

Effect Of Communication Strategies On Knowledge And Perception Ofcervical
Cancer On Illiterate Women In Mbooni West Sub-County, Kenya

by

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A thesis presented to the School of Communication

of

Daystar University
Nairobi, Kenya

In partial fulfillment of the requirements for the degree of

MASTER OF ARTS
in Communication

May 2019

APPROVAL

EFFECT OF COMMUNICATION STRATEGIES ON KNOWLEDGE AND PERCEPTION OF CERVICAL CANCER ON ILLITERATE WOMEN IN MBOONI WEST SUB-COUNTY, KENYA

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In accordance with Daystar University policies, this thesis is accepted in partial fulfillment of requirements for the Master of Arts degree.

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DECLARATION

EFFECT OF COMMUNICATION STRATEGIES ON KNOWLEDGE AND
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I declare that this thesis is my original work and has not been submitted to any other
college or university for academic credit

Signed _____
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12-1381

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ACKNOWLEDGEMENTS

I acknowledge my supervisors Winnie Mbatha and Dr. Jane Awitiwho have been patient with me and have seen me through this involving process. Thank you for challenging me to always think at a higher level and to capture ideas with clarity.

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immunity Deficiency Syndrome
DNA	Deoxyribonucleic Acid
ERB	Ethical Review Board
FGD	Focus Group Discussion
HBM	Health Belief Model
HIV	Human Immunodeficiency Virus
HPV	Human Pappilomavirus
IGSCE	International Graduate School Certificate of Education
MMS	Ministry of Medical Services
MOPHS	Ministry of Public Health and Sanitation
NACOSTI	National Commission of Science, Technology and Innovation
STD	Sexually Transmitted Diseases
UNESCO	United Nations Educational, Scientific and cultural Organization

ABSTRACT

Cervical cancer is a disease that can be controlled if women are aware of the risk factors and preventive measures so as to adopt healthy behavior. Knowledge is paramount through proper communication strategies to educate about cervical cancer. Women however continue to die from cervical cancer and some experts rate it as one of the most prevalent cancers in women especially in the age group of 35-45. This study sought to investigate what communication strategies are utilized to communicate to illiterate women aged 35-45 in Mbooni West sub-county. It investigated verbal, non-verbal and visual communication strategies utilized in educating women about cervical cancer. The study employed qualitative descriptive research design to enable giving accurate portrayal of the phenomenon. Interviews and focus group discussions were utilized as the key data collection instruments. The study revealed that most illiterate women of Mbooni Sub-county felt enough has not been done to educate rural women about cervical cancer because many people have not been reached about cervical cancer, not all rural women go to hospital, and that rural women need more education on cancer. Women could prevent or minimize the possibility of acquiring cancer through regular check-ups, having one partner, and observing proper hygiene. Women got information on cervical cancer such as risk factors, preventive measures, and effects on health through various communications strategies including verbal, non-verbal, and visuals. It was discovered that radio was the main mode of communication as verbal strategy that educates women about cervical cancer and that majority of women had heard of cervical cancer but not well aware of the risk and preventive factors. The study recommended that wide spectrum of communication strategies be designed to reach women about cervical cancer.

DEDICATION

I dedicate this work to my family; my husband, Kigen and children David, Emily, Purity and Victor. You diligently supported and encouraged me step after another until the culmination of this worthy venture.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

The aspiration to live healthy lives requires of individuals the knowledge that enables them to keep diseases at bay. Cervical cancer is one such disease which can be avoided through lifestyle choices and early detection. Rosen and Rosen (2014) argued that women can avoid cervical cancer by being informed about the risk and preventive factors for healthy lifestyle.

Cervical cancer poses a threat to human health as the second leading cause of cancer mortality in women globally. Health illiteracy of an individual may be a predictor of increased risk of cancer and bring about poor participation in cancer control programs (Joshi, 2014). About 85% of women who die from cervical cancer are from developing countries (Wright, 2014). According to Muchagi (2016), cervical cancer is the second-most prevalent cancer in women of the reproductive age in Kenya.

The target audience for this study was illiterate women aged 35-45 years in Mbooni West sub-county. According to Rosen and Rosen (2014), cervical cancer in women is frequently diagnosed between ages 35-44. The study investigated women aged 35-45 years as the age of the target group since this is the most vulnerable group as stated by MOPHS and MMS (2012)

Awareness about cervical cancer risk and preventive factors among women of reproductive age is a key to early detection and treatment (Eggleston, 2013). However, illiteracy poses a challenge in obtaining information on health matters among the illiterate women since they are economically and socially inhibited. This limits the women from seeking opportunities and even knowledge on how to avoid the

risk of acquiring cervical cancer and how to prevent it (Victor, 2015). The government of Kenya came up with the National Cervical Cancer Prevention Program Strategic Plan 2012-2015, MOPHS and MMS (2012) that sought to increase awareness of the population. However, little emphasis was placed on how the illiterate women would be educated about cervical cancer.

Effective communication utilises a combination of strategies to educate the target audience on a particular health issue (Nayab, 2019). Therefore, this effective communication plays a key role in equipping women with knowledge about cervical cancer. This research focused on three forms of communication strategies and these were: verbal, non-verbal and visual. It sought to find out the specific communication strategies, the knowledge and perceptions the illiterate women have and how these strategies affected their women's perception of cervical cancer in terms of susceptibility, severity and benefits of adopting a healthy lifestyle. A comprehensive combination of verbal, non-verbal and visual communication strategies would be necessary to ensure that women are well informed about risk and preventive factors of cervical cancer.

Background to the Study

Cervical cancer is the second most prevalent type of cancer among women worldwide; having over 500,000 estimated new cases yearly; 86% of cervical cancer related deaths take place in developing countries (Wright, 2014). According to MOPHS (2012), cervical cancer occurs when abnormal cells grow in the cervix. If cervical cancer is detected early through a pap test, it can often be successfully treated. The knowledge and perceptions that women have about cervical cancer affects the choices they make concerning their health.

Cervical cancer is normally diagnosed at advanced stages when treatment may not be successful and this is attributed to low awareness of cancer signs and symptoms, inadequate screening services, inadequate diagnostic facilities, and poorly structured referral facilities (MOPHS, 2012). Poor level of awareness of cervical cancer in developing countries has contributed to less than 5% of women having undergone screening to control the disease compared to about 75% in developed countries (Panier & Borowitz, 2014).

The high level of awareness in developed countries was attributed to well organized communication strategies which are complimented by highly developed medical facilities (Panier & Borowitz, 2014). This study set to find out what communication strategies were utilized to educate women of Mbooni West about cervical cancer. Among the three forms of communication strategies namely; verbal, non-verbal and visual, the inquiry investigated which specific ones were utilized to communicate to the women of Mbooni West. It also investigated the knowledge and perceptions the women had on cervical cancer and how the strategies influenced the women's perception of cervical cancer in terms of susceptibility, severity and benefits of adopting healthy lifestyle among the target group.

Women who live in urban and semi-urban areas are four times more likely to have knowledge about cervical cancer than their rural counterpart (Mukama, 2017). Mukama and colleagues' study indicated that 95% of women living in urban areas have a higher monthly income, had taken an HIV test and had high level of knowledge about cervical cancer prevention. Though a number of women may have heard about cervical cancer in the rural areas, their specific knowledge is low as (Rosser, Njoroge and Huchko, 2014).

The Kenya National Cervical Cancer Prevention Program Strategic Plan (2012-2015) as indicated by MOPHS (2012) stated that

With the peak age of cervical cancer being 35-45 years of age, it claims the lives of women in the prime of their life when they may be raising children, caring for the family, and contributing to the social and economic life of their community.

Women need to know how to reduce the risks of contracting cervical cancer and how to prevent it so as to ensure increased life expectancy. Risk factors stated by MOPHS (2012) included a history of many sexual partners, reproductive history of more than three pregnancies, inherited susceptibility, HIV, and smoking. The preventive factors include: Pap test screening, quitting smoking, being faithful to single sexual partners, use of male and female condoms that reduce transmission of the HPV, bearing three or less children, and vaccination of young women of 26 years and below

This inquiry was undertaken in Mbooni West where 64% of the rural populations live below poverty line (Samrack, 2015). Gender inequalities and deteriorating health services contribute to escalating poverty in Kenya among women (MOPHS, 2012). Again cultural and legal limitations create disparities where women can earn less and have limited economic power compared to men (MOPHS, 2012). This implies that illiterate women are greatly disadvantaged because of poverty and illiteracy which limit their health choices. This implied that communication strategies had to be deliberately designed to educate illiterate.

Since communication about cervical cancer among women is paramount, the communication strategies utilized to pass the messages about risk and preventive factors needed to be investigated and therefore necessitated for this study.

Statement of the Problem

Cervical cancer is a disease that can be avoided if women are aware of the predisposing and preventive factors to enable adopting healthy lifestyle (Wright, 2014). However, the reverse is true which calls for proper communication strategies in educating women on cervical cancer, a disease which can be avoided through lifestyle and early detection (Rosen and Rosen, 2014).

Lack of effective communication about cervical cancer leads to women failing to take early preventive and curative measures and thus cervical cancer is diagnosed at advanced stages when very little curative treatment can be realized (MOPHS, 2012). Women therefore continue to die from cervical cancer though it can be controlled.

Communication strategy was the gap that this study sought to fill by exploring and understanding and that would ensure effective communication to educating about cervical cancer. The communication strategies raised in the Kenya National Cervical Cancer Prevention Strategic Plan (2012-2015) on how to educate women on cervical cancer were non-elaborate and not audience specific. They lacked audience analysis and audience segmentation and the specific strategies to reach each audience (Ase-Edmunds, 2019). The government did not take into consideration on how to specifically educate the illiterate women on cervical cancer.

Therefore, this study sought to establish what communication strategies were used to communicate to illiterate women, knowledge and perceptions of the women on cervical cancer and how the communication strategies affect the women's perception of cervical cancer in terms of susceptibility, severity and benefits of adopting healthy lifestyle in relation to HBM.

Purpose of the Study

The purpose of this study was to find out the knowledge and perception of women of Mbooni West and how communication strategies influenced the women's perceptions.

Objectives of the Study

- i. To establish what communication strategies were used to inform illiterate women of Mbooni West sub-county, aged 35-45, about cervical cancer.
- ii. To determine knowledge of illiterate women of Mbooni West on cervical cancer.
- iii. To determine how communication strategies affected the perceptions of illiterate women of Mbooni West to cervical cancer in terms susceptibility, severity and benefits.

Research Questions

- i. What communication strategies were used to educate illiterate women of Mbooni West sub-county, about cervical cancer?
- ii. What knowledge did the illiterate women of Mbooni West have on cervical cancer?
- iii. How had communication strategies affected perceptions of illiterate women of Mbooni West sub-county to cervical cancer in terms of susceptibility, severity and benefits?

Significance of the Study

The significance of this study was to equip academics with new findings that would benefit the pedagogical process. Health communicators would gain knowledge to determine gaps that exist in educating susceptible rural women about cervical cancer in consideration to their attitudes in terms of their perceived susceptibility to

the disease, perceived severity and the perceived benefits of adopting healthy lifestyles. This would lead to designing of viable strategies to reach out to these women. Again, women would benefit by being equipped with knowledge about how to prevent cervical cancer so as to live longer. This would arise from communicators working from an informed point of view and backed by viable health policies.

The study would also inform health policy makers to the extent that they would be furnished to make informed decisions that benefit women in Kenya guided by the information concerning the women's perceived susceptibility, perceived severity and perceived benefits. The current policies may require re-adjustments in terms of communication strategies so as to ensure that rural women would be effectively reached with health messages that are more meaningful and pragmatic.

This was a significant study because its findings were meant to throw light on the importance of being strategic with messages that expose the risk of cervical cancer. Such communication strategies and their outcome have the potential of adding value to the government strategic plans for cancer prevention and control.

The study would also inform the Ministry of Health on how best to communicate with vulnerable women to make them aware about cervical cancer, its risks, and the opportunities for prevention and treatment. It would also inform about other communication strategies that exist and how best to reach illiterate women who are the most susceptible to cervical cancer.

Justification of the Study

Informed knowledge about cervical cancer and about the risk and preventive factors is necessary for women to be able to adopt healthy lifestyles and be disease free. The women by understanding the risk and preventive factors, their perceived

susceptibility, perceived severity and perceived benefits of cervical cancer prevention would be able to make worthwhile decisions to adopt healthy lifestyles.

The study obtained information useful to the Ministry of Health that would help in improving public policies. Women expect also benefit from improved health policies once the recommendations are adopted. Non-governmental Organizations would also gain knowledge on how to work with illiterate middle aged women of the reproductive age.

Limitations and Delimitations of the Study

Transport was a major limitation in undertaking the research, since Mbooni West sub-county is hilly, with steep rocky paths which posed a challenge. The researcher therefore recruited three research assistants who assisted in data collection. Time was another limitation. The time in which the fieldwork was to be completed was not limitless. The researcher and her assistants attempted to collect data within a timeframe of three weeks.

