

**NURSING INTERVENTIONS IN FEMALE BREAST CANCER
PATIENTS**

Narrative Literature Review

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ABBREVIATIONS

BCNs	Breast care nurses
BRCA1	Breast cancer 1 early onset
BRCA2	Breast cancer 2 early onset
CP	Clinical pathways
DCIS	Ductal carcinoma <i>in situ</i>
DoH	Department of Health
EBM	Evidence-based medicine
LCIS	Lobular carcinoma <i>in situ</i>
NHS	National Health Services
NSPO	Nursing sensitive patient outcomes
RCN	Royal College of Nursing
SEER	Surveillance, Epidemiology and End Result Program
SUHB	Science of Unitary Human Beings

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Breast cancer is the most common cancer in women worldwide. In the past decades a measure of breast cancer extent globally has increased. The incidence has increased also in Finland. The term “breast cancer” refers to a malignant tumor that has developed from cells in the breast. Breast cancer is an uncontrolled growth of breast cells, which occurs as a result of mutations, or abnormal changes, in the genes responsible for regulating the growth of cells and keeping them healthy.

Nursing interventions can do very much to reduce the perception of illness severity and allow psychological adjustment, and quality of life to be maintained. In this final thesis nursing interventions were divided into three subchapters, such as: Education, information and communication; Symptom management and importance of multidisciplinary teamwork; Psychological support and coordination of care. This work contributed to the field of breast cancer nursing; it aimed to highlight the nurse’s role in supporting breast cancer female patients throughout the illness. It has been written to influence, encourage and support women to be breast aware and to investigate the influence of the nurses’ role on breast cancer patients.

The research method of this thesis was narrative literature review. Narrative literature review attempt to provide an overview in wide range of issues within a topic and the research question. Research target group were female breast cancer patients. The limitation of this study was the lack of specific template of literature review as well as inability to read and analyze several relevant and appropriate articles, due to a blockage by payment, also restriction to English language settings.

The findings of this study have shown that role of the nurse is strictly educative and informative. Symptom management, psychosocial support, teamwork management and the coordination of care, are right after education and information provision, the most important roles of nurse in breast cancer patient treatment. There were strong uniformity between educative, informative, communicative, supportive and symptom management role of nurses. These roles enhance the development of quality and rise up the standards of nursing care among the cancer patients.

Key words: Nursing interventions, Breast cancer, Nursing care, Breast cancer treatment.

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Rintasyöpä on yleisin syöpä naisilla maailmanlaajuisesti. Viime vuosikymmeninä rintasyövän määrä maailmanlaajuisesti on kasvanut. Ilmaantuvuus on lisääntynyt myös Suomessa. Termi "rintasyöpä" viittaa pahanlaatuiseseen kasvaimen, joka on kehittynyt rinnan soluissa. Rintasyöpä on rintasolujen hallitsematon kasvu, jonka seurauksena esiintyy mutaatioita, tai epänormaaleja muutoksia.

Hoitotyöllä voi tehdä hyvin paljon vähentämään sairauden vakavuutta, parantaa psykologista sopeutumista ja elämänlaadun säilymistä. Tässä opinnäytetyössä hoitotyö jaettiin kolmeen alalukuun: Koulutus, tiedotus ja viestintä; Oireiden hallinta ja monialainen tiimityö; Psykologista tukea ja koordinoitua . Tässä työssä viitataan rintasyövän hoitotyöhön; tällä pyritään korostamaan sairaanhoitajan roolia tuettaessa rintasyöpää sairastavia naispotilaita koko sairauden ajan. Se on kirjoitettu vaikuttaakseen, kannustaakseen ja tukeakseen naisia ja kertoa sairaanhoitajien roolista rintasyövän hoidossa.

Tutkimusmenetelmänä tässä opinnäytetyössä oli narratiivinen kirjallisuuskatsaus. Narratiivisessa kirjallisuuskatsauksessa yritetään tarjota monenlaisia kysymyksiä aiheesta ja tutkia niitä. Tutkimuksen kohderyhmänä olivat rintasyöpää sairastavat naiset. Tämän tutkimuksen tekemistä rajoitti tarkan mallin puuttuminen kirjallisuuskatsauksesta, rajoittavia tekijöitä oli myös se, että kaikkia artikkeleja ei ollut mahdollisuus lukea englanniksi ja analysoida niitä niiden maksullisuudesta johtuen.

Tämän tutkimuksen tulokset ovat osoittaneet, että sairaanhoitajan rooli on ehdottoman tärkeä sairaudesta opettamiseen ja tiedottamiseen. Oire hallinta, psykososiaalinen tuki, tiimityön hallinta ja hoidon koordinoitua ovat sairaanhoitajan tärkein rooli rintasyövän sairaalahoidossa. Tuli ilmi ,että yllä olevien roolien kesken on vahva yhteys. Nämä roolit auttavat kehittämään laatua ja määräävät normit syöpäpotilaiden ja hoitohenkilökunnan välillä.

Asiasanat: Rintasyöpä, Hoitotyön menetelmät, Rintasyövän hoito, Hoitotyö.

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1 INTRODUCTION

Breast cancer is the most common cancer in women worldwide. In the past decades a measure of breast cancer extent globally has increased (Weaver *et al.* 2006, 732-742). The incidence has increased also in Finland being 96.6 per 100,000 women in 2011, which relates to approximately 4,700 new cases diagnosed annually. The relation of comparative five-year survival estimate for a patient with breast cancer (of any stage) in Finland is currently approximately 89 % (Finnish Cancer Registry, Statistics from 2002-2009). Notwithstanding improvements in treatment and diagnostic methods, approximately 800 to 900 women die of breast cancer annually in Finland (Paajanen 2006, 88-90; www.cancerregistry.fi).

The term “breast cancer” refers to a malignant tumor that has developed from cells in the breast. Breast cancer is an uncontrolled growth of breast cells, which occurs as a result of mutations, or abnormal changes, in the genes responsible for regulating the growth of cells and keeping them healthy (www.cancer.gov). Usually breast cancer either begins in the cells of the lobules, which are the milk-producing glands, or the ducts, the passages that drain milk from the lobules to the nipple. Less commonly, breast cancer can begin in the stromal tissues, which include the fatty and fibrous connective tissues of the breast. Breast cancer is always caused by a genetic abnormality (a “mistake” in the genetic material). However, only 5-10% of cancers are due to an abnormality inherited from patient’s mother or father. Instead, 85-90% of breast cancers are due to genetic abnormalities that happen as a result of the aging process and the “wear and tear” of life in general (www.breastcancer.org).

As it could be expected, prognosis after the diagnosis and treatment of early stage tumors are more favorable than those of a more advanced disease (Boyle 2003, 351-356; Tubiana & Koscielny 1999, 295-303). According to recent statistics from the Surveillance, Epidemiology and End Results (SEER) database managed by the National Cancer Institute of the United States, the five-year relation of comparative survival rate of a patient with localized breast cancer is 98.4%, while it is only 23.8% in patients with advanced disease (www.seer.cancer.gov).

Nursing interventions can do very much to reduce the perception of illness severity and allow psychological adjustment, and quality of life to be maintained. That is the reason why nursing interventions should be provided with a clear structure to make the nursing care effective and to facilitate descriptions of outcomes (Wengström, Häggmark & Forsberg 2001, 8-15). According to Orem’s theory: “*The nursing methods include the provision of a supportive environment, physical*

and psychological comforting and instructions on guiding/acting/doing for the patient” (Wengström *et al* 2001, 9). In this final thesis nursing interventions of female breast cancer patients are divided into three subchapters, such as: Education, information and communication; Symptom management and importance of multidisciplinary teamwork; Psychological support and coordination of care.

This division was made to ease the process of understanding the complicity of nursing chain in breast cancer patients.

This work contributes to the field of breast cancer nursing; it aims to highlight the nurse’s role in supporting breast cancer female patients throughout the illness. The specific question for this final thesis is: What kind of role the nurse has in treatment of breast cancer female patient?

It has been written to influence, encourage and support women to be breast aware and to investigate the influence of the nurses’ role on breast cancer patients. Hence, present thesis is restricted to female breast cancer patients’ treatment. There are several cases of male breast cancers, ranging from 10 to 20 incidents diagnosed yearly in Finland (www.cancerregistry.fi), thus, due to rare accounting of their appearance, male breast cancer treatment is not investigated in this work. Another restriction which came across during accomplishment of present thesis is language used. From all reliable and available materials only those written in English were chosen and used. It is because this thesis is meant to be written in English. It is part of the studies performed in international line, where the language spoken and written is English. This specific restriction has brought problem of its own to the present work. Many available articles from reliable school databases could not be used because the written language was too difficult for the author to be understood.

All the materials used in this thesis were gathered, analyzed, critically appraised and synthesized in ethically correct manner, following the measures of validity and reliability to serve the present and future students and teachers in Lapin University as a study material.

2 EPIDEMIOLOGY AND RISK FACTORS

The global incidence of breast cancer in the past decades has increased significantly (Weaver *et al* 2006, 732-742) and it is the most common female cancer in the world. It comprises approximately 23% of all female cancers in the world (the World Cancer Research Fund International, www.wcrf.fi). The increasing numbers of women are being diagnosed with breast cancer also in Finland (Moller *et al* 2005, 117-128). In the early 1980`s there were under 2,000 women diagnosed with breast cancer annually while the annual incidence in the late 2000`s was approximately 4,500 (www.cancerregistry.fi). The increase in extent could be attributed to mammography screening programs (White, Lee & Kristal 1990, 1546-1552) (Moller *et al* 2005, 117-128). The increase in breast cancer occurrence, though, is observed also in unscreened women (Harmer, Staples & Kavanagh 1999, 333-337), which may reflect time effects such as population ageing, better awareness of the disease and modern and more accurate diagnostic facilities (Gotzsche *et al* 2012, 17). Notwithstanding, relative 5-year survival of breast cancer patient is 89% in Finland, 800-900 women die of the disease perennally (www.cancerregistry.fi).

