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Best Practices in Nursing Care of Cervical Cancer Patient - Literature Review, MaZaFi 3-Project

Helsinki Metropolia University of Applied Sciences

Degree Programme in Nursing

Final project

Date 20.4.2015

Authors Title	Natalia Kotliar and Noora Sampio Best practices in nursing care of cervical cancer patient
Number of Pages Date	25 pages + 3 pages of appendices 20.4.2015
Degree	Bachelor of Health Care
Degree Programme	Nursing
Specialisation option	Nursing
Instructors	Eila-Sisko Korhonen (Senior Lecturer) Kirsi Talman, (Senior Lecturer)
<p>The purpose of this final project is to gather and describe evidence based best practices in nursing of cervical cancer patients using articles found in professional databases CINAHL and MEDLINE. Principles of a systematic literature review are applied and in total 15 professional articles were chosen for this literature review representing different countries and continents.</p> <p>The findings of this final project suggest that best practices in nursing care of cervical cancer patients consist of four key themes. These themes in the order of incidence in the literature were patient education, professional competence of the nurses, emotional support and individualised care of the patient.</p> <p>Surprisingly, very little reference to clinical and/or technical skills of the nurses were made in the literature, either due to lack of interest to include these aspects in the studies or because more value is being put on the psychological and emotional characteristics of nursing care.</p> <p>Based on this final project's findings, one could suggest that in order to provide good quality care to cervical cancer patients, additional focus should be directed on good communication skills and emotional support training for the nurses, as well as a more individualised care for the patients.</p>	
Keywords	nursing care, cervical cancer, best practices

Tekijät Otsikko	Natalia Kotliar ja Noora Sampio Parhaat hoitokäytännöt kohdunkaulasyöpäpotilaan hoitotyössä
Sivumäärä Aika	25 sivua + 3 sivua liitteinä 20.4.2015
Tutkinto	Sairaankohtaja (AMK)
Koulutusohjelma	Degree Programme in Nursing
Suuntautumisvaihtoehto	Sairaankohtaja
Ohjaajat	Eila-Sisko Korhonen (Lehtori) Kirsi Talman, (Lehtori)
<p>Tämän opinnäytetyön tarkoitus on kerätä ja kuvata näyttöön perustuvia parhaita hoitokäytäntöjä kohdunkaulasyöpäpotilaiden hoitotyössä. Työ on kirjallisuuskatsaus ja aineisto on kerätty elektronisista tietokannoista (CINAHL ja MEDLINE). Yhteensä 15 tieteellistä artikkeolia eri maista ja maanosista on valittu katsaukseen.</p> <p>Tämän työn tulokset antavat viitteitä sille, että parhaat hoitokäytännöt kohdunkaulasyöpäpotilaan hoitotyössä koostuvat neljästä eri osa-alueesta: potilaan ohjaus, hoitajan ammatillinen osaaminen, hoitajan tarjoama emotionaalinen tuki sekä yksilöllisesti rääälöity hoito potilaalle.</p> <p>Huomioitavaa on, että hoitajan kliinisistä ja teknisistä taidoista oli aineistossa vain vähän mainintaa joka saattaa viitata siihen, että kliinisiä taitoja kohdunkaulasyöpäpotilaan hoitotyössä pidetään vähemmän tärkeinä tai niitä ei ole otettu huomioon edellisissä tutkimuksissa.</p> <p>Tämän työn tulosten pohjalta voidaan suositella, että tuottaaksemme parasta mahdollista hoitoa kohdunkaulasyöpäpotilaille on panostettava hoitajien kommunikaation ja emotionaalisen tuen koulutuksiin sekä pyrittävä tarjoamaan potilaalle mahdollisimman yksilöllisesti rääälöityä hoitoa.</p>	
Avainsanat	hoitotyö, kohdunkaulansyöpä, parhaat hoitokäytännöt

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1 Introduction

Cervical cancer is the second most common cancer among women in the world, nonetheless it is also one of the most preventable cancers if early detected (Terveyskirjasto, 2013). A significant number of cervical cancers are caused by Human papilloma virus (HPV) and it leads to abnormal cell growth in the cervix area (McCormish, 2011:478).

According to statistics, 528 000 new cases were diagnosed worldwide in 2012 and approximately 84 percent of these cases occurred in less developed countries. The highest incidence accounted in sub-Saharan African countries such as Malawi and Zambia. (World cancer research fund international, 2013.) In addition, as many as over half of cervical cancer patients in Malawi and Zambia die from this condition due to late presentation and poor access to treatment (Kingham et al, 2013:160). In Finland cervical cancer is the 20th most common cancer among women (Suomen syöpärekisteri, 2014); the small prevalence primarily due to efficient national screening programs (Syöpäjärjestöt, 2014).

In 2013, the previously mentioned countries, Malawi, Zambia and Finland, established the MaZaFi 3 -project in order to promote high quality in health care and health care education through active participation and collaboration between all partner countries. The aim is also to promote evidence-based knowledge and clinical education to students in multicultural environment (CIMO, 2014). This final project is aimed to provide MaZaFi 3 -project with useful information about best practices in nursing care of cervical cancer patients for the purpose of possible development of nursing care in this area, and to bring new perspectives and directions for future training of nurses working in oncology setting.

As previously stated, cervical cancer affects the lives of many women worldwide, young as well as aged, and most health care professionals will encounter patients dealing with this condition or its early stages during their professional lives. Because of a wide range of interventions such as prevention/screening programs, treatments and follow-ups, these patients are visible in every sector of the health care systems, in outpatient as well as inpatient settings. A nurse's role in patients care, depending on the phase of the condition, is to educate the patient and encourage her to attend screening programs and treatments, making sure the patient gets her physiological, social, physical, emotional, spiritual and sexual needs met during treatment, as well as providing vital support that these patients often need during care. (Bedford, 2009:81.)

