal of Oncology Nursing*, 19(1).

Study Purpose: A study to examine effects of music therapy and progressive muscle relaxation training on depression, anxiety and length of hospital stay for female breast cancer patients after radical mastectomy within 48h after operation.

Method: A randomized controlled trail design (the intervention group and the control group). Zung self-rating depression scale (ZSDS) and state anxiety inventory (SAI) were used to measure the data.

Main findings: 1 Music therapy and progressive muscle relaxation training had positive results on reducing the patients' postoperative anxiety.

2 Nursing roles: resource person (to provide the information on possible therapies), guide/therapist and encourager/counsellor

3, Database: CINAHL (EBSCO)

Searching words: breast cancer AND anxiety AND nursing roles

Results (after limitation): 5

Chosen **article 4:** Badger, T., Segrin, C., Meek, P., Lopez, A. and Bonham, E. (2004). A Case Study of Telephone Interpersonal Counseling for Women with Breast Cancer and Their Partners. *Oncology Nursing Forum*, 31(5).

Study Purpose: To present a case study where the benefits of telephone interpersonal counselling for breast cancer patients and their partners on reducing the distress (depression and anxiety) were showed.

Method: An experimental design. Groups include patients who were receiving adjuvant therapy, who had early diagnose of breast cancer and their partners.

Main findings: 1 Telephone interpersonal counselling made positive changes in the women and her partner in the case study.

2 Nursing roles: counsellor, educator and recourse person (for both patients and their partners)

4, Database: Google Scholar

Searching words: after mastectomy AND anxiety AND nursing

Got via: Arcada's Nelli Portal

Chosen **article 5**: Drackley, N., Degnim, A., Jakub, J., Cutshall, S., Thomley, B., Brodt, J., VanderLei, L., Case, J., Bungum, L., Cha, S., Bauer, B. and Boughey, J. (2012). Effect of Massage Therapy for Postsurgical Mastectomy Recipients. *Clinical Journal of Oncology Nursing*, 16(2).

Study Purpose: To evaluate the effect of massage therapy on postoperative (mastectomies) pain, anxiety and overall well-being for breast cancer patients.

Method: A quality improvement pilot study in which integrative massage therapy was provided to patients after mastectomies from three surgical services at a hospital.

Main findings: 1 Nonpharmacologic massage therapy combined with routine nursing postoperative care had a significant effect on reduction in pain and stress for mastectomy recipients.

2 Nursing roles: recourse person (to provide information on possible therapy) and encourager

5, Database: Academic Search Elite (EBSCO)

Searching words: breast cancer AND nursing interventions

Results (after limitation): 58

Chosen **article 6**: Cho, H., Davis, G., Paek, J., Rao, R., Zhao, H., Xie, X., Yousef, M., Fedric, T., Euhus, D. and Leitch, M. (2012). A randomised trial of nursing interventions supporting recovery of the postmastectomy patient. *J Clin Nurs*, 22(7-8).

Study Purpose: To evaluate the combined and separate components of preoperative education and the effectiveness of wearing the Paila Gown on recovery (A. activity, B. body imagine, C. comfort, knowledge and lymphedema) following mastectomy.

Method: Experimental and longitudinal design.

Main Findings: 1 Postoperative nursing care (patients wear the Papilla Gown) can increase patients' comfort, and preoperative education can increase patients' knowledge and reduce illness-related stress/anxiety.

2 Nursing roles: recourse person and educator

6, Database: PubMed

Searching words: nursing education for breast cancer patients with postoperative anxiety

Results (after limitation): 4

Chosen two articles:

Article 7: Liao, M., Chen, S., Lin, Y., Chen, M., Wang, C. and Jane, S. (2014). Education and psychological support meet the supportive care needs of Taiwanese women three months after surgery for newly diagnosed breast cancer: A non-randomised quasi-experimental study. *International Journal of Nursing Studies*, 51(3).

Study Purpose: To find out the effects of nursing education and psychological support (both individual face-face and telephone follow-up) on postoperative anxiety, symptom distress, social support and unmet supportive care needs for newly diagnosed breast cancer patients.

Method: A non-randomized quasi-experimental design (one experimental and one control group with respectively 40 patients)

Main Findings: 1 The education and psychological support of nursing interventions had great effects on reducing the patients' anxiety level.