Breast cancers in men are rare accounting only under 1% of all breast cancers (White *et al* 2011, 219). Only 10-20 male breast cancers are diagnosed yearly in Finland (www.cancerregistry.fi). The breast cancer occurrence rate increases with age (Singletary 2003, 474-482). Risk of breast cancer is low before the age of 30 but a arbitrate increase in occurrence is observed already in the age group of 30 to 45. A clear increase in the incidence occurs from the age 45 forwards to 65-70 (www.cancerregistry.fi).

Hereditary mutations cause approximately 5-10% of all breast cancers the proportion being probably larger in breast cancer patients aged under 30 (Nevanlinna & Kallioniemi 1999, 2365-2374). Several gene mutations are identified of which highly penetrant gene mutations in tumor suppressor genes BRCA1 and BRCA2 are the most important (Turnbull *et al* 2010, 504-507; Kuusisto *et al* 2011, 20; Nasir *et al* 2009, 295-2010). Various other factors are also reported to be associated with the risk of breast cancer, most of them being related to the tissue levels of estrogens (nulliparity, late first childbirth, early menarche, late menopause, hormone replacement therapy and postmenopausal obesity) (Clemons 2001, 276-285; Butt *et al* 2009, 1926-1934; Brown & Simpson 2010, 4-7; Chlebowski *et al* 2010, 1684-1692).

Additionally, previous invasive breast carcinoma, LCIS (lobular carcinoma in situ), DCIS (ductal carcinoma in situ) are considered noteworthy risk factors for breast cancer (Colditz & Rosner 2000, 950-964) as well as previous cancers such as ovarian or uterine cancers (Arts-de Jong *et al* 2013). Another risk for carcinogenesis and breast cancer increases while exposure to radiation from any source or purpose (i.e. diagnostic imaging, radiation therapy) especially to the chest area. Association of alcohol consumption, smoking and physical inactivity with breast cancer have also been documented (Colditz & Rosner 2000, 950-964; Singletary 2003, 474-482; Singletary & Gapstur 2001, 2143-2151; Luo *et al* 2011, 1016). Additionally disruptions of circadian rhythm and light at nights have been associated with increased risk for breast cancer due to disturb of melatonin secretion. Physical activity, normal body mass index and breast feeding are reported to decrease the risk for breast cancer (Pieta *et al* 2009, 186-189).

The occurrence of breast cancer has been observed to vary between races and social status. It is lower among the American black people than among white people reflecting lower risk for breast cancer among black people. The incidence of breast cancer rises with improving social status. Women with high economic status are at greater risk of getting breast cancer. The association between cultural factors and these differences is currently unclear (Vainshtein 2008, 833-839). Nearly 75% women diagnosed with breast cancer have no observable or significant risk factors for the disease (Berg 2010, 168-169). It is possible to estimate the individual risk of invasive breast cancer, using for instance the freely available Gail model, which considers the most important risk factors such as age at menarche, age at first live birth, number of previous breast biopsies and the presence of atypical hyperplasia in a biopsy specimen, number of first-degree relatives with breast cancer and age (Gail *et al* 1989, 1879-1886; Meads, Ahmed & Riley 2012, 365-377; Rockhill *et al* 2001, 358-366).

3 NURSING INTERVENTIONS IN FEMALE BREAST CANCER PATIENTS

Nurses are in the ideal position to take on the role of key worker for patients diagnosed with breast cancer. It is due to the constant development of nurse's education in the field of cancer. As nursing strives to strengthen the evidence base for practice, there is a move away from descriptive and exploratory research to the testing of new interventions and greater use of more evaluative research designs. The current drive for complex interventions is outlined by Richards and Borglin (2011, 531) who '...urge researchers in nursing to increase the volume of translational research by embracing new complex interventions research methods thinking'. They highlighted the non-benign nature of nursing practice and called for improved knowledge for nursing practice derived from a solid evidence base.

Nursing interventions must be based on evidence that the interventions and actions being implemented are likely to result in more good than harm. It is therefore incumbent on nurses to develop the knowledge and expertise to advance and embrace research methodologies that provide the highest form of evidence to support practice, so that choices are well informed and likely to lead to benefits for service users and society (Corry *et al* 2013, 2366-2386).

In this final thesis nursing interventions used are based on education, intervention and communication; symptom management and importance of multidisciplinary teamwork; and psychological support and coordination of care. This division for three subgroups was made to ease the process of understanding the complicity of nursing chain in breast cancer patients. According to the author of present thesis, it is necessary to introduce the definition of all three subgroups, which are presented below.

According to Oxford Dictionary Online, education is defined as the process or receiving or giving systematic instruction. In the field of nursing care, education is strictly related to ethics. The ultimate goal of ethics education is eminently practical: to promote ethically reflected practice and positively influence the moral behavior of future patients with regard to shared ethical standards of the profession (Grob, Leng & Gallagher 2012, 26:35–41). It is essential that the patient education which professional nurses conduct as skilled interventions is appropriate, effective, and meaningful for each individual. Evidence-based research in education has shown that learning is enhanced if: The information is developmentally appropriate and culturally relevant; verbal and written information is understood by the client; and medical jargon is kept to a minimum.

Format and font of written material should be uncluttered and large enough for elderly patients to read. Sensory or motor deficits that might impede learning or ability for self-care should be addressed and may indicate a need for altering the method of teaching (Hindelang 2006, 14-16).

According to National Cancer Institute, symptom management is defined as care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of symptom management is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment (www.cancer.gov). Symptoms are a subjective experience appraised by the patient (Liehr 2005, 5). Symptoms are the most common reason people seek health care and they are a major problem for individuals and their families since their management and resulting outcomes are often their own responsibility (Lee & Miaskowski 2014,). Multidisciplinary teamwork plays very important role in breast cancer patient's treatment. It consists of a group of members with varied but complimentary experience, qualifications and skills that contribute to the achievement of the organization's specific objectives (Liao *et al* 2010, 49-59).

To date most studies assessing needs for psychological support and detailed information have restricted their analysis to the description of patients' expression of their needs (Raupach & Hiller 2002, 289-301; Salminen *et al* 2004, 663-668; Tsuchiya & Horn 2009, 149-155). They have identified psychological support to manage the fear of cancer spreading and provision of information regarding benefits and side effects of treatments as some of the major needs in breast cancer patients (Harrison *et al* 2009, 1117-1128). Comprehensive psychological supportive care reinforces needs related to information provided, management of daily life activities, emotions and sexuality. Supportive care include personalized information with reading material and use of an interpreter, practical assistance with daily life and child-minding, specific help and counseling to address psychological as well as sexual issues (Griesser *et al* 2011, 466-474).

3.1 Education, information and communication

Nursing interventions promotes efficient, patient-centered care and are highlighting the need for the patients to receive the treatment that they need, just exactly when they need it. It is essential, while

promoting high quality care and patients empowerment, to emphasize the importance of communication between healthcare professionals and patients. According to the statement from Department of Health from year 2000, need of information and empowerment for the patients and their families is highly important: *“Issues being important to the patients include: being treated with humanity, dignity and respect, good communication, clear communication, the best possible symptom control and psychological support”* (McCready 2003, 49). Nurses are in prime position to make use of the opportunities they experience in everyday work, to influence, encourage and support women to be breast aware. *“They have the potential to make an impact on women’s health by encouraging women to become more involved in their own health”* (Bailey 2000, 14, 30). Nurse’s role in guidance of a patient is predominantly educational and involves: Encouraging women to be familiar with their breasts; Offering verbal and written information; Being aware of the management of breasts problems; Informing women about the screening program; Continuation of care, while meeting the patients on their follow-up treatment (McCready 2003, 41-49; Mahon 2007; Miller 2008, 479-487). Because of breast cancer impact on body image and intimate relationships as well as its increasing incidence in younger women, breast cancer is associated with significant emotional distress (Bouchardy *et al.* 2007, 1743-1746; Montazeri 2008, 27-32). Needs for psychosocial support and for detailed information are usually very high (Sanson-Fisher *et al* 2000, 226-237; Hjerl *et al* 2002, 258-264; Raupach & Hiller 2002, 289-301; Osborne, Elsworth & Hopper 2003, 755-762; Thewes *et al* 2004, 177-189; Booth *et al* 2005, 225-232; Iwamitsu *et al* 2005, 19-24; Vivar & McQueen 2005, 520-528; Connell, Patterson & Newman 2006, 419-426; Grabsch *et al* 2006, 47-56). Answering these needs appropriately can significantly improve the quality of life of breast cancer patients (Scholten *et al* 2001, 459-464). During the guidance process of a cancer patient, nurse is “waking up” the breasts awareness in female involved. One part of nursing implementation is teaching what “normal breasts” is, and how “normal breasts” does feels like and looks like, and another part is teaching what changes to look for and what do to if the change is found (Ferrell *et al* 2003, 1-11). The main aim each and every nurse should develop during practicing his/her career is to empower patient by providing information, advice and support (Bailey 2000, 34-36). Many women confuse breast awareness with breast self-examination and often believe they are the same thing. However, breast awareness advocates that women no longer need to worry how to examine their breasts in a particular way or to remember to do it at a particular time, as is recommended with breast self-examination. Instead it focuses on breast awareness becoming a normal part of caring for their bodies. Many health initiatives have been implemented with the aim of dispelling the ongoing confusion around breast awareness. These

initiatives include the National Health Services (NHS) Cancer Plan commitment to detecting cancers earlier by raising public awareness and the Royal College of Nursing (RCN) review of the nursing guidelines on breast palpation and breast awareness (Department of Health, 2000; RCN, 2002). The RCN review recommends that nurses no longer teach women how to examine their breasts but take a more educational role, encouraging women to become familiar with what is normal, offering written and verbal information, being aware of the management of breast problems and informing women of the breast screening program (Graham 2005, 23).