2 Nursing care

As Smetlzer et al. (2010:5) and Clark et al. (2003:3) state, nursing has many particular purposes, interventions, focuses and values. It is defined as the use of clinical judgement in the provision of care to enable people to maintain, improve, or recover health and to achieve the best possible quality of life, whatever the patients' disease or disability. Therefore the ethical responsibilities in nursing care are to promote health, prevent illnesses, restore health and alleviate suffering. (Fry & Johnstone, 2008:67-79.) When considering nursing care, one must understand that the focus is not just on sickness but on health generally and the circle of customers includes people of all ages in all settings and consists of individuals, families and even whole communities (Clark, 2003:7; Gill & Duffy, 2010:764).

As stated earlier, the focus in nursing care is not just on sickness but also on the human being. In holistic care the connectedness of body, mind and spirit are valued and acknowledged and therefore individuals are treated as unique (Mariano, 2005:48). Holistic nursing treats and heals the whole individual, and as Dossey (2005:37) states, nurses are the facilitators of the healing process and honour the individual's subjective experiences and beliefs about their health and values.

3 Oncology and oncology nursing

Oncology is defined as the branch of medicine which deals with the diagnosis and treatment of cancer (National cancer institute, 2014). Oncology nurses are challenged with all stages of the cancer trail; from diagnosis, through treatment, potential recurrence, survivorship or even possible death (Gill & Duffy, 2010:761). As Gill and Duffy's (2010) and Bakker et al.'s (2013) literature reviews state, the nature of oncology nursing care has traditionally held a negative image associated only with suffering, death and toxicity of treatments, and therefore the nature of oncology nurses' work can be stressful and emotional. Still, many nurses have reported and stated that oncology nursing is a field of nursing where both rewards and challenges are experienced. Many of these nurses describe that their work is satisfying, rewarding and meaningful. (Bakker et al. 2013:83.)

Oncology nurses are expected to fulfil a variety of activities such as information giving, symptom control, psychological care and social support for the patient. The ability to

coordinate patient care throughout the continuum of cancer control, effective communication skills, and use of therapeutic presence or “being there” for their patients and their families, are important parts of the care of patient with cancer (Bakker et al. 2013:83; Gill & Duffy, 2010:765). This field of nursing also requires specialized knowledge and skill in different procedures and protocols of cancer control. For example specific technical competence is required for preparation and administration of cytotoxic drugs (Bakker et al. 2013:72). Oncology nurses are also expected to be patient advocates and experts when providing palliative care (Gill & Duffy, 2010:761). To summarize, caring for patients with cancer is complex and involves a wide range of skills since nurses are challenged to provide holistic care encompassing physical, social, spiritual and psychological care, not only for the patient, but also for his/her entire family (Gill & Duffy, 2010:764).

4 Cervical cancer and cervical cancer patients

Nearly all cervical cancers are caused by the Human papilloma virus (HPV) which is the most common sexually transmitted infection (STI) (McCormish, 2011:478). Genital HPV is commonly transmitted through epithelial contact with infected cervical, vaginal, penile or anal area (Bedford, 2009:81). However, not all women that have been infected with HPV will develop cervical cancer as the body often takes care of the virus itself leading to resolution of the infection. Other risk factors for developing cervical cancer include smoking, age, socioeconomic status and the number of sexual partners in the past. Nowadays the reasons behind cervical cancer are well-known and screening measures have been developed. Even though the reasons behind this cancer are known, it has also been established that some women have a bigger risk of developing it. (McCormish, 2011:478.)

Patients with cervical cancer may initially experience watery, blood-tinged vaginal discharge that further develop into more frequent episodes of bleeding, manifesting especially after sexual intercourse or any other manipulation of the cervix. Foul-smelling discharge may appear as the tumour grows and areas of it become necrotic. More advanced symptoms include back and lower abdominal pains. At times patients may also develop deep-vein thrombosis due to frequent compression on the vascular and lymphatic channels in the groin caused by the enlarged lymph nodes (Fischer, 2002:194).

Cervical cancer is practically the only cancer type the early stages of which can be successfully detected through screening programs and through that be prevented from developing further into malignant carcinoma (Vesterinen, 2004:121). Primary prevention strategies include vaccines that are available for girls at the age of 11 and 12 (McCormish, 2011:481). Early detection of cervical cancer allows fast and efficient interventions for precancerous stages such as colposcopy, conization, laser vaporization, loop electrosurgical excision and even hysterectomy to prevent more invasive disease (McCormish, 2011:482). When choosing a treatment for cervical cancer the most important factor to consider is the stage of the cancer. Other factors include age, physical condition and type and location of the cancer. (American Cancer Society, 2013.)

Every patient is an individual and therefore no two patients deal with cervical cancer in the same way. It is a challenge for nurses to provide continuous and comprehensive psychological and physiological assessment concerning patient's response to diagnosis of cervical cancer and to provide effective intervention when necessary. (McCullin M. 1992.)

4.1 Best practises and treatments of cervical cancer

The definition of best practice refers to practices that stem from utilizing the best available knowledge gained from research. Therefore the aim of best practices in nursing is to apply the most relevant and recent interventions, based on research, in real life practice. (College of Nursing, 2015.) In this chapter a number of currently used evidence based treatments for cervical cancer are presented and described in more detail.