2 Nursing roles: recourse person, educator and listener

Article 8: Stephens, P., Osowski, M., Fidale, M. and Spagnoli, C. (2008). Identifying the Educational Needs and Concerns of Newly Diagnosed Patients With Breast Cancer After Surgery. *Clinical Journal of Oncology Nursing*, 12(2).

Study Purpose: To identify the educational needs and concerns of newly diagnosed breast cancer patients after surgery.

Method: A descriptive exploratory design with the help of telephone interview.

Main Findings: 1 Patients with breast cancer can experience fear of recurrence and anxiety regarding postoperative treatments. The needs of nursing education were high

among these patients and nurses can provide support services and post-treatment information to reduce their anxiety.

2 Nursing roles: recourse person, educator and navigator

7, Database: Google Scholar

Searching words: reduced anxiety AND radical mastectomy AND nursing interventions

Got via: Arcada's Nelli Portal

Article 9: Liu, C., Hsiung, P., Chang, K., Liu, Y., Wang, K., Hsiao, F., Ng, S. and Chan, C. (2008). A study on the efficacy of body-mind-spirit group therapy for patients with breast cancer. *Journal of Clinical Nursing*, 17(19).

Study Purpose: To evaluate the effects of culturally enriched body-mind-spirit group therapy on anxiety, depression and holistic well-being among women with breast cancer after surgery.

Method: A randomized controlled trial and a focus group interview design. Two groups of patients from outpatient department of surgery.

Main Findings: 1 The therapy had effects on reducing the patients' anxiety and increasing their body-mind-spirit well-being.

2 Nursing roles: Resource person, guide/therapist and encourager

3 Other factors which can contribute to the patient's well-being: imparting of information, interpersonal learning, catharsis, universality, group cohesiveness, altruism, hope and existential factors.

Through "snowball sampling" manual search method, more specifically from references based on the previous chosen articles, one related article was selected:

Article 10: Remmers, H., Holtgräwe, M. and Pinkert, C. (2010). Stress and nursing care needs of women with breast cancer during primary treatment: A qualitative study. *European Journal of Oncology Nursing*, 14(1). (Based on the article 1 above)

Study Purpose: To investigate specific strains affecting the breast cancer patients during the primary surgical therapy, and the needs of nursing care.

Method: A semistructured interview with 42 patients (59.5% of the women had breast conserving therapy, and 40.5% had mastectomy)

Main Findings: 1 The needs of nursing care are high among these patients, and there are three main areas of the needs: the relationship to the nurses, professional competences and the external condition of care.

2 Nursing roles/interventions: listener, emotional support, valuable patient-nurse relation, professional competences of nurses, caring environment

APPENDIX 2. SAMMANFATTNING AV EXAMENSARBETE PÅ SVENSKA

Inledning

Vad kan sjuksköterskor hjälpa bröstcancer patienter lindra deras ångest efter att de har opererat sina bröst? Med denna fråga som min motivering vill jag göra mitt examensarbete.

Genom tiden har bröstcancer bland kvinnor blivit allt vanligare över hela världen. Enligt tidigare studier har bröstcancer till och med blivit den vanligaste cancerformen bland kvinnor i Finland (Finnish Cancer Registry, 2010). Från ett medicinskt perspektiv, kan bröstcancer behandlas med primära ingrepp såsom mastektomi och bröstbevarande kirurgi, strålbehandling, cytostatikabehandling och hormonell behandling. Visserligen kan de behandlingarna bota själva bröstcancer sjukdomen, men föreligger det fortfarande vissa komplikationer som är långvariga och kan negativt påverka patienters normala liv. Till exempel, kan patienter lida av medicinska, fysiska, psykologiska och psykosociala komplikationer efter mastektomi operation (ASCO, 2014). Som Pålsson (1995) har påstått, kan patienter uppleva rädsla av återfall av sjukdomen, lågt självförtroende och självkänsla på grund av förändrade kroppfigurer och utsatte kvinnlig identitet. De kan också känna sig ångestfulla och ensamma (Arman, 2003). Postoperativ ångest kan karaktäriseras som en kombination av olika stort negativa känslor, såsom ilska, tråkighet, depression, irritation, hopplöshet och hjälplöshet (Stuart & Laraia, 20015). Av tidigare studier framgår att förekomsten av postoperativ ångest bland kvinnor som har undergått