3.2 Symptom management and importance of multidisciplinary teamwork

The symptom experience of breast cancer varies greatly among patients and is a result of the disease or its treatments. Subjective symptoms often include fatigue, anxiety, depression, constipation, nausea, and pain, problems with concentration, sleep disturbance and dyspnea. Visible signs include vomiting, diarrhea, hair loss, and weight change (Cleeland 2001, 1657-1661). A nurse coordinator role is an essential element of quality care to help patients and their families cope with symptoms across treatments and time (Skrutkowski *et al* 2008, 948-954). The main function of nurse while implementing symptom management treatment in care of a patients and families is assessing and managing needs (Wengström, Häggmark & Forsberg 2001, 8-15; Boyle 2006, 407-416; Bryce, Bell & Connola 2007, 532; Clark *et al* 2008, 43-45; Boehmke & Dickerson, 2005, 382-389).

Psychological distress and quality of life among patients with cancer are influenced by perceived life threat. Women undergoing treatment for breast cancer are suffering from distress of the greater scale due to unexpected symptoms rather than those symptoms they were told they could expect. They are coping much better with expected symptoms and they have fear of the unknown. Symptom management interventions reduce distress. Ambulatory nursing care interventions have been shown to improve outcomes with respect to symptom distress (Strutkowski *et al* 2008, 948-954).

Quiet time, with or without controlled environmental noise, such as background music, is a noninvasive nursing intervention that typically is used to induce a state of relaxation or maintain a resting state (Thomas 2002, 313-321). Relaxation or music is an equal effective means of reducing postoperative pain (Good 2002, 61-70). Music is a more effective means of reducing state anxiety than uninterrupted rest (Wong 2001, 376-387). Dialogue is a noninvasive nursing intervention that is regarded as an essential aspect of nursing practice (Caris-Verhallen 1997, 915-933). Nurses have

used dialogue for many years to provide support to patients experiencing pain, distress and anxiety (Anderson 1965, 151-157). Talking with patients can reduce their pain and enhance their mood (Diers 1972, 419-428; Kelly *et al* 2004, 625-631).

According to P. Maguire, about 30 per cent of women with breast cancer develop an anxiety state or depressive illness within a year of diagnosis, which are three or four times the norm in the rest of the population (McCready 2003, 48). Breast cancer diagnosed patients, often describe themselves as “ugly” and keep on thinking they are unacceptable by the environment they live in. Their suffering lies deep in psychological effects of having cancer stem from a sense of loss, loss of health, opportunities, choice, and control, uncertainly about the future, anxiety and depression (Grosser 2003, 13-14). To promote the process of symptom management nurse need to encourage disclosure, often true open questioning. Also the skills of sensitivity and empathy are very valuable. The support of health professionals, family and closest friends is associated with better adjustment and decreased emotional distress among patients with cancer. Breast care specialist nurses have an important role to play as part of the multidisciplinary team caring for the patient. Research endorses the value of this specialist role, particularly in identifying those women at risk of psychiatric morbidity (McCready 2003, 48-49). Breast cancer treatment is about the stages and treatment of breast cancer, follows-up and check-ups after treatment, and information about professional healthcare resources and patient support groups. During that process of care professional multidisciplinary team conducted of experts in cancer or cancer-related issues, such as: a surgeon, a psychiatrist, a breast cancer case manager, a few nurse educators in oncology, a social work professional, patient itself, patient’s closest relatives, and occasionally dependent on the personal need, nutrition therapeutic professional, are involved in (Liao *et al* 2010, 49-59).

3.3 Psychological support and coordination of care

Women with breast cancer need supportive care to alleviate psychological distress and assist them adapt to the situation. Supportive care is an attitude that facilitates interpersonal relationships and individual’s physical and psychosocial comfort. There are different support needs experienced with individuals with breast cancer, like physical, informational, emotional, practical/tangible support, which are influenced by personal, environmental and social factors (Fitch 1994). Informational care refers to advice in dealing with problem, emotional support contributes to the feeling, one is given,

cared for and loved. Tangible support is a direct aid, such as taking care of a critically ill patient. There are several personal factors, like demographic characteristics, personal experiences of breast cancer (symptoms, history of breast tumor etc.) family structure, coping resources and social support, which have direct impact on patient's holistic well-being. Environmental factors include culture and urban or rural location, while social support includes the structure of the family, ranging from spouse to families with significant others (Liao *et al* 2010, 49-59).

Supportive interventions incorporating individualized informational and emotional support given by the professional healthcare providers have been shown to improve the emotional and psychological status of patients with breast cancer (Pålsson & Norberg 1995, 277-285). Cancer patients need repeated explanations and professional care from nursing staff, due to significantly short clinical visits at the physician office. Patients find it easier to open up for nurse, than for the doctor (Korber *et al* 2011, 44-50), they have also admitted, nurses speak more simple and better understandable language than the physicians, and still they have the professional knowledge and skill on the issue concerning them (Pålsson & Norberg 1995, 280). The anxiety level of patients with breast cancer has been shown to be decreased by telephone consultation and follow-up (Beaver *et al* 2006). The literature review supports the use of informational and psychosocial support programs via face-to-face sessions or telephone to improve care outcomes for patients with breast cancer.

Emotional support provided by the care team, particularly the professional nurse, and significant others are the key to successful treatment completion. Support often is perceived as "just being there" and could be likened to the concept of intentional presence. Having a nurse to rely on is seen as valuable factor in managing the illness (Korber *et al* 2011, 45-46).

A need exists today to clinically individualize nursing interventions that reduce side-effects for women receiving treatment for breast cancer. Interventions can do much to reduce the perception of illness severity and allow psychological adjustment, and quality of life to be maintained (Wengström, Häggmark & Forsberg 2001, 12-13). Patients under current treatments such as chemotherapy have often nausea, weakness and other side effects. Their daily living is made more difficult and the needs for practical assistance with housekeeping, child-minding and other similar day-to-day tasks are consequently increased. Furthermore, anxiety and fears about cancer spreading or returning are commonly identified among patients undergoing treatment who have therefore more support needs to address those psychological issues. Comprehensive psychological supportive care reinforces needs related to information provided, management of daily life activities, emotions and sexuality (Griesser *et al* 2011, 466-474).

Continuity of care is essential in developing interventions to improve symptom management. Interventions provided by professional nurses, like coordinating care, lending emotional support, providing education are shown to be helping breast cancer patients and their caregivers navigate the healthcare system and manage their symptoms. Nurse-led follow-up has shown improvement in emotional functioning and quality of life, increased satisfaction with care, and decreased the number of physical symptoms among patients with breast cancer (Kelly *et al* 2004, 627-631; Badger *et al* 2005, 273-279).

4 PURPOSE AND PROBLEMS OF THE STUDY

The main aim of narrative literature review is to investigate and delve into the topic, and especially to find out what is already known about it. The knowledge and established ideas are being researched and the statement about most significant questions and problems addressed before is being done. The idea is to convince the consignee that the research study is necessary and represents the next step in knowledge-building and draws attention for the future need of the research project in the particular topic (Moule, P & Goodman 2009, 143-150). This work contributes to the field of breast cancer nursing; it aims to highlight the nurse's role in supporting breast cancer female patients throughout the illness. The specific question for this final thesis is: What kind of role the nurse has in treatment of breast cancer female patient?

It has been written to influence, encourage and support women to be breast aware and to investigate the influence of the nurses' role on breast cancer patients. Hence, present thesis is restricted to female breast cancer patients' treatment. There are several cases of male breast cancers, ranging from 10 to 20 incidents diagnosed yearly in Finland (www.cancerregistry.fi), thus, due to rare accounting of their appearance, male breast cancer treatment is not investigated in this work. Another restriction which came across during accomplishment of present thesis is language used. From all reliable and available materials only those written in English were chosen and used. It is because this thesis is meant to be written in English. It is part of the studies performed in international line, where the language spoken and written is English. This specific restriction has brought problem of its own to the present work. Many available articles from reliable school databases could not be used because the written language was too difficult for the author to be understood.

Limitation of time for accomplishment of this thesis was also a problem the author had to face. Thirteen articles used in this study were found in relatively short time, all were restricted by the English language, free full text and the criteria described in chapter five. Author is assured that if there would be more time, more relevant articles would be found and critically analyzed. Limitations restricted by the English language use, didn't allow choosing all relevant articles possible. Author had to limit the research process, which brought generally very good and very relevant results. Problem was in the amount of the articles which were relevant to this particular thesis, and it was thirteen articles. One of them was older than 20 years (Pålsson & Norberg 1995,

277-285), but still, this article was very reach in information related to the topic. For this reason, author decided to consider and later on decide on including it in this thesis.

Articles used provided great amount of scientific and reliable information to the topic of this thesis. Some of them have been dealing with more than one issue related to nursing intervention in breast cancer patients described in this work (Kelly *et al* 2004, 625-631). It brought a problem to the author during the process of division, where the thirteen articles were divided into three subchapters of Education, information and communication; Symptom management and importance of multidisciplinary teamwork; and Psychological support and coordination of care. This division was made to ease the process of understanding the complicity of nursing chain in breast cancer patients. The decision on where to “add” the specific article, to which subchapter, was based on the amount of scientific information presented in the article. Subsequently, to some extent, article was used also in the other subchapter because the material mentioned was essential to this particular section of this final thesis.

