

THE FACTORS INFLUENCING THE HEALTH POLITICAL ROLE OF NURSES  
AGAINST CERVICAL CANCER IN A REGIONAL REFERENCE HOSPITAL

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**DECLARATION**

I, Juliet Nabbowa Businge (2008-MPH-PT-001), declare that this is my original work and it has never been submitted for any academic award in any institution of higher learning. Any literature and all other sources referred to have been duly appraised.

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Signature:.....Date.....

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Signature:.....Date.....

Institute of Health Policy Management

## **DEDICATION**

I dedicate this work to the nurses who have done their best to save the women affected with cervical cancer

I would also like to dedicate it to my parents Mr and Mrs Kaganda for the foundation they gave me which has brought me to this level.

## **ACKNOWLEDGEMENT**

I thank all the respondents who sacrificed their valuable time to participate in this research.

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## **LIST OF ABBREVIATIONS/ACRONYMS**

<i>et al</i>	and others
FGD	Focus Group Discussion
HPV	Human Papilloma Virus
ICO	International Cancer Organization
IHSU	International Health Science University
MOH	Ministry of Health
PAP	Papanicolaou
SPSS	Statistical Package of Social Scientist
UBOS	Uganda Bureau of Statistics
VHT	Village Health Team
WHO	World Health Organization

## **ABSTRACT**

**Introduction:** Cervical Cancer is one of the preventable cancers in Uganda with a crude incidence rate of 22.6 per 100,000 population, and 2,464 deaths per year. Eighty percent of the clients report late a situation which can be averted by the nurses if they played their health promotional role against cervical cancer.

**General Objectives:** The main objective of the study was to investigate the factors that influence the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital.

**Methodology:** The study was carried among 154 nurses in Jinja Regional Referral Hospital using a cross sectional design. Participants for quantitative and qualitative study were selected using the consecutive and purposive sampling methods respectively. Data was collected on nurses' socio-demographic factors, health system factors, and nurses' attitudes towards health promotional roles against cancer of cervix using a pre-tested questionnaires and interview guides. Quantitative data was entered in the Epidata and analysed by SPSS software package version 10.0. Qualitative data was analysed by thematic analysis of the response to identify the emerging themes for presentation of results.

**Results:** Nurses with less than nine years of work experience (OR = 2.32, P = 0.011), nurses with salary scale U3-U4 (OR = 10.51, P = 0.027), nurses without a job description (OR = 5.56, P = <0.001) and nurses who follow-up of cancer patient (OR = 7.2, P = 0.001) were more likely to be involved in health promotional activities against cancer of cervix. Overall nurses were less involved in health promotional activities against cancer of cervix.

Nurses with negative attitudes towards their health promotional role against cervical cancer (OR = 0.52, P = 0.048), clients involvement (OR = 0.45, P = 0.016) and health promotion as a concept (OR = 0.38, P = 0.004) were less likely to get involved in health promotion against cancer of the cervix.

**Conclusion:** Overall nurses were less involved in health promotional activities against cancer of cervix. Generally nurses in Jinja Regional Referral Hospital had a positive attitude towards health promotion against cancer of cervix. Nurses with less than nine years of work experience, salary scale U3-U4, without a job description and nurses who followed-up cancer patients were more likely to be involved in health promotional activities against cancer of cervix than those who were not.

**Recommendation:** It is recommended that the Ministry of Health strengthens the cervical cancer prevention programs while providing logistic and in-service training to the health workers so as to increase accessibility and utilisation of cervical cancer prevention services by the clients. Jinja District uses various approaches and media to disseminate health promotional messages against cervical cancer as the hospital conducts three continuous medical sessions on cervical cancer per quarter and gives support for follow up visits. The Ministry of Health and nursing council needs to strengthen its supervisory role to change the nurses' attitudes towards preventive services.

## **OPERATIONAL DEFINITION**

**Attitude:** The process of thinking about something

**Cancer:** A tumour which affects part of the body of the uterus and spreads to other areas

**Cancer of the cervix:** A tumour which affects the lower part of the cervix and spreads to other parts of the body

**Cervix:** The lower part of the uterus

**Health Education:** This is the process of influencing the individuals' and communities' knowledge, beliefs, attitudes and behaviour through effective communication to enhance their well-being and prevent ill-health.

**Health prevention:** The prevention of the initial occurrence of disease, progress and complications

**Health promotion:** The process of enabling people to increase control over their health and improve it

**Health Protection:** The development and implementation of health policies and codes of practice aimed at preventing ill-health or positively enhancing well-being.

**Healthy Public Policy:** Guidelines developed to protect the health of the public.

**Nurse:** A person trained and qualified to provide promotive, preventive and nursing care including the midwives.

**Policy:** Guideline of doing something

## CHAPTER ONE

### INTRODUCTION

#### **1.1. Background to the Study**

Cervical cancer is one of the preventable cancers but still a silent killer of many women (WHO/ICO, 2010). World wide it is the second most common cancer among women, with an estimated 529,409 new cases and 274,883 deaths registered as of 2008. The burden of cervical cancer in Uganda is also alarming in that it is the most frequent cancer among women, mainly those between 15 and 44 years of age. The crude incidence rate of cervical cancer per 100,000 population is 22.6; cases diagnosed annually are 3,577 with 2,464 deaths (WHO/ICO, 2010).

The exact prevalence of cervical cancer in Jinja Regional Referral Hospital is not known as there is only one functional Kyadondo cancer registry in the country which covers Kampala city and the surrounding area (Agaba, 2007). However cervical cancer is the commonest cancer among the clients referred to Hospice Jinja (Rays of Hope, 2007).

Human Papilloma Virus (HPV) is the major cause of cervical cancer responsible for 75% of all the cases while the predisposing factors include: high parity, HIV prevalence (15-49 years), use of oral contraceptives above 5 years, smoking, early exposure to sex, promiscuity and marriage to polygamous men (WHO/ICO, 2010).

Although cervical cancer can be prevented through health education, counselling and guidance on the risk factors, immunisation against HPV, screening using PAP smears to

detect changes in cervix, surgery and chemotherapy which halts the progression of cancer, 80% of the cases report late leading to a higher morbidity and mortality rate.

According to Hilton *et al* (2003), the causes of delay to access cancer screening services can be averted if nurses played their role of encouraging more women to access these services. This is possible because health promotion is one of the four core roles of nurses including preventing illnesses, restoring health and alleviating suffering (Kozeir, 2004).

Factors like low level of qualification, lack of time, lack of continuing education, attitude towards health promotion, ambiguous job description, mission of the health institution, lack of coordination and an ineffective referral system have been identified as nurses' barriers to promote the prevention of cervical cancer (Hilton *et al*, 2003 & Leuven &Prion, 2007). Understanding these factors will guide the Ministry of Health and other policy makers to develop relevant strategies to enable the nurses to actively contribute to the prevention of cervical cancer, thus reducing its burden in the country.

The aim of the study therefore was to investigate the factors that influence the nurses' health promotional role in preventing cervical cancer in Jinja Regional Referral Hospital.

## **1.2. Scope of the study**

The study was carried out Jinja Regional Referral Hospital. The participants were nurses and midwives working in that hospital.

### **1.3. Statement of the Problem**

Worldwide cervical cancer is one of the leading causes of death among women. It is estimated that annually 529,828 women are diagnosed with cervical cancer and 275,128 die from the disease. In Africa 80,419 women are diagnosed with cervical cancer and 53,334 die from the disease (WHO/ICO, 2010a).

Approximately 7.5 million of Uganda's population is at risk of developing cervical cancer and HPV contributes to 75% of all cancers. Despite the efforts to scale up cervical cancer prevention programs to all referral hospitals, 80% of the clients report late. Jinja Regional Referral Hospital annually refers 65% of such clients to Hospice Jinja (Rays of Hope, 2007). If nothing is done, the annual cervical cancer cases and death are likely to increase to 6407 and 4281 respectively by 2025 (WHO/ICO, 2010).

Barriers to nurses' involvement in promoting health and prevention of diseases have been identified in studies done in USA (Hilton *et al*, 2003 & Leuven & Prion, 2007) to include level of qualification, lack of time, inadequate opportunities for continuing education, lack of feedback from managers and attitude of nurses towards health promotion. Other factors are ambiguous job description, mission of the health facility, lack of coordination and an effective referral system

This study therefore aimed at investigating the factors that influence the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital.

### **1.4. General Objective:**

To investigate the factors that influences the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital

### **1.5. Specific Objectives were to:**

- Determine the nurses' health promotional role against cancer of the cervix among those working in Jinja Regional Referral Hospital
- Identify the socio-demographic and health systems factors that influence the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital
- Assess the nurses' attitude towards their health promotional role against cancer of the cervix in Jinja Regional Referral Hospital
- Determine the relationship between nurses' attitudes and their involvement in the health promotion against cancer of the cervix in Jinja Regional Referral Hospital

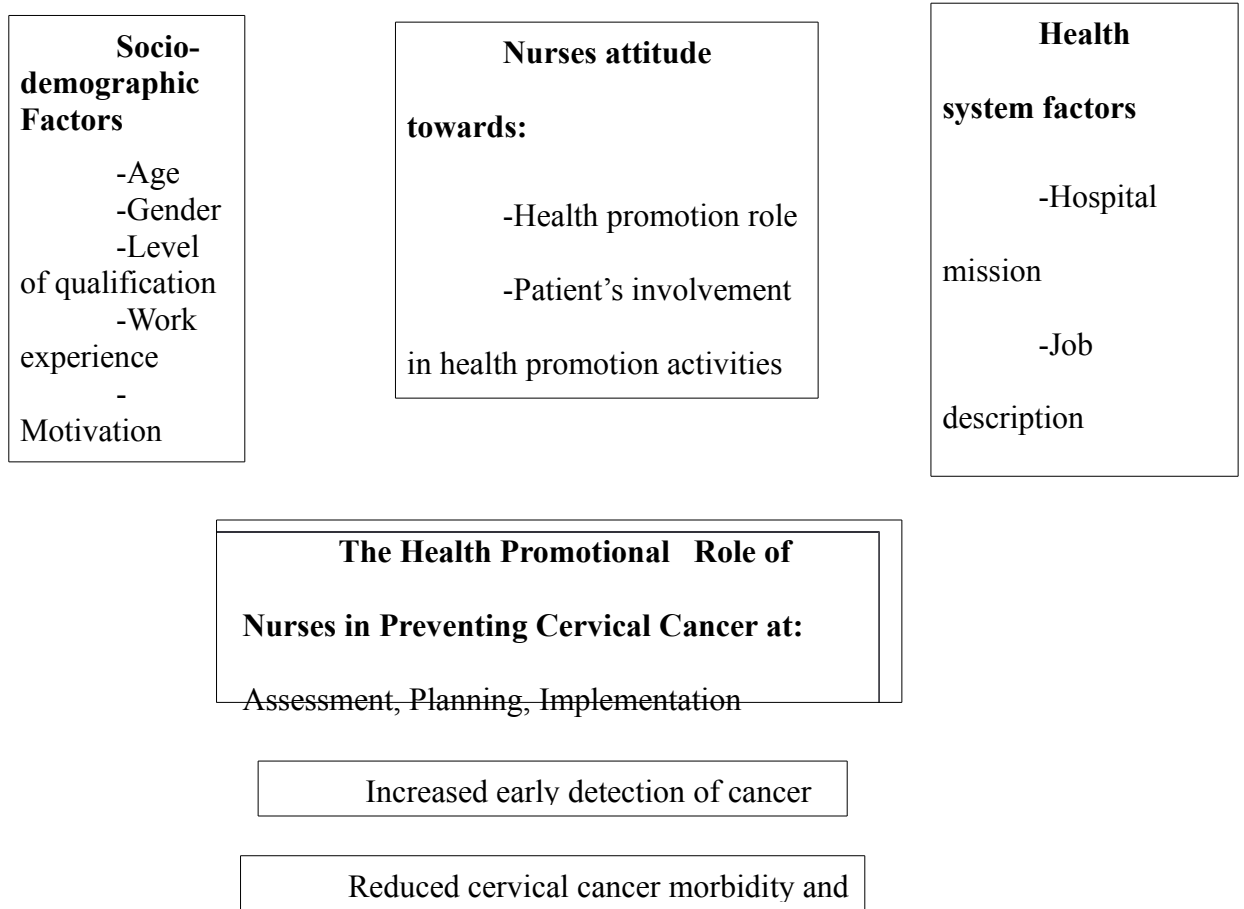
### **1.6. Research Questions**

- What is the health promotional role played by the nurses against cancer of the cervix in Jinja Regional Referral Hospital?
- What are the socio-demographic and health systems factors that influence the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital?
- What is the attitude of nurses towards their health promotional role against cancer of the cervix in Jinja Regional Referral Hospital?
- Is there a relationship between the nurses' attitudes and their involvement in health promotion against cancer of the cervix in Jinja Regional Referral Hospital?