Language was also another limitation since the target group was illiterate and could not understand English. The researcher translated the interview guide and Focus Group Discussion questions into Kamba Language since both the main researcher and assistants were familiar with the language.

Assumptions of the Study

The study assumed that the target group would be willing to participate, and that the local leaders as the community gatekeepers would be willing to support with the necessary assistance. It also assumed that the respondents would understand what they were being asked.

Scope of the Study

This inquiry investigated illiterate women, aged 35-45 years, in Mbooni West sub-county in Makueni County, Kenya. These are women had acquired education level of standard eight and below in the Kenyan 8-4-4 system, including those who had never been to school. The research utilized a sample size of 66: 42 participants for interviews and 24 participants for the three FGDs with each having eight participants.

The study concerned itself with finding out what communication strategies were used to communicate to women about cervical cancer. It also investigated the knowledge and perceptions of illiterate women of Mbooni West and the effect communication strategies had on perceptions in relation to the first three components of HBM; perceived susceptibility, perceived severity and perceived benefits. The first three components were the preliminary steps toward health behavior change.

This research investigated these three components because of time and space. Time is not limitless and investigating all the six elements at the same time would mean that much space would be taken and the work would be bloated. It also sought to give adequate emphasis on the three elements for clear understanding instead of providing broad and shallow information if the six elements of HBM were tackled.

This research considered investigating perceived susceptibility, perceived severity and perceived benefits as laying foundation for later investigation on impact of communication strategies on knowledge about cervical cancer. The subsequent investigation after this current one would be to find out to what extent the target group has acted upon the knowledge on cervical cancer in terms of perceived barriers, cues to action until they to attain self-efficacy- the last three components of HBM.

Definition of Terms

Knowledge: Knowledge is the awareness of or familiarity with a variety of things, ideas objects, principles, or ways of doing things (Henriques, 2013). Knowledge in this study referred to understanding of risk and preventive factors of cervical cancer.

Cervical cancer: Wright (2014) explained cervical cancer as a malignant growth of cervical cells that affects the normal functioning of the neighboring ones and thus spreads to other parts of the body. Often ultimately fatal, its development to a terminal disease can be arrested by early detection and treatment as well as prevention (Wright, 2014). This study investigated what communication strategies were utilized to educate illiterate women on cervical cancer, the knowledge and the effect the communication strategies on the women's perception of cervical cancer in terms of susceptibility, severity and benefits in relation to HBM

Communication strategies: According to Johns (2015), communication strategies are blueprints that guide how information is to be exchanged, using verbal, non-verbal, or visual content. This study investigates what communication strategies are used to share the knowledge about cervical cancer to illiterate women aged 35-45 in Mbooni West.

Effect: The term effect according to Carlo (2011) refers to relations that are causal. It a change brought about by consequence of an action. This study sought to find out how communication strategies affected the perceptions of women on cervical cancer in terms of susceptibility , severity and benefits of adopting a healthy lifestyle.

Illiterate: According to UNESCO (2015), an illiterate person is one who cannot with understanding both read and write a short, simple statement on their everyday life. For the purpose of this study illiterate women were those women who had an educational level of standard eight or below in the Kenya 8-4-4 school system including those who had not been to school before.

Literate: According to Price (2010), literacy is typically the ability to read and write. UNESCO (2015) defines a literate person as one that has ability to identify, understand, create, interpret, compute, communicate, and use materials, both printed and written. A literate person is usually an individual that has acquired education beyond primary school level (Price, 2010).

Perception: Perception is a mode of apprehending reality and experience through the senses to discern, figure and form language, behavior and action. Given states that the perception of an individual influences their opinion, judgment, and understanding of something.

Summary

This chapter has introduced the study by giving the background of the research which sought to explore what communication strategies were used to communicate to illiterate women of Mbooni West sub-county about cervical cancer. The purpose and objectives of the study gave rise to research questions, and these were arguments for the justification and significance of the study. The chapter also has provided assumptions which were the plausible facts to be upheld throughout the study, as well as the scope, limitations and delimitations, and definition of terms. The next chapter is on literature review.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter provides the theoretical framework that underpins this study. It also provides the general literature review by discussing communication strategies utilized in educating about the risk and preventive factors of cervical cancer. The empirical review focuses on statistical evidence from other studies related to the topic. The chapter also gives a conceptual framework that outlines how the variables are related and ends with a brief summary.

Theoretical Framework

This study adopted the Health Belief Model (HBM), which was developed by Rosenstock (1960). This model was originally intended to explain why people were reluctant to participate in health programs that would enable them to diagnose and prevent diseases (Schavo, 2007). The upper socioeconomic group, the young people and the highly educated were more likely to respond positively to specific health campaigns and adopt recommended health practices (Rosenstock, 1960).

The assumption of this model is that for the intended audience to engage in healthy behavior, they need to be aware that they are at a severe risk of a disease that threatens their lives. An individual will not take a health action unless he believes that a threat to him exists; he believes that means exist to reduce the intensity of the threat and is aware of how to use these means (Rosenstock, 1960).

The rationale for choosing HBM was that it resonated with the topic of the study and the objectives. This was because matters of reproductive health are intimate and the model relates to how an individual, not a group, processes the messages conveyed through communication strategies to perceive susceptibility and severity of

cervical cancer and the benefits on embracing preventive measures. Again, this model takes into consideration an individual person as a key in making decision about their health matters and this rhymes with interview method of data collection where an individual's sentiments and views were considered as key resources in data collection. HBM was also significant in guiding the study and provide framework to give the study stability.

The research questions sought to find out what communication strategies were utilized to communicate to women of Mbooni West about cervical cancer; how much the women know about risk and preventive factors of cervical cancer and how the communication strategies affected the perceptions of the women about cervical cancer. For women to be aware as postulated by HBM, there has to be communication strategies to enhance the awareness.

This study therefore sought to find out the communication strategies used to educate illiterate women of Mbooni West about cervical cancer, the knowledge and perceptions that the women had on cervical cancer, and how communication strategies affected perception of cervical cancer in terms of susceptibility, severity and benefits of adopting positive lifestyle in relation to HBM.

An individual should be able to perceive that to reduce the risk of acquiring cervical cancer, one needs to embrace a lifestyle that would translate to one adopting preventive measures; a positive change of behavior. The women should be able to perceive that the merits of the change of behavior are more prominent than potential barriers or other negative aspects of the recommended actions (Schiavo, 2007). Such perception should be informed by the knowledge of the health issues, in this case cervical cancer. Such knowledge therefore needs to be communicated through communication strategies to initiate the process of behavior change.

HBM model, however, does not lack weaknesses; the model fails to explain logistical matters such as access to health care. The model also lacks explanation on availability on monetary access to healthcare. This study overcame these weaknesses by investigating communication strategies, knowledge of illiterate women so as to come up with recommendations on how to effectively educate women on matters of healthcare especially concerning cervical cancer.

In addition, the study did not consider economic and environmental factors that may inhibit or enhance the recommended health action and assumes that everyone has similarity in access to information on illness. This study overcame these weaknesses by examining the economic background of the women and finding out how much they were knowledgeable about cervical cancer so as to come up with recommendations on how to best to reach illiterate women.

Components of HBM

Perceived Susceptibility

For an individual woman to embrace the information being communicated, they need to perceive the risk of contracting cervical cancer. Schiavo (2007) stated that how an individual perceives a health issue directly influences how much they know and believe, and that this influences behavior. Schiavo further argued that the risk perceived by an individual makes them examine their opinions on how likely their behavior can lead to a negative outcome.

An individual will perceive herself as susceptible to cervical cancer depending on the degree of knowledge of risk and preventive factors. Communication strategies are therefore paramount in educating women on cervical cancer. The individual's belief about being susceptible and the seriousness of the disease is what defines the threat rather than the view of a professional about the reality (Rosenstock, 1960). This

therefore calls for proper communication strategies to inform the women so that women can shape their beliefs accordingly.

Perceived Severity

How an individual would perceive the seriousness of a health problem varies from one person to another (Rosenstock, 1960). HBM suggests that change of behavior occurs because of three main reasons. Firstly, the individual recognizes that the health concern is plausible and backed by enough reason. Secondly, the individual also understands that he/ she is susceptible to a disease or a perceived health threat. Again the individual must understand that the change of behavior has benefits, and those benefits outweigh the costs incurred in the process of behavior change (Schiavo, 2007).

Effective communication strategies assist an individual in perceiving the seriousness of cervical cancer so as to adopt proper health behavior to avert infection. An individual may be able to see not only medical and clinical consequences but also broader and more complex implications such as effects on her job, family and social relations (Rosenstock, 1960).

With regards to the individual's subjective feelings on whether a specific illness or disease can be serious or life threatening and thus demanding one's attention, individuals would also respond to messages of prevention and risk depending on how severe they consider the health issue to be (Rosenstock, 1960). An individual may not determine to adopt a certain health behavior unless the issue is salient to her and the health issue at hand has great consequences on her and her family.

If women are unaware of the intensity of cervical cancer as a life-threatening disease and how to prevent it, then they may not take the appropriate action (Schiavo,

2007). Schiavo further argued that the beliefs that an individual holds concerning the effects the disease has on one's states of affairs, be that economic, social and otherwise, influence the health behavior of that individual. One is able to perceive the difficulties to undergo due to the effects of the disease.

Perceived Benefits

Communication strategies need to articulate the benefits that follow after embracing the suggested health behavior. The strategies should seek to influence the perception that the women have of the benefits that would accrue from adopting the actions recommended. A positive disposition by women would help to reduce the risk of the seriousness of cervical cancer morbidity. Embracing the messages being communicated would translate to a healthy lifestyle resulting in the chance for the woman to live a longer life (Kreps, 2013)

How an individual woman would perceive the costs and challenges of adopting the actions that are recommended would influence the extent to which she embraces change. That is why appropriate communication strategies are of great significance in persuading women to adopt the recommended health behavior. This has to do with the individual's own evaluation of the challenges and impediments that hinder her from adopting the new health behavior. For people to adopt the new behavior they have to believe that the benefits of the new behavior outweigh the consequences of remaining in the old behavior (Kreps, 2013).

Perceived Barriers

This refers to how an individual's perceptions of the costs and obstacles that hinder on one from adopting recommended health behavior. These include economic costs and other lifestyle sacrifices (Schiavo, 2007). Before an individual determines to

undertake any venture, one considers if the advantages override the disadvantages and if there are challenges, whether enduring the challenges will bring about better outcomes. These costs and barriers could be both economic and lifestyle sacrifices. One undertakes a cost-benefit analysis also in terms of dangers like side-effects; how unpleasant the change of behavior is, for example painful, upsetting or difficult and how inconveniencing among other costs (Kreps, 2013)

Health behavior change, therefore, should override the challenges and costs for an individual to be able to make a decision to adopt that health behavior. This calls for proper communication strategies to objectively inform women about cervical cancer to overcome their subjective uninformed perceptions. The women can then objectively perceive the dangers of the life-threatening disease so as to adopt a healthy behavior.

Cues to Action

Hints or cues, whether internal or external, play a key role in influencing individuals to take action and adopt the recommended health behavior. A cue may be that one more event that is necessary to take place so that the desired results may come by (Rosenstock, 1960). These hints may be from within an individual like a form of a symptom or external like discussions with others, information from the mass media or any other source of knowledge. These cues therefore act as stimuli necessary in order to trigger response to adopting required health behavior. Communication strategies which use real life experiences would act as cues for women to take action to adopt positive behavior.

Self-Efficacy

Once women embrace behavior change and practice the new recommended behavior, they achieve a state referred to as self-efficacy. Self-efficacy is when an

individual becomes confident about performing and sustaining the recommended behavior with ease (Kreps, 2013). It implies achievement of self-belief in one's own ability to make choices, eat, and live healthily.

This study utilized the first three components of HBM namely, perceived susceptibility, perceived severity and perceived benefits. The inquiry tested communication strategies used to communicate to women about cervical cancer and how the communication strategies affected how women perceived themselves susceptible to cervical cancer, the severity of the disease and benefits of adopting a positive lifestyle. These perceptions would influence understanding and uptake of control measures and subsequent lifestyle change.

The other remaining three components of HBM which are: perceived barriers, cues to action and self-efficacy are suggestions for further research. The study sought to investigate how communication strategies affected the perceptions of illiterate women of Mbooni West in terms of susceptibility and severity of cervical cancer as well as benefits of adopting a healthy lifestyle to avoid cervical cancer acquisition.

General Literature Review

Communication Strategies

The communication strategies utilized in educating women greatly influence their level of awareness about cervical cancer. Communication strategies are the blue prints of how communication is relayed and exchanged between the sender and the receiver (Johns, 2015). A communication strategy is a plan meant to achieve communication objectives (Spacey, 2015). Spacey stated that a communication strategy has four components; first, it has goals which are the desired end results of a communication program. Second, a communication strategy has target audience and this refers to anyone communicated to as part of the strategy.