All the materials used in this thesis were gathered, analyzed, critically appraised and synthesized in ethically correct manner, following the measures of validity and reliability to serve the present and future students and teachers in Lapin University as a study material. The contract between the author and the authorities of the Lapin University of Applied Sciences is attached in Appendix 1.

5 METHODOLOGY

5.1 Literature review

The research method of this thesis is narrative literature review. Literature review is an evaluation of research published till date on a specific topic for various purposes like justify a research, support a proposal for research, provide an overview on a topic drawing attention for further needs of research and in some cases as a thesis like this paper. It can be exploratory, descriptive, or evaluative according to the target question. It can be a part of a research proposal, a section in a completed research study report, and can also be a part of a journal article where it is sometimes called the introduction. (Moule & Goodman 2009, 138.) According to LoBiondo and Haber (2006: 88-89), traditional print resources do not need to be included in electronic database research.

There are two types of literature review: one is “Narrative literature review” and the other is “systematic literature review”. A systematic literature review is defined as, “the application of scientific strategies that limit bias by the systematic assembly, critical appraisal, and synthesis of all relevant studies on a specific topic” (Pain Physician 2009, 35-72). Systematic reviews and meta-analyses are labor intensive, requiring expertise in both the subject matter and review methodology, and also must follow the rules of EBM which suggest that a formal set of rules must complement medical training and common sense for clinicians to interpret the results of clinical research effectively. While expertise in the subject matter is crucial, expertise in review methods is also particularly important (Pain Physician 2009, 35-72).

Narrative literature review attempt to provide an overview in wide range of issues within a topic and the research question is descriptive which aims to gather information that highlights relationships, patterns & links between variables for e. g, association between communication style and patient’s breast awareness outcome (Moule & Goodman 2009, 13.)

During literature review process, author deals with three things: summarizing, critical appraisal, and synthesis. At first articles are being summarized including the issues like literature framework, methodology, sample selection, context, results, & relevance of the literature; in the next step, articles are critically appraised, which is an important assessing tool of a literature review for producing; it is about analyzing the retrieved information and producing an evidenced based work. Critical appraisal seeks to find out answer on some target questions like: Are the concepts mentioned in the article well defined? Does the theoretical framework of the research support the

claims and findings of the research? What are the strengths and weaknesses of the article? What has been a criterion for choosing participants, sample size, location and type of study? And in the last step articles are synthesized. Synthesizing means identifying issues highlighted and show how the literatures are linked to each other and to authors' own work and concluding finally what the literature says. (Moule & Goodman 2014, 120)

In this thesis thirteen articles are being summarized in subchapter 5.3 dealing with data collection. At first author describes in this subchapter issues including literature framework, methodology, sample selection and the main results. Appendix 2 include table consist of all articles used, their title, authors, year of publication, purpose of the study, data collection and the main findings. It was done to visualize the process conducted by the author, while completing present thesis. Secondary, author appraises critically the articles in subchapter 5.4 which consists of data analysis. During this part of narrative literature review process, author seeks to find out the answer on target question: What kind of role the nurse has in treatment of breast cancer female patient? Finally, articles are synthesized in the chapter 6, dealing with results and conclusions. Author concludes in this chapter what the literature says.

5.2 Implementation of the literature review

Narrative literature review uses a qualitative approach to research and do not provide answers to specific quantitative research questions. A narrative literature review provides neither a list of databases or methodological approaches used to conduct the research, nor knowledge of the inclusion or exclusion criteria used when selecting research articles or material. Narrative literature review will discuss findings, comment on the methods used, and highlight the strengths and weaknesses. (Moule & Goodman 2009, 146-147.)

This final thesis is a narrative literature review because it provides an overview of association between informative education and communication, symptom management and psychological support. It aims to bring a demand in improving the establishment of the effect of supportive care on anxiety and depression levels of women diagnosed with breast cancer by providing evidence that interventions can do much to reduce the perception of illness severity and allow psychological adjustment,

and quality of life to be maintained. The method in evaluating the selected articles is a qualitative approach. No any explicit inclusion and exclusion criteria are used besides the purpose of the article matching to the author's thesis purpose. There are no criteria in selecting articles based on methodologies and specific databases except reputed databases. A narrative literature review includes a summary and critical analysis and doesn't have any specific analysis method (Moule & Goodman 2009, 146-147). Therefore, the articles included in this specific final thesis are just summarized and critically analyzed. While conducting the process of narrative literature review author need to go through hundreds of articles in order to find the articles which match with the purpose of the thesis that is being done. Articles must be understood in terms of their respective purpose. The concluding points should refer back to the purpose and focus of the narrative literature review (Price bob 2009, 43). The material used should be trustworthy, and taken only from a reliable source because narrative literature review is based on the others research, and so the produced thesis must be reliable and honest. Theoretical source can be taken from reputed books, chapter in edited books, organization's websites, PhD dissertation and research to be reviewed from international e-journals, library database, and conference and research reports.

In this final thesis the purpose of the research are explored: the process of encouragement and support of women to be breast aware, to highlight the nurse's role in supporting breast cancer female patients throughout the illness and to investigate the influence of the nurse's role on breast cancer patients. Thirteen articles are reviewed and analyzed targeting to the aim of the thesis.

In order to complete and fulfill this final work, author referred to different reputed journals and PhD dissertations. Plenty of articles have been read, including reference source which were considered and decided to be included. Thirteen from all red articles were included for this final thesis. In this work electronic databases used were MEDIC, EBSCO and PUBMED. The following key words were used to perform searches on each of the above databases: "Nursing interventions" AND "Breast cancer", "Breast cancer treatment" AND "nursing care", "Nursing interventions" AND "Breast cancer", "Psychological support" AND "breast cancer", "Breast cancer" AND "Nursing care". The key words were combined by "and" to get more relevant information that helps to answer the question of this final thesis work. The articles were arranged in a table containing author, year, sample, data collection methods and analysis, and main findings (Appendix 2).

Three articles were carried on the theme education, information and communication, six articles were carried on the theme symptom management and importance of teamwork, and four articles

were carried on the theme psychological support and coordination of care. The articles have been chosen in reference to the purpose of authors' thesis. Articles have been thoroughly studied, critically appraised and synthesized. The questions regarding critical analysis as mentioned earlier were considered in summarizing the review and evaluating its reliability.

5.3 Data collection

According to LoBiondo and Haber (2006: 88-89), traditional print resources do not need to be included in electronic database research. This final thesis was a narrative literature review, and used electronic databases were EBSCO, MEDIC, and PUB MED. The following criteria were used to include articles for further consideration:

1. The article is published in English
2. The article is available in free full text
3. The article is relevant to this final thesis topic
4. The article is based on empirical research

A table below presents the database search and relevant hints. The exclusion criteria used was that the findings were not relevant to this final thesis research questions. Literature search and review process retrieved 951 articles. Most studies were excluded after the free full text and English language settings, and thirteen articles passed the review process leaving scientific articles, which had relevant information that helps to answer the research questions.

Table 1. Database search and relevant hints

Date	Database	Keywords	Hints	Free full articles	English language	Relevant to study
23.10.2014	EBSCO	“Breast cancer treatment” AND “nursing care”	43	29	29	3
23.10.2014	EBSCO	“Nursing interventions” AND “breast cancer”	90	77	77	7
11.11.2014	EBSCO	“Psychological support” AND “breast cancer”	126	47	47	1
23.10.2014	MEDIC	“Nursing interventions” AND “breast cancer”	51	10	10	1
23.10.2014	PUBMED	“Breast cancer” AND “nursing care”	641	44	44	1

Thirteen articles relevant to this final thesis were categorized and gathered in below table to visualize the process of relevant data (material) collection.

Table 2. Categorization of chosen articles

CATHEGORY	DATABASE	KEYWORDS	RELEVANT ARTICLE
<i>Education, Information and Communication</i>	EBSCO	“Breast cancer treatment” AND nursing care	1
	EBSCO	“Nursing interventions” AND breast cancer	2
<i>Symptom management and importance of teamwork</i>	EBSCO	“Breast cancer treatment” AND nursing care	2
	EBSCO	“Nursing interventions” AND breast cancer	3
	MEDIC	“Nursing interventions” AND breast cancer	1
<i>Psychological support and coordination of care</i>	EBSCO	“Nursing interventions” AND breast cancer	2
	EBSCO	“Psychological support” AND “breast cancer”	1
	PUBMED	“Breast cancer” AND nursing care	1

During the accomplishment process of articles categorization, articles were categorized in three subgroups named subsequently as follow: Education, information and communication; Symptom management and importance of teamwork; Psychological support and coordination of care. All together three articles were found for subgroup one, concerning education. One article in different keywords category of “Breast cancer treatment” AND nursing care found in EBSCO, was establishing issues strictly related to informative and communicative role of nurse in female breast cancer treatment process. The author examines the biological, psychological and social aspects of managing patients with breast cancer, and highlights the nurses’ role in supporting patients throughout the illness. Concluding that a patient’s desire for autonomy may be less powerful than the need for clear and accurate information (McCready 2003, 41-49). This study was a literature review, based on the previous research carried on the topic of breast cancer in the United Kingdom of England and in Sweden. The two other articles concerning educational review on breast cancer patients, were found also in EBSCO, by the keywords used “Nursing interventions” AND breast cancer. “Therapeutic Touch, Quiet Time, and Dialogue: Perceptions of Women with Breast Cancer”. (Kelly *et al* 2004, 625-631). This article compared the perceptions of women with breast cancer to an experimental therapeutic touch. Qualitative study base on the Science of Unitary Human Beings was conducted. Eighteen women participated in the study, and the method used was telephone interview. The study concluded that women regarded nursing intervention as a positive experience. Some also expressed positive regard for the research nurse. The last article in this subchapter was “Implementing a Survivorship Care Plan for Patients with Breast Cancer” (Miller 2008, 479-487). This article describes a model of a survivorship care plan in a community hospital for patients with breast cancer. It has been conducted in the United States of America. Five breast cancer survivors completing radiation or chemotherapy treatments were selected as the initial patient group for implementation of the project. During initial implementation, qualitative interviews were conducted. The study concluded that nursing has a central role in all phases of the cancer trajectory, including survivorship.