### 1.7. Conceptual Framework

**Figure 1: The factors influencing the health promotional role of nurses in preventing cervical cancer in Jinja Regional Referral Hospital.**



The conceptual framework demonstrates that the health system and socio-demographic factors either directly or indirectly influence the nurses' involvement in preventing cervical cancer. The nurses are expected to participate in planning, implementation and evaluation as well as influencing health policies while executing their health promotion role in preventing cancer of cervix.

The concept assessed if Jinja Regional Referral Hospital considers nurses involvement in cervical cancer prevention as an important strategy of reducing its burden. **1.8.**

### **Significance of the study**

Cervical cancer is on the increase in Uganda with an estimated 7.1million of the population being at risk. Despite the available prevention programs 80 % of the clients are diagnosed with advanced cancer. However, through advocacy and health promotion nurses can improve the health-seeking behaviour of women so as to avoid such effects. Despite promoting health and preventing illness being a core role of nurses it is hardly emphasized in the official documents such as the health policy. Instead most of the interventions designed refer to the village health team (VHT) strategy as an effective way of promoting health (MOH, 2010, MOH, 2005& MOH, 1996). It is therefore possible that nurses are reluctant to execute their role as the major focus is put on the VHTs.

Studies on nurses' role in promoting prevention of cancer of cervix are scanty in Uganda. This study therefore, revealed the factors influencing nurses' role in promoting cervical cancer prevention so as to strengthen the cervical cancer prevention activities which will increase the demand and utilization of the services thus reducing the burden.

The findings of this study will be used to inform policy makers on strategies for promoting health in cervical cancer which will contribute to better cancer prevention services and clients health outcomes.

The aim of the study was therefore to determine the factors influencing the health promotional role of nurses in preventing cervical cancer in Jinja Regional Referral

Hospital.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

This literature review was guided by the general research question which sought to investigate the factors that influence the nurses' health promotional role in preventing cervical cancer. The review aimed at searching relevant information with respect to the variables of the study, which included the health promotional role of nurses, socio-demographic, health system factors, and attitude of nurses towards their health promotional role, client involvement, restrictions and health promotion as a concept.

#### **Natural History of cancer of the cervix**

Cervical cancer is an abnormal growth of the cells of the cervix, 75% caused by Human Papilloma virus ((WHO/ICO, 2010).The risk to Human papilloma virus infection is as high as 80% & but only 5% infections progress to cervical cancer (Population Reference Bureau, 2004).

Smeltzer & Bare (2004) describes the natural history of cervical cancer into two major stages; pre-invasive and invasive stage.

#### **Pre-invasive stage**

This is the early stage of the disease characterised by abnormal changes in the cells around the cervix. The abnormal cells can disappear in some cases while in others it can progress to cervical cancer but only limited to epithelial layer.

### **Invasive Stage**

This is further subdivided into 4 stages

Stage 1: Cancer is only confined to the cervix and can only be identified microscopically.

Stage II: Cancer spreads beyond the cervix it may or may not involve the vagina but not the pelvic wall.

Stage III: Cancer extends to one or both pelvic walls and involves the lower third of the vagina. It may also obstruct the ureters.

Stage IV: The cancer extends beyond the true pelvis. It may involve the mucosa of the bladder and/ the rectum, and neighbouring or distant organs.

### **The health promotional role of nurses against cancer of the cervix**

According to Smeltzer & Bare (2004), cancer of the cervix can be prevented at all levels of prevention such as primary, secondary and tertiary level. At primary level cancer of the cervix can be prevented by offering health education, counselling and guidance on the risk factors and immunisation against HPV. Immunisation is done by giving 3 injections over a course of six months. Young girls and women between 10- 55 years are eligible (Population Reference Bureau, 2004).

At secondary level it can be prevented by early detection through screening using PAP smears and follow up by prompt and effective treatment. PAP smear involves gentle scrapping of the cells of the cervix onto a slide for analysis. All sexually active women are required to do this test starting after their first sexual encounter then repeat every one to three years (Population Reference Bureau, 2004).

Visual inspection with acetic acid or schiller's test with Iodine can be used as an alternative to PAP smear. When cervical cells are stained with acetic acid those which are abnormal turn white while with iodine they turn yellow or brown (Population Reference Bureau, 2004).

At tertiary level cervical cancer prevention is done by rehabilitating the patient with established residual disabilities and complications to improve on the quality of life. According to Hilton *et al* (2003), nurses can promote health at each level of cervical prevention

Tonnes & Tilford (2001) & WHO (2003) define health promotion as the process of enabling people to increase control over their health and to improve it. Tonnes & Tilford (2001) describes Tannahill model to comprise of three components of health promotion that is health education, health protection and prevention. These components inform and spread into the nursing care through the nursing process which comprises assessment, planning, implementation and evaluation (Hogston & Simpson, 1999 & Kozeir *et al*, 2004). Therefore according to Kozier *et al* (2004) the nurses' health promotional role against cervical cancer can be explained using the nursing process as discussed below.

Assessment is the first step of the nursing process. A nurse carries out a comprehensive assessment in order to identify the actual and potential health needs of the clients. The nurse takes the history and performs a physical examination of all the health functional patterns including sexual health pattern. Some nurses use guidelines designed by the facility management or other authorities to get more standardised and reliable results (Kozeir *et al*, 2004). By conducting thorough assessment the nurse is able to identify health risk behaviour, knowledge gaps in certain health education issues and detecting a health problem as early as possible (Atman, Buclsel & Coxon, 2000). Due to the long asymptomatic period of cervical cancer, comprehensive assessment is important so as to identify those who are affected as early as possible (Smelter & Bare, 2004). Atman *et al* (2000) also recommend client involvement during assessment so as to create an effective relationship and also getting reliable information

Unfortunately despite the advantages of needs assessment Cronghan *et al* (2004) in their study reported that most school nurses were unable to carry out effective assessment, while others did not record all the information, thus creating a gap in service delivery.

After assessment the nurse analyses the findings and makes a wellness diagnosis. A wellness diagnosis describes the positive change expected of the client. It provides a clear focus for planning health promotion interventions such as health education, screening services, referral for support and others services (Kozeir *et al*, 2004).

Furthermore, the nurse shares the findings with the clients so as to prioritize the identified needs and designs health promotional plans. According to Kozeir *et al*, (2004), health promotional plans are designed according to the client needs and priorities. The nurse in

this case acts as a facilitator to guide the client to come with best plan which contributes to the desired outcome. The nurse also acts as a resource person as the client sets the goals and the interventions to achieve the outcomes. Goals are used as a yard stick to measure the progress and are regularly reviewed by both the client and the nurse.

Similarly, nurses are required to involve the clients in the planning process as it promotes ownership of the plan by the clients and the health team does not appear as imposing it on the client (Almatan *et al*, 2000). Alexandropoulou *et al*, (2010), in her study observed that some nurses depended on guidelines or their own perception to plan for the client care. The authors further say that lack of client involvement in planning affects their ability to take up recommended services.

The nurse also acts as a facilitator throughout the nursing process. He/she collaborates and works closely with other health team members when planning health promotional programs (Kozeir *et al*, 2004).

It is also a nurse's responsibility to explore the availability of resources and services for instance the nurse should be aware in case of cancer when and where the client should access cervical cancer prevention and treatment services.

After developing the health promotional plan the nurses encourage the client to set a timeframe for the action and also sign that contract. All these actions are done to motivate clients achieve their goals (Altman *et al*, 2000).

Interventions such as counselling, consulting, facilitation and supporting are carried out depending on the client's needs. Nurses provide these services as individual or group program such as campaigns in order to support clients to achieve the desired behaviours.

According to Alexandropoulou *et al*, (2010), individual programs are effective but need time where as group programs are easy to implement, clients learn from each other but some clients may not be able to express themselves and therefore their needs may not be addressed. Rash (2008) reported than some nurses were unable to implement group programs due to lack of time, skills, resources and cooperation from the health team.

On the contrary, Alexandropoulou *et al*, (2010), in her study reported that due to lack of time and shortage of staff, school nurses opted for group programs so as to reach many of their clients. Therefore according to these studies it is not clear which program is more preferred by the nurses.

Nurses are also required to document all the health promotion interventions conducted (Kozeir *et al*, 2004). These documents are used for evaluation of the intervention and also act as legal documents. They may also be used as a reference guide when re-planning or designing new program

Unlike in a study done by Urasa and Darj, (2011) where 84.6% of the nurses had never done a PAP smear, the nurse must act as role models of wellness. They must have a philosophy and lifestyle that demonstrate good health habits where clients can learn from (Kozeir *et al*, 2004)

Furthermore, nurses evaluate health promotion interventions by reviewing the health promotional goal, reassessing the client's progress to determine the actual response which is compared with the desired outcome and later assist in making a judgement (Kozeir *et al*, 2004). Nurses also follow up clients either by telephone call or home visits to check on their progress. Wright *et al*, (2008) however noted that most nurses fail to follow up clients



due to lack of resources. Whitehead (2002) also reported that health promotion activities are rarely evaluated and as a result they are rendered ineffective and unsuccessful.

Despite the challenges, health promotion strategies need to be evaluated as to how well they meet the client needs (Hogston & Simpson, 1999). The findings from the evaluation are used to re-plan, change or repeat the interventions.

Health policy and health education form a basis for health promotion (Tonnes& Tilford,2001). Therefore it is important for nurses to take part in developing and implementing policies. Some nursing schools in developed countries have introduced health policy development and implementation courses but few nurses are participating (Shoqurat, 2010).

### **Social-demographic factors and nurses' health promotional role in preventing cancer of the cervix**

The nursing profession like any other profession comprise of nurses with different age groups. In a study conducted by Urasa & Darj (2011) it was indicated that young nurses ( $p = 0.027$ ) had adequate knowledge in cervical cancer compared to the old nurses, implying that, young nurses are more competent in some aspects than the old nurses.

On the contrary, another study revealed that some young nurses ignore promoting health among the elderly and children (Leuven &Prion, 2007). It is therefore not clear why those who are knowledgeable in health promotion ignore certain age groups and whether it also applies to promoting cervical cancer prevention.

Furthermore the difference between the age of the nurse and the client creates a barrier to discussing sexual health matters. This was confirmed by a study conducted in UK which revealed that most nurses felt more comfortable discussing sexual health issues with their peers (Gott *et al*, 2004). In the same study almost all of the participants mentioned that middle aged and adult clients consider sexual health as a private and personal issue making it difficult to discuss it exhaustively. This affects the quality of interaction irrespective of the knowledge the nurse might have.

It has also been noted that the nursing profession is dominated by females and it is assumed that they are able to effectively interact with their female clients compared to male. This was confirmed by Gott *et al*, (2004), who reported in their study that nurses fear to be misunderstood by clients of the opposite gender when they discuss sexual health issues. They find it easy to discuss sexual health issues with the person of the same gender, possibly thinking that they have the same concerns.

In addition to that most clients fear to undress for examination; this is worsened if they are to be examined by a male nurse. Unfortunately in Uganda some units are managed by male nurses who might be hindering the number of women turning up for cervical cancer prevention services (MOH, 2005). Likewise men fear discussing sexual health issues and accessing family planning services because it is mainly provided by women (UDHS, 2006). Therefore the difference in gender may affect the tendency of the woman to be examined for cervical cancer (UBOS, 2006).

O'Donnell (2010) also confirmed that gender balance in the nursing profession affects the provision of health services. In his study he reported that few men were seeking sexual

health care because they were few male health specialists (24%) compared to other specialties (88%).

Furthermore the nursing profession comprise of different qualification level ranging from enrolled nursing to PhD (MOH, 1996). Although all of them are trained to promote health, the level of training differs. This was also highlighted by Urasa & Darj (2011)'s study which found out that though most nurses were knowledgeable in cervical cancer, the level of knowledge differed significantly between cadres. Registered nurses had more adequate knowledge than enrolled nurses ( $p = 0.006$ ). The majority did not know screening intervals and a few were aware of HPV vaccine. It is noted that that the level and scope of education determines the level of effectiveness in health promotion (Partridge *et al*, 2007).