bröstcancer operation är väldigt höga (Pålsson, 1995). Det är därför att behovet av professionellt stöd, det vill säga omvårdnadsintervention är starka bland de patienterna. Sjuksköterskan kan erbjuda olika omvårdnadsinterventioner baserat på nivån av patientens ångest. För allvarlig ångest, kan sjuksköterskan i allmänt lindra patientens ångest på olika sätt. Att etablera en tillitsfull relation med patienten, att vara medveten om sin egen ångest eller frustration. Dessutom är viktigt att sjuksköterskan tillåter patienten bestämma över sin egen vilja och omgivning och respekterar patienten självbestämmande. Det är också viktigt att uppmuntra patienten till betydelsefulla aktiviteter. När det gäller måttlig ångest, kan sjuksköterskor erbjuda patienten föreläsningar om ångesten och ställa rätt frågor vid bedömning av ångesten (Stuart & Laraia, 20015).

Teoretiskt ramverk

I detta examensarbete har ”interpersonal nursing theory” av Hildegard E. Peplau använts som ett teoretiskt ramverk. Teorin fokuserar på det interpersonella förloppet och det terapeutiska förhållandet mellan sjuksköterskor och patienten (Peplau, 1991). Det interpersonella förloppet innefattar fyra delar: förhållandet mellan sjuksköterskor och patienten, kommunikation, mönster integrering och sjuksköterskeroll.

I den första delen beskrivs det förhållandet som en skiftande process med tre faser: orientering fas, bearbetning fas och upplösning fas. När sjuksköterskan och patienten mötas första gången, börjar de anpassa varandra och samtidigt börjar patienten lita på sjuksköterskan. Anpassningstid kan vara några minuter eller upp till några månader, beror på patientens aktuella hälsotillstånd och välbefinnande. Därför är det viktigt för sjuksköterskan att bedöma patientens behov redan vid första mötet. När ett tillitsfulla förhållande har grundats, kan sjuksköterskan närmare identifiera patientens problem och planera en omvårdnadsplan enligt patientens situation och önskemål. Därefter kan patienten uppleva samhörighet och trygghet. Om det dyker upp något problem för patienten, ska sjuksköterskan ge henne möjligheter att försöka bekämpa problem självständigt utan att direkt lösa problemet åt patienten. I den sista fasen har patientens behov och önskan uppfyllt genom att samarbeta med sjuksköterskan. Men om det psykologiska beroendet fortfarande finns i relationen, kan det vara svårt för de både två.

Kommunikation omfattar både verbal och icke-verbal kommunikation. Att kunna utnyttja verbala kommunikation är oerhört viktigt för det förhållandet mellan sjuksköterskan och patienten. Medan icke-verbala kommunikation kan påverkas av olika kulturer. Det är därför att sjuksköterskan ska vara medveten om annorlunda tolkning av icke-verbala kommunikation.

Enligt Peplau (1991) spelar sjuksköterskan framförallt sex roller: som främling, lärare, resursperson, rådgivare, företrädare och ledare.

Syfte och frågeställning

Syftet med detta examensarbete är att visa om hur omvårdningsingripande mot postoperativ ångest för bröstcancerpatienter fungerar, särskilt om att tydliggöra sjuksköterskeroll i denna process.

Följande frågeställning besvaras:

Vilka omvårdningsingripande kan tillämpas för att hjälpa bröstcancerpatienter lindra deras postoperative ångest?

Metod

Med denna studie har jag genomfört en litteraturöversikt som omfattade 10 vetenskapliga artiklar vilka analyserats induktivt med hjälp av kvalitativ innehållsanalys. De 10 artiklarna är urplockade med vissa inklusive kriterier från Arcadas tillgängliga databaser, såsom EBSCO (Academic Search Elite and CINAHL), PubMed och Google Scholar. En av de artiklarna är vald via ”snowball sampling” manuell sökningsmetod. De inklusive kriterier är att alla artiklar måste vara vetenskapliga fulltext, och artiklar är publicerade mellan år 2004 och 2015 samt i akademiska tidskrifter. Sökord som används för att hitta artiklarna är bland annat bröstcancer, omvårdnad, omvårdningsintervention, sjuksköterskeroll, ångest, mastektomi, efter mastektomi. Sju olika kombinationer av sökord har underlättat datasamlingsprocess. Mer information angående data-

samlingsprocess kan finnas i Appendix 1. Efter att ha läst genom alla valda artiklar, har två huvudsakliga typer av artiklar upptäckts. En sorts artiklar fokuserar mer om indirekt omvårdnadsintervention för att lindra patienters postoperativa ångest. En annan sorts artiklar handlar om direkta omvårdnadsingripande. Det är därför att först två tema har kategoriserats. Därefter har olika underkategorier sammanfattats, se Tabellen som följer,