Communication plan is the other component and this is an outline of how communication strategy will be achieved and includes a schedule and responsibilities. Again a communication includes channels which are the physical medium of transition used to convey information signal. There are three forms of communication strategies (Spacey, 2015).

Verbal Communication Strategies

The verbal strategies entail use of words in passing the intended message. According to Nayab (2019), verbal strategies include written and oral communication. Written communication strategies include letters and documents, e-mails, text chats, SMS, including any other message communicated through written form. Nayab further argued that the commonly used written verbal communication strategies include handbooks, brochures, contracts, memos, press releases, and formal business proposals among others. To ensure effectiveness, writing style, grammar, vocabulary and clarity should be taken into consideration in written verbal communication (Nayab, 2019).

According to WHO (2017), in strategic communication framework for effective communication document whose purpose was to present strategic approach for effective communication, mass media strategies were recommended including community billboards and poster on public transportation which gives a broad reach and helps in increasing awareness.

The WHO framework also recommended local radio for disseminating urgent information. The framework also recommended use of interpersonal channels especially to influence attitudes and encourage wider acceptance of health behavior. In order to reach a broad audience, WHO framework recommends international news media, websites, networks of local organizations and, interpersonal and community

networks. Since the target group of this study was illiterate, written verbal strategy was not considered.

Oral communication strategies on the other hand were of great significance in this inquiry since the target audience was of low education level. Oral communication includes the use of the phone, radio, and face to face (Johns, 2015). These were the key oral strategies that were considered in this study as they were assumed to be accessible to the target audience of illiterate women. Other forms oral communication which exist but are not considered in the study because they are deemed inaccessible to that target group include formal communication such as lectures, and conferences (Nayab, 2019).

Nayab (2019) stated that oral communication can be enhanced by clarity of speech, modulation of voice, pitch, volume, and even other non-verbal communication like body language, and visual cues. This implies that messages about cervical cancer should be crafted and communicated through verbal, non-verbal and visual strategies in order to effectively educate women about this killer disease which can be prevented by embracing the right information for behavior change.

Non-verbal Communication Strategies

Non-verbal communication involves sending and receiving wordless messages (Nayab, 2019). These are meant to reinforce verbal communication as well as convey thoughts and feelings on their own. Johns (2015) identified visual cues such as body language, facial expression, physical distance, and tone. These were the strategies considered in this study as they were deemed accessible to the target group since language is universal though not all were found to have been utilized.

Nayab (2019) mentioned that tone of voice accounts for 38% of all communications. Nayab also added that facial expressions are a common strategy and

that body language including facial expressions account for 55% of all communication. Gendeh (2016) indicated that non-verbal communication conveys 65-70% of information in communication. This strategy therefore if well exploited, would effectively convey messages about cervical cancer to illiterate women.

Visual Communication Strategies

The third forms of communication strategies include the use of visuals which include actual objects, photographs, pictures or symbols, video or practical demonstrations (Johns, 2019). This study considered objects, photographs, pictures, video and practical demonstrations by doctors or nurses. Nayab (2019) argued that visual communication with graphs and charts usually reinforces written communication and can actually replace written communication altogether. He further argues that visual communication is more powerful than verbal and non-verbal communication and that technological advancement has made visual communication easier to express.

According to Rocio and Cockly (2013), communicating to a vulnerable group who are illiterate is challenging, thus, the use of visuals would encourage the audience to trust the health communicators and believe their messages, stimulating the participants' willingness to participate in decision-making concerning their health. Possessing good grasp of different types of communication strategies would help a communicator to know how to better deal with audiences and clear up misunderstandings and misconceptions for clear understanding (Nayab, 2019).

Cervical Cancer Risk Factors

There are risk factors that predispose women to acquiring cervical cancer and these are as follows:

Smoking

Women need to be informed that smoking exposes people to many cancer causing chemicals which are absorbed through lungs and circulated throughout the body in the bloodstream (Rosen & Rosen, 2014). It is also necessary to know that tobacco by-products have been found in the cervical mucus of women smokers. These carcinogens damage the cervix cell's DNA and subsequent development of cervical cancer.

MPHS (2012) explained that the carcinogens in the smoke of cigarettes and other smoked nicotine cause mutations in the DNA which affect the carcinoma cells of the cervix, causing cancer of the cervix. Communication strategies need to be utilized to communicate to women about dangers of smoking which predisposes them to cervical cancer. Women would be able to clearly perceive their susceptibility to cervical cancer, perceive severity of the disease and perceive the benefits of adopting healthy lifestyle to avoid acquiring cervical cancer.

Multiple Pregnancies

Rosen and Rosen (2014) argued that women who have had three or more full-term pregnancies are at higher risk of developing cervical cancer. Hormonal changes during pregnancy are likely to make women more susceptible to HPV infection and subsequent cancer growth.

According to Smith (2016), cervical cancer is mainly caused by HPV, a sexually transmitted virus which is asymptomatic and without any clinical consequence. However, when the infection is persistent, it increases the risk of dysplasia and subsequent progression to cervical cancer. Bruni (2015) stated that HPV can cause infection in the cervix but may not last long if the immunity of the body is able to fight it. The infection on the other hand can change cervix cells to pre-cancer

cells. Many of these cells go back to their normal state, others do not and begin to progress to cervical cancer. If detected early, these can be treated; if not, they then turn to cervical cancer. Effective communication strategies need to be utilized to educate women about the need of having three or less children for the benefit of their health.

Inherited Susceptibility

Women need to be informed that if one comes from a family line where there have been cases of cervical cancer in their families they are likely to acquire the disease. It is important for women to understand their family susceptibility and take the precaution of ensuring regular check-ups so as to ensure early detection and take preventive measures (Panier & Borowitz, 2014).

Well-designed communication strategies would ensure that the women acquire the appropriate knowledge on how to prevent cervical cancer and search in their family history to determine inherited susceptibility so as to take preventive measures early enough. They would also be able to clearly perceive the severity of the disease and embrace the benefits that accrue from embracing preventive measures and shunning the risk factors (Panier & Borowitz, 2014).

Having Multiple Sexual Partners

Studies have shown that there is a strong link between HPV infection and cervical cancer (Liu et al., 2015). Epidemiological studies have consistently indicated that sexual behavior is the main risk factor of HPV infection more so among people with many sexual partners. Proper communication strategies would be necessary to help educate women about taking charge of their health and avoiding irresponsible sexual behavior that predisposes them to acquiring cervical cancer.

This study concerned itself with investigating what communication strategies were used to communicate to illiterate women of Mbooni West about cervical cancer. It also sought to find out the women's knowledge and perception of the preventive measures and risk factors including having multiple sexual partners and how it affected the women's perception of how susceptible they were to cervical cancer; how they perceived the severity of the disease and how this affected how they perceived the benefits of adopting a positive lifestyle and the subsequent behavior change.

HIV Infection

A study by Holmes et al. (2009) showed that there is risk of both an association of increased cervical pathology which is linked with HIV infection in African population. Holmes et al. further argues that though there has not been a direct link of HIV and cervical cancer, HIV predisposed the cervix to other infections including the HPV, which may progressively develop to cervical cancer.

According to MPHS (2012), in Kenya, the prevalence of HIV Prevalence in patients with invasive cervical cancer is 15%. MPHS and MMS said that a recent study indicated that 43% of women attending HIV care clinics had abnormal cervical cytological results, which was much higher than 3.6% which was found in the general population. Communication strategies should therefore address the issue of cervical cancer prevention in a wider dimension to include prevention of HIV/ AIDs infection. That demands for well-designed communication strategies with well deliberate messages to educate the population in a wider dimension with the aim of influencing them to developing appropriate perceptions and attitudes for eventual behavior change.

How to Prevent Cervical Cancer

Pap-Test Screening

MPHS (2012) explained that one can treat the early cervical cells changes otherwise known as dysplasia, as well as reducing the risk of abnormal cell changes, so as to minimize the risk of cervical cancer. Women should undergo a regular Pap test based on age and the recommendations that the doctor gives.

A study done by Rosser et al (2014) indicated that lack of knowledge is a significant contributor to failure for uptake of cervical cancer screening services especially in low income setting. This calls for organizing of proper communication strategies for women so that they may be able to perceive their susceptibility to cervical cancer, perceive the severity of the disease as well as the benefits of adopting a healthy lifestyle.

Use of Condoms

Sexual partners should use condoms to prevent transmission of infections and especially the HPV virus that may lead to acquisition of cervical cancer (MPHS, 2012). Women need to be informed that the cervical cancer causing virus, HPV can be transmitted and should therefore take preventive measures. Both the male and female condoms go a long way in insulating women against transmission of HPV and other related infections. The idea of female condoms may be new especially to rural illiterate women. This calls for well-designed communication strategies that would inform and empower women to embrace this new invention despite the cultural challenges expected.

Having Few Pregnancies

Women should ensure that the number of their pregnancies does not exceed five because more than that number may make the cervix susceptible to developing

dysplasia which can easily lead to cervical cancer (MPHS, 2012). A reduction in immunity that comes with pregnancy can make a woman susceptible to HPV infection and the more the exposure through multiple pregnancies the chances of acquiring cervical cancer. Since matters of the number of pregnancies might be embedded in cultural values in communities, there is need for communicators of cervical cancer prevention be in collaboration with other health communicators like family planning communicators so as to come with proper communication strategies and enhance the messages.

Vaccination

According to Rosen and Rosen (2014), women aged 26 years and below should get the HPV vaccine. The vaccine protects women from two types of human papilloma virus that cause cervical cancer. The vaccine is recommended for children of ages 11 and 12 but can also be given as early as the age confine. The vaccine is also recommended at age 26 for girls (Rosen & Rosen, 2014).

Mothers as major decision makers in families have a great influence in matters concerning the health of their daughters. Proper communication strategies would inform and guide the women in making decisions concerning the health of their children in relation to the perceived susceptibility, perceived severity and perceived benefits of allowing their daughters to be vaccinated.

Being Faithful to a Single Sexual Partner

Couples should ensure that they remain faithful to each other so as to curb transmission of the HPV virus that causes cervical cancer. They should talk honestly about sexually transmitted infections before they begin a sexual relationship (Rosen & Rosen, 2014).

Women need to be educated that having more than one partner predisposes them more to HVP the cervical cancer causing infection. This demands for persuasive communication strategies that would enable the women to acquire the knowledge of cervical cancer prevention and to perceive their susceptibility, severity and benefits of changing behavior so as to adopt healthy lifestyle.

Quitting or Avoiding Smoking

Women should be informed that smoking has great disadvantage of damaging cervical cells by the carcinogens that cause mutation of the DNA leading to developing of cervical cancer (MOPHS & MMS, 2012). Women need to be persuaded to avoid or stop smoking to avoid predisposing them to cervical cancer. Communication strategies are required to persuade women to keep off tobacco so as to be healthy.

Empirical Literature Review

Communication Strategies in the Empirical

A study conducted by Omedo (2014) sought to investigate the effect of communication campaign on compliance with mass drug administration in terms of how the campaign affected attitudes and health behaviour. A qualitative study was conducted with community health workers as informants. The health communication campaign was conducted in 75 villages located within a radius of 10km of the shore of Lake Victoria in eight districts in Western Kenya where schistosomiasis was prevalent among 13-14-year school children. Community Health Workers had been chosen from each district and trained on praziquantel drug distribution in the community.

Intensive mass media campaigns were conducted before and during the campaigns. A total of five semi-structured FGDs were conducted to elicit perceptions

of the community health workers. The study recommended that more than one radio stations should be used during campaigns for not all members use the channels that were used. The study also recommended that radio announcements and road shows should mention who would be responsible for drug distribution. One woman felt that posters should be used in place of community gatherings since the gatherings had been abused by other organizations before (Omedo, 2014).

A study by Silva and Arongo (2012) sought to verify the relevance of communication strategies in palliative care. Three hundred and three care givers who worked with patients receiving palliative care were investigated. The study revealed that 57.7% were unable to state at least one verbal communication strategy. Only 15.2% were in a position to describe five signs or non-verbal communication strategies. The study further indicated that the verbal strategies commonly used were those that concern with answering questions about disease and treatment. This implies that communication strategies utilised in health communication are limited hence the need to make investigation so as to come with recommendation on how to better improve communication on health matters.

Prilutsiki (2010) undertook a study to investigate the success of public health campaigns in Ghana and scrutinised the communication strategies used in each. The first campaign that Prilutsiki investigated was national tuberculosis control program (2005). Prilutsiki revealed that the methods that WHO recommended included all different types of media and channels as well as print media and community activities. However, Prilutski said that there was no public evaluation available online but he came up with recommendations. The inquiry recommended for interpersonal communication integrated at local community level; it is the most all-round effective strategy to bring about health behavioural change. The study also recommended for

cultural similarity between the communicators and the target groups to increase the likelihood of behaviour change.