Limited knowledge in some aspects of health care can be associated with the nature of the nurses training. Worldwide it is known that some aspects such as research and health promotion are given fewer hours during the nurses training (Hinaly, 2010). This is because their training focuses more on disease management than other aspects.

Furthermore, it was also noted that nurses rarely develop a knowledge base beyond the role of educational, medical and behaviour modifying approaches that are lifestyle and disease oriented (Irvine, 2007). This finding was similar to Hilton *et al*, (2003), results that most nurses-midwives in her study had received little or no continuing education regarding cervical cancer. They did not prioritise this area as their work and neither looked for new knowledge nor followed current research.

According to Hilton *et al*, (2003), nurses need excellent clinical training to carry out colposcopy for effective prevention of cervical cancer. It is not clear whether nursing

schools in Uganda train nurses to do such an examination. Most nursing schools emphasize immunization, nutrition and family planning compared to other aspects (Liimatainesn, 1999).

In addition to that nurses are assessed during the training and usually there is no follow up or in-service training conducted after qualifying. According to Liimatainesn (1999) nurses find it difficult to transfer knowledge into practice and theory loses meaning after some time. This indicates that even some nurses who are trained in cervical cancer screening may not practice due to lack of support supervision; others may even forget the skills due to lack of in-service training.

Furthermore senior nurses who would support the junior nurses have scanty information in health promotion yet mentoring is one of the training approaches in nursing (Liimatainesn, 1999). It is possible that junior nurses decline promoting health after learning the attitude of their seniors.

The principle of reorienting the health system also recommends that strong attention be put to health research, as well as changes in professional education and training to meet the changing needs in health (Victoria, 2010). Based on this, it is important that nurses' training schools review their curricula to improve on health promotion activities such as cervical cancer screening.

In practice it is expected that the more the experience someone has, the better the performance. However according to Liimatainesn (1999), some senior nurses are incompetent in health promotion, therefore they cannot help the juniors to learn.

On the contrary, Sawyer (2002) said that experience alone without advancement in knowledge does not necessarily enable nurses to handle new and complex challenges in health. The nursing practice in health promotion requires current knowledge derived from other fields like biological and social sciences , and community health to mention but a few (Tonnes & Tilford ,2001).This implies that nurses have to look for opportunities to go for further studies in order to be competent in health promotion interventions. The hospital may also conduct regular continuous medical education to update those in-service.

Furthermore lack of motivation negatively affects the nurses' ability to conduct health promotion activities; some of the de-motivators have been highlighted as lack of job satisfaction, and lack of resources and skills (Rash, 2008 & Hagopian, 2007. These factors were associated with the low involvement of nurses in the prevention of cervical cancer (Hilton 2003, Urasa & Darj, 2011)

Lack of recognition, promotion and opportunities for career development also de-motivate nurses (Shattuk *et al*, 2008). Nurses need to be given opportunities for career development as it acts as great tool in assisting nurses to meet the challenges of providing health services (Sawyer, 2002).

Similarly nurses are de-motivated due to shortage of nurses which results in increased work load and lack of time to conduct some of the health interventions (Rash, 2008). The same author confirmed that lack of time has diverted nurses from promoting health to disease management which requires urgent attention. Lack of time was also highlighted as a major barrier in communicating with clients about cervical cancer (Hilton et al, 2003).

In addition to that, the low uptake of health services by clients also affects the nurse's morale to promote health (Rash, 2008). Clients who disregard the nurses' advice affect their enthusiasm in health promotion.

Partridge *et al*, (2007) also noted that some nurses are de-motivated in promoting health because there is scanty information on the impact of educational programs on health promotion. Harvey *et al*, (2002) says that evaluation acts as an intrinsic motivator for the practitioners to improve on their performance. They turn challenges into learning opportunities. It is therefore not clear whether lack of evaluation affects the role of nurses in promoting cervical cancer prevention.

### **Health systems factors and their effect on the nurses' health promotional role against cervical cancer**

Hospitals are the best place for health promotion activities including prevention of cervical cancer; unfortunately most of them focus on disease management due to increased communicable and non-communicable diseases (Jorgensen & Groene, 2005). Likewise nurses working in such facilities follow the hospital's mission which also determines the content of their job description (Kelly & Abraham, 2007).

Focus on disease management by health institution has compromised on attention paid to health promotion interventions, resource allocation, staffing and incentives given to those engaged in health promotion compared to those offering therapeutic services (Rash, 2008, Wills & Rudolph 2010, Whitehead, 2004)

Similarly, nurses are deployed in different departments within a health facility such as eye, medical, or paediatric to mention but a few. If a nurse is confined in one department for a

long time he/she may forget the skill and knowledge to participate in other activities outside his or her department. Through experience he/she may only know what happens in her department (Alexandropoulou *et al*, 2010)

Likewise, some nurses have job description while others do not. Surprisingly, some of those who have the job description have diverted from what they are supposed to do (Alexandropoulou *et al*, 2010). They perform duties according to allocation or demands of the clients. Lack of a clear job description most likely affects the nurses' performance as they have no guidance of what they are supposed to do.

In another study it was revealed that clinician handle health promotion by referring clients to other specialists rather than nurses. Nurses are in most cases left out to assist clinicians in disease management (Leuven & Prion, 2007). The same author also reported that there is lack of co-ordination between the clinician, nurses and the specialists when it comes to health promotion activities. Clients are lost as there is no adequate follow up since nurses are not always aware where the client was referred to. Some specialist when they receive client they do not request for some laboratory test such as those for cervical cancer screening with a view that it was done by the primary health care provider (Leuven & Prion, 2007).

Whitehead (2004) highlighted that even in those hospitals which implement some health promotion programs, most of them are run parallel to each other. Staffs are incompetent in linking a client from one program to another. Some clients leave the facility without receiving all the services they ought to receive.

## **Nurses attitude towards prevention of cervical cancer**

Although the majority of the nurses are female and have knowledge about cancer, few go for regular medical check ups. A study done in Tanzania indicated that 84.6% of the nurses in a certain regional hospital had never had a PAP smear examination (Urasa & Darj, 2011). This implies that some nurses may also have a negative attitude towards cervical cancer prevention, thus not actively encouraging the clients to go for cervical cancer screening

Research has also confirmed that nurses in clinical practice usually do not consider health promotion interventions as their major role; instead they focus on alleviating and treating disease as opposed to actively strengthening the positive aspects of the patients' health (Svedberg, 2009). In addition to that, the nurses' views of health promotion also play a role in determining their level of involvement in health promotion. Naidoo & Wills (2000) revealed that health promotion involves changing behaviour which requires a lot of time to give adequate information as well as allowing the client to share his/ her challenges. Most nurses however have interpreted it as time wasting and disturbing (Rash, 2008).

On the contrary, a study done by Leuven & Prion (2007) revealed that assisting a client to overcome a risky behaviour is rewarding no matter the time spent. Therefore it is not clear whether all nurses believe that health promotion is waste of time or not. Some nurses also believe that patients perceive health promotion as boring, blaming or inducing worry. Others feel that patients' lifestyle is deeply and culturally engrained thus their effort to promote change are useless (Rash, 2008).



However a study done in a Sweden in one of the mental units revealed that there were no significant differences (0.45) between patients and staff perception in health promotion interventions (Svedberg *et al*, 2009). It is therefore not clear whether nurses assume that clients do not like health promotion interventions or vice versa.

Similarly, nurses have ethical standards which guide their practice. Some of them include respect for the clients and autonomy. Nurses are not supposed to coerce, persuade or manipulate a client but to create a favourable environment for an informed choice. During health promotion however, they are confronted with the ethical dilemma because they cannot choose for the client (Mandle, 2006). Nurses usually label clients “difficult” when they do not accept their advice thus affecting their relationship (Mandle, 2006).

Likewise Leuven & Prion’s (2007) study revealed that nurses feel that some clients like in geriatrics and paediatrics do not require health promotion activities. They think that they are confused, cannot understand and therefore cannot make or implement the decision. Such age groups are rarely attended to yet have health concerns.

Nurses are role models of the clients implying that even for health promotion nurses must practice what they say. Unfortunately most nurses assist clients to improve, yet they do not have time for themselves. Since they are role models, failure to practice what they preach may affect the clients’ perception to take up some of the health promotional activities (McElligot & Siemers *et al*, 2009).

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.0. Introduction:**

This chapter focuses on the description of the methods that were used in the study. It therefore specifies the research design, study area, population of study, sampling strategies, sampling procedures, data collection methods, research instruments, as well as the research procedure.

#### **3.1. Study Design**

A descriptive cross sectional design was used. The design established the factors influencing the health promotional role of nurses in preventing cervical cancer and also determined the relationship between nurses' attitudes and their actual involvement in promoting the prevention of cervical cancer in Jinja Regional Referral Hospital. The study involved both quantitative and qualitative data collection methods.

#### **3.2. Study Area**

The study was conducted in Jinja Regional Referral Hospital located in Jinja District. It is the largest regional referral hospital in the Eastern Region serving a population of approximately 2,000,000 people with a bed capacity of 600. It has the highest staffing level of 98% among all the regional referral hospitals, with 38% nurses. It provides specialized services like preventive, promotive and outpatient care among others. The hospital also offers in-service training, consultation and research in support of the community-based healthcare programs (MOH, 2004). It also has a public school of nursing and midwifery under the Ministry of Education and Sports. Nurses are involved in all these activities.

### **3.3. Population**

The target population was all qualified nurses and the accessible population was all nurses who were working in Jinja Regional Referral hospital between July and August 2011, while the study population was all nurses who satisfied the selection criteria

### **3.4 Eligibility Criteria:**

#### **Inclusion Criteria**

- All qualified nurses who were working in Jinja Regional Referral Hospital.
- Nurses on duty during the time of data collection.
- Nurses who consented to participate in the study

#### **Exclusion Criteria**

- Those who were very busy for instance working in theatre or attending meetings.

### **3.5. Sample Size determination**

Jinja Regional Referral Hospital has an average of 164 nurses and since the population is small all of them served as a study unit.

### **3.6. Sampling Technique for quantitative data**

A consecutive sampling method was used, since nurses' work in shifts and the time for collecting data was limited. The nurses' duty roster was obtained from the Principal Senior Nursing Officer and all those who were on duty during the time of data collection were

interviewed. Nurses on night duty were interviewed during their shift. Informed consent was obtained and those who accepted were given serial numbers and registered.

### **3.7. Sampling Technique for Qualitative Data**

A purposive sampling method was used to select both the key informants and those who attended the focus group discussions. This method was relevant as only staff with adequate knowledge in the nursing services and the management of the hospital were selected. The key informants included the Medical Director, the Senior Principal Nursing Officer, the deputy area in charge of the gynaecology and surgical Department, the in-charge of gynaecological ward and deputy in charge of gynaecology outpatient clinic. Two focus group discussions were conducted. Appointments to interview the key informants and to conduct the focus group discussion were made a week in advance.

### **3.8 Study Variables**

#### **Dependent variables:**

Nurses execute their health promotional role by assessing, planning, implementation and evaluating health promotion activities. They also influence health policies which form a foundation for health promotion. Using the nursing process they provide health education, prevention and advocate for health protection to enable people increase control over the determinants of health and thereby improving their health.

#### **Independent variables:**

The independent variables were categorised into three: the socio-demographic factors, health system factors and the nurses' attitude.

The socio-demographic factors included gender, age, and level of qualification, work experience and salary. The health system factors included hospital's work policy, job

description, and deployment of staff, resource allocation, Continuous Medical Education, co-ordination, referral and follow-up system. While the nurses attitude included their attitude towards their role in health promotion against cervical cancer, patient's involvement in cervical cancer prevention activities and restrictions in promoting cervical cancer prevention and health promotion as a concept.