Huvudsaklig kategori	Underkategori
Indirekta omvårdnadsingripande	1 uppmuntra patienter att delta terapier 2 förbättra patienters fysiska och sociala vårdmiljöer 3 ge konstruktiva förslag till patienters partner eller närstående 4 vara medvetna om egna känslomässiga stämningar
Direkta omvårdnadsingripande	1 som informatör 2 som rådgivare 3 ge känslomässigt och psykologiskt stöd
Kommunikation	Kommunikations kompetens

Resultat

Studiens resultat framgår att sjuksköterskor kan erbjuda patienter både indirekta och direkta omvårdnadsintervention (se Tabellen ovan).

Indirekta omvårdnadsingripande

1 Uppmuntra patienter att delta terapier

Enligt Zhou et al. (2015) hade två slags interventioner, musikterapi och progressiv muskelträning, positiva effekter vid förbättringen av patienters postoperativa ångest. Genom att uppmuntra patienterna att göra muskelavslappande terapi parallellt med musikterapi, upplevde patienterna mindre ångest samt deras vistelser på sjukhus var kortare. I (Drackley et al., 2012)s studie om inverkan av massageterapi på bröstcancer patienters postoperativa smärtor och ångest visade att massageterapi kunde lindra patienternas smärtor och ångest samt de kändes bättre överhuvudtaget efter terapin. Patienterna rapporterade till och med den betydelsefulla effekten av kombination av rutinmässigt omvårdnadsarbete och massageterapi för att lindra deras ångest. Dessutom kunde den som kallas "body-mind-sprit" gruppterapi lindra patienters postoperativa ångest. Under terapin deltog patienterna i tillgängliga fysiska och avkopplande aktiviteter som uppmuntrades av sjuksköterskor. Detta gav patienterna positiva inflytande över sina ångest och sorger. "When I feel nervous, I play the relaxation CD you gave us to help me relax" (Liu et al., 2008 s.2544), som en av de patienterna påstod.

2 Förbättra patienters fysiska och sociala vårdmiljöer

Vårdmiljöer kan vara de platser och de sammanhang där ett möte mellan en vårdare och patient eller anhörig utspelar sig. Den kan vara den fysiska miljön runt kring patienter, och också vara patienters anhöriga eller närstående. Enligt Remmers et al. (2010) hade patienter som genomfört mastektomi högre nivå av ångest eller traumatisk stress än de andra som gjort bröstbevarande kirurgi. Den fysiska miljön på sjukhuset spelade stor roll på patienters känslomässiga stämningar och deras känslor av tillhörighet. De kände

sig välkomna och hemma av olika dekorationer på sjukhuset. Dessutom uppskattade patienterna högt befintliga privata rum på sjukhuset så att de kunde dra nytta av rummen för fred. "(...) for me, it was really good that I could sometimes go down to the chapel and find some peace" (Remmers et al., 2010 s.15), som en av de patienterna påstod.

När det gäller den sociala omgivningen runt kring patienter, upplevde de starka känslor av isolering efter operationen, vilket orsakade ångest för dem. Genom att delta i "body-mind-sprit" gruppterapi, kunde patienternas ångest lindras på vilket sätt att de kändes tillhörighet, glädje och uppmuntran av patienter i gruppen (Liu et al., 2008).

3 Ge konstruktiva förslag till patienters partner eller närstående

Patienters partner eller närstående spelar betydande roll i att stödja bröstcancer patienter hela vägen under behandlingstid. Patienters partner eller närstående kan bli påverkade av patienters ångest. Därför är det naturligtvist att patienterna oror sig över sina partner eller närstående. För att hjälpa patienterna lindra deras ångest kan sjuksköterskor nå detta mål genom att stödja patienternas partner eller närstående. Till exempel, kan sjuksköterskor via telefonsamtal svara partners frågor, erbjuda bröstcancer-och cancerbehandling-relaterade information och ge konstruktiva förslag om ångesthantering. I studier visades, av både patienter och deras partner, positiva förändringar över den psykologiska utmaningen och den relationen mellan de och deras barn (Remmers et al., 2010; Badger et al., 2004).