The second health campaign that Prilutsiki (2010) investigated was integrated child healthcare campaign (2002) whose main goal was providing malarial bed-nets for prevention. The main communication strategy used was interpersonal communication through trained volunteers, 28,000 in number. Other communication strategies included celebrity appearances, popular artists singing the campaign songs and delivery of 1.5 million leaflets. The campaign was successful because 96.4% of Ghanaian children aged less than two years received bed-nets. 72% of the children slept under bed-nets. Prilutski stated that the success of the campaign was brought about by sustained interpersonal communication at community level.

The third campaign program that Prilutski (2010) investigated was home based care for malaria campaign (2002) which sought to increase awareness among mothers on how to recognise and treat malaria among children. It also sought to increase knowledge among pharmacists about dosing. Communication strategies for this campaign were mainly based on electronic media; radio and TV. There was a specific song which was composed and aired in both TV and radio in local languages. The campaign also used posters, leaflets and flip cards. However, in a presentation made by the deputy head of the Ghanaian national malaria control program. No specific data on the results of these campaigns are available (Prilutski, 2010).

The fourth health campaign investigated by Prilutski (2010) was titled “life choices” that sought to empower women to control the number of children to have by encouraging use of contraception. The campaign used different communication strategies including songs on TV and radio, use of posters, stickers, educational sessions, events and community networking. 100 billboards were put up nationwide.

Results indicated that 89% of the members of the target audience were aware of the life choices campaign. Mass media was identified as the most effective strategy in that campaign. However, only people living in urban areas were involved in the campaign and Prilutski (2010) recommended for use of interpersonal communication.

Perceived Vulnerability to Cervical Cancer

Kutto (2014) did a study on communication issues regarding control of cervical cancer among rural women in Elgeyo- Marakwet County, Kenya. The study explored the extent to which women had been informed about cervical cancer and the hindrances that health communicators had encountered in reaching these women. The concern was, although technology has realized a lot in terms of control of cervical cancer detection and treatment procedures as well as other preventive measures, the disease continues to exact infections and mortalities.

Women are therefore unaware of the susceptibility of the disease. This requires health communicators to utilize suitable communication strategies to help illiterate women perceive their susceptibility to the disease. A study by Ngugi, Boga, Muigai, Wanzala, and Mbithi (2012) that sought to determine factors affecting uptake of cervical cancer early detection measures among women in Thika, Kenya subjected 50 women to in-depth interview. The findings of the study indicated that most women believed that one would never know whom the disease might affect (Ngugi, 2012). Ngugi's study gave no statistical data but inferred that most of the respondents had difficulty accepting the idea of susceptibility and how it should prompt tests, early detections and curative measures.

According to Ngugi (2012), rural women believed that cervical cancer is more likely to affect the rich because they eat "funny" food, an implication that rural women do not see themselves as susceptible to cervical cancer. A few believed that

those who live in the rural areas were more at risk of getting the disease because they did not have resources to know about cancer screening methods. One woman said that those who live in the city were at a higher risk because of pollution, since there is fresh air in the rural areas. Others said that those who take contraceptives are at a higher risk of developing cervical cancer.

The findings of this study equipped health communicators with information on how to design better informed communication strategies to reach women such as those interviewed by Ngugi (2012). with meaningful messages about cervical cancer since they have their own perceptions about cervical cancer and not the facts.

Ombech, Mungai, and Wanzala (2012) conducted a study on awareness of cervical cancer risk factors and the practice of Pap smear testing among female primary school teachers in Kasarani Division in Nairobi, Kenya. The objective was to determine the awareness of cervical cancer, knowledge of risk factors and practice of Pap smear testing. The findings indicated that 87% of the subjects were aware about cervical cancer, while 75% knew about the Pap smear test. Only 39% of these women knew that HPV infection was a risk factor for developing cervical cancer while only 41% had ever had a Pap smear test done. There was a slight association between awareness of cervical cancer risk factors and practice of Pap smear test. If women perceived themselves as susceptible to cervical cancer, they would engage in regular Pap tests as indicated among the sample of literate women of Kasarani.

This study shifted focus to a less literate population than Kasarani. Its findings reveal that rural illiterate women were not well informed about risk and preventive factors of cervical cancer so as to take initiatives towards curbing the disease. It also sought to find out how communication strategies affected how the women perceived their susceptibility to cervical cancer, perceived the severity of the disease and how

these strategies affected how women perceived the benefits of adopting preventive measures and avoiding the risks. The findings are clearly provided and discussed in chapters four and five of this study.

Perceived Seriousness of Cervical Cancer

In a study by Ombech, Mungai, and Wanzala (2012) conducted in Kasarani Division, systematic random sampling was carried out among approximately 450 female primary school teachers in the 25 schools in the division. Using a list of female primary school teachers in the division which was obtained at the Kasarani District Education Office, the names of the teachers were written and numbered in an ascending order.

Every third teacher was approached and the repeated procedure raised 20 female teachers from each school to fill the questionnaire. A total of 384 respondents were investigated. Out of the total number of participants, 55% identified having multiple sexual partners as a risk factor that leads to development of cancer; 54% identified use of oral contraceptives; 53% identified the presence or history of STDs and use of hormonal contraceptives (injectable) as risk factors; 45% identified inherited susceptibility (hereditary risk because of a history of the disease in family), and 42% identified immunosuppression of immune system,

Also identified as risk factors were smoking (39% of the respondents), early sexual debut (32%); early pregnancy (30%) and 25% old age. Furthermore, 23% identified having an uncircumcised partner as a risk factor, while 12% blamed poverty, 10% having many children, 8% having one sexual partner, and 7% having a circumcised sexual partner.

In the study by Korir (2014) that sought to determine the level of awareness cervical cancer in Kenyatta National Hospital in the year 2006, 320 cervical cancer

patients aged 22-80 years and 30 health care workers participated in the investigation, where 75% (241) of the women were not aware of what cervical cancer is. Also, 90% (288) were not aware of the risk factors associated with cervical cancer. There were even suggestions by 2.2% of the respondents which associated the disease with witchcraft. It was found that patients with primary or secondary levels of education were less likely to come for late diagnosis compared to those who never attended school.

The above studies revealed that the level of knowledge about cervical cancer was poor. However, the studies did not seek to determine what communication strategies had existed to educate the target population about cervical cancer. They also did not seek to examine how these communication strategies, or lack of them, influenced the levels of knowledge and perceptions.

The gap in this research was communication strategies used to educate about cervical cancer. The study sought to fill the gap by exploring what communication strategies are utilized to educate illiterate women aged 35-45, in Mbooni West sub-county about cervical cancer and how the women perceived the disease in terms of susceptibility, severity and benefits of behavior change as indicated in the HBM model.

Perceived Advantage

Ngugi's (2012) study showed most women were positive about cervical cancer screening. They saw the advantage of cervical cancer being detected early, leading to doctors administering early treatment and saving their lives. Those of reproductive age could still go on to be able to bear children. Some respondents in Ngugi et al. study said that they believed that in the process of screening, doctors could detect other infections in the vagina and treat them.

These studies proved that there exists some knowledge about cervical cancer among women, but not all that knowledge reflects correctly about the risk and preventive factors about cervical cancer. This called for investigation of the illiterate young adult women of Mbooni West so as to determine what communication strategies exist, and what the level of awareness of cervical cancer is.

The earlier mentioned study by Korir (2015) that sought to find out the level of awareness among patients and staff of Kenyatta National Hospital indicated that 41% of the respondents had gone for a Pap smear test, while 59% had not. Among these 59% who had never had a Pap smear performed, 37% of them did not know about the test. Also, 15% of the respondents did not know where to access the test; 12% found the test too expensive; 11% did not feel sick and therefore did not see the need to go for the test; and 10% felt embarrassed to go for the test. In addition, 8% found the test to be unnecessary; while seven percent said that they did not have time to go for the test.

This study sought to determine what communication strategies were used to educate illiterate women about cervical cancer, what the level of knowledge was on cervical cancer in relation to the communication strategies used and how these strategies affected the women's perception of their susceptibility to the disease, severity of it and benefits of adopting the preventive measures and avoiding the risks. Though cervical cancer is easily preventable, awareness about cervical cancer seems wanting from the studies done so far. Women need to be well informed about cervical cancer so as to make wise health choices which would help them avoid suffering from the disease (MPHS, 2012).

Perceived Limitations

In the investigation by Ngugiet al. (2012) lack of knowledge about early detection was one of the barriers to screening of cervical cancer. Most of the women had not heard of cervical cancer screening. Others did not know that cervical cancer was preventable, and suggested that the church, which was accessible to many, should communicate the prevention message to their congregations. Other women did not know the health services offered at the local health centers.

The women stated financial constraints as a barrier to cervical cancer screening (Ngugi,. 2012). They said the cost of treatment was expensive, and that even when they fell ill to common ailments, they were prevented by costs from seeking treatment. If they could not afford to seek treatment for ailments, why would they spend amounts they could barely afford, or not afford at all, on cancer screening when they were not feeling sick.

Still on perceived barriers to cancer screening, women from the rural parts of Kiambu, said that the cost of travel to Thika District Hospital or the Kenyatta National Hospital in Nairobi was high. The women also identified responsibilities at home as housewives and inability to afford house helps to help in attending to their chores, as a hindrance to attending cervical cancer screening. Others said that they had unsupportive and overprotective husbands who denied them opportunities to go to the health centers. Again, others said that the procedure was uncomfortable and others were ashamed of being treated by male doctors (Ngugi, 2012).

According to Korir (2015), women's knowledge of cervical cancer was very limited in many developing countries. A vast majority of women in some countries had not heard of cervical cancer, and many of them did not even know about screening. Korir's findings, however, contrasted those of Ombech, Mungai, and

Wanzala (2012) where 87% of the women were aware about cervical cancer and Pap smear. This high level of awareness can be attributed to the urban setting where there is access to many sources of information through different avenues. The high level of awareness can further be attributed to the fact that the staff of Kenyatta National Hospital was educated. 75% of the respondents also knew what pap smear test was.

The research by Kutto (2014) was limited to a qualitative approach. It employed use of semi structured interviews to obtain personal accounts concerning the challenges of communicating cervical cancer. Focus Group Discussions were also used to determine the communication challenges rural women face, which hinder them from undertaking screening or early check up to prevent precancerous cells from developing to full blown cervical cancer.

Results revealed that the women lacked adequate information and therefore, awareness about cervical cancer and its control: detection, prevention, treatment and palliative care. Again the study revealed myths that make the women not talk about the disease. Myths around death and fear influence women against cancer screening. Kutto established that culture was another constraint: it restrained women from them from talking about reproductive health. Lack of support at medical facilities and restraint by oppressive male spouses was also another hindrance.

A study done by Korir (2014) investigated the barriers to early diagnosis of cervical cancer among patients at Kenyatta National Hospital, Nairobi, Kenya. It concerned itself with finding out and documenting the socio-economic, cultural and healthcare system factors associated with delayed diagnosis of cervical cancer. The objective of the study was to determine barriers that hindered early diagnosis of cervical cancer among patients at Kenyatta National Hospital. It was a cross-sectional

study of cervical cancer among patients attending radiotherapy clinic, or those admitted for chemotherapy.

The participants were subjected to a structured questionnaire. They stated some of the barriers as high costs of care, in addition to the long distance which they had to travel to receive treatment at the cancer facility.

Hints to Take Action

In the investigation by Ngugi et al. (2012), a few of the women among those who had a history of cervical cancer screening said that they had friends or relatives who had suffered from the disease, and that is what motivated them to get screened. A few of the women said that they had heard about cervical cancer screening in the media and went ahead to get screened. Others said that because their friends had gone for the screening, they also went. Others still had been referred by their general practitioners after consultations for diagnosis.

The study by Ngugi, however, revealed that though a few of the women had heard about cervical cancer screening in the media, they had not bothered to take the test because the communication did not explain clearly about cervical cancer and its dangers. Most of the women who reside in urban areas and those in school suggested the media as a good tool to provide awareness of cervical cancer. They said the media should give more information about cervical cancer and develop the messages in a culturally sensitive and meaningful manner.

A few of the women suggested women's groups, like the *Chama*, as the best place to provide training and awareness of cervical cancer and reproductive health. A few student participants suggested that cervical cancer awareness be introduced in the school curriculum, because although they had gone through higher education, they were not well informed about the causes and prevention of cervical cancer.

Self-Effectiveness of Adopting Healthy Lifestyle

Most of Ngugi's respondents had no idea about the HPV vaccine, and could not relate to taking their daughters for cervical cancer vaccination. This suggested that very few women have attained self-efficacy. Investigation to determine what communication strategies were utilized in communicating to women about cervical cancer remains necessary. It was necessary to determine how these communication strategies influence the level of awareness about cervical cancer among women and their perceptions

No study had investigated the communication strategies that exist in Mbooni West Sub-County to educate illiterate aged 35-45 years and how these strategies influenced the level of awareness and necessitated for this research.