### **3.9. Data Collection Methods**

#### **Quantitative data collection tools:**

A questionnaire designed in English was used to collect the quantitative data. Part of the questionnaire used to examine the nurses' role and their attitude in health promotion was adopted from Sourtzi (1995) and was modified to suit this study. The original questionnaire reported a Cronbach's  $\alpha = .64$  for scale for measuring health promotion activities and a Cronbach's  $\alpha = .74$  for attitudes scale. The questionnaire was developed to assess different variables thought to be affecting the nurses' health promotional role of preventing cervical cancer. It had four sections: Section A had six open and closed ended questions related to nurses socio-demographic factors such as gender, age academic qualification, years of experience, salary scale and source of motivation; Section B had ten open and closed ended questions on the hospital's mission, Continuous Medical Education, job description, referral and follow up system; while section C explored the nurses' role and had 4-point scales (always, often, rarely and never). It also had sixteen questions on the nurses' attitude on their health promotional role, clients' involvement, restrictions and the health promotion as concept. The answering pattern of the 16 questions was ordinal with five categorical scale strongly disagree, disagree, uncertain, agree and strongly agree. See Appendix i: Questionnaire.

### **Qualitative data collection tools**

An interview and a focus group discussion guides were developed and used to collect data from the key informants and during the Focus Group Discussion (FGD) respectively. Most of the questions in both guides were almost similar. They included questions on cervical cancer services in the hospital, factors that affect nurses' involvement in cervical cancer programs and the hospital's support for cervical cancer program.

### **Pre-testing of tools and techniques**

The questionnaire was administered to 10 nurses in Kawempe Health Centre IV and necessary changes were made to improve on clarity prior to commencement of the study. The interview guide for key informants and FGD guide were also pretested on some staff members of Kawempe Health Centre IV. Content validity was carried out and adjustments made before they were used.

### **Quantitative data collection method**

Self administered questionnaires with the help of two research assistants were distributed to participants over a course of a week. Omission and errors were checked before the questionnaire was received from each participant. The questionnaires were coded to avoid double entry.

### **Qualitative data collection method**

Appointments were made with key informants, then interview were conducted at the agreed time during the period of data collection. Two FGDs of 6 and 7 participants each

were conducted. Responses from both interview and FGD were pre-recorded by both handwriting and tape recording then transcribed.

### **3.10. Data Management Methods**

#### **Quantitative data management**

The collected data was checked for completeness and consistence, coded, double entered into Epidata software and cleaned. It was exported and analyzed using the Statistical Package of Social Scientists (SPSS) version 10.0 with the help of a statistician. Incomplete questionnaires and multi-recorded data were removed.

#### **Qualitative data management**

The participants' responses were transcribed, coded and typed in the MS word. Themes and sub themes were generated and continuously analysed during and after data collection.

### **3.11. Data Analysis**

#### **Quantitative data analysis**

Data was entered in Epidata and analysed using SPSS version 10, software. Data for descriptive analysis was summarized and presented as percentages. Logistic regression was carried out to determine the strength of the relationship between dependent and independent variables. The median score for the dependent variable, which is the nurses' health promotional role was, 30 while the scores for each independent variable were also determined. The odds ratio (OR) was used to determine the strength of the association between the independent and dependent variables. The P-value of 0.05 was used to determine the statistical significance of the results.

### **Qualitative data analysis**

A two stage analysis of qualitative data was used. The first stage involved identifying from the conceptual framework broad categories to which responses from the key informants and focus group discussion were grouped. Assignment of responses to a particular category was made by logical analysis and identification of the relationship between the responses and category.

The second stage involved thematic analysis of the responses in each category to identify emerging themes for presentations of final results. Triangulation between qualitative and quantitative data was made to have a thorough understanding of quantitative results.

### **3.12. Data Quality Control**

The following was done to ensure quality of this study: pretesting of data collection tools (questionnaire), hiring of a facilitator for focus group discussion, checking for consistence and completeness of data, coding of data, double data entry into Epidata soft ware and cleaning of data. Two research assistants were trained to understand the procedure of data collection and the ethical issues. Data was analyzed using the most appropriate analytical techniques and advanced statistical packages.

### **3.13. Ethical Considerations**

The proposal for this study was submitted through the supervisor to the ethical review committee of IHSU. Any concerns raised were addressed before the study by IHSU, Research & Ethics committee. The researcher obtained a letter of introduction from the Institute of Health Policy



Management to prove her attachment to the above institution as a student. She received approval and support from the research committee and the management of Jinja Regional Referral Hospital. Permission was obtained from Kawempe Health Centre IV for pretesting of tools, techniques and the study respectively. Nurses were requested to consent before participating in the study. Results from the study are to fulfill the requirement of the award for Masters in of Public Health and academic purposes only.

## CHAPTER FOUR

### RESULTS

#### 4.0 Introduction

A questionnaire was administered to 161 nurses who were willing to participate in the study. Five questionnaires were not returned and 2 were rejected as they were incomplete. A total of 154 questionnaires were therefore the sample size used for data analysis. Information from 2 focus group discussions and five interviews with the key stakeholders were also analysed.

#### 4.1 The Nurses Health Promotional Role in Cervical Cancer Prevention

The role of nurses in health promotion is categorized into assessment, planning, implementation, evaluation and influencing health policies. During the study nurses were asked whether they were carrying out these roles in relation to cervical cancer prevention. The responses were categorised as never, rarely, often and always as indicated in Table 1.

##### **Health Needs Assessment:**

Only 46/154 (29.9%) of the nurses always assessed clients with risky behaviour for developing cervical cancer, while 43/154 (27.9%) and 37/154 (24 %) rarely or had never assessed clients respectively.

When asked whether clients were involved in the assessment, results revealed that only 60/154 (39%) nurses often involved the clients while 50/154 (32.5%) rarely and 27/154 (17.5 %) never involved them at all. It was also noted that very few respondents 26/154 (16.9 %) had often and 23/154 (14%) had always used a guideline to assess and care for the clients, whereas only 57/154(37%) had always and 52/154 (33.8%) had often worked

with Ministry of Health in promoting cervical cancer prevention. Generally the findings indicate the nurses were slightly less involved in health needs assessment in relation to cervical cancer prevention.

### **Planning:**

The findings showed that 49/154 (31.8%) of the nurses always and 23/154 (14.9%) often worked with other health workers in planning for cervical cancer activities while 29/154 (18.8%) always and 23/154 (14.9%) often have involved clients in planning health promotion activities. The majority 80/154 (52%) of nurses rarely or often, got involved in planning for health promotion against cancer of the cervix.

### **Implementation:**

Regarding the methods used to implement cervical cancer prevention activities, respondents were asked if they were using the opportunistic approach to provide information on cervical cancer; majority 62/154 (40.3%) agreed that they often used this approach followed by 45/154 (29.2%) who said they always did while 57/154 (30.5%) had either rarely or never used it.

### **Evaluation:**

Sine evaluation is also an important role of the nurses in health promotion against cancer of the cervix, the researcher asked the respondents whether they recorded the information they were giving to clients. At least 54/154 (35.1 %) had always and 34/154 (22.1%) had often recorded the results. Despite that, 80/154 (56.5 %) of the respondent had never evaluated the impact of the information they give to the clients. Worst still, only 29/154

(18.8%) agreed that they had always and 25/154 (16.2%) had often followed up clients who had the desire to maintain a positive attitude towards cervical cancer prevention. This shows that although evaluation is an important role of the nurses in health promotion against cancer of the cervix, most of the nurses in this study were not involved in the evaluation process.

### **Influencing Policies**

In order to promote health effectively, it is important that nurses are involved in policy formulation and implementation; therefore nurses were asked if work gave them a chance to do so. As shown in table 3 only 28/154 (18.2%) had always influenced the policies followed by 43/154 (27.9%) who had often done so; the majority 83/154 (56.6%) had rarely or never influenced policies related to prevention of cervical cancer. On the issue of whether policies were based on the real needs of the population, only 53/154 (34.4 %) agreed that always while 52/154 (33.8 %) agreed that often policies were developed basing on the real needs.

**Table : The health promotional role of nurses against cancer of the cervix**

Variables	Never (%)	Rarely (%)	Often (%)	Always (%)
In your routine activities do you find out clients with risky behaviour for developing cervical cancer?	37 (24 )	43 (27.9)	28 (18.2)	46 (29.9)
Do you involve clients in their needs assessment?	27 (17.5)	50 (32.5)	60 (39.0)	17 (11.0)
Do you follow any guidelines in assessing and caring for client with cancer of cervix?	50 (32.5)	55 (35.7)	26 (16.9)	23 (14.0)
Do you cooperate with MOH in promoting cervical cancer prevention?	18 (11.7)	27 (17.5)	52 (33.8)	57 (37.0)
Do you work with other health workers in planning cervical cancer prevention activities?	41 (26.6)	41 (26.6)	23 (14.9)	49 (31.8)
Do you involve clients in planning health promotion activities?	50 (32.5)	30 (19.5)	45 (29.2)	29 (18.8)
Do you use the opportunistic approach to provide information on cervical cancer?	27 (17.5)	20 (13.0)	62 (40.3)	45 (29.2)
Do you record any health promotion information you give to client about cervical cancer?	23 (14.9)	31 (20.1)	46 (29.9)	54 (35.1)
Do you evaluate the impact of the information you give to client about cervical cancer?	57 (37.0)	30 (19.5)	34 (22.1)	33 (21.4)
Do you follow up clients with a positive attitude towards cervical cancer prevention to monitor if they maintain that attitude?	70 (45.5)	30 (19.5)	25 (16.2)	29 (18.8)
Does your work give you chance to influence policies related to prevention of cervical cancer?	35 (22.4)	48 (31.2)	43 (27.9)	28 (18.2)
Do you think policies are based on real needs of the population?	29 (18.8)	20 (13.0)	52 (33.8)	53 (34.4)

## **4.2 Socio-demographic factors and Health system factors that influence the nurses health promotional role in preventing cervical cancer in Jinja Regional referral Hospital**

### **Socio-demographic factors that influence the nurse's health promotional role in preventing cervical cancer in Jinja Regional referral Hospital**

As indicated in table 2, the median age of the respondents was 38 years where 51.3% (79/154) of them were above 38 years and the rest below that age. The median work experience for the nurses was 9 years and 52.6 % (81/154) had worked for less than 9 years. It was also noted that the hospital employs more female nurses 76% (117/154) than male 24 % ( 37/154).

The majority of the respondents 81/154 (52.6 %) were enrolled nurses followed by registered nurses 53/154 (34.4 %) and the least were those with Bachelor of Science in Nursing 8/154 (5.2 %).

It was also noted that the majority of the nurses 88/154 (57.1%) earn the least salary which is under a salary scale of U7, an equivalent of 154,000-185,000/=, while the least nurses 8/154 (5.2%) earn the highest salary of U1-U2 an equivalent of 970,000-2,000,000/= as shown in table2.

**Table : Socio-demographic factors of 154 nurses in Jinja Regional Referral Hospital**

<b>Variables</b>	<b>N</b>	<b>Percentage (%)</b>
<b>Age</b>		
≤ 38	75	(48.7)
>38	79	(51.3)
<b>Work experience</b>		
≤ 9 years	81	(52.6)
>9 year	73	(47.4)
<b>Gender</b>		
Male	37	(24.0)
Female	117	(76.0)
<b>Academic qualification</b>		
Enrolled nurse	81	(52.6)
Registered nurse	53	(34.4)
Comprehensive nurse	12	(7.8)
BNS nurse	8	(5.2)
<b>Salary scale</b>		
U1-U2	8	(5.2)
U3-U4	12	(7.8)
U5-U6	46	(29.9)
U7	88	(57.1)

*U-Uganda Government salary scale*

**The health system factors that influence the nurses' health promotional role in preventing cervical cancer**

In table 3 all most all the participants 146/154 (94.8%) had attended at least two Continuous Medical Education sessions on cancer of the cervix per year.

Some of the respondents 97/154 (63 %) had a job description and 108/154 (56.5%) including those without job descriptions mentioned that their job emphasized clinical care more than health promotion. However, almost 84/154 (55%) agreed that their routine work deviated from the job description.

**Table : Health Systems Factors influencing the nurses' health promotional role against cervical cancer among 154 Nurses in Jinja Regional Referral Hospital**

<b>Variables</b>	<b>N</b>	<b>Percent</b>
<b>CME</b>		
Yes	146	94.8
No	8	5.2
<b>Is there job description?</b>		
Yes	97	62.9
No	57	37.1
<b>Job description</b>		
Clinical	108	56.5
Health promotion	68	35.6
Both	15	7.9
<b>Deviation from job description</b>		
Yes	84	54.5
No	66	45.5
<b>Follow-up of cancer patients</b>		
Yes	26	16.9
No	127	82.5
<b>Referral system</b>		
Admitted	65	34.4
Referred	113	59.7
Not sure	11	5.8
<b>Motivation</b>		
Salary	74	35.9
Recognition	78	37.9
Workshop	7	3.4
Home area	13	6.3
Career development	8	3.9
Accommodation	3	1.5
Attitude of workmate	4	1.9
Promotion	19	9.2
<b>Challenges</b>		
Lack of space	12	4.4
Inadequate resource	113	41.5
Lack of supervision	28	10.3
Inadequate knowledge on prevention	97	35.7
Low staffing levels	10	3.7
Lack of equipment for screening	12	4.4

*Multiple response = Referral system, Motivation, Challenge CME=Continuous Medical Education*



Likewise, respondents asked whether they were following up clients with suspicious cervical lesions, the majority 127/154 (83%) reported not following up clients and about 113/154 (59.7 %) mentioned that clients suspected of cervical cancer are referred while 65/154 (34.4%) said they were admitted.