4 Vara medvetna om egna känslomässiga stämningar

Remmers et al. (2010) menade att det är essentiellt för sjuksköterskor att kunna professionellt hantera sina egna negativa känslor som indirekt kan påverka patienters ångest. Istället skall sjuksköterskor medföra sina positiva känslomässiga stämningar och personligheter in i förhållanden med patienterna.

Direkta omvårdnadsingripande

1 Som informatör

I en studie av Liao et al. (2014) belyste vikten av bröstcancer-relaterad omvårdnads-kunskap på postoperativ ångest för bröstcancer patienter. Resultatet i studien framgick att denna sorts kunskap kunde lindra patienternas ångest och samtidigt förbättrade patienternas uppfyllda omvårdnadsbehov. Kunskapen utgick ifrån medicinska, psykosociala och omvårdnad perspektiv, såsom information om själva sjukdomen, behandlingarna, kirurgi-relaterade komplikationer, komplikationshanterings strategier och sexualitet-relaterade frågor samt undervisning om egenvård såsom nutrition, matvanor och så vidare (Liao et al., 2014; Liu et al., 2008). Dessutom hade det positivt inflytande över bröstcancer patienters återhämtningar när patienterna före operationen hade fått tillräcklig information om själva operationen och postoperativa försiktighetsåtgärder (Cho et al, 2012; Palmer, 2007). Patienterna som hade fått den preoperativa informationen kunde bättre utföra vardagliga aktiviteter. I samband med att de efteråt hade fått postoperativ information i frågan om kroppsfigurer och postoperativ omvårdnad, kunde de tänka positivt om sina sexualitet och lindra sina ångest (Remmers et al., 2010; Stephens et al., 2008). Så länge är patienter medvetna om att det alltid finns personal som kan erbjuda viktig information, upplever de överhuvudtaget mindre postoperativa ångest. "Now when I have any problem, I can ask them for help, which make me feel calm" (Liu et al., 2008 s. 2544), som en av de öppenvårdspatienterna från kirurgiska avdelningen påstod.

2 Som rådgivare

Enligt Liao et al.(2014) kan sjuksköterskor hjälpa bröstcancer patienter lindra deras ångest genom att fungera som en rådgivare och erbjuda dem ångesthanterings strategier. Dessa strategier inkluderar bland annat att patienter uttrycka känslor, berätta bekymmer, balansera känslor och ångest samt att informera deras partner och barn för aktuella hälsotillstånd. Med hjälp av rådgivningen via telefonsamtal, kan sjuksköterskor uppmuntra

patienter uttrycka känslor, förklara vanliga symptom av stress/ångest och diskutera de strategier som kan hjälpa dem hantera cancer-behandling relaterade fysiska och psykologiska biverkningar. Ytterligare kan sjuksköterskor hjälpa patienter förstå och acceptera deras sjukroller, och ge råd för övriga avkopplande terapi för att lindra deras stress/ångest (Badger et al. 2004).

3 Ge känslomässigt och psykologiskt stöd

Av två valda vetenskapliga artiklar framgår att det är nödvändigt att ge bröstcancer patienter som genomgått mastektomi känslomässigt och psykologiskt stöd för att hjälpa dem lindra ångest. Författarna har även poängterat att stödet skall börja ges före operationen. På så sätt kan patienterna förebygga postoperativa ångest (Hsu et al., 2010; Remmers et al., 2010). Det känslomässiga stödet fokuserar på att uppmuntra patienter uttrycka känslor och förklara meningar av lidandet till andra, att uppmuntra patienter dela tankar med andra som har liknande upplevelser. Genom att uppleva någon slags gemenskap kan patienter uppfatta att de inte är ensamma i kampen mot bröstcancer, och därmed upplever de mindre ångest (Liu et al., 2008). Det psykologiska stödet syftar till att erbjuda patienter ”stressfri” tillfälle där de kan vara öppna till sjuksköterskor, förklara sina osäkerheter och uttrycka sina känslor. Genom tiden kan patienter känslomässigt och psykologiskt anpassa sig till aktuella förändringar, och därefter kan de uppleva mindre ångest (Liao et al., 2014).

Kommunikation

Kommunikationen mellan sjuksköterskor och patienter är oerhört viktig för att lyckas med tillämpande av dessa omvårdnadsinterventioner. Utöver detta kan sjuksköterskor genom kommunikation upptäcka patienters problem och bedöma deras behov (Stephens et al., 2008). Enligt Remmers et al. (2010) kan en god kommunikation eventuellt ge patienter en känsla av att de har fått den bästa omvårdnaden.