There were six articles included and decided for subgroup two, concerning symptom management and importance of teamwork. The first two of those six specific articles were found in EBSCO, by the keywords category of “Breast cancer treatment” AND “nursing care”. “The Effect of supportive care on the anxiety of women with suspected breast cancer” by Liao Mai-Nan. This article was a longitudinal quasi-experimental study, conducted in Taiwan. 122 participants were recruited from a large teaching hospital. The experimental group (n = 62) received a supportive care program and the

control group (n = 60) received routine care. Data were collected from October 2006 to April 2007. The anxiety levels of women receiving supportive care were significantly lower ($P = 0.017$) than those of women receiving routine care. The study concluded that supportive care that incorporates informational and emotional support and follow-up telephone consultations can decrease anxiety levels of women with suspected breast cancer. The second article conducted by the same database and keywords category was “Impact of a Pivot Nurse in Oncology on Patients with Lung or Breast Cancer: Symptom Distress, Fatigue, Quality of Life, and Use of Healthcare Resources” by Strutkowski Myriam. This study was a randomized controlled trial in which participants were randomly assigned to an intervention group (n = 93) with care by a pivot nurse in oncology and usual care by clinic nurses or to a control group (n = 97) with usual care only. Research was conducted in three outpatient ambulatory oncology clinics in a large university health center in Quebec, Canada. There were 190 participants in this study, 113 patients with lung cancer and 77 patients with breast cancer. The main finding was concentrated on nurse’s role, and stood that experienced nurses with specialized knowledge of oncology symptom assessment and management may reduce the symptom burden experienced by ambulatory patients with breast or lung cancer. Another three articles out of six concerning symptom management were found through EBSCO, by keywords used: “Nursing interventions” AND “breast cancer”. Those articles were as follow: “Coping with radiation therapy: Effects of a nursing intervention on coping ability for women with breast cancer” by Wengström Yvonne. This article present randomized study carried out to investigate whether nursing interventions would affect coping ability and symptom relief of women coping with breast cancer. The research was done in Stockholm, Sweden. The control and experimental groups both consisted of 67 patients. The Wheel Questionnaire was used to evaluate the effect of the intervention. Results showed that individual interventions aimed at improving well-being helps patients. It also highlights the fact that individual approaches to improving well-being are needed. Such interventions should be directed to patients at risk for poor adjustment, such as those older than 50 years of age.

Following article was written by Badger Terry, who has examined the effectiveness of a telephone interpersonal counseling intervention compared to a usual care attentional control for symptom management (depression and fatigue) and quality of life (positive and negative affect, stress) for women with breast cancer. The article was named “Telephone Interpersonal Counseling with Women with Breast Cancer: Symptom Management and Quality of Life”. Research was conducted in Arizona, USA. Methods used were experimental with repeated measures. 48 women patients with breast cancer, participated for the research, they were all married, in their mid-50s, employed

at the time of the study. Conclusions gathered in the article showed that women in the intervention group experienced decreases in depression, fatigue, and stress over time and increases in positive affect. The last article found by EBSCO by the same means as above, concerning symptom management was written by Bryce Jane and was named: "Clinical Pathways in Breast Cancer Teach Evidence Based Practice and Monitor Nursing Sensitive Patient Outcomes". The purpose of this project was to implement evidence based (EB) symptom management of breast cancer patients using clinical pathways (CP) with a specific focus on evidence-based interventions and nursing sensitive patient outcomes (NSPO) measurement. The study was done in Naples, Italy. Research was conducted base on the existing systematic reviews and included standard grading and oral care instructions. Subjective patient reports were also used. Study concluded that the clinical pathway model provides a method for planning evidence based care with clear measurement and outcome criteria. The model facilitated teaching nurses the process of evaluation of evidence with its application in clinical practice.

Symptom management and teamwork are very important factors in handling breast cancer patients. The last article concerning that issue was carried on by different database. It was found in MEDIC by keywords "Nursing interventions" AND "breast cancer", and was written by Jussila Aino-Liisa. "Stabilizing of Life: A Substantive Theory of Family Survivorship with a Parent with Cancer". The study was conducted as a grounded theory, to explore families living with a parent with cancer and to develop substantive theory to explain how those families solve the main concern in their lives. The data was collected and analyzed according to the grounded theory methodology and consisted of 2377 incidents and the memo found of 97 pages. The results has shown that adjusting to life with the disease comprised clarifying of facts, resorting to help, returning to life, intensifying of togetherness, teamwork and maturing through hardships.

There were four articles considered and decided for the last subgroup of psychological support and the coordination of care. Three of them were found in EBSCO, two articles by the same keywords: "Nursing interventions" AND "breast cancer". First of those two articles was named: "A Breast Navigator Program: Barriers, Enhancers, and Nursing Interventions" written by Korber Susan. Research used semi-structured, open-ended questioning to guide the interviews and elicit identification of barriers to and enhancers of treatment. Content analyses were used to identify themes. The participants were women enrolled in the breast navigator program. The study was conducted in the USA, in two teaching hospitals ambulatory cancer centers. The main purpose of this research was to identify barriers to and enhancers of completion of breast cancer treatment from

the perspective of the participants. The study concluded that completion of breast cancer therapy and care can be improved by recognizing the value the nurse navigator role brings to the patients experience and enhancing that role. Second article found in EBSCO, by the same means was titled: "Breast cancer patient's experiences of nursing care with the focus on emotional support: the implementation of a nursing intervention". The article was written by Pålsson Maj-Britt Elisabet in 1995. Study explored in this article was conducted in Sweden. Nursing care with the focus on emotional support, aimed at improving breast cancer patients' adjustment to everyday life, was implemented. A total of 26 Swedish women, aged 35-69, with newly diagnosed breast cancer, and participated for the study. They have described their experiences of the disease and nursing care in a semi-structured interview 6 months after the primary treatment. Data were coded by open coding where themes and categories were formulated. Findings showed that emotional support, as well as organizational changes of care, led to feelings of safety and security. Third article found by EBSCO, used different keywords, of: "Psychological support" AND "breast cancer". It was titled "Socio-demographic predictors of high support needs in newly diagnosed breast cancer patients". Article was written by Griesser. Study aimed to identify high support needs and their socio-demographic predictors to improve supportive care for newly diagnosed breast cancer patients. A cross-sectional study measured patients' needs and unsatisfied support needs by the supportive care needs survey. Socio-demographic, disease and treatment characteristics completed data collection. A total of 308 questionnaires were completed with a response rate of 88%. Study was conducted in Geneva, Switzerland between September 2005 and August 2006. Findings showed that highest level of needs is related to the psychological support information domain.

The last article chosen for the subgroup of psychological support was "The perception of support received from breast care nurses by depressed patients following a diagnosis of breast cancer". It was found in PUBMED by keywords as follow: "Breast cancer" AND "nursing care". The article was written by Clark Louise and aimed to test whether breast care nurses (BCNs) are able to overcome the potential barrier of emotional distress detection and offer support to the patients. Participants for this study were women with primary breast cancer ($n = 355$) 2–4 days after mastectomy or wide local excision, self-reported perceived professional support and current depression. The main findings of this study confirm the importance of maintaining the special role of the BCN. BCNs were able to provide as much support to depressed patients as to non-depressed patients, whereas depressed patients felt less supported by surgeons and ward nurses than did non-depressed patients.

5.4 Data analysis

During the process of data analysis, thirteen articles used in this thesis are critically appraised. In this part of narrative literature review, author seeks to find out the answer on target question: What kind of role the nurse has in treatment of breast cancer female patient? In this work, author presents the critical appraisal in three parts, subsequently starting with the subchapter of Education, information and communication, and as follow the subchapter of Symptom management and importance of multidisciplinary teamwork, and Psychological support and coordination of care.

First article in subchapter concerning education describes very clearly the role of nurse in treatment of breast cancer patients and simultaneously answers on target question stated by the author. According to McCready, nurse's role is predominantly educational, and involves: encouraging women to be familiar with their breasts; offering information and being aware of the management of breast problems (McCready 2003, 49). It is clear that women diagnosed with breast cancer need treatment. Even more important would be breast cancer prevention. This article outlines significantly the educative role of nurse towards patients, without clear view on improvement in education of nurses. For instance, breast mammography screening is expensive, requiring technological equipment and highly trained staff. Breast care nurse is expected to work alongside expert screening radiographers, radiologists and surgeons in supporting women and their families in relation to the screening program and treatment options, that is why constant education is needed also in relation nurse- multidisciplinary team (McCready 2003, 41-49).

Second article concerning issues strictly related to educative role of nurse, also has managed to answer on the target question of this thesis. According to the authors, the role of the nurse is to promote human betterment by providing dialogue interventions and control quiet time. Although, the study has given attention to criteria for establishing the trustworthiness of qualitative data, including credibility, dependability, conformability, and transferability, the sample used was small, which mandates caution when drawing conclusions, the noninvasive nursing intervention of quiet time plus dialogue may be as effective as the noninvasive nursing intervention of therapeutic touch plus dialogue (Kelly *et al* 2004, 627-631). The final article in this subchapter, describes the role of a nurse as knowledgeable about cancer treatments, side-effect management, and interventions; communicative with patients and providers, and sharing survivorship care plans with survivors. Survivorship care is based on a continuous healing relationship with patients. The reality of incorporating survivorship care plans into a busy clinical setting presents many challenges.