Respondents were asked to identify what motivates them to work in Jinja Regional Referral Hospital. The respondents gave multiple responses where both recognition and salary almost had the same number of respondents of 78/154 (37.9 %) and 74/154 (35.9%) respectively. The attitude of workmates 4/154 (1.9%) and accommodation 3/154(1.5%) were less frequently mentioned. Multiple responses were also given in relation to the challenges that affect the nurses' participation in cervical cancer prevention where the majority 113/154 (41.5%) said inadequate resources were the main challenge followed by inadequate knowledge in prevention 97/154 (35.7%) and the lowest being lack of space 12/154 (4.4%) among others as shown in table 2.

#### **4.3. Nurses attitude towards their health promotional role in cervical cancer prevention, client participation in cervical cancer prevention, restrictions to cervical cancer prevention and health promotion as a concept**

The study explored how nurses felt towards their health promotional role against cervical cancer, involving clients in cervical cancer prevention, influence of the known restriction towards cervical cancer prevention and health promotion as a concept. The response were given as strongly disagree, disagree, uncertain, agree and strongly agree and the results from each subscale were as indicated in table 4.

### **Nurses attitude towards their role in cervical cancer prevention**

About 60/154(39%) and 49/154 (31.8%) respondents strongly disagreed and disagreed respectively that routine nursing care prevented them from participating in cervical cancer prevention while 12/154 (7.8%) were uncertain.

Regarding whether nurses thought that cervical cancer prevention is not a nurse's responsibility, almost the same number of respondents 85/154 (55.2%) of the respondents either strongly disagreed or disagreed that it was their responsibility to prevent cervical cancer.

Furthermore 78/154 (50.6%) agreed and 53/154 (34.4%) strongly agreed that nurses can play an active role in planning for cervical cancer prevention activities and similarly 60/154 (39%) agreed and 87/154 (56.5) strongly agreed that nurses should actively be involved in cervical cancer prevention. Generally nurses had a positive attitude towards their role in cervical cancer prevention.

### **Nurses attitude towards clients' involvement in health promotion**

If prevention of cervical cancer is to be successful clients should be involved in health promotion activities; therefore respondents were asked about their attitude towards this. The majority 141/154 (91.6%) of the respondents either strongly agreed or agreed that nurses can play an active role in clients participation in cervical cancer prevention.

Some respondents 66/154 (42.9%) also felt that cervical cancer prevention intervention can be effective when performed in partnership with the community; however, 7/154 (4.55%) opposed the idea. About 64/154 (41.5%) of the respondent either disagreed or strongly

disagreed that clients are unable to play an important role in cervical cancer prevention as opposed to 58/154 (37.7%) who either strongly agreed or agreed to the idea yet 32/154 (20.8%) were uncertain respectively.

Only 60/154 (39%) of the respondents strongly agreed and 54/154 (35.1%) agreed that clients must be involved in the assessment of their risk for cervical cancer prevention, 30/154 (19.5%) of them were uncertain while 10/154 (6.4%) either strongly disagreed or disagreed. Overall the nurses in this study seem to support the idea of involving patients/clients in health promotion against cancer of the cervix.

### **Nurses attitudes towards restrictions to cervical cancer prevention**

Respondents were further asked whether some of the known challenges affected their attitudes towards cervical cancer prevention.

Regarding availability of time, the majority 100/154 (64.9%) of respondents agreed or strongly agreed that nurses do not have enough time to promote cervical cancer. Similarly 54/154 (37%) of the respondents strongly agreed and 47/154 (30.5%) agreed that nurses do not have enough skills to facilitate the communities to participate in cervical cancer prevention. Most, 80/154 (52%) of the respondents strongly disagreed or disagreed while 64/154(41.6%) strongly agreed or agreed that nurses find it hard to work with clinicians and other senior staff in cancer prevention.

Furthermore, the majority 58/154 (37.7%) of the respondents strongly agreed while 44/154 (28.6%) just agreed that nurses do not have enough skills to facilitate clients' participation in prevention of cervical cancer. The rest of respondents strongly disagreed 18/154 (11.7%), disagreed 15/154(9.7%) and were uncertain 19/154(12.3%) about of the idea.

On the contrary, the majority 50/154 (32.5%) of the respondents disagreed and 19/154 (12.3%) strongly disagreed that nurses find it hard to co-operate with members of specific social groups, 27/154 (17.5%) were uncertain, the rest either agreed 30/154 (19.4%) or strongly agreed 28/154 (18.8%) with the statement. These results indicate that although generally the nurses accepted that most items restricted their participation in cervical cancer prevention, others were not.

### **Nurses attitude towards health promotion as a concept**

Of the 154 respondents interviewed 125/154 (88.1%) of them either strongly agreed or agreed that nurses like participating in health promotion activities as opposed to 15/154 (9.7%) who either strongly disagreed or disagreed and the rest 14/154 (9.1%) were uncertain. The majority 133/154 (86.4%) of the respondents either agreed or strongly agreed that health promotion information helps people to develop positive health habits, as opposed to 9/154 (5.8%) and 2 (1.3%) who strongly disagreed and agreed respectively.

Similarly 50/154 (32.5%) of the respondents strongly disagreed and 39/154 (25.3%) disagreed that nurses' felt that health promotion is a burden in their job. The majority 112/154 (72.1%) of the respondents however strongly agreed that health promotion activities can result in positive change in clients habits and behaviour. Generally the findings show that nurses had a positive attitude towards health promotion as a concept.

**Table : Nurses attitude towards cervical cancer prevention, client participation in cervical cancer prevention, restrictions and the health promotion concept in Jinja Regional Referral Hospital**

Variables	Strongly disagree (%)	Disagree (%)	Uncertain (%)	Agree (%)	Strongly agree (%)
<b>Nurses attitudes towards their role in cervical cancer prevention</b>					
Involvement in routine nursing care prevents nurses from participating in cervical cancer prevention	60 (39.0)	49 (31.8)	12 (7.8)	19(12.3)	14 (9.1)
Cervical cancer prevention is not the nurses' responsibility	43 (27.9)	42 (27.3)	25 (16.2)	27(17.5)	17 (11.0)
Nurses can play an active role in planning of cervical cancer prevention activities.	6 (3.9)	6 (3.9)	11 (7.1)	78(50.6)	53 (34.4)
Nurses should be actively involved in cervical cancer prevention activities	1 (0.6)	1 (0.6)	5 (3.2)	60(39.0)	87 (56.5)
<b>Attitudes towards clients' involvement in health promotion</b>					
Nurses can play an active role in clients' participation in cervical cancer prevention	4 (2.6)	0 (0.0)	9 (5.8)	71 (46.1)	70 (45.5)
Cervical cancer prevention interventions are effective when they are performed in partnership with the community	2 (1.3)	5 (3.2)	29 (18.8)	66 (42.9)	52 (33.8)
Clients are unable to play an important role in cervical cancer prevention	19 (12.3)	45 (29.2)	32 (20.8)	36 (23.4)	22 (14.3)
Clients must be asked to participant in the assessment of their risk to cervical cancer	3 (1.9)	7 (4.5)	30 (19.5)	54 (35.1)	60 (39.0)
<b>Attitudes towards restriction towards cervical cancer screening</b>					
Nurses do not have enough time to promote cervical cancer prevention effectively	22 (14.3)	21 (13.6)	11(7.1)	51 (33.1)	49 (31.8)
Nurses do not have the appropriate skills to facilitate the community's participation in cervical cancer prevention	20 (13.0)	12 (7.8)	18 (11.7)	47 (30.5)	57 (37.0)
Nurses find it hard to work with clinicians and other senior staff in cancer prevention	28 (18.2)	52 (33.8)	10 (6.5)	18 (11.7)	46 (29.9)
Nurses do not have enough skills to facilitate clients' participation in prevention of cervical cancer	18 (11.7)	15 (9.7)	19 (12.3)	44 (28.6)	58 (37.7)
Nurses find it difficult to cooperate with members of specific social group	19 (12.3)	50 (32.5)	27 (17.5)	30 (19.5)	28 (18.2)
<b>Nurses attitude towards health promotion as a concept</b>					
Nurses like participating in health promotion activities	6 (3.9)	9 (5.8)	14 (9.1)	43 (27.9)	82 (53.2)
Health promotion information helps people develop positive health habits.	9 (5.8)	2 (1.3)	10 (6.5)	69 (44.8)	64 (41.6)
Nurses feel that health promotion is a burden in their job.	50 (32.5)	39 (25.3)	2 (7.8)	22 (14.3)	31 (20.1)
Health promotion activities can result in positive changes in clients habits and behaviours	8 (5.2)	4 (2.6)	10 (6.5)	20 (13.0)	112 (72.7)

#### 4.5 Socio-demographic factors and health system factors that influence nurses' health promotional role of preventing cervical cancer.

##### Socio-demographic factors that influence nurses' health promotional role of preventing cervical cancer.

Years of experience was significant as respondents who had worked for fewer than 9 years were twice more likely to participate in the health promotional roles against cervical cancer than their counterparts (OR=2.32, P=0.01).

**Table : Relationship between socio-demographic factors and the nurses' health promotional role against cancer of the cervix by 154 nurses in Jinja Regional Referral Hospital between June and September 2011**

Variables	N (%)	OR	P-value
<b>Age</b>			
≤38 years	75 (48.7)	0.81	0.522
>38 years	79 (51.3)	1	
<b>Years of Experience</b>			
≤9 years	81 (52.6)	2.32	0.011
>9 years	73 (47.4)	1	
<b>Gender</b>			
Male	37 (24.0)	1.85	0.111
Female	117 (76)	1	
<b>Salary scale</b>			
U1-U2	8 (5.2)	0.32	0.175
U3-U4	12 (7.8)	10.51	0.027
U5-U6	46 (29.9)	0.74	0.400
U7	88 (57.1)	1	
<b>Academic qualification</b>			
Enrolled nurse	81 (52.6)	0.14	0.071
Registered nurse	53 (33.4)	0.13	0.062
Comprehensive nurse	12 (7.8)	0.14	0.109
BNS nurse	8 (5.2)	1	

*Dependent variable = Nurses' health promotional roles (≤30 score = 0, >30 score = 1), P = 0.05*

Nurses who were earning at a salary scale of U3-U4 were 10.5 times more likely to participate in health promotional roles against cancer of the cervix than nurses with a salary scale of U7 (OR=10.51 P=0.027).

The rest of the socio-demographic and professional characteristics were not significantly associated with nurses' health professional role in preventing cervical cancer as shown in table 5.

**Health system factors that influence nurse's participation in the health promotion role against cervical cancer.**

As summarised in table 6, nurses who had a job description were less likely to participate in activities of health promotion against cancer of the cervix than those who did not have a job description (OR =0.18, P=<0.001). However respondents who were following up clients were 7 times more likely to participate in the health promotional role than those who did not (OR=7.2 P=0.001).

**Table : Relationship between health system factors and nurses health promotional role of preventing cancer of the cervix by 154 nurses in Jinja Regional Referral Hospital between June and September 2011**

<b>Variables</b>	<b>N (%)</b>	<b>OR</b>	<b>P-value</b>
<b>CME for cancer of cervix</b>			
<b>Yes</b>	146 (94.8)	1.03	0.97
<b>No</b>	8 (5.2)	1	
<b>Job description</b>			
<b>Yes</b>	97 (62.9)	0.18	<0.001
<b>No</b>	57 (37.1)	1	
<b>Deviation from job description</b>			
<b>Yes</b>	84 (54.5)	1.45	0.258
<b>No</b>	66 (45.5)	1	
<b>Follow-up of cancer patients</b>			
<b>Yes</b>	26 (16.9)	7.2	0.001
<b>No</b>	127 (82.5)	1	

*Dependent variable = Nurses' health promotional roles ( $\leq 30$  score = 0,  $> 30$  score = 1) P = 0.05*

#### **4.6. Relationship between nurses' attitude and their involvement in health promotion against cancer of the cervix.**

Attitude of nurses towards their role in the prevention of cervical cancer was found to be significant as indicated in table 7. The participants who scored less than 13 were less likely to participate in promoting cervical cancer prevention than those who scored more than 13 (OR=0.52, P=0.048). Similarly attitudes of nurses towards clients' involvement in health promotion activities, was also significant. Respondents who scored less than 15 scores were less likely to participate in promoting cervical cancer prevention than those who scored above 15 (OR=0.45, P =0.016).