As previously stated, treatments for cervical cancer patients depend on many factors. These factors include stage of the cancer, the tumour size, cell type of the cancer, grade, depth of invasion, and whether or not the cancer has spread to the adjuvant lymph nodes. Based on these factors surgery, chemotherapy and/or radiation therapy is chosen as treatment. (Fischer, 2002:196.)

Surgical interventions for cervical cancer include multiple options. Options such as simple hysterectomy (removal of cervix and uterus), radical hysterectomy (removal of cervix, uterus, upper part of the vagina and a wide area of ligaments and tissues that closely surround these organs), total hysterectomy with salpingo-oophorectomy (removal of fallopian tubes and ovaries) and pelvic exenteration (in addition to cervix - uterus, vagina,

ovaries and nearby lymph nodes, lower colon, rectum and bladder are removed). Plastic surgery may be required to reconstruct an artificial vagina for the patient after larger operations. (National cancer institute, 2014.)

With larger and metastasized tumours surgery is not always an option. For those patients the standard treatment is radiation along with chemotherapy. (Fischer, 2002:196; Schwartz, 2009:260.) Radiation therapy is a form of cancer treatment that uses high energy x-rays or other types of radiation to kill cancer cells or prevent them from growing. Cervical cancer patients receive external radiation to the pelvic area followed by intracavitary radiation (also known as brachytherapy) either by low or high dose delivery. (National cancer institute, 2014 & Fischer, 2002:196.) In intracavitary radiation the radioactive substance is sealed either in needles, seeds, wires or catheters and placed directly into the cancer or in its close proximity (National cancer institute, 2014). Sometimes also surgical patients benefit from radiation therapy in addition to surgery (Fischer, 2002:196).

Chemotherapy consists of anti-cancer drugs that are used to kill cancer cells in most parts of the body. The drugs are injected directly into the patient's vein or given by mouth. The drug most commonly used for this purpose is Cisplatin, or Cisplatin plus fluorouracil. (National cancer institute 2014 & American cancer society, 2014.) Chemotherapy is often given with radiation, also known as concurrent chemoradiation. Research has verified that giving chemotherapy and radiation simultaneously works better at killing cancer cells than having these treatments on their own. The reason for this is still not entirely clear, but researchers believe that it is because chemotherapy makes cancer cells more sensitive to radiation. (Cancer Research UK, 2014.)

Concurrent chemoradiation not only kills cancer cells but it also lowers the risk of malignant cells from spreading to other parts of the body. Regardless of the fact that this treatment form works better in eradicating cancer, it often has more severe side-effects for the patient, leaving them to be more prone to infections and having more digestive side-effects. (Cancer Research UK, 2014.)

Due to variety of treatments available for cervical cancer patients and many different factors influencing the choice of the treatment, many national and international facets such as WHO (World Health Organization), SIGN (Scottish Intercollegiate Guidelines Network) and the NCCN (National Comprehensive Cancer Network) have developed

specific practise guidelines to help determine appropriate treatment in each stage of the cancer. (Fischer, 2002:196, WHO, 2006 & SIGN, 2008.)

4.2 Special considerations in treating cervical cancer patients

There are a few special considerations that must be taken into account when treating and managing cervical cancer patient. The most significant ones are women's fertility, pregnancy and because of high prevalence of HIV and AIDS in African countries (WHO, 2015), also HIV and AIDS have been included in the following chapter.

Approximately 40% of women diagnosed with cervical cancer are in fertile age and fertility concerns are a major quality of life indicator for these patients, therefore preservation of fertility must be addressed from diagnosis. Initially the preservation of fertility in women is much more complex than it is in men (sperm is much easier to freeze than oocytes), due to the finite number of follicles. The number of follicles naturally decreases each year and this process is accelerated when the patient receives chemotherapy and/or radiation. (Schwartz, 2009:260.)

The chance for successful fertility preservation in cervical cancer patients depends on two factors: 1) the stage of the cancer at diagnosis and 2) the woman's age. Women diagnosed in early stages and women whose cancer is treated with surgery have more options for fertility preservation. An example of a surgical intervention to achieve this is radical vaginal trachelectomy, where only cervix is removed and uterus left in place. The goal of radical vaginal trachelectomy is to preserve the patients' fertility while achieving the same result and survival rate as in previously mentioned radical hysterectomy. (Schwartz, 2009:260.)

An example of a fertility preservation method for women undergoing radiation therapy is oophoropexy, or in other words ovarian transposition. Oophoropexy is a surgical relocation of the ovaries out of the pelvis and away from the radiation site. This could be achieved either during surgery or laparoscopically. Once radiation is completed, the ovaries are relocated back to the pelvis. (Schwartz, 2009:263.)

Although it is rare, sometimes cervical cancer is diagnosed in pregnant women. Management of the condition is also stage related as in all non-pregnant patients. (WHO, 2006:187.) A patient in an early stage of pregnancy, up to 20 weeks, is usually offered

radical hysterectomy or chemoradiation. Cancer diagnosed after 28 weeks of pregnancy can be treated after delivery of the baby. In that case Caesarean delivery is required to avoid haemorrhage as the cervix dilates. (Schwartz, 2009:263.) A diagnosis of cervical cancer during pregnancy can be extremely difficult for a woman and her family to accept, especially if treatment requires termination of the pregnancy. Skilled counselling is essential to help these patients overcome the sometimes unbearable situation and come to terms with it. (WHO, 2006:187.)