Survivorship care needs to be standard for all patients with cancer, and this can be done only if care plans are accepted into practice and become routine (Miller 2008, 479-487).

There are six articles decided for critical appraisal in subchapter two, concerning symptom management and importance of team work. First of them states that, nurses' role in treatment of breast cancer patients is supportive care that incorporates informational and emotional support and follow-up telephone consultations. During the diagnostic period women have been shown to need not only confirmation of their diagnosis, but also informational and emotional support to alleviate psychological distress. Although patient-centered healthcare has been emphasized by cancer care policies in both Taiwan and Western countries (National Institute of Clinical Excellence 2004), most clinics pay more attention to the treatment and care of patients with a confirmed breast cancer diagnosis (Woodward & Webb 2001, 29-41). Therefore, women with suspected breast cancer have tended to receive inadequate clinical supportive care during the diagnostic period (Liao *et al* 2010, 49-59).

Second article carried on the theme of symptom management and importance of teamwork indicates that nurses role is coordinative and advocative, providing support and information and subsequently to manage patient's needs. Although patient satisfaction generally is high with care delivery models, like the one used in this article, no research to date has studied the effect of a nurse coordinator or any other navigator-type role on specific patient-outcome variables (e.g., symptom distress, quality of life, healthcare usage). In addition, little evidence of the roles' impact on nursing-related outcomes exists, despite considerable advocacy (Skrutkowski *et al* 2008, 948-954). The third article in the present subchapter formally declared that nurses' role in breast cancer patients' treatment is promoting of behaviors to support the patient to restore, maintain or increase their abilities to interact with the situation and adapt to the demands of radiation treatment. A need exists today to clinically individualize nursing interventions that reduce side-effects for women receiving treatment for breast cancer. Women facing breast cancer may develop coping styles in response to the disease as a global concept. This means that they pay less attention to their specific situation and that this may well influence the number and intensity of psychological side-effects. Of prime importance is if it is possible to influence coping style with a structured nursing intervention at a later time than diagnosis during the illness continuum (Wengström *et al* 2001, 8-15). Fourth article carried on the same theme, introduced the nurses role as a counseling and socially-supportive, promoting qualitative and quantitative social support early in treatment. Researchers generally believe that social support can reduce the appraised threat and stress responses that

commonly follow a psychological or physical threat and that social support provides a general sense of belonging and well-being that minimizes psychological despair. Fatigue might be indirectly influenced by the psychological indicators. Hence, authors were unable to test that hypothesis because of the small sample size (Badger *et al* 2005, 273-279).

According to the authors of the fifth article, nurses role responses to effective symptom management and supportive and educative care of patients with breast cancer. Nurse is expected to perform as a part of multidisciplinary team. Systematic reviews are helpful in teaching about levels of evidence and little experimental evidence was applicable to the setting used in this article. Cognitive dysfunction: In depth testing is impractical in the nonresearch setting but increased clinician awareness permits simplified screening and referral (Bryce, Bell & Connola 2007, 532). The final article for this subchapter pass announcement that nurses role is to be active part of a multidisciplinary team responsible for support of physical and mental well-being of cancer patients and their families. Patients have a great number of needs regarding symptom management, information and support, which are unmet in the health and social care because entire families are not dealt as a patient. Moreover, adolescent children of women suffering from breast cancer find that their needs for information are poorly met, since they have fears, uncertainties and a feeling of isolation in response to their mothers` cancer diagnoses. Thus, the emotional impact of breast cancer on adolescents is significant. The need of managing the symptoms of a whole family as a patient is very expected, to be fulfilled by the nurses (Jussila 2004, 20-25).

The last four articles decided for critical appraisal in subchapter three concerning psychological support and coordination of care, have brought very good results and clear answers for target question presented in this thesis. First of them, states that essence of the nursing role in breast cancer patients treatment are psychological support, assistance with symptom managing, team approach and continuity of care. Using the patient`s perspective, this research attempted to validate the effectiveness of navigator programs by identifying barriers to and enhancers of completion of breast cancer treatment. After months of intensive therapy and interaction with multiple team members, the issues were focused on leaving a supportive environment, fears of recurrence and questions about long-term follow up. Moreover, the small number of noncompleters and the single interview conducted didn`t let the reader to get familiar with the broader picture of mentioned issues (Korber *et al* 2011, 44-50). The second article presents the role of a nurse as being emotionally and psychologically supportive with press on organizational changes of care. To meet the nurse for support and follow- up talk, was experienced as important. Although, the organization

of care after the intervention was experienced as positive, further changes are needed. It seems to be mentally demanding for cancer patients to have to wait for information after different kinds of examinations, which may be explained by the fact that the sense of control has been lost, and the uncertainty is terrible to bear (Pålsson & Norberg 1995, 277-285). Third article for this subchapter also manages to answer the target question. According to the authors of this article, nurses' role is strictly supportive. Therefore, psychological and daily living support for newly diagnosed breast cancer patients is expected to be strongly reinforced, alongside with support in sexuality domain. In this article socio-demographic factors were measured by additional survey exploring family situation, country of origin, education and other related socio-demographic factors. Moreover, a number of those socio-demographic factors may have been considered as non-significant because the study lacked power to show differences (false negative). Finally, as the study was performed in a single urban hospital, findings may lack generalizability to other settings (Griesser *et al* 2011, 466-474). The final article decided for the subchapter of psychological support and coordination of care, indicates that nurses role in breast cancer patients treatment comes down to support and information giving. Support from professional staff was rated as high, by both depressed and nondepressed patients, and the differences in support experienced by depressed and non-depressed patients were modest by comparison. Whether the generally high level of ratings reflects general satisfaction with support, or patients' well-known tendency to be positive when evaluating their care staff is not clear. The authors measured support shortly after diagnosis and surgery, and findings may differ as this crisis period recedes (Clark *et al* 2009, 43-45).

6 RESULTS AND CONCLUSIONS

In respect to the conclusions, author would like to admit that nursing interventions are highly important in creating high quality standards of patients' care, not only cancer patients but widely, the whole range of patients receiving health care word wild. Author shares the opinion with Rogers, who said that "*The ultimate goal of the Science of Unitary Human Beings (SUHB) nursing practice is to promote human betterment*" (Kelly *et al* 2004, 626).

The main point of this thesis was to answer the research question, which was asking what kind of role the nurse has in treatment of breast cancer female patient? In order to find out the answer, present narrative literature review was committed and the outcome came as: role of the nurse is strictly educative and informative towards the breast cancer patients in their treatment. The guidance, advice, and support are the main factors that make the nurse being fulfill in his/her role. Furthermore, good, clear communication helps a nurse to improve in symptom management, psychosocial support, teamwork management and the coordination of care, which are right after education and information provision, the most important roles of nurse in breast cancer patient treatment. Hence, it is clearly to see, how strongly all those mentioned above factors collaborate with each other and fulfill one another. Described roles enhance the development of quality and rise up the standards of nursing care among the cancer patients. These all significant roles played by the nurse are leading to development in patients care. In fact, every single aspect of positive patient-nurse relationship leads to improvement in care and psychosocial development of symptom management in cancer patients.

6.1 Education, information and communication

The results from the three articles, which explore the education, information and communication process of a patient with breast cancer, show fairly that raising awareness of needs following cancer treatment helps patients and healthcare providers and improves the quality of care offered in oncology settings. Hence, supportive care is essential to empower women to make their own treatment decision (McCready 2003, 41-49). Effective communication is of great importance to patients in their long-term adjustment to breast cancer treatment. Part of the communication focuses on how the patient can self-monitor for breast cancer recurrence. Women who have been treated

successfully for one breast cancer need to be informed about their potential risk for a second breast cancer and encouraged to seek preventive screening (Mahon, 2007). Time is spent educating the woman regarding the importance of scheduling a yearly mammogram, maintaining clinical breast examination appointments at least every six months if recommended by the oncologist, and performing monthly self-examination of the breasts. The patient is reminded to seek prompt medical attention with the oncologist if changes are found in any breast examinations. Information is reinforced regarding how to perform a breast self-examination and what changes to report (for instance: lumps, hard knots, thickening of the skin, swelling of the breast or under the arm, skin irritation, redness, dimpling, an orange peel-like appearance of the skin, nipple pain, and nipple discharge if she is post-menopausal). Time is spent on reviewing the techniques for breast self-examination and answering questions (Miller 2008, 481-483).

Patients want the nurse to be a friend, comforter, explainer as well as a nurse. And nurses on their behalf must be knowledgeable about cancer treatments, side-effect management, and interventions because high quality nursing interventions and performance skills are based on a continuous healing relationship with patients (Miller 2008, 479-487). Nursing has a central role in all phases of the cancer trajectory, including survivorship. Nurses are able to assess and address the multidimensional spectrum of needs for those faced with cancer (Ferrell *et al* 2003, 1-11). Nurses encounter patients with cancer in a variety of areas, such as hospitals, outpatient settings, and homes. Oncology nurses are able to provide care plans in clinical settings and to bridge patients' care from active treatments to survivorship care. This intervention allows nurses to implement an approach to care that permits patients to get involved in decisions made regarding their health issues. Teachable moments exist in clinical practice and can be found during the period of time when people face cancer diagnosis and when they transition to cancer survivorship. The teachable moments have the potential to motivate individuals to consider and adopt behavioral and lifestyle changes. Consultation visits provided an opportune time to continue the therapeutic relationship and to provide information to help patients assume greater control of the decision making related to care after treatment completion (Miller 2008, 479-487).