**Table : Relationship between nurses' attitudes and their health promotional role against cancer of the cervix by 154 nurses in Jinja Regional Referral Hospital between June and September 2011**

<b>Attitude Scores</b>	<b>N (%)</b>	<b>OR</b>	<b>P-value</b>
Attitudes towards nurses' role in prevention			
$\leq 13.0$ score	89 (57.8)	0.52	0.048
$> 13.0$ score	65 (42.2)	1	
Attitudes towards clients' involvement in health promotion			
$\leq 15.0$ score	78 (50.6)	0.45	0.016
$> 15.0$ score	76 (49.4)	1	
Attitudes towards restriction to cervical cancer screening			
$\leq 18.5$ score	77 (50.0)	0.66	0.198
$> 18.5$ score	77 (50.0)	1	
Attitudes towards health promotion as a concept			
$\leq 16.0$ score	67 (43.5)	0.38	0.004
$> 16.0$ score	87 (56.5)	1	

*Dependent variable = Nurses' health promotional roles ( $\leq 30$  score = 0,  $> 30$  score = 1) P = 0.05*



There was also a significant relationship between nurses' attitude towards health promotion and their participation in the health promotional role of preventing cervical cancer. Nurses who scored less than 16 score were less likely to participate in activities that promote cervical cancer prevention compared to those who scored more than 16 score (OR=0.38, P=0.004) as shown in table 7.

#### **4.7 Qualitative Study Results**

##### **The health promotional role**

Among all the nurses who were interviewed only one senior nurse had ever performed a PAP smear while she was still working in Mulago Hospital. Most respondents said that it was difficult for them to identify any one in the early stage of cervical cancer. This was confirmed by one of the key informants who said that "*it is difficult for us to know that they have cervical cancer because for us we do not want the patient to know they have cervical cancer.....because they will be depressed*" Another member of FGD said that "*clients come when already diagnosed by the Doctors*"

Fortunately most of the FGD members and key informants agreed that they offer health education to clients admitted with cervical cancer. One key informant said that "*Unlike HIV cervical cancer is not frequently taught*" while another key informant said that "*she has ever heard that topic in antenatal and outpatient Clinic*" This is an indication that nurses use an opportunistic approach to talk about cervical cancer. Since most clients are admitted in late stage it is possible that, respondents do not consider health education as an

important intervention in cervical cancer prevention and most likely are not aware of the different levels of preventing cervical cancer.

Furthermore respondents appear to be more involved in cervical cancer management than prevention. One of the key informants said that *“once the client is admitted they take her particulars, remove blood for malaria parasite, haemoglobin level, grouping and cross matching”* Another informant said that *“they send clients to the lab for PAP smear”* while most respondents said that *“it is only Doctors who can make a diagnosis”* All these findings indicate that nurses rarely get involved in cervical prevention activities and also had a knowledge gap.

Like in the quantitative study it was evident that lack of a follow-up mechanism had a negative effect on the nurses’ participation in cervical cancer prevention activities. For instance, one member of the FGD said that *“Patients get lost in the community, they may not come back for results, we do not follow them up, they are gone for good”* One of the key informants also said that *“we do not follow up the clients because we are few and we do not have the money”*

### **Socio-demographic data and nurses’ involvement in cervical cancer prevention**

During the focus group discussion and the interview, it was evident that the majority of the nurses were female. Only two males participated in the focus group discussion. This was similar with the quantitative findings where the ratio of female to male who participated was 3:1

The majority of the nurses had worked for more than 5 years. However, most of them claimed that they had never screened clients for cervical cancer and usually receive clients

in the late stage and refer them to the doctors. One of the key informants during the interview revealed that *“despite cervical cancer being a component of post natal care he was not certain whether it is done routinely in the post natal clinic”* One member of FGD also said that *“there were no cancer screening services in the hospital”* This indicated that some nurses were not aware of this service, yet it was available in the hospital. Probably this could be one of the reasons why most nurses have never provided it, despite having a long working experience.

During the interaction with the respondents it was noted that most of them were either enrolled or registered nurses. This however did not have a direct effect on the level of participating in promoting cervical cancer prevention. One factor which was commonly highlighted was deployment, as one of the key informants mentioned that *“only those nurses who work in the gynaecology ward or comprehensive nurses who studied both Nursing/Midwifery had the knowledge in cervical cancer but enrolled nurses did not”*.

Almost all the respondents also felt that earning a salary was the only motivating factor of working in the hospital, although in the quantitative data; recognition was the most commonly given reason for working in the hospital during interviews. The difference in the salary scale was not taken as an important issue; these findings were similar to the qualitative finding that difference in salary scale was insignificant apart from U3-U4 scale.

### **Health system factors**

During the focus group discussion it was evident that the hospital conducts Continuous Medical Education (CME) however, it was not clear whether cervical cancer prevention is also discussed frequently. This is because one of the key informants who mentioned

establishing a cancer screening unit commented that the first stage would be “*sensitizing everyone about cervical cancer prevention*”. Similarly one member of the FGDs mentioned that “*they need training in cervical cancer prevention.*” Another key informant said that “*we have limited knowledge so if we can get CME in cervical cancer then it will be easy for us to assist the women because it is on increase.*” These indicated that the CMEs held in the hospital rarely address cervical cancer. These findings were similar to the quantitative findings which revealed that attending CMEs by the nurses had no significant influence in their participation in the health promotional role of preventing cervical cancer.

Another issue explored was whether the hospital had a follow-up mechanism. One FGD member said that “*some clients run away once diagnosed and probably reappear when in late stage*” Another member confirmed that “*some clients are lost for good including those in the late stage due to lack of follow-up*” These findings were in line with the qualitative findings whereby more than two thirds of the respondents said no follow up is done in the hospital.

### **Nurses attitudes towards cervical cancer prevention, clients’ participation in cervical cancer prevention, restriction towards cervical cancer prevention and the health promotion as a concept**

#### **Nurses attitudes towards their role in cervical cancer prevention**

Almost all the respondents agreed that cervical cancer prevention was their responsibility. One key informant mentioned that “*nurses are interested in cervical cancer prevention because at any time they can become victims.*” She cited a nurse from Hoima who died of cervical cancer as an example. In the quantitative data it was also noted that attitude

towards cervical cancer prevention was significantly associated with nurses activities against cancer of the cervix.

### **Nurses attitudes towards clients' involvement in health promotion**

FGD members felt that clients should be involved in health promotion activities. One member mentioned that *“some clients run away because they do not know the dangers of cervical cancer.”* Another member said that *“they disappear in the community which lacks awareness..... and therefore there is need to reach the communities and educate them.”* These findings were similar to those in the quantitative study that nurses attitude towards clients involvement in health promotion was a significant factor.

### **Nurses attitude towards restrictions to cervical cancer prevention**

Respondents identified lack of time, funds, equipment, shortage of staff, knowledge and skills as their major restrictions to participating in cervical cancer prevention. Others felt that failure of clients to come early affected their interventions. One key informant said that *“if nurses are trained, they can screen clients”* While another said *“they would reach the community if they had the funds”*. All these finding are similar to what the quantitative study revealed.

### **Nurses attitude towards health promotion as a concept**

Almost all the respondents appreciated the role of health promotion towards healthy living. One member mentioned that *“it is good but needs enough resources”* This indicates that nurses are aware of the advantages of health promotion but are constrained.

## CHAPTER FIVE

### DISCUSSION

#### **Introduction**

The study was intended to determine the factors that influence the nurses' health promotional role against cancer of the cervix, determine the nurses' health promotional roles against cancer of the cervix, assess the attitudes of nurses towards their health promotional roles and determine the relationship between nurses' attitude and their involvement in cervical cancer prevention. The findings in relation to these objectives are discussed below

#### **Health Promotion Role of Nurses**

The health promotional role of nurses involves conducting needs assessment, planning, implementation, evaluation and influencing policies. During the study it was discovered that generally nurses were more involved in cervical cancer management than prevention. For instance in the interview and FGDs most of the participants said that "*clients come with advanced cervical cancer, they are admitted and nurses take off blood for haemoglobin level and cross matching as they wait for the doctor to examine the clients.*"

#### **Needs Assessment**

The findings on needs assessment revealed that more than a half of the participants do not assess clients for cervical cancer; they were also not involving clients during assessment and only three in ten were following guidelines for caring for such patients. This gap was also noted in the interview where one key informant said that "*they cannot tell if someone has cervical cancer if she is not bleeding.*" A participant in the FGD also said that "*When*

*clients come they are referred to the gynaecologists for assessment and if they are not around they are referred to Mulago Hospital or to a nearby private clinic”*

Failure of nurses to assess clients was also found in a study done by Croghan *et al*, (2004), in the United Kingdom among school nurses which revealed that most participants had challenges conducting health needs assessment ...”

According to Kozeir *et al*, (2004), health needs assessment is one of the most important part of the nursing process, therefore given the shortage of clinicians in the facility, if most nurses cannot do it, it implies that most clients cannot be diagnosed in the early stage of cervical cancer. It is therefore important that the hospital sets a standard that requires nurses to conduct a comprehensive health needs assessment to identify other health needs the client may not be aware of.

### **Planning**

It was also noted that seven in ten of the respondents were supporting MOH to promote cervical cancer prevention. However only half of all respondents worked with other health workers in planning such activities and almost the same number involved clients in planning for cervical cancer promotion activities.

During the focus group discussion it was also discovered that some nurses are interested in working with other health workers as one member said that *“as nurses they are interested in indentifying clients with cervical cancer, however they need the help of other health workers.”* Similarly another participant said that *“it is important to involve clients so that they can know what is going on.”*

According to Alexandropoulou *et al*, (2010), study participants were indifferent; some initiated the health promotion activities on their own while others used guidelines. It was not clear whether those who never used the guidelines involved the clients.

Since working as a team and involving clients' leads to better outcomes, all nurses should be encouraged to involve clients in this process so to promote their compliance to intended behaviour. Teams in the hospital should be strengthened to support and holistically care for each other and the patient respectively.

### **Implementation**

It was discovered that nurses were using an opportunistic approach to promoting cervical cancer prevention. One of the key informants said that “*health education about cervical cancer is given to a client when suspected or admitted with cervical cancer*”. Another key informant doubted if cervical cancer topics were taught in the gynaecological or outpatient department.

This was confirmed when about seven in ten participants accepted to using an opportunistic approach of providing information to clients. This finding was different from Alexandropoulou *et al*, (2010), which revealed that due to various challenges such as lack of time and shortage of staff, most of the nurses preferred providing health promotion activities to a group of people to ensure that the majority of the clients are reached.

Since cervical cancer is asymptomatic for a long time, using an opportunistic approach does not help a nurse to identify clients with risky behaviour to developing cervical cancer or those with suspicious lesions. Therefore it is important that nurses are given information on the disease progression so as to develop effective strategies of promoting cervical



cancer prevention. It also requires the managers to develop health education schedules including the topics on cervical cancer which should be taught in all almost all departments at least once a week. The Hospital should also teach nurses other cervical cancer screening methods such as visual inspection and PAP smear for effectiveness.

## **Evaluation**

Although about six in ten of the respondents accepted recording what they have discussed with the clients, majority said that they were not following up clients. Barriers to following up clients were identified as lack of time, funds and support by some of the participants and key informants.

Despite that the majority of the participants and key informants agreed that follow-up was one of their roles. One of them mentioned that *“it is important to follow-up clients because some of them run away because they do not know the disadvantage of having cervical cancer.”* Many of them cited lack of funds and time as a major barrier to follow-up.

Similar findings were found in the study by Wright *et al*, (2008), that nurses who cared for clients with myocardial infarction strongly believed that following-up clients was their major role but lacked resources. Whitehead (2002), revealed that health promotion activities are rarely evaluated and as a result they are rendered ineffective and unsuccessful.