Conceptual Framework

Regoniel (2015) suggested that a conceptual framework represents the researcher's synthesis of literature on how to explain a phenomenon. A conceptual framework maps out the actions required in the course of the study given the previous knowledge and observations on the subject of research. This means that the conceptual framework is seeks to understand how the particular variables in a study connect with each other. Conceptual framework provides a roadmap in pursuing a study.

Further, Regoniel (2015) argued that the conceptual framework lies within a much broader framework called theoretical framework. The latter draws support from time-tested theories that embody the findings of many researchers on why and how a particular phenomenon occurs. Figure 2.1 shows the conceptual framework followed by the study.

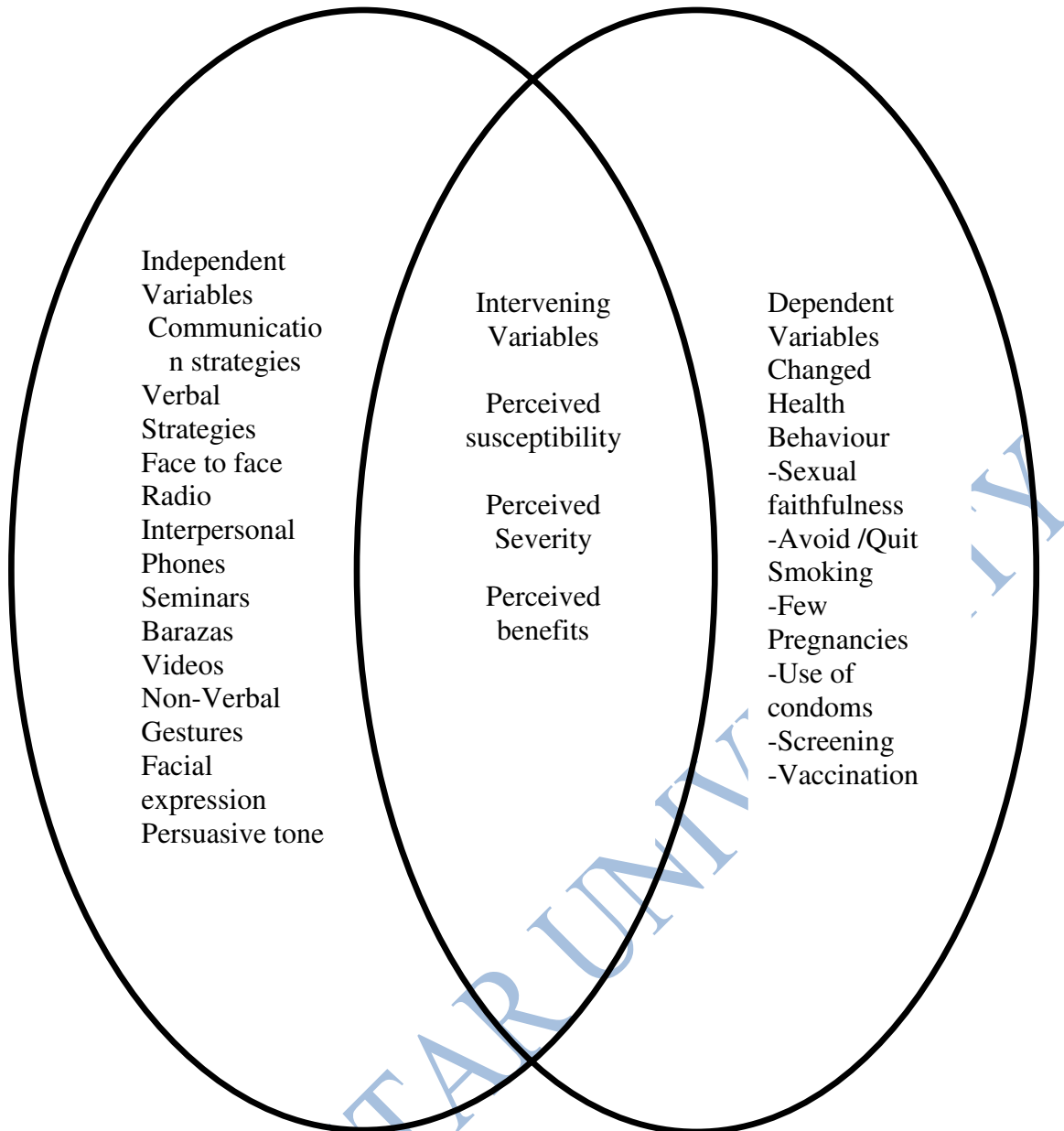


Figure 2.1: Conceptual Framework

Source: Spacey (2015)

Discussion

The conceptual framework depicts how a communicator, utilizing verbal, non-verbal and visual communication strategies communicates about cervical cancer to the women of Mbooni West. The communicator transcends the women's subjective perceived susceptibility, severity and benefits, equipping the women with knowledge on how to control cervical cancer, bringing about health behavior change for healthy life that is cervical cancer free.

A combination of the communication strategies and a subjective evaluation of the audience determined the women's perceived susceptibility to cervical cancer as well as its severity or serious consequences to their lives and the benefits they perceive after adopting the new health. Schiavo (2007) argued that the process of interaction between the communicator and the audience in a way that breaks down the barriers, determines the level of knowledge of the subject matter, in this case cervical cancer. This is mainly influenced by how a communicator exploits a variety of communication strategies in a bid to pass the message intended and cause the intended impact, in this case perceptions and subsequent change of health behavior.

Summary

The chapter begins with an introduction and provides the theoretical framework that underpins the study. The general literature review provides information on preventive and risk factors as well as communication strategies. Empirical literature review which follows after, provides the tangible evidence of the communication strategies utilized to inform about cervical cancer and the level of awareness among various audiences and groups. The conceptual framework outlines how different factors come into play to determine the level of awareness of cervical cancer among women. The next chapter is on research methodology.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

The chapter mainly concerned itself with how the data was collected. It outlines the research design, and states the population, the specific target population, sample size and the techniques utilized in sampling. Data collection instruments and procedures used are explained. The chapter also indicates how data was analyzed and the ethical issues considered. This research utilized interviews and focus group discussions. Both the interviews and focus group discussions (FGDs) provided an in-depth understanding of the population under investigation in correlation with the research objectives.

Research Design

A research design is a set of methods and procedures utilized in collecting and analyzing measures of variables specified in a study. This inquiry used qualitative descriptive research design which provides straight and full descriptions of phenomena (Salendowski, 2000). This study sought to establish what communication strategies were utilized in informing women about cervical cancer. It also endeavored to find the knowledge and perceptions of cervical cancer and how communication strategies affected perceptions of the target audience in terms of susceptibility to cervical cancer, severity of the disease and the benefits accruing from adopting healthy lifestyle by avoiding risks and adopting preventive measures of cervical cancer.

A qualitative descriptive design was able to give accurate portrayal of the qualities of each particular individual interviewed in their natural setting (Dulock, 2018). The design was holistic and therefore involved data collection which provided

retrospective portrayal of individual participants to include their opinions, attitudes and perspectives (Nasaj, 2015).

A qualitative descriptive design was cost effective and time saving because it did not involve manipulation of environment thus providing space for data analysis and presentation. It allowed for investigation without affecting normal behavior in participants' natural environment and this validated the process (Nasaj, 2015).

Population

The population in this study was middle-aged women of Mbooni West sub-county in Makueni County Kenya, aged 35-45 years, and with education level of Standard eight in the Kenyan 8-4-4 education system or below to include even those who had never been to school. The total population of Makueni County where Mbooni West is found is 884,527, 49% being male and 51% female (Samrack, 2015). The total population of Mbooni West was 112,977 as per the Demographic Health Survey (2014), with the population of women of reproductive age of 15- 49 being 27,115; women of productive age constitute 24% of the total population in Kenya (Mwangangi, 2017). Each year therefore accounts for 798 women. Between 35-45 years, are 11 years and this accounted for the population of reproductive age aged 35-45 as 8,778.

Target Population

The target population for this study was illiterate women aged 35-45 in Mbooni West sub-county in Makueni County, Kenya. These were women who had an education level of standard eight and below in the Kenyan 8-4-4 education system including those who had never been to school. According to Amen (2017), when one stops learning, the brain starts to die. That implied that much of what an individual had learnt was lost; the women were therefore deemed illiterate since they had been

away from school for over twenty years. The number of women of reproductive age aged 35-45 was 8,778. According to the Kenya Demographic Health surveys (2014), women of education level of below class eight accounts for 22.5%. The target population therefore was 1,976.

Sample Size

The sample size of a study refers to the number of participants that were chosen as a source of data collection. The sample size for the study was 66 participants. The study employed two data collection tools. Firstly, the investigation utilized interviews with a sample size of 42 participants. This was a sample size which was representative of the target population and one that the researcher could comfortably handle in relation to the resources of time money and personnel while providing adequate data for the study. The recommended sample size for a qualitative research is between 12 and 60 (Crow, 2013).

The investigation also utilized three FGDs where eight respondents participated in each session amounting to a total of 24 participants. The rationale for choosing eight participants per session was to enable participation of each participant. It also ensured there was minimal passiveness of the participants and provided a chance to collect varied responses. According to Carlsen (2011), a sample size for Focus Discussion Groups should range between 4 to 12 participants, so the sample size for this study was within the recommended range.

Sampling Techniques

This study adopted a purposive sampling method which was instrumental in reaching the target group quickly (Crossman, 2016). The target group was unevenly distributed in the geographical region and therefore required subjective judgment of the researcher to locate them. Tonko (2016) argued that the researcher should decide

what is to be known and set out to find people who could provide such information. Crossman (2016) stated that purposive sampling method provided a lot of insight into the phenomena under investigation since the researcher wanted to speak with as many kinds of participants as possible to come up with a plausible view.

The researcher, through subjective judgment gauged the age and educational level of a potential participant. The researcher then approached the woman and asked to speak to her and introduced herself to the woman as researcher from Daystar University undertaking a study on cervical cancer. The researcher then requested to know the participant's age and education level. If eligible, the researcher sought the woman's consent to participate in the interview in the place and position the participant felt comfortable. Some would be in their stalls, shambas, and wells and even on the way. If she agreed, the researcher proceeded to explain the participant's rights and asked the participant to sign the consent forms if she so willed.

Data Collection Instruments

Data collection instruments are devices used in to collect data. The main researcher enlisted assistance of three research assistants who were competitively selected. Prior to the commencement of the data collection, invitations for application to the vacancies of research assistants were made through posters and also verbally. The eligible candidates had to have obtained a general grade of at least C+ in the K.C.S.E. Out of the six applicants three were selected. This study utilized the following instruments:

In-depth Interview Guide

This research utilized semi structured interview guides administered face-to-face on one-to one context. The guide comprising of 17 questions of which some were closed and others were open ended. The first four items captured the participants'

demographics so as to enable proper understanding of their backgrounds for an exhaustive analysis. The second section had three items which captured the level of knowledge and perceptions of cervical cancer of the participants.

The third section tackled perceptions of the participants in terms of susceptibility, severity and benefits as outlined in the first three components of the HBM model. The fourth section of the interview guide comprised of three items and tested the communication strategies; verbal, non-verbal and visuals which assisted in finding out what communication strategies were utilized in relation to the first objective. The fifth section was the occlusion which was the parting shot in testing the gaps that arise from the participants and key players in educating women on health matters. These provided deep meaningful responses that resonated with the objectives and research questions.

The researcher engaged one respondent at a time in about 40 minute's session, to provide adequate time to obtain data and avoid tiring the respondent. These interviews took place at the participants' place of convenience and the respondents had the liberty to end the session at will. Before the participants engaged in the interview process, the researcher sought their consent and the participant then proceeded to sign the consent forms if they so wished. This method was relevant because it enabled the researcher to maintain and comment on the observations, behaviors, and environmental contexts and non- verbal cues (Crow, 2013). As Crow added this enabled the interviewer to probe and pursue the lines of discussion opened up the interviewees and obtain a rich data.

Focus Group Discussion Guide

The study also utilized a focus group discussion guide. The FGD guide comprised 17 items. The FDG guide sought to find out the demographics of the

participants, their knowledge and perception of cervical cancer, communication strategies used to educate women on cervical cancer and perceptions of the women in terms of susceptibility to cervical cancer, severity and benefits of embracing preventive measures. The FGDs provided an in-depth understanding of the target audience and exploited group dynamics for rich data. There was one Focus Group Discussion in each of the three wards; a total of three.

A focus group discussion guide was used in the discussion groups where two researchers were involved. One acted as a moderator of the discussion while the other wrote notes on the interactions as well as making audio recordings, with the consent of the participants and acted as the backup data. The focus discussion groups were significant in obtaining primary data, instrumental in showing the correlation between the dependent and independent variable. The independent variable constituted communication strategies used which comprised verbal and non-verbal cues and visual, while knowledge of cervical cancer and perception in terms of perceived susceptibility, severity and benefits made up the dependent variables.

Types of Data

This research mainly utilized qualitative data. This is data that comprised of words, texts and sound recordings which the research used to describe phenomena and relationships between variables. Using qualitative data, the researcher developed instruments of judgment and constructed data in a meaningful way in terms of categorical data using natural language descriptions (Verdinelli & Scagnoli, 2013).