6.2 Symptom management and importance of multidisciplinary teamwork

Findings from six articles carried on the theme symptom management and importance of teamwork, suggest that the female patients felt comfortable with the nurse, home visits and nursing

interventions. According to Oxford English Dictionary Online, being comfortable refers to: “*a state of physical and material well-being, with freedom from pain and trouble, and satisfaction of bodily needs*” (Kelly *et al* 2004, 630). The stunning outcome of nursing interventions related to symptom management, has been discovered during this narrative literature review: nurses provide comfort, lend support and a sense of security, they provide relief and assistance in times of sickness and soothe in times of trouble (Kelly *et al* 2004, 625-631; Liao *et al* 2010, 49-59; Badger *et al* 2005, 273-279). It is no easy task to perceive information, support and participate in patients care simultaneously. Nurses must be knowledgeable about cancer treatments, side-effect management, and interventions. The preparation and consultation visit can be demanding and time intensive for a nurse (Boyle 2006, 407-416). At present, consultation visits that address survivorship care are not reimbursed. To ensure that the practice is sustained in the clinical setting, creative strategies are needed to seek reimbursement and to build systems where nursing can coordinate the services required for long-term survivorship care (Wengström *et al* 2001, 8-15). A nurse role has been advocated as an essential element of quality care to help patients and their families cope with symptoms across treatments and time. Four main functions in the care of patients and families are assessing and managing needs, teaching and providing information, providing support, and coordinating and ensuring continuity of patient care (Boehmke & Dickerson 2005, 382-389). Symptom distress is a subjective interpretation of a lived, personal experience with a given set of symptoms (Boehmke & Dickerson 2005, 382-389). The most salient symptoms do not necessarily cause the most distress, and patients often report multiple symptoms (Strutkowski *et al* 2008, 948-954). Lack of energy, fatigue, numbness, pain, nausea, and difficulty sleeping were found to be the most distressing symptoms for patients with breast cancer. Symptom incidence and distress levels vary over time and treatment, making continuity of management particularly important. According to Strutkowski (948-949) symptom distress is a complex experience with many factors that influence individual perceptions and evaluations. Contributing factors include depression and anxiety, locus of control, and self-blame. Psychological distress and quality of life among patients with cancer were influenced more by perceived life threat than objective disease stage, further demonstrating the complexity of symptom distress and underscoring the need for individualized care. The finding also suggests that symptom management interventions could reduce distress (Bryce, Bell & Connola 2007, 532).

6.3 Psychological support and coordination of care

The last four articles explored in this final thesis, were carried on the theme psychological support and coordination of care of breast cancer female patients. The results from those articles show fairly, that the organization of care after the intervention was experienced as positive and gave feelings of safety and security, as well as of not being abandoned after the hospital stay (Pålsson & Norberg 1995, 280-285). The impact of diagnosis and treatment for breast cancer unfolds over a long period of time. Psychological responses to this are unique for each point in time for the individual. In the fast-paced ambulatory care environment of a radiation oncology department, it is necessary for oncology nurses to perform much focused patient assessments. If this is not possible, the relevance of the care provided to patients will be lessened. The nursing care intervention proved the necessity for interventions and careful assessment in order to enhance psychological adjustment to diagnosis and treatment. Feelings of certainty and security were reported in connection with the nurses' information about nursing care. Early intervention with open communication and emotional support from nurse was related as important, and gave feelings of safety and reduced anxiety to the patients (Korber *et al* 2011, 44-50). It is very clear that supportive care is essential if women are to be empowered to make treatment decisions at the time when they are feeling less able to do so. Effective communication and supportive care are of great importance to patients in their long-term adjustment to breast cancer treatment. Patients want the nurse to be a friend, confidante, and explainer. Nurses must ensure that care is co-ordinate with the multidisciplinary team, using appropriate communication skills and resources to deliver the highest standards of care for patients (Pålsson & Norberg 1995, 277-285; Korber *et al* 2011, 44-50).

7 VALIDITY AND RELIABILITY

It is very challenging to find a specific reliability measure in narrative literature review. Reliability of a narrative literature review depends on the reliability of the researches reviewed. The research is expected to be done without using authors' own opinion. Information need to be impartial and ought to consist international knowledge. Reliability of a research is secured by using diversified scientific material (Polit & Beck 2010). All the researches, studies and the articles used in this final thesis are scientific articles taken from reliable electronic academic databases, like EBSCO, PUBMED and MEDIC, also from e-journals and reputed books. The different articles used in this narrative literature review come from different countries but findings were significantly similar.

The researches that have been reviewed in this final work have well explained the notion and association between the concepts by using the theories as well as previous studies. Those researches have justified their suppositions based on previous researches. General outcomes, main findings, the measures, instruments, and analysis method used in this work, were gathered to prove the authenticity of this thesis and to outline that hypotheses were scientifically based which has provided an evidence based results. The trustworthiness of this work has also been measured by using the measures according to the methodology. The most important exclusion criteria used was that the findings were not relevant to this final thesis research questions and limitation to the English language. The results were assessed by reflecting on the content of the utilized articles after gathering the data.

This final thesis have been supervised by two supervisors, one who has long working experience as an internal nurse, which includes specifically the care for oncologic patients and the other is a nursing teacher who has been an internal nurse and midwife and has been teaching nursery of women and family. Author believes that these specific supervisors are strength for this study, since their knowledge and experience of working life are extremely valuable and can make this thesis more reliable. Author has conducted present thesis under constant and regular supervision, which included many changes and corrections. It was done in order to keep up with regulations and measure of reliability and validity, to assure trustworthiness and give a justice to the materials used in this work.

Working on this thesis was not an easy process; it has limitations of its own. The topic area explored in this work has already been investigated extensively by previous researchers. The articles available on the subject chosen by the author, to enhance in this study, were relatively many. Moreover, after getting familiar with the text presented in those articles, author realized that only few are capable to provide answers on the target question of this study. The process of selection the right articles to meet the criteria for the study, brought some difficulties. Though the aim of the author was to target one specific result but due to lack of access to research articles in one specific topic, author had to choose a variety of articles which stated the role of nurse in treatment of breast cancer patients. The positive point is, reviewed articles have shown nurses role and the importance of nursing interventions in the diverse dimensions contributed by positive patients' reception.

8 ETHICAL CONSIDERATION

Partialist and impartialist forms of ethical reasoning are defined and singled out as being central to the difference between what is known as the “care” moral orientation and the “justice” orientation (Kuhse 1997). The ethical considerations are based on the articles that were used to collect data. All of the articles followed ethical guidelines by ensuring that participant’s anonymity and confidentiality was maintained and informed consent was obtained. The references for each data used are cited after the sentence or paragraph and in the reference page as well. These final project findings were based on the scientific articles and author personal view was not included.

Ethical consideration has a great significance in every research because it is important to protect research participants and ensure the integrity and reliability of the research. In addition ethical norms promote the aim of research, such as knowledge, truth and avoidance of possible mistake – for example, prohibitions against fabricating, falsifying, or misrepresenting research data prove the truth and avoid mistake. Many organizations have adopted codes, rules and policies strictly related to research ethics, in order to protect the ethical conduct of the research (Rensik 2011).

There are several principles which are expected to be followed in every research in order to maintain ethics, those are: – honesty, objectivity, integrity, carefulness, openness and respect for intellectual property. The data results, methods and procedures, and publication status ought to be written honestly. Negligence, mistakes and remissness need to be avoided by the researchers, who shall be critical towards themselves and accurately in scrupulous manner examine own work. Plagiarism shall be avoided by the all means, in every research; instead honor patents need to be emphasized, alongside with copyrights and other forms of intellectual property (Rensik 2011).

In this final thesis work which is literature review, the principles mentioned above have been followed. In authors own mind, carelessness and bias has been avoided. The materials used in this thesis have clearly been referenced in text as well as bibliography. The articles reviewed in this thesis have gone through critically analysis process. The findings of this research are reported truthfully and honestly.

9 DISCUSSION

Breast cancer related issues have always been a very delicate topic; almost none ever wanted to talk about it. Patients themselves were more likely hiding their disease, and finally dwelling into deep depression instead of getting better day by day. This work contributes to the field of breast cancer nursing. Author chose the subject of nursing interventions to be explored in this final thesis for several purposes. It has been written to influence, encourage and support women to be breast aware and to investigate the influence of the nurses' role on breast cancer patients. It aims to highlight the nurse's role in supporting breast cancer female patients throughout the illness. The specific question for this final thesis is: What kind of role the nurse has in treatment of breast cancer female patient? The influence of nurses' role on female breast cancer patients was carefully investigated in this work. Different articles have shown that there is strong uniformity between educative, informative, communicative, supportive and symptom management role of nurses. These roles enhance the development of quality and rise up the standards of nursing care among the cancer patients. These all significant roles played by the nurse are leading to development in patients care. In fact, every single aspect of positive patient-nurse relationship leads to improvement in care and psychosocial development of symptom management in cancer patients. According to the articles used in this thesis, some important theoretical implications can be drawn from the existing study on breast awareness perceptions, including the present study. There are implications for how breast awareness perceptions are inquired and woken up in female patients.

As people's beliefs are rather ambiguous, and as contradictory views may emerge depending on whether one thinks about positive-nurses role or negative-nurses role factors, structured survey questions may not give the best picture of nurses' role perceptions. For this reason, author of present studies avoided questionnaire in conducting her work. This final thesis was a narrative literature review because it favored author's short time period for completing the work. In author experience, literature review is still very demanding and difficult process, which requires an aggressive study and analysis. It obligates author to do lots of critical analysis while reviewing literature from research articles. While searching for the methods of doing literature review, author came to know that literature review can be done in a variety of ways and different style of thesis template can be used. It was difficult to formulate a constructive literature review thesis as there is no specific template of literature review.