As this final project is intended for MaZaFi 3 –project that involves Malawi and Zambia, where the prevalence of HIV and AIDS is one of the highest in the world (UNICEF, 2013), considering HIV/AIDS-patients as a special group in cervical cancer treatment is of essence. According to Fischer (2002:196) patients with acquired immunodeficiency syndrome tend to have more aggressive tumours than other patients, and hence it is suggested that all patients with cervical cancer should undergo HIV testing to determine whether they fall into that category. HIV/AIDS-patients have particularly high risk for complications because of immunosuppression and simultaneous treatment of the underlining condition is necessary. Preferable treatment for HIV/AIDS-patients with cervical cancer is surgical, and when that is not possible adjustments to radiation and chemotherapy must be made accordingly. (WHO, 2006:187; Fischer, 2002:196.)

4.3 Nursing care of cervical cancer patient

As mentioned, cervical cancer treatments primarily include surgery, radiation and chemotherapy (Fischer 2002: 193.) The nursing care of patients with cervical cancer depends on the treatment regimen the patient is receiving. For example patients that have undergone a total abdominal hysterectomy or a radical hysterectomy will have multiple needs immediately after the surgery and also in the long term. In the immediate postoperative phase, the nurse's main concerns are maintaining fluid balance, preventing possible infections, pain management and prevention of complications. (Fischer 2002: 197.) Common complications after surgical procedures include bleeding, infections in the urinary tract or wound, pneumonia, deep vein thrombosis, pulmonary embolism and myocardial infarction. A nurse has an important role in encouraging these patients up and out of bed to prevent the development of clots in the legs as well as pneumonia. (Fischer 2002: 197.)

In addition to interventions mentioned above, preoperative and postoperative teaching of the patient is involved. Before surgical procedure, a nurse should educate the patient about possible complications of the surgery (in the long term a risk of bladder dysfunction, lymphedema, the development of lymph cysts and sexual dysfunction), and explain what the patient should expect afterwards. This will hopefully decrease some of the patient's anxiety and fears towards the surgery. (Fischer 2002: 197.) Also, most women who have undergone this type of surgery will go home with a Foley catheter that they have to be taught to look after for. If the patient does not have a Foley catheter in situ, she will then need to be taught how to self-catheterize (Fischer 2002: 197).

The loss of fertility and sexual changes related to surgical treatment of cervical cancer can be very traumatic for some women. Nurses working with patients that are dealing with this type of issues have to be able to comfortably discuss sexual issues and provide a non-threatening environment for patients where they can ask questions on this matter (Fischer 2002: 197). Furthermore, women with cervical cancer need a lot of support and may require interventions from social work and psychological counselling already in the early stage of their treatment. It is up to the nurses to create a collaborative plan of care for these patients and coordinate its components. (Schwartz 2009:266.)

Of course a lot of components in nursing care are similar regardless of the unit the nurse is working at but there are also differences. In an oncology ward where cervical cancer patients receive chemotherapy a nurse's role requires specialized knowledge and skills. Nursing care in that type of environment for instance includes in addition to all previously mentioned; preparation and administration of cytotoxic drugs, assessing responses to the treatment, preventing and responding to treatment adverse effects, managing technology, information giving and education. (Bakker et al. 2013:82.)

5 Purpose and aim of the literature review and research question

The purpose of this final project is to gather and describe evidence based best practices in nursing of cervical cancer patients using articles found in professional databases CINAHL and MEDLINE. The method of doing so is literature review. The aim is to provide MaZaFi-project with useful information for the purpose of possible development of nursing care in this area, and to bring new perspectives to the care of these patients along with directions for future training of nurses caring for this patient group. The research

question of this final project is: What are the evidence based best practises in nursing care of cervical cancer patients?

6 Literature review and data analysis

A literature review is a comprehensive study and analysis of earlier published literature that relates to a specific topic (Aveyard, 2010:6). The purpose of a review is to present what is currently known on a topic of interest. It may also inspire new research ideas and help to create foundation for future studies by providing readers with a background for understanding current knowledge, and lighten the importance of new studies. (Polit & Beck, 2010:77-78.)

A well written literature review collects information about a specific topic from many different sources. It is written in an academic manner, contains little, or no personal biases, has a distinct search and selection strategy and is well structured in order to enhance readability. (Cronin 2008:1.) A more detailed description of the search and data selection strategy (inclusion criteria) of this review is described in the next chapter. A literature review is neither a list nor a summary of articles on a subject but rather a critical analysis made by the author(s) of the collected data. (Burns & Grove, 2005:93.)

Undertaking a literature review requires identifying a research question and answering the question by reviewing and analyzing acquired relevant data using a systematic approach (Aveyard, 2010:6). After the literature or data has been analyzed, the review is written in a manner that presents findings in a clear and consistent way, highlighting and comparing results from different sources also addressing any contradictions and inconsistencies. The role of the reviewer at this point is to summarize and evaluate the evidence about a topic, pointing out similarities and differences offering possible explanations for any inconsistencies. (Cronin 2008:6.) A review should be concluded with a summary of findings describing current knowledge and giving implications for future research (Cronin 2008:6).

According to Cronin (2008:2), there are two types of literature reviews, each using slightly different approaches - traditional or narrative literature review and systematic literature review. In this final project, principals of a systematic literature review methodology were applied.

6.1 Inclusion criteria

Inclusion criteria for this final project's data collection was that articles were written in English; were peer reviewed; were relevant in terms of the subject of this final project; were published during years 2003-2014; reflected on current clinical practises concerning cervical cancer treatments (e.g. hysterectomy, chemotherapy, radiation therapy) and nursing care; answered the research question of this final project and were either literature reviews, qualitative or quantitative studies.

6.2 Database search

In this final project CINAHL and MEDLINE were used as databases to find relevant and evidence-based knowledge on the topic of nursing care of cervical cancer patient. The initial search was made with keywords such as: "cervical cancer", "nursing care", and additional searches included search terms such as: "oncology nursing", "cancer control" and "hysterectomy". The searches were completed while reflecting on the study question of this final project. The results of the searches are presented in the appendices in the end of this final project. In total 15 articles were chosen for this final project's literature review. Database search table can be found in the appendices.