The research investigated communication strategies, the knowledge and perception of women about cervical cancer and perceptions of the women to the disease in terms of their susceptibility, severity and the benefits perceived for

adopting the preventive measures and shunning the risks. This required descriptions to explore the ideas postulated exhaustively.

Data Collection Procedures

The researcher was the key investigator assisted by three assistants who were trained prior to data collection. The research utilized both in-depth interviews and Focus Group Discussions. For the interviews, the researcher and assistants each engaged one respondent at a time in about 40 minute's session, to provide adequate time to obtain data and avoid tiring the respondent. These interviews took place at the participants' places of convenience. The main researcher tackled the Northern side of Mbooni West sub-county and the assistants investigated on the eastern, southern and western side each respectively. The research data collection took three weeks.

The investigation involved purposively selecting participants for the interviews. The researcher would approach a potential candidate and introduce him/herself, kindly request to know the age and the level of education and explain the purpose of asking for those details. If the woman was eligible, the investigator proceeded to request for consent and if she agreed, the participant would be asked to be explained her rights and proceeded to sign the consent forms if she so wished. Purposive sampling was relevant because it enabled the researcher to maintain and comment on the observations, behaviors, and environmental contexts and non-verbal cues (Crow, 2013). This enables the interviewer to probe and pursue the lines of discussion opened up by the interviewees and obtain a rich data.

The study also utilized three focus group discussions with participants drawn from women attending pre-natal, post-natal and family planning clinics. The target group of the study mainly lies in the women attending these clinics. Again, such women were not ill and therefore were at ease participating in the FGDs without

discomfort. These clinics coincided with the market days of the respective towns next to the health facilities and therefore this ensured that the researcher easily obtained the required number of the target group members. Mbooni West has three main health facilities; Mbooni Hospital Level, Kitundu Dispensary and Tawa Hospital.

The researcher obtained permission from the medical superintendent at Mbooni Level 4 hospital, who is in charge of all the health facilities in the sub-county. This was to ascertain ethical protection of participants, and with the help of medical administrators of these facilities as key informers, focus discussion groups comprising eight members of the target group were conducted. One FGD was held under a tree due to lack of adequate space and two in rooms provided by the hospital (Carlsen, 2011).

For the FGDs the researcher approached potential candidate after being attended to by the medics, sought to know the woman's age and level of education. If the woman was eligible the researcher would then ask potential candidate if she was willing to participate in a group discussion about cervical cancer. If she agreed, she and other subsequent recruits would be shown to the venue where the FGD would take place and take a soft drink of their choice as they waited for other participants.

The involvement of two researchers in recruitment from the three clinics ensured that the recruiting process took shortest time possible. Other permissions obtained were Daystar University's ERB permit as well as the National Commission for Science, Technology and Innovation (NACOSTI) permit. These were photocopied and provided to assistant researchers to authenticate the process of data collection. Each session took about 60 minutes to provide adequate time for discussion while also avoiding tiring the participants.

These discussion groups utilized FGD interview guide tool, where two researchers were involved. One acted as a moderator of the discussion while the other took notes on the interactions as well as making audio recordings, with the consent of the participants, was the backup data.

The filled interview guides and FGD schedules were filed and handed over to the main researcher for data analysis. The file was stored at the main researcher's study room at her house in Machakos Town, Machakos County in Kenya. The main researcher then transferred the information to the database in her computer while comparing information from the hard copies and that from the audio recordings.

If there was any disparity between the hardcopy and audio recordings; the researcher responsible for the concerned copies would be called to clarify. In cases where the information was not clear, then the information in the audio recording prevailed.

Pretesting

Pretesting for this study was done in Masii Division in Mwala sub-county. The objectives of the pretest were to determine the length of time to be taken in both the interviews and FGDs sessions, to find out how clearly the audience understood the wording of the questions of both the interview guide and FGD guide so as to make appropriate changes, and to establish how familiar the target audience was with the subject under investigation so as to give the researcher a glimpse of what to expect in the field.

The researcher selected four women, one at a time, through purposive sampling and subjected each to an interview. A pretest was also undertaken on the FDG guide at Masii Market where four participants were purposively recruited and engaged in a FGD session.

The pretest revealed that the time allocated for interviews which was 40 minutes was adequate to capture all the necessary information without tiring the respondents. It also revealed that a few alterations of wording had to be made for clear understanding of the questions. Results from the pretest indicated that the level of knowledge about cervical cancer was minimal among the illiterate women aged 35-45 years.

Data Analysis Plan

Data was cleaned by removing errors for misspelling and mistyping, filling in missing information, removing duplicate records through merging and consolidating records and fixing integrity constraints violations. Data analysis involved examining the data so as to categorize, organize and recombine it (Nigatu, 2009). It utilized content analysis method which was both descriptive and interpretive. It involved categorizing data so as to come up with meaningful description of the various aspects of phenomena and express the interpretations therein.

Ethical Considerations

The researcher was genuine in the whole process of this research so as to come up with an authentic representation of the empirical. This research was free of plagiarism and falsification which are unethical practices (Ogweno, 2015). This research was planned and participants were interviewed one after another after seeking informed consent. There was equitable selection of the participants so as to avoid bias and uphold justice since selection was done in all the four corners of Mbooni West sub-county (David & Resnik, 2015).

This research also took into considerations the rights of the participant as enshrined in Chapter Four of the Kenyan constitution, where the researcher sought the consent of the participants. Participation of the respondent in a study should be within

the law. This research also respected and protected the autonomy of participants to sustain their dignity and rights (Ogweno, 2015). This was taken care of by use of a consent form which outlined the rights of a participant, purpose of the study procedure of conducting the interview and the length of time the interview process would take.

The researcher therefore sought to protect and maintain privacy, anonymity and confidentiality of the participants. Since the participants had a literacy level of not above standard eight, the researcher and assistants used vernacular to interview. The participants were informed that they were free to stop at any point at the participants' convenience (David & Resnik, 2015).

The researcher obtained ethical clearance from Daystar University through the ERB as well as a research permit from NACOSTI. There was also a permit obtained from Mbooni Hospital Superintendent to allow conducting of FGDs at the three medical facilities in the sub-county.

Summary

The chapter has outlined the research design and described the population which was investigated. It has also outlined the sample size, sampling techniques and data collection procedures. Data analysis plan has also been explained as well as the ethical considerations of the study. The next chapter is on data presentation, analysis and interpretation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Introduction

This chapter has addressed the analysis and presentation of data that was collected from the field. The chapter has given the interpretation of the findings based on the objectives of the study. Chapter five presents discussions, conclusions and recommend This chapter presents the analysis and interpretation of primary data that was obtained from the field during data collection exercise. First, the chapter provides information on how many respondents participated then the analysis and interpretation of the actual data.

Data that is analyzed and interpreted include the demographic information of the respondents, communication strategies used to educate illiterate women of Mbooni West sub-county on cervical cancer, extend to which the women know about the risk and preventive factors including their perceptions on cervical cancer. The analysis also included information on how communication strategies affected the perceptions of the participants on cervical cancer in terms susceptibility, severity and benefits. The findings are summarized in descriptions.

Presentation, Analysis and Interpretation

Response of Participants

The study targeted a sample of 42 participants for in-depth interview. However, the researcher managed to successfully conduct interviews with 40 participants. According to Carlsen (2011) this was adequate response for analysis, interpretation and making inferences as well as making inferences and conclusions using the study findings.

Demographic Information of Respondents

The study was interested in the age, number of children respondents had, occupation of the respondents, and occupation of the respondents' husbands. The findings were as presented, analyzed, and interpreted here in after.

Age of the Respondents

The study indicated all the forty illiterate women of Mbooni West were aged 35-45. Therefore, these findings show that the study's target population was achieved thus the findings are relevant to the purpose of this study.

Respondent's Number of Children

The study sought to know the number of children the respondents had. Findings showed that majority of the women, twenty-three in number out of forty, of the women had between four to seven children, while a few, seventeen in number had three or less children. These findings imply that the information on the knowledge and perception on cervical cancer was obtained from women who had given birth despite being illiterate.

Occupation of Women

The study sought to know the occupation of the illiterate women of Mbooni West Sub-county. The findings showed that a majority of twenty-one women out of forty were farmers, eleven were business people, and four were salonists while the remaining four were: a tailor, a cateress, a housewife and a cooks. These findings were attributed to the fact that the study targeted illiterate women who engaged themselves in the informal sector to earn a living.

Occupation of Husbands

The study sought to know the occupation of the husbands of the respondents. The investigation indicated that a few of the women, thirteen in number, of the husbands of the women were farmers, nine of the women were single or the husbands had died, eight of the husbands were businessmen, three were bodaboda operators and two drivers and two masons, while the rest were a cook, an insurer and a plumber. These findings imply that the majority of the husbands to the literate women of Mbooni West Sub-county involved themselves in informal sector activities.

Communication Strategies Used to Educate Women

First objective of this study was to find out what communication strategies were used to educate illiterate women of Mbooni West, on cervical cancer. Therefore, the study first sought to establish how the respondents came to know about cervical cancer.

Findings indicated that nineteen of the illiterate women of Mbooni West come to know about cervical cancer through use of radio, eight knew about cervical cancer through health officers/hospitals, five knew through church, while two knew through *barazas*. Further, the findings show that one of the women indicated that she knew about cervical cancer through Friends while five did not respond. In addition, radio was generally rated as very good mode of communication about cervical cancer.

Participants in FGDs were also asked to say how they came to know about cervical cancer. One respondent said:

I knew about cervical cancer when I accompanied my friend to hospital for family planning and she was told she must be screened for cervical cancer as a requirement to obtaining the family planning service. However, I have not been educated about cervical cancer.

Another respondent said:

I knew about cervical cancer when we were told in hospital that my mother was suffering from cervical cancer.

Two participants said that they knew about cervical cancer through friends, two said they knew through radio, one said she knew through hospital, while one said she knew through people.

Generally, these findings are attributed to the fact that Radio was the widely used mode of communication majority of illiterate women who are between 35-45 years old. Therefore, the findings imply that verbal strategy through radio was the easiest communication strategy to use to reach many of the illiterate people in rural Kenya.

The research went further to establish the communication strategies used to communicate to the illiterate women of Mbooni West Sub-county about cervical cancer. They include verbal, non-verbal, and visual methods of communication. First, the respondents were asked to highlight verbal communication strategies that were used to communicate to them about cervical cancer. Findings revealed that

The majority of the respondents, twenty-four in number said that radio was well used as a verbal communication tool. Eight of the women said they received the information through face to face and one said videos. Seven women did not respond to the question.

Findings from FGDs revealed that the participants learned about cervical cancer through hospitals, and announcing for screening on loud speakers. When they were further asked to explain what they liked about each of these ways of learning about cervical cancer, they highlighted that there was continued education in hospital and it teaches on cervical cancer. One participant said:

For the radio the program comes in the evening when we are busy and again it is generally about cancer and not specifically about cervical cancer.

These findings imply that most of the respondents considered radio as the best verbal communication tool that could reach them for information about cervical cancer teachings. They said that it was very good communication method in disseminating information about cervical cancer.

The second type of communication strategies the study sought to know how they were utilized to disseminate information about cervical cancer was non-verbal. The respondents were asked to highlight some of the non-verbal communication strategies used to communicate about cervical cancer.

The findings revealed that a majority (35) of the respondents were not sure of the non-verbal communication strategies that were being used to communicate about cervical cancer. However, 5 agreed that facial expressions were used as methods of communication about cervical cancer. None of the women mentioned other non-verbal strategies like communicating using physical distance, body language and tone.

From these findings, it implies that non-verbal communication strategies were not widely used to disseminate information about cervical cancer to the illiterate women of Mbooni West.

The study also sought to know the visual communication strategies used to communicate to the respondents about cervical cancer. Findings showed that the majority (20) of the illiterate women of Mbooni were not sure of any visual communication strategies used in delivering information about cervical cancer. However, 16 were in agreement that doctors' and nurses' practical demonstrations were well utilized in delivering information about cervical cancer, two indicated that pictures were used, one said photographs, while one mentioned videos.

These findings imply that most of the illiterate women of Mbooni Sub-county were in agreement that visual methods were not highly employed to disseminate

information about cervical cancer. However, several of the respondents said that doctors' or nurses' demonstrations pictures video and photographs were visual strategies that were being used to pass information on cervical cancer indicated the methods as generally good.

Knowledge of Cervical Cancer

Another objective of this study was to find out to what extent the respondents knew about the risk and preventive factors about cervical cancer. To achieve this objective, the researcher set a number of questions touching different aspects in relation to risks and preventive factors about cervical cancer.

First, the study sought to know if the respondents had heard of the disease called cervical cancer. Findings indicated that a majority of thirty-five of the women had heard of the disease called cervical cancer, while few, five in number indicated that they had not heard about the disease. These findings imply that most the illiterate women of Mbooni West know about cervical cancer thus the findings of this study were obtained from informed people.