The limitation of this study is definitely the lack of specific template of literature review as well as inability to read and analyze several relevant and appropriate articles, due to a blockage by payment. Some of the articles did not have a full free text option included at all. Author found this lack of access as a very frustrating experience. Short time period can be taken as another limitation for this thesis. Thirteen articles used in this study were found in relatively short time, all were restricted by the English language, free full text and the criteria described in chapter five. Author is assured that if there would be more time, more relevant articles would be found and critically analyzed. Limitations restricted by the English language use, didn't allow choosing all relevant articles possible. Author had to limit the research process, which brought generally very good and very relevant results. Despite these limitations author managed to identify significant evidence of nurses' role in creating high quality standards for breast cancer patients' care. As opposed to many previous studies in the literature author of present thesis was able to analyze and provide reliable answers on the research question. In order to do it, the reviewing process has been made. Different reputed e-journals have been used, which delve into and explore the author research purpose. Critical analysis of those reputed e-journals have been made to provide supportive evidence that the role played by the nurses lead to improvement in emotional functioning and quality of life, increased satisfaction with care, and decreased the number of physical symptoms among patients with breast cancer.

All the materials used in this thesis were gathered, analyzed, critically appraised and synthesized in ethically correct manner, following the measures of validity and reliability to serve the present and future students and teachers in Lapin University as a study material. The contract between the author and the authorities of the Lapin University of Applied Sciences is attached in Appendix 1. Therefore, there is a room for further research and development in the field of nursing interventions in female breast cancer patients' treatment. According to the author of this thesis, focus ought to be on improving patient-nurse relationship facilitating more positive interactions and to empower women to make their own treatment decisions. While doing this final thesis author came to be familiar with specific terms which represent female breast cancer patients' development in psychosocial dimension. They are: breast awareness and self-esteem. It would be a contribution in the field of nursing interventions development if one do research on "how can we improve breast awareness in female patients" or "how can we develop self-esteem in female breast cancer patients".

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- www.wcrf.fi The World Cancer Research Fund International
Read: 23.3.2014

ATTACHMENTS

Appendix 1: The contract between the author and the authorities of the Lapin University of Applied Sciences.

THESIS COMMISSION AGREEMENT

This agreement shall apply only to thesis projects which are not completed in a project with external non-UAS funding.

Commissioner	Name (e.g., company) Harri Anna-Maria Contact information (contact person, phone number, email address) tel. 0404160532 harri.anna@yahoo.com		
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Commissioner	<i>Kemi 24.11.2014</i>	<i>Anja Mikkola</i>	
Author	<i>Kemi 24.11.2014</i>	<i>Harri Anna-Maria</i>	
Lapland UAS			

Appendix 2: Summary of the reviewed articles

TITLE	AUTHORS & YEAR OF PUBLICATION	PURPOSE OF THE STUDY	DATA COLLECTION AND ANALYSIS	FINDINGS
<i>“Management of Patients with Breast Cancer”.</i>	McCready, T. 2003	To highlight the nurse’s role in supporting patients throughout the illness; To outline the development, anatomy and physiology of the breast;	Systematic literature review.	Supportive care, information providing and clear communication are essential for effective treatment of breast cancer.
<i>“Therapeutic Touch, Quiet Time, and Dialogue: Perceptions of Women with Breast Cancer”.</i>	Kelly, A.E. Sullivan, P Fawcett, J Samarel, N 2004	To compare the perceptions of women with breast cancer to an therapeutic touch plus dialogue nursing interventions.	Qualitative study, data collection, telephone interviews.	Feelings of calmness, relaxation, security and comfort while being treated by dialogue and therapeutic touch.
<i>“Implementing a Survivorship Care Plan for Patients with Breast Cancer”.</i>	Miller, R. 2008	This article describes a model of a survivorship care plan, Cancer Treatment Summary and Follow-Up Care Plan for patients with breast cancer.	Systematic literature review. Qualitative study.	This intervention shifts the paradigm of cancer survivorship care from an acute care medical model to a wellness model for women with

				breast cancer in the clinical setting.
<i>“The Effect of supportive care on the anxiety of women with suspected breast cancer”.</i>	Liao, M.N Chen, P.L Chen, M.F Chen, S.C 2010	This article is a report of a study of the effect of supportive care on anxiety levels of women with suspected breast cancer during the diagnostic period.	Longitudinal quasi-experimental study.	Supportive care that incorporates informational and emotional support and follow-up telephone consultations can decrease anxiety levels of women with suspected breast cancer.
<i>“Impact of a Pivot Nurse in Oncology on Patients with Lung or Breast Cancer: Symptom Distress, Fatigue, Quality of Life, and Use of Healthcare Resources”.</i>	Skrutkowski, M. Saucier, A Eades, M Swidzinski, M Ritchie, J Marchionni, C Ladouceur, M 2008	To examine the impact on continuity of nursing care delivered by a pivot nurse in oncology to improve symptom relief and outcomes for patients with lung or breast cancer.	Symptom distress scale, Brief fatigue inventory, and Functional assessment of cancer therapy scale. Healthcare usage was evaluated through a review of hospital records.	Experienced nurses with specialized knowledge of oncology symptom assessment and management may reduce the symptom burden experienced by ambulatory patients with breast or lung cancer.
<i>“Coping with radiation</i>	Wengström, Y. Hägemark, C	To investigate whether a nursing intervention	The Wheel Questionnaire	Individual interventions aimed at

<p><i>therapy: Effects of a nursing intervention on coping ability for women with breast cancer”.</i></p>	<p>Forsberg, Ch 2001</p>	<p>would affect the coping ability of women with breast cancer.</p>	<p>was used.</p>	<p>improving well-being helps patients. It also highlights the fact that individual approaches to improving well-being are needed. Such interventions should be directed to patients at risk for poor adjustment, such as those older than 50 years of age.</p>
<p><i>“Telephone Interpersonal Counseling With Women With Breast Cancer: Symptom Management and Quality of Life”.</i></p>	<p>Badger, T. Segrin, C Meek, P Lopez, A.M Bonham, E Sieger, A 2005</p>	<p>To examine the effectiveness of a telephone interpersonal counseling (TIP-C) intervention compared to a usual care attentional control for symptom management of women with breast cancer.</p>	<p>Experimental methods with repeated measuring. Telephone interpersonal counseling.</p>	<p>Women in the intervention group experienced decreases in depression, fatigue, and stress over time and increases in positive affect.</p>
<p><i>“Clinical Pathways in Breast Cancer Teach</i></p>	<p>Bryce, J. Bell, C Connola, M 2007</p>	<p>To implement evidence based (EB) symptom management of breast cancer patients using</p>	<p>Existing systematic reviews and included standard</p>	<p>Clinical pathway model provides a method for planning</p>

<p><i>Evidence Based Practice and Monitor Nursing Sensitive Patient Outcomes”.</i></p>		<p>clinical pathways (CP) with a specific focus on evidence-based interventions and nursing sensitive patient outcomes (NSPO) measurement.</p>	<p>grading and oral care instructions. Subjective patient reports were also used.</p>	<p>evidence based care with clear measurement and outcome criteria. The model facilitated teaching nurses the process of evaluation of evidence with its application in clinical practice.</p>
<p><i>“Stabilizing of Life: A Substantive Theory of Family Survivorship with a Parent with Cancer”.</i></p>	<p>Jussila, A.L 2004</p>	<p>To explore families living with a parent with cancer and to develop substantive theory to explain how those families solve the main concern in their lives.</p>	<p>Grounded theory methodology.</p>	<p>Adjusting to life with the disease comprised clarifying of facts, resorting to help, returning to life, intensifying of togetherness, teamwork and maturing through hardships.</p>
<p><i>“A Breast Navigator Program: Barriers, Enhancers, and Nursing Interventions”</i></p>	<p>Korber, S.F. Padula, C Gray, J Powell, M 2011</p>	<p>To identify barriers to and enhancers of completion of breast cancer treatment from the perspective of the participants.</p>	<p>Semistructured, open-ended questioning. Content analysis.</p>	<p>Study concluded that completion of breast cancer therapy and care can be improved by recognizing the value the nurse navigator role brings to the patients</p>

				experience and enhancing that role.
<i>“Breast cancer patients experiences of nursing care with the focus on emotional support: the implementation of a nursing intervention”.</i>	Pålsson, M-B. E. Norberg, A 1995	Nursing care with the focus on emotional support, aimed at improving breast cancer patients' adjustment to everyday life, was implemented.	Semi-structured interview.	Findings showed that emotional support, as well as organizational changes of care, led to feelings of safety and security.
<i>“Socio-demographic predictors of high support needs in newly diagnosed breast cancer patients”.</i>	Griesser A.-C, Vlastos G, Morel L, Beaume C, Sappino A.-P, Haller G. 2011	To identify high support needs and their socio-demographic predictors to improve supportive care for newly diagnosed breast cancer patients.	A cross-sectional study. Questionnaire.	Findings showed that highest level of needs is related to the psychological support information domain.
<i>“The perception of support received from breast care nurses by depressed patients following a diagnosis of breast</i>	Clark. L. Holcombe, C Hill, J Downey, H Fisher, J Krespi, M.R Salmon, P 2009	To test whether breast care nurses (BCNs) are able to overcome the potential barrier of emotional distress detection and offer support to the patients.	Report.	Study confirm the importance of maintaining the special role of the BCN. BCNs were able to provide as much support to depressed patients as to non-depressed patients, whereas

<i>cancer</i> ".				depressed patients felt less supported by surgeons and ward nurses.
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