Lack of evaluation compromises the ability to measure the contribution of certain interventions such health education in the prevention of cervical cancer. Likewise, the condition of clients who run away worsens and in the end the nurses effort is not realised. This calls for the nurses to determine their own health promotion agenda in cervical cancer

prevention based on their own evidence of effectiveness and efficiency. This will provide them with tangible evidence of what has been achieved and thereby offers nurses confidence and satisfaction in relation to their health promotion role. The hospital also needs to develop a follow-up system to support the nurses and also to minimise the lost to follow-up clients and hence the disease burden.

### **Influencing policies**

It is also important to note that, health policies are designed to support health promotion activities; therefore, those involved in health promotion should be part of the team involved in policy formulation and implementation. However in this study slightly less than half of the nurses accepted to have ever influenced the policies. Fortunately the majority believed that policies were developed according to the population needs.

Lack of nurses' involvement in policy formulation and implementation may affect its success, since nurses play a major role in preventing cervical cancer. As the results shows that nurses were interested in cervical cancer prevention which is currently on the increase, there is need to explore why nurses are not participating in health policy formulation and implementation.

### **Socio-demographic factors and the nurses' health promotional role against cancer of the cervix in Jinja Regional Referral Hospital**

In the study, years of experience, gender and salary scale of U3-U4 were identified as significant factors that contributed to nurses' level of involvement in promoting the prevention of cervical cancer among other demographic factors and professional characteristics that were studied.

An almost equal number of nurses, that is five in ten had worked for less than and above 9 years. However, nurses who had served for fewer than 9 years were twice more likely to be involved in cervical cancer prevention than those who had served for more than 9 years. Probably senior nurses are less involved in patient's care or lack skills in health promotion (Liimatainesn, 1999). It also supports Tones & Tilford (2001), findings that young nurses have current knowledge required for health promotion than senior nurses.

Low involvement of senior nurses in promoting cervical cancer prevention has a negative impact in that most of them are managers implying that this service is not considered a priority. Therefore there is need to create awareness among the senior nurses about the magnitude of cervical cancer and be able to plan for it.

On contrary, Leuven & Prion (2007)'s findings revealed that young nurses ignore promoting health among the elderly. The difference in the findings could be because Leuven & Suzan (2007), researched on health promotion as a concept yet this study specifically focused on promotion of cervical cancer prevention.

Usually years of experience corresponds to the age of the person, implying that the 73/154 (47.4%) respondents who had experience of more than 9 years of experience were older than those with less experience. According to WHO/ICO (2010), cancer of the cervix is more common in women above 40 years, implying that some clients in this hospital might fear discussing their reproductive health needs with young nurses who are more knowledgeable but with less experience. This possibly affects the provision of quality cervical cancer prevention services.

During the focus group discussion and interviews it was noted that female nurses were more interested in cervical cancer prevention than males. For instance one participant said that “*as ladies we have to assist our colleagues because any of us can become a victim*”. However, in the quantitative study male nurses were involved twice as often in the health promotional roles against cervical cancer prevention than their colleagues. The reason why male nurses were more active could be because they are more ambitious than female nurses as revealed, by Ozdemira *et al*, (2008). Surprisingly MOH (2005) found that women fear to be examined by male health workers. Likewise the results were different from Gott *et al*, (2004)’s findings that male nurses fear discussing sexual health with clients of the opposite sex.

Difference in the findings could be that Gott *et al*, (2004), interviewed 35 female nurses; the 13 male participants were general practitioners. This might have created an information bias as opposed to this study where both male and female participants were of the same cadre.

Since the majority of the nurses are females and most clients find it hard to share their sexual-reproductive health problems with male nurses, there is need to encourage and motivate more female nurses to participate in health promotion against cancer of the cervix.

Furthermore nurses earning a salary between 543,000-1,050,000/= were 10.5 times more likely to participate in cervical cancer prevention than those earning between 154,000-185,000/= The findings are similar with those in a study done in Wakiso district by Mutyaba *et al*, (2007), which revealed that well paid nurses are committed and active.

Almost eight in ten nurses were above 38 years of age; however age did not significantly influence the nurses' health promotional role for preventing cancer of the cervix. Young nurses were less likely to promote cervical cancer prevention. These finding contradicted the results of Urasa and Darj (2011) which revealed that young nurses were more knowledgeable in cervical cancer prevention compared to the old nurses, which in other words could compel them to promote cervical cancer prevention. More difference in the studies could be that the mean age used by Urasa was 45 compared to 38 in this study.

Regarding the level of qualification, half of the respondents that, is five in ten were enrolled nurses followed by registered nurses (three in ten). However, the level of academic qualification was not associated with the nurses' health promotional roles against preventing cancer of the cervix. This was contrary to Urasa & Darj's (2011) findings in which registered nurses had more knowledge than enrolled nurses and probably they participated more in cervical cancer prevention than their colleagues. The difference in the findings could be that the operational definition of the term registered nurses in Urasa & Darj's (2011) study referred to nurses with University degrees, and advanced and ordinary diplomas in nursing while in this study it referred to only nurses who were slightly above the enrolled nurses with certificates.

### **Health system factors and the nurses' health promotional role against cancer of the cervix**

Among the health system factors, only having a job description and follow-up of cancer patients were significantly associated with the health promotional role of nurses in the

prevention of cervical cancer as opposed to Continuous Medical Education and deviation from the job description.

About nine in ten participants had at least attended two sessions of Continuous Medical Education on cervical cancer. However, this study found that attending CMEs was not significantly associated with nurses' involvement in health promotion against cancer of the cervix. This was also noted during the interviews and FGDs that almost all participants said that "*cervical cancer is rarely discussed in the CMEs*" and it was one of their recommendations that it is included in the program. These findings were similar with Urasa & Darj's (2011) findings that despite most of health facilities conducting CMEs, cervical cancer is not a priority topic. Hilton *et al* (2003) in her study in Sweden also revealed that nurses and midwives had received little or no continuing education regarding cervical cancer, including prevention and treatment beyond their training. She further said that they even never prioritize this area.

Since cervical cancer is on the increase and nurses form the majority of the health worker force it is important that Jinja Regional Referral Hospital prioritises cervical cancer sessions among the CMEs and ensures that all its nurses are trained. This will contribute to the success of the cervical cancer prevention program as the nurses will be able to provide health promotion services.

Furthermore it was also discovered that six in ten respondents had a job description According to Jorgensen & Groene (2005), a job description guides an employee on what she/he is supposed to do and it is designed in line with the hospital goal. Kelly & Abraham, (2007) in a study revealed that most hospitals focus on disease management and most job

descriptions are designed according to this. This was mentioned by a key informant that *“Jinja Regional Referral Hospital like any other hospital, focuses more on Diseases Management.”* One participant also mentioned that *“In most cases you are left alone on the ward and you cannot leave a client in need unattended to”*

Having a job description was a significant finding in that those who had the job description were less likely to participate in cervical cancer prevention compared to those who did not. Therefore it is possible that nurses who did not have job descriptions responded to the needs of the clients as they arose and based on the findings they unknowingly participated in cervical cancer prevention than their colleagues.

Rash's, (2008) study done on advanced nursing students revealed that many countries have failed to describe the roles of health promoters .

Lack of job description or ambiguous job descriptions with no clear health promotion roles compromises the nurses' ability to avert preventable diseases, including cervical cancer. Therefore there is need for the Ministry of Health and the management of various hospitals to review the policies and the nurses' job description to focus more on prevention than disease management.

Likewise respondents who accepted following up cervical cancer patients were more likely to participate in cervical cancer prevention compared to their colleagues who never did. This is supported by the statement made by one of the respondent that *“most of the clients get lost due to lack of follow-up.”* While another respondent said that *“some clients after knowing the diagnosis escape from the hospital and with absence of follow-up system they come back in the late stage.”* Low involvement of nurses in follow-up could be

associated with the way health promotion activities are done in a hospital. Leuven& Prion (2007) showed that there is lack of coordination between clinicians, nurses and specialists when it comes to health promotion activities. The same authors found that clinicians refer clients for cervical cancer screening without involving nurses, so clients eventually get lost.

The findings indicate that in Jinja Regional Referral Hospital, it is upon the nurses' discretion to follow-up clients. The majority of the clients, including those with suspicious cervical lesions are not followed up leading to a high morbidity and mortality due to cervical cancer.

### **Nurses attitude towards their health promotional role against cervical cancer prevention**

Generally nurses had a positive attitude towards their health promotional role in cervical cancer prevention, for instance most accepted that routine nursing care cannot stop them from promoting cervical cancer prevention. During the focus group discussion and interview with the key informants almost all the participants agreed that they had a positive attitude towards promoting cervical cancer prevention and they were willing to promote cervical cancer prevention. One key informant mentioned that *“nurses are interested in cervical cancer prevention because at any time they can become victims.”*

Despite that the nurses' attitude towards their health promotional role was a significant factor, whereby nurses with a low attitude score were less likely to participate in cervical cancer prevention compared to those with higher attitude score. These findings were



similar to Svedberg's (2009) results that most nurses do not consider health promotion as their major role, instead they focus on alleviating and treating diseases.

On contrary, in a study conducted by Alexandropoulou (2010) on school nurses in Greece the majority of the participant agreed that health promotion was part of their role irrespective of its challenges.

The difference in the findings could be that for Alexandropoulou (2010) the study population was school nurses who were working with children with special needs and therefore needed support rather than treatment; yet in this study the sample comprised of hospital based nurses who were therefore used to clinical care.

The findings indicate that as much as nurses are aware that promoting cervical cancer prevention is their role, their involvement depends a lot on their attitude. The hospital managers should ensure that as they plan to provide cervical cancer prevention services, measures should be taken to change the nurses' attitude. This can be done through training and offering adequate support.

### **Nurses' attitude towards clients' involvement in cervical cancer prevention**

Nurses with a low attitude score towards involvement of clients were less likely to participate in the health promotional roles in preventing cervical cancer than those with a high attitude score. These were respondents who felt that clients should not be involved in health promotion activities.

On the contrary, most respondents in the FGDs and interviews knew the dangers of not involving clients in cervical cancer prevention activities. One member mentioned that

*“some clients run away because they do not know the disadvantages of cervical cancer.”* while another one mentioned that *“they disappear in the community which lacks awareness ....and therefore there is need to reach communities and educate them”*.

These findings were similar to the result of Alexandropoulou *et al* (2010) that participants who organised health promotion programs for groups were more positive towards health promotion than those who did not. This shows that nurses appreciate the relevance of involving clients in cervical cancer prevention; therefore, if Jinja Regional Referral Hospital embarks on supporting the program many clients will benefit from the services, thus reducing the disease burden.

#### **Nurses attitude towards restriction to cervical cancer screening**

There was no significant difference between nurses with high attitude score and those with low attitude score in relation to the health promotional role of nurses in preventing cervical cancer.

However in the FGDs and interviews conducted respondents revealed that lack of time, money, resources, knowledge and skills, and shortage of staff were some of the major obstacles to promoting cervical cancer prevention. One of the key informants mentioned that *“they would reach the community but they lack funds.”* These findings were similar to some of the challenges which were mentioned under the health system factors which included inadequate resources, inadequate knowledge on prevention, lack of supervision, and others. Rash (2008) and Leuven & Prion (2007) found similar findings in the studies conducted among advanced practice nursing students in Florida and during a state-wide conference of nurse practitioners in San Francisco respectively.

This implies that if the hospital management addressed the challenges raised in this study, nurses will be able to promote cervical cancer prevention.

### **Nurses' attitudes towards health promotion as a concept**

Regarding health promotion as concept, respondents with a poor attitude were less likely to promote cervical cancer prevention than those with a positive attitude. About five in ten of the respondents strongly agreed that they like participating in cervical cancer prevention, while seven in ten of the respondents strongly agreed that health promotion activities can result in positive health habits and behaviours. More than three-quarters of the respondents were aware of its advantages, such as people developing positive health habits after receiving health promotion. The findings indicated that nurses had a positive attitude towards health promotion. However they were contrary to Svedberg's (2009) findings which revealed that nurses in clinical practice do not consider health promotion as their major role; they focus mainly on alleviating and treating diseases. The difference in the findings could probably be that Svedberg's study was done among nurses working in a mental health institution while this study was done on nurses in a general hospital.

### **Methodological issues**

The following methodological issues were noted:

A cross sectional design was used which makes generalization of the results to all the nurses in Uganda difficult.