6.3 Data analysis

Because this final project's purpose is to describe best practises in nursing of cervical cancer patient, the data consisted of published qualitative reviews and studies that regarded this phenomenon. Therefore this final project's data was analysed using principles of qualitative content analysis. Data analysis of qualitative content includes primarily describing the already existing information. (Burns & Grove, 2003:378.)

Content analysis is one of the main methods of analysing data in nursing research. Content analysis aims to produce replicable and valid conclusions from the collected data, and to provide knowledge, representative facts as well as practical guides for action. (Elo & Kyngäs, 2007:107.) Content analysis process achieves this through organizing and integrating qualitative information according to emerging themes and concepts (Polit & Beck, 2010:469). The process involves open coding, forming of categories and abstracting (Elo & Kyngäs, 2007:109). The purpose is to identify key themes from the collected

data and group them into categories according to the similar and dissimilar concepts. In this final project in order to achieve this, principals of thematisation are applied.

According to Eskola and Suoranta (2001:174), thematisation is a recommendable analysis method when one is looking for an answer to a practical problem. Information relevant to the research question is then retrieved from the literature. Specific themes are identified from the data and differentiated from each other based on the context. When describing emerged themes for instance in the findings section, direct citations of the original sources could be used as an illustrative example of the themes. (Eskola and Suoranta, 2001:174-178.)

When conducting data analysis the authors of this final project first identified distinct words and sentences that arose from the literature that in their belief answered the research question. These words and sentences were then grouped into specific categories in accordance with their similarities in context. All words and sentences of a particular theme included a common nominator that described for instance “support” or “patient education”. The groups were named in accordance to what the authors believed to be the common nominator of the theme. Content of themes “patient education” and “competence” felt at times to be overlapping and in order to be able to properly differentiate the contents of these themes, a closer analysis of the context of the original source was required.

The literature of this final project included fifteen professional articles and were analysed from the perspective of the research question - What are the evidence based best practises in nursing care of cervical cancer patients? From the analysis of the collected data the authors of this final project could identify and name four main themes. The themes in the order of their highest prevalence in the articles were patient education, competence, support and individualised care.

7 Findings

The research question of this final project is: What are the evidence based best practises in nursing care of cervical cancer patients? Four main themes were identified by the authors from the data. In the following paragraphs these main themes will be presented and described in more detail. The intent was to arrange the findings in a logical way according to their content to ensure easy readability and understandability for the reader.

To clarify; the authors have not differentiated nurses from other health care professionals if it has not been done so in the original source. For that reason, the authors in some context refer to nurses as health care professionals.

7.1 Patient education

In their articles, Cleary, Hegarty and McCarthy (2011) as well as Rasmusson and Thomé (2008) highlight the importance of educating and providing information about sexuality issues to patients. They also advocate that patients ought to receive the information before, during and after treatments. In addition, Kritchарен, Suwan and Jirojwong (2005:687) as well as Rasmusson and Thomé (2008:217) indicate that women with cervical cancer, and their partners, need advice from the nursing staff to understand cancer disease, its treatment and the treatments eventual side-effects and potential changes it may have on sexuality and gender roles. Along with advising patients, Kritchарен, Suwan and Jirojwong (2005:687) also encourage health care professionals to suggest problem-solving methods, like using lubricants and changing sexual positions to patients who have concerns and issues related to having sexual intercourse during and after treatments. Furthermore, Cleary, Hegarty and McCarthy (2011:95) underline that health care professionals need to have a holistic approach while addressing sexuality issues with patients, and Rasmusson and Thomé (2008:217) suggest that health care professionals should in fact be the initiators in starting conversations about sexuality with patients in an open and sensitive matter. Similarly, Cleary, Hegarty and McCarthy. (2011:95) continue that sexuality is a multidimensional concept that must be addressed by health care professionals. Not only does the information about sexual issues given by health care professionals ease the patients and partner's anxiety, information about bodily and emotional changes could also improve the couple's mutual communication (Rasmusson & Thomé, 2008:217).

Cook, McIntyre and Recoche (2014:10) stress that gynaecological oncology patients are a vulnerable patient group, as all cancer patients, and it should be common practice that these women receive information and education as part of their routine care. Hammer, Mogensen and Hall (2009:276) emphasize that the way health care professionals provide information and answer patient's questions is also of relevance. It effects on the patients' impression of how they feel they are being treated. Pinar, Kurt and Gungor (2011:7) recommend that information should be provided verbally with written booklets and relaxation techniques to reduce patients' anxieties.

Medical personnel, including nurses, play a major role in reducing patient's anxieties by giving information concerning treatment, side-effects of medications and how to alleviate side-effects. Providing knowledge about disease care is similarly important. (Chen et al. 2013:5.) Also, nurses should explain to the patients the symptomatic pathology of the side-effects and symptoms so that the patient understands and accepts them (Phianmongkhon & Suwan, 2008:744-745). Pinar, Kurt & Gungor (2011:4) state that emotional and psychological surgical preparation plays an essential role in many areas of nursing. Giving information could decrease anxiety, pain, as well as post-operative complications of the patients. Nursing approach as well as preoperative information given by nurses is an effective way in reducing the levels of anxiety. (Pinar, Kurt & Gungor, 2011:4-7.)

Lloyd et al. (2014:369-370) found in their study that women with cervical cancer who undergo fertility sparing surgical procedures often have need for statistical information about treatment survival and recurrence rates and future pregnancy recommendations, so providing these women with that knowledge may improve these patients experience and decision-making. In addition, Kritcharen, Suwan & Jirojwong (2005:687) suggest that women and their partners should be informed about vaginal changes after surgical and other procedures that may involve vaginal ulceration, scarring and stenosis.