Kommunikationen kan utföras med hjälp av olika metoder, såsom via telefonsamtal, telefonintervju och ”face to face” intervju. Under samtalet är det viktigt att direkt svara på patienters frågor och uppfylla deras önskemål så att de inte behöver att vänta på svaren länge (Stephens et al., 2008).

Ytterligare är det nödvändigt för patienter att prata med sjuksköterskor i en tillåtande atmosfär där de är uppmuntrade att ställa frågor och berätta bekymmer. Det blir lättare för patienter att förstå inlärd information om sjuksköterskor svar dem på ett förståndigt sätt utan att använda medicinska språk. Sjuksköterskor har önskats av patienter att utveckla sina personligheter och samtalkonster. Till exempel ska sjuksköterskor vara vänliga, lugna och omtänksamma. De ska vara tålmodiga som bra lyssnare så att patienter kan känna sig trygga. Därefter ett tillitsfulla förhållande kan etableras mellan dem (Remmers et al., 2010).

Diskussion

Studiens resultat har diskuterats med stöd av det valda teoretiska ramverket ”interpersonal nursing theory” av Hildegard E. Peplau (1991), framförallt har studien tydliggjort vissa viktiga sjuksköterskeroller i den processen som att hjälpa patienter lindra deras postoperativa ångest.

Som lärare. Sjuksköterskan har ansvar som att lära patienten om den pågående proceduren, den aktuella behandlingen och de behandling-relaterade komplikationerna. Sjuksköterskan erbjuder samtidigt vitala kunskap i samband med patientens intresse och önskemål. Genom att ge patienten postoperativ information i frågan om kroppsfigurer och postoperativ omvårdnad, kan patienten uppleva ökad trygghet och mindre ångest.

Som informatör. Sjuksköterskan har möjlighet och förmåga att ge patienten information efter deras egna behov, framförallt att ge dem särskild information om ångesthantering. Till exempel, kan sjuksköterskan erbjuda patienten information om musikterapi, muskelavslappande träning och massageterapi samt så kallas ”body-mind-sprit” gruppterapi. Därefter kan sjuksköterskan vägleda patienten till lämpliga terapin.

Som rådgivare. Sjuksköterskan kan hjälpa patienten lindra hennes postoperativa ångest genom att hjälpa henne förstå och hitta livsmening i den aktuella situationen samt ge råd och uppmuntran till patienten för livsförändring. Sjuksköterskan kan vara en rådgivare för både patienten och dennes partner eller närstående. Å ena sidan kan sjuksköterskan, genom att ge råd till patienten, uppmuntra henne uttrycka känslor, förklara vanliga symptom av stress/ångest och diskutera strategier som kan hjälpa henne hantera cancerbehandling relaterade fysiska och psykologiska biverkningar. Å andra sidan kan sjuksköterskan ge råd till patientens partner eller närstående om att förstå patientens situation och bemöta oron av ångest.

Som vårdmiljöansvariga. Enligt Peplau (1991) har sjuksköterskan förmåga att påverka patientens fysiska vårdmiljö under vårdtid på sjukhuset. En välkomna sjukhusmiljö med en hem känsla kan ge positivt inflytande över patientens postoperativa ångest. En gynnsam och positiv socialmiljö runt omkring patienten kan väcka hennes inspiration om nya livet så att hon förmår bekämpa vidare sjukdomen och ångesten.

Slutsats

Med denna litteraturstudie har jag genom tio vetenskapliga artiklar kartlagt omvårdnadsintervention över postoperativ ångest för bröstcancer patient, framförallt har jag sammanfattat några viktiga sjuksköterskeroller i processen som att hjälpa bröstcancer patient lindra deras ångest. Men som en rekommendation, skulle det vara märklig att kunna samla forskningsinformation via intervjun så att forskare skulle kunna upptäcka nya idéer kring detta forskningsämne. Det skulle också vara lysande att kunna genomföra studien på en mer konkret nivå, som till exempel att åldersgrupp av bröstcancer patienter skulle kunna riktas mellan 18 och 50 år, eller att patienter bara har undergått mastektomi operationer. Till sist skulle det vara intressant att utreda ur ett kulturperspektiv hur detta ser ut i olika länder.