- Information bias might have occurred since a non-probability sampling method (consecutive method) was used to enrol participants into this study. The views and

opinions of the respondents might be different from those who never participated in the study.

- Information bias might also have occurred during the data collection as most respondents probably gave what was ideal but not what is actually done.
- Recall bias might also have occurred especially on some issues like the number of CMEs conducted and issues related to job descriptions.
- Transfer of the nurses had just taken place and some of those who had just come in especially the key informants were not versed with the services in the hospital.
- The way the variables were categorised might have resulted in loss of some information leading to residual confounding. However, this may not have affected the results significantly so as to ignore these findings
- Since the study was carried among nurses working in Jinja Regional Referral Hospital, the findings may not be generalised to all nurses in Uganda
- The study did not involve the health policy makers/politicians yet their opinion would be important regarding developing and implementing policies for involving nurses in health promotion

## CHAPTER SIX

### CONCLUSION AND RECOMMENDATIONS

From the study the following conclusion can be drawn:

#### 1. The nurses' health promotional role

- Generally nurses were less involved cervical cancer prevention than its management

#### 2. Factors influencing the nurses' health promotional roles against cancer of the cervix.

- Nurses with less than nine years experience were more likely to participate in health promotional activities against cervical prevention than those with more working experience.
- Nurses working in Jinja Regional referral hospital and on a salary scale of U3-U4 are more likely to get involved in health promotional activities for preventing cancer of cervix than nurses in salary scale U7.
- Respondents who had a defined job description were less likely to participate in promoting health activities for preventing cancer of the cervix than those who did not have a job description.
- Participants, who followed-up patients, were more likely to participate in health promotional activities against cancer of cervix than those who did not follow-up patients.



### **3. Attitudes of nurses towards nurses' health promotional roles against cervical cancer prevention**

- Generally, the nurses in Jinja Regional Referral hospital had a positive attitude towards the nurses' health promotional role in preventing cancer of cervix despite the challenges and restrictions.

### **4. Relationship between nurses attitudes and nurses health promotional roles**

- Nurses with negative attitudes towards nurses' health promotional roles against cancer of cervix were less likely to get involved in activities against cancer of cervix than those with a positive attitude.

#### **Recommendations:**

From the findings of the study and taking into consideration the limitations and the factors that influence the nurses' involvement in promoting cervical cancer prevention the following are recommended:

- The Ministry of Health needs to strengthen all cervical cancer prevention services in all health facilities. It should provide in-service training for all health workers in cervical cancer prevention. It should also ensure regular supplies of logistics needed for cervical cancer prevention.
- Jinja District should ensure that health promotion messages on cervical cancer reach the communities through various media such as radio, talk shows, sensitization workshop at community level and news paper for demand creation.

- The hospital should ensure that at least three sessions on cervical cancer prevention per quarter are covered during Continuous Medical Education. It should also promote community outreaches, sensitization and the client follow up system.
- The Ministry of Health and the nursing council should strengthen their supervisory role of the nurses to improve on their attitude towards the prevention services.

Recommendation for further research:

More explanation is needed why

- Male nurses who are not affected by cervical cancer are more concerned with the disease than the female nurses.
- The proportion of nurses involved in cervical cancer prevention is low yet the magnitude is high and increasing.
- Factors that influence nurse's involvement in policy formulation and implementation
- Further studies involving country wide nurses are needed to be able to generalise the findings.



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## APPENDICES

### APPENDIX 1

#### INFORMED CONSENT FORM

Good morning/afternoon

I am Juliet Nabbowa Businge from International Health Science University Kampala (IHSU). You have been identified in Jinja Regional Referral Hospital as a resource person to participate in the study on the factors influencing the nurses' health promotional role in preventing cervical cancer.

I am requesting you to complete a questionnaire which will take about 10 minutes of your time. Your information and that of other participants will be used only for the purpose of this study and also to guide the policy makers and the nursing schools on improving the role of nurses in health promotion.

You will not be exposed to any potential risk during this study and your contribution will be treated confidential. The information provided will be locked in the cupboard which will only be accessed by the principal investigator.

Your participation in this study is voluntary. You are encouraged to ask any question before, during and after the interview. You are also free to withdrawal or decline to participate in the study, which you will not be penalized for.

In case you would like to get further information, please contact the principal investigator as indicated:

**Juliet Nabbowa Businge Tel: 0776-631428**

#### **Certificate of Consent**

After reading and understanding the above information I voluntarily consent to participate in this research.

Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

Date/month/year

#### **Statement by the researcher**

I confirm that the participant has voluntarily consented to participate in the study after reading and understanding the above information.

Name of Researcher \_\_\_\_\_

Signature of Researcher \_\_\_\_\_ Date \_\_\_\_\_

**APPENDIX II:**

**Questionnaire**

**Code:**

The questionnaire guides on assessing **the health promotional role of nurses in prevention of cervical cancer**. It is anonymous and all the information received will be treated confidential

**Section A: The socio-demographic Information:**

*Tick the most appropriate response*

1. Gender: Male                      Female

2. Age:

3. Academic qualification:

- Enrolled Nurse      Registered Nurse      Comprehensive Registered Nurses
- Degree Nurse      Any other .....

4. How many years have you worked for?

5. Salary scale: U1- U2              U3-U4      U5-U6      U7

6. What motivates you to work in this hospital?

Salary

Promotion

Recognition

Others              i) -----

ii) -----

iii) -----

**SECTION B: Health system factors**

7. Between disease management and disease prevention which one is a priority in this hospital (*Tick one*)

Disease management      Disease prevention

8. Does this hospital offer Continuous Medical Education to nurses? Yes              No

9. If yes, how many do you attend in a year?



10. Among those you have attended how many presentations were on cervical cancer?

11. Do you have a job description? Yes                      No

12. If yes which major roles are stated in the Job description?

Disease management

Disease prevention

Attending to pregnant and mothers

Others -----

-----

13. Do your routine activities deviate from the job description?

Yes                      No

14. Have you ever screened clients for cervical cancer?

Yes                      No

15. What happens to a client diagnosed with cervical cancer?

i) Admitted on Cancer ward

ii) Referred to Mulago Hospital

iii) Not Sure

iv) Any other i) -----

ii) -----

iii) -----

16. Is there a system in place for following up clients with a suspicious cancer lesion?

Yes                      No

17. What challenge(s) do you have in promoting cervical cancer prevention?

a) Lack of space

b) Inadequate resources

c) Lack of supervision

d) Inadequate knowledge in cervical cancer prevention

e) Others-----

**Section C :**

**The Health promotional role of nurses in Preventing Cervical cancer**

Please the appropriate box

**Key: 1-Never 2 Rarely 3-Often 4- Always**

		1	2	3	4
18	In your routine activities do you find out clients with risky behaviour to developing Cervical cancer				
19	Do you involve clients in their needs assessment?				
20	Do you follow any guidelines in assessing and caring for client with cancer of cervix?				
21	Do you cooperate with MOH in promoting cervical cancer prevention				
22	Do you work with other health workers in planning cervical cancer prevention activities?				
23	Do you involve clients in planning health promotion activities?				
24	Do you use the opportunistic approach to provide information on cervical cancer?				
25	Do you record any health promotion information you give to the clients				
26	Do you evaluate the impact of the information you give to client about cervical cancer?				
27	Do you follow up clients with positive attitude towards cervical cancer prevention to monitor if they maintain that attitude?				
28	Do you follow up clients with suspicious cervical cancer lesions?				
29	Does your work give you chance to in influence policies related to prevention of cervical cancer				
30	Do you think policies are based on real needs of the population?				

**Nurses attitudes towards cervical cancer prevention, Clients participation in cervical cancer prevention and the health promotion concept**

Please tick appropriate the box

Key: 1-strongly disagree 2-Disagree 3-Uncertain 4- Agree 5- Strongly agree

		1	2	3	4	5
<b>A</b>	<b>Nurses attitudes towards their role in cervical cancer Prevention</b>					
3 1	Involvement in routine nursing care prevents nurses from participating in cervical cancer prevention					
3 2	Cervical cancer prevention is not the nurses' responsibility					
3 3	Nurses can play an active role in planning of cervical cancer prevention activities					
3 4	Nurses should be actively involved in cervical cancer prevention activities.					
<b>B</b>	<b>Attitudes towards clients' involvement in health promotion</b>					
3 5	Nurses can play an active role in clients' participation in cervical cancer prevention					
3 6	Cervical cancer prevention interventions are effective when they are performed in partnership with the community					
3 7	Clients are unable to play an important role in cervical cancer prevention					
3 8	Clients must be asked to participate in the assessment of their risk to cervical cancer.					
<b>C</b>	<b>Attitudes towards restriction towards cervical cancer screening</b>					
3 9	Nurses do not have enough time to promote cervical cancer prevention effectively					
4 0	Nurses do not have the appropriate skills to facilitate the communities participation in cervical cancer prevention					
4 1	Nurses find it hard to work with clinicians and other senior staff in cancer prevention					
4 2	Nurses do not have enough skills to facilitate clients' participation in prevention of cervical cancer					
4 3	Nurses find it difficult to cooperate with members of specific social group.					
<b>D</b>	<b>Nurses attitude towards health promotion as a concept</b>					
4 4	Nurses like participating in health promotion activities.					
4 5	Health promotion information helps people develop positive health habits.					
4 6	Nurses feel that health promotion is a burden in their job					

4	Health promotion activities can result in positive changes in clients habits and behaviours					
7						

## **APPENDIX III**

### **Focus Group Guide**

1. How does Jinja Regional Referral Hospital implement cervical cancer prevention program? (What is done, who does it)
2. What is the role of nurses in prevention of cancer of cervix in Jinja Regional Referral Hospital?
3. What factors affect the nurses role as they implement cervical cancer prevention program in Jinja Regional Referral Hospital?
4. How do nurses feel about cervical cancer prevention in Jinja Regional Referral Hospital??
5. What information do you want to share with me about cervical cancer prevention in Jinja Regional Referral Hospital?

## **APPENDIX IV**

### **Interview Guide**

1. How does Jinja Regional Referral Hospital implement cervical cancer prevention program ? (What is done, who does it)
2. What is the role of nurses in prevention of cancer of cervix in Jinja Regional Referral Hospital?
3. What factors affect the nurse's role as they implement cervical cancer prevention program in Jinja Regional Referral Hospital?
4. How do nurses feel about cervical cancer prevention in Jinja Regional Referral Hospital?
5. Which type of support does the hospital management give to nurses as they pursue their role in preventing cervical cancer?
6. What information do you want to share with me about cervical cancer prevention in Jinja Regional Referral Hospital?

### APPENDIX V: RESEARCH WORK PLAN

Activity	TIME FRAME (April-November 2011)															
	Apr		May		June		July		Aug		Sept		Oct		Nov	
<b>Developing a research Proposal</b>																
<b>Submission of the proposal</b>																
<b>Pre-testing of the questionnaire</b>																
<b>Obtaining approval from Jinja Regional Referral Hospital</b>																
<b>Collecting data</b>																
<b>Compiling and cleaning of the data</b>																
<b>Data analyses and compilation</b>																
<b>Writing of draft research report</b>																
<b>Submitting final report</b>																

### Budget for conducting the Research

Activity	Resource	Amount
Proposal development	Internet Literature search	200,000
	Stationery	50,000/=
	Secretarial services	150,000/=
	Upkeep	250,000/=
Pre-testing of the tools	Distributing Questionnaires	30,000/=
	Collection of filled questionnaire	50,000/=
	Secretarial services for corrections	5,000/=
Data collection	Sample selection	200,000/=
	Distribution of questionnaire	862,000/=
	Follow up	150,000/=
	Collection of filled questionnaire	550,000/=
	Stationery	120,000/=
	Transport	100,000/=
	Secretarial services	250,000/=
Data Entry	Data entry assistants for 7 days	700,000/=
Data analysis	Transport	140,000/=
	Statistician	300,000/=
Report writing	Secretarial services	250,000/=
	Stationery	150,000/=
Dissemination of results		500,000/=
<b>Total</b>		<b>5,480,000/=</b>



**Budget Justification**

A total of 5,480,000/= was spent from the time of developing the research proposal to dissemination of the result. Stationery and typing services were required together with regular transport during pre-testing and collecting data. Data entry assistants and a statistician were hired to speed up the exercise and to analyse the data respectively. Detailed expenditure per activity is indicated in the work plan above