Patients who undergo chemotherapy treatment may suffer from painful side-effects like stomatitis and proctitis and therefore need recommendations from the nurses of what sorts of foods to eat. Nurses should also instruct the patients and their carers not to use strong-smell spices like garlic in cooking. (Phianmongkhon & Suwan, 2008:744.)

7.2 Competence

Farrell et al. (2005:72) have provided clear evidence in their study that the staff's focus on psychosocial aspect is essential when caring for cancer patients. The study highlights not only the need for good basic communication skills training for the staff but also for preparation in listening and responding to non-medical psychosocial concerns that cancer patients might have. Farrell et al. (2005:72) also conclude that a nurse should be aware of the things that are troubling her patients the most, because according to the same study, nurses fail to identify 80% of their patients concerns. Similarly, Phianmongkhon and Suwan (2008:741) state that patients need attention on their stresses.

Hilton et al. (2003:2073) suggest that more standardization of training in women's health and cancer care in general is also necessary.

Timing of nursing interventions was described to be an important feature in patient care (Cook, McIntyre & Recache, 2014:12, Rasmusson & Thomé, 2008:215). Furthermore, Rasmusson and Thomé (2008:2015) emphasise that health care professionals should be certain of the right timing to take up different matters and address these matters in good approach. A good approach for conveying information requires good communication skills, trust, ability to listen and competence on the part of the nurse or health care professional. In addition, open and sensitive attitude towards patients' questions is required.

According to Phianmongkhol and Suwan (2008:744), nurses should focus their attention on all the symptoms occurring during and after treatments, reduce the severity of these symptoms, and prevent them from occurring by assessing and caring for their patients. Nurses ought to relieve nausea and vomiting experienced by the patients by reducing the factors that induce the symptoms. Nurses not only have a role of giving medicine against nausea and vomiting, but they should also seek causes and solutions for the problems that patients exhibit. Solutions that include, for instance, improving the ward environment, taking care of patient's mental wellbeing and the patient's food condition by cooperating with dietetic units to ensure adequate nutritional status.

Furthermore, according to Kritchарен, Suwan & Jirojwong (2005:687) nurses should understand their role in addressing and helping patients deal with issues associated to sexuality. For that reason nurses need to have the incentive knowledge regarding the sexual effects of treatments and their consequences to meet the requirement for information their patients may have (Rasmusson & Thomé, 2008:217).

7.3 Support

In order to maintain hope and avoid hopelessness during illness and treatments, patients require assistance, such as support and assurance, from nurses and other health care professionals. Nurses ought to create a positive atmosphere and practise hope inspiring nursing and recognise that they are invaluable resources for the patient in that respect. Just being present for the patient might trigger hope and activate inner strength and power of the patient. (Hammer, Mogensen & Hall, 2009:276-278.) Hart et al. (2011:523)

conclude in their article that supporting patient's self-healing resources can enhance the positive outcomes of treatments, such as chemoradiation.

So and Chui (2007:157) studied women's experiences of internal radiation for cervical cancer treatment and in their study they found that patients could cope with their experiences better when they received psychological support from health care professionals, family and fellow patients. A similar conclusion was drawn from Farrell et al.'s (2005:76) study, which indicates that patients' concerns are reduced and alleviated through support by nurses. Furthermore, So and Chui (2007:158) conclude that patients valued direct interaction with health care professionals and families. One particular patient in their study disclosed her appreciation of a nurse who relieved her discomfort by distracting methods:

"A nurse visited me and chatted with me. I really felt thankful. It made a great difference when a nurse was present and chatted with me when I was facing problems. I told her I was in great pain. Then she chatted with me. I had forgotten my pain when I chatted with her. I felt very comfortable. I thanked the nurse a lot." (So & Chui, 2007:157-158).

Another patient in the same study expressed her gratefulness of a nurse who was caring and comforting towards her (So & Chui, 2007:157-158). In the conclusion of their study So and Chui (2007:160) suggest that in order to tailor better nursing care for these patients it could be beneficial to deliver similar therapy to two women in adjacent beds giving them the opportunity to support each other. Nurses can also help friends and carers to provide more effective support for the patients.

In addition to psychological and emotional support, Phianmongkhol and Suwan (2008:744) state that nurses should encourage patients to rest and sleep - or in other words relieve their fatigue, exercise and gain physical strength, raise their self-esteem and be mentally healthy. When sexuality is in question, patients and their partners often feel fearful and anxious about having sexual relations after treatments, so at times nurses may even need to encourage and support patients to have sexual intercourse. (Kritcharoen, Suwan & Jirojwong, 2005:687.) Additionally, Phianmongkhol and Suwan (2008:744) point out that nursing personnel should foster patient's body image.

7.4 Individualised care

Cook, McIntyre and Recoche (2014:11) argue that in order to meet patient's needs, care provided by nurses should be holistic and individualized. This may include individualized pain interventions, or for instance tailored follow-ups. In their study, Cook, McIntyre and Recoche (2014:9) noticed that patients receiving telephone follow-ups expressed high levels of satisfaction with their care and preferred telephone contact over usual physician appointment due to greater convenience. To add, So and Chui (2007:160) report that it might be useful to spend time on debriefing patients after they have successfully completed their treatments to allow the patients to recall their experiences and perhaps recognize some positive gains from it.