Knowledge about the Part of Body Cervical Cancer Affects

Secondly, the study sought to know if the illiterate women of Mbooni West Sub-county knew the part of the body that is mostly affected by cervical cancer. The findings showed that a few of the women (12) indicated that cervical cancer affects the cervix. Twelve indicated that it affected the uterus, four said cervical cancer affected the breast, while twelve had no idea on what part of the body cancer affected.

In addition, findings from FGDs also revealed that illiterate women of Mbooni understood cervical cancer as disease that affects the uterus, stomach or cervix. For instance, four respondents in the FGDs said that cervical cancer is a disease that

affects women stomach; three respondents said cervical cancer affects the uterus, while another three said it affects the cervix.

One woman, when asked responded thus:

Interviewer: “*Kanzainoikwataaivu ya aka kana cervical cancer ikwataakilungu kiva kyakyamwiiwamundumuka. Which part of the body does cervical cancer affect?*”

Respondent: “*Uwauusuuwataakilungukyaitheokikwatanitenawaowamwana. (The disease affects part below the uterus at the mouth of it)*” i.e cervix

These findings imply that most the illiterate women had a clue on the parts of the body that are affected by cancer. It is worthy to note that there were some of the respondents who were aware that cancer affects the cervix and that it is referred to as cervical cancer.

Risk and Preventive Factors about Cervical Cancer and Perceptions

The study also sought to establish if the respondents were aware of the risk factors that could lead to a woman acquiring cervical cancer. The findings showed that a majority of (22) of the women had no idea of the risk factors that could lead a woman to acquiring cervical cancer. Eleven said that many partners could lead to a woman acquiring cervical cancer; five said that family planning could lead to cervical cancer among women; one indicated smoking as a risk factor, while another one pointed out poor diet as a risk factor that could lead to cervical cancer.

Findings from FGDs also revealed that cervical cancer is caused by deep penetration during sexual intercourse, unsafe sex, having multiple partners, and poor eating habits.

One respondent was asked and responded as follows:

Interviewer: *Ni maundu ma umatumaamunduakwatwaniuwauusuwaKanzaya usyainthiniwamundumuka? (What are the risk factors that predispose one to have cervical cancer?)*

Respondent: *Kwiyiekeamuunduumeakaulikanthini vyu ivindayilayakwonanakiMwii. (Letting a man penetrate deep during sex)*

These findings imply that majority of the women; twenty-two in number had no knowledge on the risk factors that can cause cervical cancer while some had an idea on the risk factors. Eleven said that cervical cancer is caused by family planning, one said poor diet and one said it is caused by smoking.

Again, the study sought to reflect if the respondents knew how one could prevent or minimize the possibility of acquiring cervical cancer. The investigation revealed that as many as nineteen of the women had no idea on how one can prevent or minimize the possibility of acquiring cancer. On the other hand, thirteen of them indicated that one can prevent or minimize the chances of acquiring cervical cancer through regular check-ups. Five said one could cervical cancer through having one partner; three indicated observing proper hygiene of women. These findings imply that a majority of the illiterate women of Mbooni West Sub-county had no knowledge on the preventive measure one had to take to minimize or prevent cervical cancer acquisition.

Results from the FGDs revealed that some of the women knew that cervical cancer can be prevented through continuous screening. However, majority did not know. One of the women said,

One can avoid acquiring this disease by avoiding deep penetration during sexual intercourse or by having good diet with many fruits.

The study sought to know whether the respondents felt that enough had been done to educate rural women about cervical cancer. Twenty of the respondents said that enough had not been done to educate rural women about cervical cancer. However, nineteen were in agreement whereas one was not sure. The findings implied that many of the respondents were not in agreement as to whether enough had been done to educate the rural women about cervical cancer.

Respondents were further asked to give reasons for their responses with regards to whether they felt that enough had been done to educate rural women about cervical cancer.

Findings indicated most of illiterate women of Mbooni Sub-county, twenty in number felt enough had not been done to educate rural women about cervical cancer because many people had not been reached about cervical cancer, nine said not all rural women go to hospital and seven said that rural women need more education on cancer. However, some of the women, nineteen in number felt that enough had been done to educate rural women about cervical cancer because most of them avoid risk factors, eight said that they avoid contraceptives at, one said that education on cancer had been done through radio, six said women had been educated on the importance of screening and eleven said that many rural women were aware of cervical cancer.

Participants of FGDs were also asked whether they knew that enough had been done to educate rural women about cervical cancer. One said,

No. Many women have not been reached. Like us, we do not know how to prevent the disease. Also so many women have not been reached.

Another one said,

No. This is because not all women come to hospital. Others do not afford the radio to get educated. There is a lot of stigma.

One more respondent said,

Fair. This is because some people get tested only but are not educated about the disease. Therefore, more needs to be done.

Yet another woman said,

Enough has not been done, they have just fairly tried because we are only screened but not educated about cervical cancer. We are only taught about breast cancer when we go to hospitals. And therefore needs to be done. They at times just emphasize on HIV/Testing.

Still another woman said:

There is congestion at the screening clinics. They usually send a team once in a while and we are given only one or two days which is not sufficient for all of us to be tested; only a few women are tested. They should extend the duration for up to one week or even a month. Also some nurses demand for bribes as much as five hundred shillings.

These findings have demonstrated that some of the illiterate women in rural Kenya have been informed about cervical cancer while some have not been educated about cervical cancer.

Further, the research sought to study what the respondents thought should be done concerning educating rural women about cervical cancer. The findings revealed that a majority of twenty-nine of the respondents identified seminars as one way of educating rural women about cervical cancer. Further, five of the women identified barazas, four said regular check-ups, whereas two were not sure.

When asked what they thought should be done concerning educating rural women about cervical cancer, participants of FGDs highlighted the following: organizing for meetings, teach women in church, reach women even in market places, more education on cervical cancer, encourage women for screening, and when women visit clinics they should undergo mandatory testing. The findings imply that frequent seminars, barazas, and check-ups are the major ways of educating rural women in Kenya about cervical cancer.

Further the study sought to know the effort done by the illiterate women of Mbooni Sub-county to ensure they learn more about their personal health. Their responses showed that some of them, seventeen in number, were for check-ups, ten were for maintaining hygiene, five were for seminars, three were for radio health programs, one was for healthy eating, whereas four were not sure of the effort to be done.

Participants of FGDs also indicated that they had made the following efforts to ensure that they learned more about their health: visiting hospital when sick, observing diet, regular screening, and observing hygiene. The findings imply that some of the illiterate women of in Kenya have done general checkups and observed their hygiene to ensure that they learned more about their personal health.

The study also sought to establish what the government had done enough to ensure that women in Mbooni Sub-county were educated about cervical cancer. According to the findings, a majority of twenty-four of the respondents said that the government had tried to ensure that women in Mbooni west sub county are educated about cervical cancer, eight said the government is doing good five said the government's effort is poor, two said the government is doing very good, whereas one was not sure. All the participants of FGDs indicated that the government has fairly tried in terms of what it has done to ensure that women in Mbooni West Sub-county are educated about cervical cancer.

Effect Communication Strategies on Perceptions on Cervical Cancer

The third objective of this study was to determine how communication strategies had affected the perceptions of the women of Mbooni west to cervical cancer in terms of susceptibility, severity and benefits. Based on the information communicated to the respondents about cervical cancer, they were first asked to indicate how they considered themselves with regards to be susceptible to cervical cancer.

It was revealed that a majority of twenty-three of the women considered themselves somehow susceptible to cervical cancer, of which fourteen had indicated that they knew at least a preventive measure and eleven had indicated they knew at least a risk factor. Fourteen of them considered themselves highly susceptible of

which eight had indicated they knew at least a risk factors and seven knew at least a preventive factor. Two women indicated that they were not susceptible to cervical cancer at all and both were totally unaware of any risk and or preventive factor. One said she was less likely to be susceptible to cervical cancer and this participant had indicated she knew a risk factor but not preventive factor.

During FGDs, respondents were also asked to say who are at the risk of developing cervical cancer. From their responses, women who are sexually active are at more risk to acquire cervical cancer. One woman said thus:

Interviewer: *Ni aka*

mekumakwatawamumomunoniuwauuwakanzayawaowamwana?) Which women are more likely to acquire cervical cancer?

Respondent: *Aka alamonanaanaamuume moo muno* (It is women who are sexually active.

Interviewer: *Kuunikumaanishaata?* (What do you mean by that?)

Respondent: *Aka ala me wendimunenewakukomanaamuume* (Women who have great appetite for sex).

Interviewer: Do you mean within or without marriage.

Respondent: *Onanthiniwamutwaanonunduweeyiekeeamuunduume*

,nunuukuumisyananiwisi,

muiikaniuwamiakamiongoinaakanimethiawamayendaukumanaamuumemuno. (Even within marriage since if you let a man, he will penetrate deeply and hurt you and you know at my age above forty, that is the time women seem to have great appetite for sex. If one is not careful, she will acquire this disease.)

Another respondent, when asked responded thus:

Interviewer: Which women are more likely to acquire cervical cancer?

Respondent: *Aka alamokomanaamuume moo munonamatesiiaa ta kwithiwamenaanyanyaeingi ma kukomanamo kana kunywasikala*

(Generally all women who are sexually active are likely to get cervical cancer if they do not take preventive measures like avoiding having many sexual partners and smoking.)

Another respondent added,

Cervical cancer has no specific age of women who are at risk of acquiring it. However, women who have given birth more than thrice are at more risk than those who have not given birth or who have given birth to one or two children only.

These findings imply that most of the illiterate women of Mbooni West Sub-county considered themselves susceptible to cervical cancer thus the need for regular check-ups.

The study sought to know from the FGDs whether the respondents knew anybody in their area who had suffered or was suffering from cervical cancer. Respondents gave varied responses. One respondent was asked and responded as follows:

Interviewer: Have you witnessed a person who suffered from cervical cancer

Respondent: *Ii ninisimundumukaumweindiawaitenondoinditi kanzayawao.* (I only know of one person with breast cancer but not cervical cancer).

The majority of the participants in FGDs said that the case of cervical cancer was in most cases not disclosed. A total of four participants indicated that they knew at least one case of a woman who was suffering from cervical cancer. A total of four participants indicated that they did not know any victim of cervical cancer. One respondent said she knows one victim who finally died. One respondent had this to say:

“Uwauwakanzayauvuyamwananiuwaumuthuku.UkwataamunduUkethiandanee na. Kwangelekanioninisisikivetikimwekwituyutii Ki sivitali.

Yilanilaukyonakyaikivinyuvyu.” (“Cervical cancer is a very bad disease. It affects a person until one cannot talk. For example, I know one woman in our village that is currently in hospital because of cervical cancer. The last time I visited the woman, she was very weak”)

Further the respondents were asked their perception on whether cervical cancer causes serious consequences on their health based on the information communicated to them. Findings showed that a majority of twenty-three of the women said that cervical cancer could have serious consequences to their health of which eighteen had stated that they knew at least a risk factor and fourteen had stated that they knew at least a preventive measure. Thirteen indicated that the consequences were fair of which four had indicated they knew at least a risk factors and five said

that they knew at least a preventive factor. A few, four in number said cervical cancer was less likely to cause severe effects to their health of which none had said they knew preventive nor risk factors.

From the FGDs, all the participants agreed that they perceive cervical cancer as a disease that causes severe consequences in human health. One participant said,

Mundumukawinauwauuu no aemekusyaa” (“A victim of cervical cancer may not give birth.”)

These findings imply that most of the illiterate women of Mbooni West Sub-county perceive cervical cancer as a disease that has severe consequences to their health.

Further, the study sought to know how the women considered the benefits of adopting positive lifestyle to avoid risks and adopt preventive measures of cervical cancer. The study findings showed that some women, nineteen in number, considered the measures to be excellent of which thirteen had stated they knew at least a risk factor and fourteen knew at least a preventive measure. Eleven considered the measures as fair of which four said they knew at least a risk factor and two said that they knew at least a preventive factor. Nine considered the measures to be very good of which five said they knew at least a risk factor and three knew at least a preventive measure, while one considered the measures to be unnecessary in prevention of cervical cancer and that respondent knew neither any preventive nor a risk factor.

FGDs revealed that the participants perceived information about risk and preventive factors of cervical cancer of very high benefit because women escape cervical cancer and women remain productive in life.

One participant said, “It is very beneficial because you will escape the killer disease.”

These findings imply that majority of the women view the benefits of adopting positive lifestyle to avoid risks and adopting preventive measures as generally good.

Summary of Key Findings

A majority (24) of the respondents came to know about cervical cancer through use of radio, eight knew about cervical cancer through health officers/hospitals, five knew through church, while two knew through Barazas. Further, one of the women indicated that they knew about cervical cancer through friends while five did not respond. In addition, radio was generally rated as very good communication of communication about cervical cancer.