Chen et al. (2013:4-5) studied the effectiveness of nurse case management compared with usual care with cancer patients. They concluded that nurse case management in its timeliness and frequency of treatment regimen proved to have positive effects, for instance reduced unplanned readmissions to hospitals due to complications of treatment. It also improved patient's reliance on the hospital and further enhanced treatment continuity of cancer patients. In addition they found that nurse case managers not only promoted patient's reliance on the medical institute but further improved completion of cancer treatment regimen and follow-up and improved patient's adherence to cancer care in general. Guezo (2003:42) on the other hand in her article describes the development of an integrated care pathway for women undergoing total abdominal hysterectomy in Guernsey. She also concludes that nurses play a key role in the development of care pathways to provide individualized and patient centred cancer care.

As Roberts, Rezai and Edmondson (2007:136) describe in their article, each case is unique and patients and their families should be central in the decision-making process. Phianmongkhol and Suwan (2008:745) suggest that nurses should promote relationships among family members and Kricharoen, Suwan and Jirojwong (2005:682) further recommend that nurses ought to identify culturally sensitive and appropriate solutions for open discussions between oncology nurses, patients and their partners when or if it is needed.

8 Validity, limitations and ethical considerations

Study validity is a measure of correctness and truth of a claim (Burns & Grove, 2005:93-94). Validity is not an all-or-nothing phenomenon; it is something that is measured on a continuum (Burns & Grove, 2003:274-275). This is the first time for the authors to conduct a review of this sort. The authors' lack of knowledge concerning the topic and lack of experience in writing reviews could have been a possible risk to the validity and consistency of the findings in this final project. In order to avoid or minimize these risks the authors had carefully gone through guidelines for writing literature reviews and had judiciously picked articles that had been peer-reviewed.

The amount of literature utilised in this final project's findings was limited and this may have been caused by the small amount of published articles on the topic or insufficient database searches due to the authors' lack of knowledge and experience. However, the authors contemplate that regardless of the limited amount of articles used in this final project's findings, all articles were written and published by professionals in their own field from many different countries and continents. Subsequently, this would indicate that the findings of this final project are based on a global sample. As the research question inquires what the best practises in nursing care of cervical cancer are, the authors feel that considering these practises on a global level is far more beneficial than focusing on just one country or continent.

The criteria for a good and ethical study or a review is that reviewers use honesty, caution and accuracy when carrying out a review, present results without biases, and judgement. It is also ethical to give appropriate credits to other people's work and avoid misinterpreting the content of data (Logan University, 2014). As this final project was a literature review and existing published data was interpreted and included no interviews; issues like informed consent, confidentiality and subjective views were not of issue in this final project. However, even though the authors tried their best not to misinterpret or in any case modify original information retrieved from the articles, one cannot be entirely sure that the findings of this final project are entirely free of bias. All appropriate credit have been given to the original authors.

9 Discussion

The purpose of this final project was to collect previously published professional literature on the subject, and to describe evidence based best practices in nursing of cervical cancer patients. As pointed out in chapter two, the world of oncology nursing is extremely complex in its variety of cancer forms; different types of treatments - surgical and other types; diversity of cytotoxic drugs and other medications as well as rapidly advancing disease care.

Also a nurse's role in an oncology setting requires many different skills and knowledge. Nurses need to have a profound understanding on the disease and its care, the variety of procedures and treatments as well as handling and preparing medications. Additionally, technical skills are required to be able to manage the technological devices used in clinical setting. All these areas require constant training and improving one's competence. As nurses are usually the ones spending most time with patients, they need to have the ability to encounter different types of patients in different life situations, treat them with respect and dignity and make them feel comforted and safe.

During the process of this final project, reading through a variety of articles and reviews, it became evident that the most valuable and essential aspects that nurses can bring to the care of patients with cervical cancer are supporting and educating rather than clinical skills. In fact, the authors only found a single article in the literature used for this final project that mentioned any use of clinical or technical skills in patients' care, even though basic clinical skills are a big part of nursing care when dealing with this patient group. The lack of appearance of clinical skills in literature may indicate that they are not valued or that these aspects have not been included in previous studies for one reason or another. The authors suggest that more research in this area is needed.

As mentioned in the previous paragraph, supporting and educating patients were included in the most frequently mentioned themes in the articles. Cervical cancer patients, as all cancer patients, are a very vulnerable patient group that must encounter many challenges and difficulties during their sickness. These challenges may include fear for survival, fear of treatments and their outcomes as well as the condition's eventual effect on their and their family members' quality of life in the future. These patients experience a lot of uncertainty and anxiety and therefore it is important for the health care professionals to have the skills and ability to relate to these patients in proper manner that

supports and helps the patients deal with their challenges and difficulties. Providing adequate and good patient education along the care path has been shown by research to reduce patients' anxieties and fear in stressful situations.

All previous considered, it is fair to suggest that in order to improve the quality of nursing care for cervical cancer patients, the focus should be on improving and ensuring good communication skills of the nurses and their ability to relate to patients undergoing emotional, psychological and physiological crises. The focus should also be on good standardised training in women's health for the staff (Hilton et al. 2003:2073) and within resources, providing more time for the nurses to spend with their patients and to address their patients' concerns. As patients are all individuals, the care should be tailored individually in order to meet each patient's needs best.

As MaZaFi 3 -project was established in collaboration with Malawi, Zambia and Finland in order to promote high quality in health care, the authors hope that the findings of this final project will provide useful and evidence based information for the MaZaFi 3 -project in order to promote and develop cancer care in the African partner countries.

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Appendix 1: Database search table

Database (search done)	Keywords	Hits	Selected by title	Selected by abstract	Articles used for review
CINAHL EBSCO (4.2.2015)	hysterectomy AND nursing AND care	42	6	1	1
	cervical cancer AND oncology AND nursing	11	7	3	2
	cervical cancer AND hope AND patients	5	2	1	1
	cervical cancer AND experience AND radiation	4	1	1	1
	specialist nurse AND cervical cancer	1	1	1	1
	sexuality AND gynecologic cancer	11	3	2	1
MEDLINE OVID (12.2.2015)	cervical cancer AND oncology AND nursing	15	7	3	1
	the role of nursing AND cervical cancer	2	1	1	1
	nurse case management AND care AND cervical	1	1	1	1
	sexuality AND gynecologic cancer	43	8	2	1
	cervical AND chemotherapy AND nursing	8	2	1	1
	gynecological cancer AND chemotherapy AND nursing	9	2	1	1
Manual search, PUBMED (4.2.2015)	gynecological cancer AND nursing care AND evidence	12			1
	cervical cancer AND oncology AND nursing AND specialist	2			1
					Total: 15

Appendix 2: Data analysis table

First author, year country	Purpose of the study	Sample size	Data collection on analysis	Main findings
Linda White Hilton, 2003, USA	To describe nursing role in the context of cervical cancer screening, prevention and detection in US and Sweden. To describe the use of practice guidelines in these areas and to suggest future directions for nursing research.	-	Descriptive review	More standardization of training in women's health is necessary. Cervical cancer guidelines need to be established as a disease management program
Winnie Kwok-wei So, 2007, China	To explore the experiences of women undergoing internal radiation for cervical cancer	8 participants, aged 38 to 72	Unstructured telephone interviews, phenomenological analysis method	The most distressing aspects of undergoing internal cervical irradiation were the experience of isolation and different physical and psychological symptoms. Psychological support provided by health care professionals, family and fellow patients, in addition with positive attitude helped them to cope.
Carole Farrell, 2003, UK	To identify key concerns of patients receiving in-patient chemotherapy and to assess whether nurses are able to identify patients' concerns.	35 women	Descriptive statistics were used to describe the samples.	Majority of patients concerns are not usually detected by nursing or medical staff.
Olivia Cook, 2014, Australia	To evaluate the role and interventions used by specialist nurses in caring for women with gynecological cancer.	9 articles	Systematic review	Outcomes of specialist nurse care were positively affected when nursing interventions involved comprehensive, individualized and timely care.
Jennifer Guezo, 2003, UK	To describe how one organization developed an integrated care pathway for women undergoing total abdominal hysterectomy. The efficacy of care pathways to provide patient-centered care is also discussed.	-	Descriptive article	Nursing and medical staff have indicated that they like the pathway and that it saves time in the documentation of care and in addition it helps patients to understand their care, decreases patient anxiety and facilities provision of more information compared previous hospital stays.
Karen Roberts, 2007, UK	A case study that describes how gynecological oncology and midwifery team provided comprehensive care to a pregnant patient diagnosed with cervical cancer.	-	Descriptive article	These types of patient cases are always individual and wishes of the woman and her family have to be central in the decision-making process.
Laura K. Hart, 2011, USA	To describe different types of complementary therapies available for cancer patients and to identify the benefits of these treatments.	-	Descriptive review	Appropriate integration of complementary care has the potential to enhance the impact of conventional care by putting patients in the best condition for nature to act on them.

Vicky Cleary, 2011, Ireland	To investigate sexual self-concept, sexual relationships and sexual functioning in Irish women diagnosed with gynecological cancer.	106 women	Descriptive article	Gynecological cancer has a potential to affect negatively a woman's sexual concepts, sexual relationships and sexual functioning.
Else-Marie Rasmusson, 2008, Sweden	To examine women's wishes and need for knowledge concerning sexuality and relationships in connection to gynecological cancer.	22 women	Content analysis based on Catanzaro	Nurses who care for women with gynecological cancers, ought to meet women's individual need for knowledge on sexuality during disease treatment.
Sureeporn Kritcharen, 2005, Thailand	To describe patients' and their partner's perceptions on gender roles and sexuality before diagnosis and after treatment for cervical cancer.	97 women	Structured interview methods	The perceptions on sexuality were changed for the women and their partners after the women had undergone the treatment for cervical cancer.
Kristianna Hammer, 2009, Denmark	To investigate meaning of hope in women newly diagnosed with gynecological cancer.	15 women	Phenomenological analysis	Hope was found to be connected to diagnosis, cure and life itself and was closely tight to hopelessness. Women receiving fresh diagnosis, fluctuate between hope and hopelessness. It is important that nurses practice hope-inspiring nursing in order to help these patients.
Gul Pinar, 2011, Turkey	To investigate the impact of preoperative instructions on the level of post-operative anxiety in gynecological patients.	60 women	Using SPSS program	Preoperative instructions reduce post-operative anxiety in women with gynecological cancer.
Yu-Chin Chen, 2013, Taiwan	To evaluate the effectiveness of case management compared with usual care in cancer patients.	600 subjects	Using SPSS program	Cancer case management could improve cancer care.
Yupin Phianmongkhon, 2008, Thailand	To examine feelings, symptom management and needs of patients with gynecological cancer undergoing chemotherapy.	286 patients	The instrument was modified from the Toxicity Assessment Tool (OTTAT)	Patients undergoing chemotherapy experience a variety of feelings, symptoms and help needs. Nurses need to explain the pathology of symptoms so that patient can understand and accept them.
Philippa A. Lloyd, 2014, UK	To describe experiences of women following a radical vaginal trachelectomy and its impact on health, sexuality and fertility as well as perceived supportive care needs.	12 women	Descriptive phenomenological approach	Patients need among other things; statistical information, counselling, peer support and pregnancy recommendations.