The majority (24) of the respondents stated that radio was well used as a verbal communication tool, eight said by face to face and then one said videos and seven gave no response. A majority (35) of the respondents were not sure of the non-verbal communication methods that were being used to communicate about cervical cancer. However, five agreed that facial expressions were used as methods of communication about cervical cancer.

Sixteen respondents were in agreement that doctors' and nurses' practical demonstrations were well utilized in delivering information about cervical cancer, two indicated that pictures were used, one said photographs, while one said videos were utilised.

The majority of the respondents, thirty-five in number, of the respondents had heard of the disease called cervical cancer, while few, five in number, indicated that they had not heard about the disease. Twelve of the respondents indicated that cervical cancer affects the cervix, twelve indicated that it affects the uterus, four said it affects the breast, while twelve had no idea on what part of the body cervical cancer affects.

Some of the respondents, (11) understood that women could acquire cervical cancer from sexually engaging with many partners, five said that family planning could lead to cervical cancer among women, one indicated smoking as a risk factor, while another one pointed out poor diet as a risk factor that could lead to cervical cancer. However, a majority of twenty-two indicated that they did not have an idea on the risk factors that could lead to cervical cancer among women.

Nineteen of the respondents had no idea on how one can prevent or minimize the possibility of acquiring cervical cancer. On the other hand, thirteen of them indicated that one can prevent or minimize the chances of acquiring cervical cancer through regular check-ups, five said through having one partner, while three indicated observing proper hygiene of women.

Some of the respondents (11) felt enough has been done to educate rural women about cervical cancer because most of them avoid risk factors; eight stated use of contraceptives, four said they receive education on cancer done through radio, six said that they had been educated on the importance of screening and eleven of the rural women said they were aware of cervical cancer. On the other hand, some of the respondents, seventeen in number, felt enough has not been done to educate rural women about cervical cancer because many people have not been reached about cervical cancer. It was discovered that not all rural women go to hospital as nine respondents indicated and seven respondents said that rural women need more education on cancer.

A majority (24) of the respondents said the government fairly responsible to ensure that women in Mbooni West sub-county are educated about cervical cancer, eight said the government is doing good five said the government's effort is negligible, two said the government is doing very good, whereas one was not sure on

what the government has done to ensure that women in Mbooni West Sub-county were educated about cervical cancer.

Twenty respondents considered themselves fairly susceptible to cervical cancer of which fourteen said they knew at least a preventive measure and twelve said they knew at least a cervical cancer risk factor. Fourteen considered themselves very much susceptible of which seven said they knew at least a preventive factor and eight knew at least a risk factor. Two indicated that they were not susceptible to cervical cancer at all and none of them knew any risk nor preventive factor. One said she was less susceptible but did not know risk nor preventive measures.

Twenty-three respondents agreed that cervical cancer's consequences to their health would be great where eighteen stated that they knew at least a risk factor and fourteen knew at least a preventive measure. Thirteen indicated that the consequences were bearable of which four said that they knew at least a risk factor and five said that they knew at least a preventive measure. A few, four in number, said cervical cancer was less likely to cause severe effects to their health and none of these women knew any preventive or a risk factor.

Nineteen respondents perceived taking measures to prevent cervical cancer as very important. Thirteen knew at least a risk factor and fourteen knew at least a preventive measure. Eleven considered the measures as fairly necessary of which four stated that they knew at least a risk factor and only two said they knew at least a preventive factor. Nine considered the measures to be good where five knew at least a risk factor and three knew at least a preventive factor. One considered the measures to be unnecessary in prevention of cervical cancer and she neither knew any risk nor preventive factor.

Summary

This chapter has addressed the analysis and presentation of data that was collected from the field. The chapter has given the interpretation of the findings based on the objectives of the study. Chapter five presents discussions, conclusions and recommendations of this study.

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CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter discusses the key findings based on the study's objectives and relevant literature review as provided in Chapters 3 and 4. The objectives of the study include to find out what communication strategies are used to educate illiterate women of Mbooni West sub-county aged 35-45 on cervical cancer, the extent to which they know about the risk and preventive factors about cervical cancer and how communication strategies have affected the perceptions of the women to cervical cancer in terms susceptibility, severity and benefits. The chapter also provides the conclusions, recommendations of the study, and areas for further research.

Discussion of Key Findings

Communication Strategies Used to Educate Women on Cervical Cancer

The communication strategies utilized in educating illiterate women in rural areas about cervical cancer would greatly influence their level of awareness. Communication strategies are the blue prints of how communication is relayed and exchanged between the sender and the receiver (Johns, 2015). Johns identified three types of communication strategies. According to this study's findings, nineteen of the respondents came to know about cervical cancer through use of radio, eight knew about cervical cancer through health officers/hospitals, five knew through church, two knew through barazas, while one knew through friends.

The study findings revealed that verbal communication was the widely used in communicating with women of Mbooni West about cervical cancer, with the radio being the major mode of communication. These study findings were in agreement with Nayab (2019) that oral communication involved use of radio, and face to face

among others. According to Johns (2015), the verbal communication strategy includes written and oral communication. Since this study focused on illiterate rural women, oral verbal communication was more applicable. Oral verbal communication includes the use of the phone, radio, and face to face.

Nonverbal strategy of communication which includes visual cues such as body language, facial expression, physical distance, and tone were sparsely used and in fact seemed unfamiliar to the participants. Only facial expressions were utilized as indicated by five women; thirty-five out of forty women had no idea. According to Nayab (2019), body language including facial expressions accounts for 55% of communication. Nonverbal communication conveys 65-70% of information in communication.

Visual communication strategy includes photographs, pictures and video or practical demonstrations (Johns, 2015). Visual communication strategies were fairly used in communicating to women of Mbooni West since only half of the women indicated that visual were used; the other half had no idea. This implies that the communication strategies used to inform illiterate women of Mbooni West about cervical cancer are wanting and need to be restructured.

In addition, Rocio and Cockly (2013) argued that communicating to a vulnerable group like illiterate women in rural areas is challenging, thus, the use of visuals would encourage the audience to trust the communicators and believe their messages, stimulating the participants' willingness to participate in decision-making concerning their health. This study also agrees with Omedo (2014) that radio is major strategy in communicating health matters. However, Omedo further recommended use of posters as an additional strategy to reinforce the radio and also use of road shows, a strategy not considered in this study. Barazas were identified as one of the

communication strategies used in communicating with illiterate women of Mbooni. Omedo's (2014) study discouraged use of gatherings since the gatherings had been abused by other organizations before and recommended use of Posters.

The findings of this study on use of radio as the main communication strategy to inform on health matters agrees with Prilutski (2010) that electronic media especially radio and others were responsible for the success of health programs in Ghana. The four Ghanaian health campaign that Prilutski investigated had all utilized radio as key communication strategy and this correlates to the findings of this study. This finding agrees with Prilutski's (2010) that interpersonal communication was a key to the success of health campaigns.

Knowledge of Cervical Cancer

Study findings revealed that a majority of thirty-five of the women had heard of the disease called cervical cancer, while a minority (5) indicated that they had not heard about the disease. This clearly shows that most of the illiterate women in rural Kenya have heard about a disease called cervical cancer. This therefore provides a better platform for communicators to use various strategies to educate the women on the risk factors as well as preventive measures. Further, the study revealed that most of the women, twelve in number, were aware that cancer affects the cervix, twelve were aware that it affects the uterus, while four were aware that it affects the breast. This implies that most of the rural women are much informed about cancer.

The findings also revealed that some of the women, eleven of the illiterate women felt that women could acquire cervical cancer from sexually engaging with many partners, five said that family planning could lead to cervical cancer among women, one indicated smoking as a risk factor, while another one pointed out poor diet as a risk factor that could lead to cervical cancer.

In support of these findings, Rosen and Rosen (2016) found that women need to be informed that smoking exposes people to many cancer causing chemicals which are absorbed through lungs and circulated throughout the body in the bloodstream. Rosen and Rosen further noted that it is necessary for women to know that tobacco by-products have been found in the cervical mucus of women smokers. These carcinogens damage the cervix cell's DNA and subsequent development of cervical cancer. In addition, Kimani (2012) explained that the carcinogens in the smoke of cigarettes and other smoked nicotine cause mutations in the DNA which affect the carcinoma cells of the cervix, causing cancer of the cervix.

Further, this study's findings are in agreement with Liu et al. (2015) that having many sexual partners is a risk factor that can cause cervical cancer. The findings in this research revealed that eleven women out of the forty respondents identified having more than one sexual partners as one of the risk factors of developing cervical cancer. According to Liu et al. (2015), studies have shown that there is a strong link between HPV infection and cervical cancer. Sexual behavior is the main risk factor of HPV infection more so among people with many sexual partners. This calls for proper communication strategies to help educate women about taking charge of their health and avoiding irresponsible sexual behavior that predisposes them to acquiring cervical cancer.

This study however contradicts Rosen and Rosen (2014) who found that women who have had three or more full-term pregnancies are at higher risk of developing cervical cancer since none of the respondents identified having multiple pregnancies of more than three children as a risk factor of cervical cancer. Hormonal changes during pregnancy are likely to make women more susceptible to HPV infection and subsequent cancer growth. According to Smith (2016), cervical cancer

is mainly caused by HPV, a sexually transmitted virus which is asymptomatic and without any clinical consequence.

When the infection is persistent, it increases the risk of dysplasia and subsequent progression to cervical cancer. Bruni (2015) stated that HPV can cause infection in the cervix but may not last long if the body immunity is able to fight it. The infection on the other hand can change cervix cells to pre-cancer cells. Many of these cells go back to their normal state, others do not and begin to progress to cervical cancer. If detected early, these can be treated; if not, they then turn to cervical cancer.

On preventive measures, a majority of nineteen of the respondents had no idea on how one can prevent or minimize the possibility of acquiring cancer. On the other hand, thirteen of them indicated that one can prevent or minimize the chances of acquiring cervical cancer through regular check-ups, five said through having one partner, while three indicated observing proper hygiene of women of Mbooni West aged 35-45 years.

The findings were also in agreement with MOPHS (2012) that Pap test screening is a preventive measure for cervical cancer as just as this study found out. Thirteen of the respondents indicated screening as a measure of prevention of cervical cancer. The plan explains that one can treat the early cervical cells changes otherwise known as dysplasia, as well as reducing the risk of abnormal cell changes, so as to minimize the risk of cervical cancer. Women should undergo a regular Pap test based on age and the recommendations that the doctor gives.

In addition, study done by Rosser et al (2014) indicated that lack of knowledge is a significant contributor to failure for uptake of cervical cancer screening services especially in low income setting. This calls for organizing of proper communication

strategies for women so that they may be able to perceive their susceptibility to cervical cancer, perceive the severity of the disease as well as the benefits of adopting a healthy lifestyle.

As a preventive measure, sexual partners should use condoms to prevent transmission of infections and especially the HPV virus that may lead to acquisition of cervical cancer (MOPHS, 2012). Women need to be informed that the cancer causing virus, since the findings indicated that more than half of the respondents had no idea of the risk factors. HPV can be transmitted and women should therefore take preventive measures and this requires a combination of communication strategies designed to effectively reach the target group, since a majority of women are unaware. Both the male and female condoms go a long way in insulating women against transmission of HPV and other related infections.

This study's findings did not identify having multiple pregnancies of over three children, as a risk factor and this contradicts Rosen and Rosen (2014). Rosen and Rosen stated that women who have had three or more full-term pregnancies are at higher risk of developing cervical cancer. Hormonal changes during pregnancy are likely to make women more susceptible to HPV infection and subsequent cancer growth. According to Smith (2016), cervical cancer is mainly caused by HPV, a sexually transmitted virus which is asymptomatic and without any clinical consequence. However, when the infection is persistent, it increases the risk of dysplasia and subsequent progression to

MOPHS (2012) noted that women should ensure that the number of their pregnancies does not exceed five because more than that number may make the cervix susceptible to developing dysplasia which can easily lead to cervical cancer. A reduction in immunity that comes with pregnancy can make a woman susceptible to

HPV infection and the more the exposure through multiple pregnancies the chances of acquiring cervical cancer. However, since matters of the number of pregnancies might be embedded in cultural values in communities, there is need for communicators of cervical cancer prevention be in collaboration with other health communicators like family planning communicators so as to come with proper communication strategies and enhance the messages.

Effect of Communication Strategies on Perceptions

From this study's findings, a majority of twenty-three of the illiterate women of Mbooni West Sub-county considered themselves fairly susceptible to cervical cancer, 14 respondents considered themselves very much susceptible, two indicated that they were not susceptible to cervical cancer at all, while one said she was less likely susceptible to cervical cancer. These findings are in agreement with Schiavo (2007) that how one would perceive health matters directly influence how much one knows and believes concerning that health issue, because a majority of the respondents perceived themselves susceptible to cervical cancer.

Further, 20 women agreed that cervical cancer's severity to their health was very much, thirteen indicated that the consequences were fair, while a few, four in number, said cervical cancer was less likely to cause severe effects to their health. As a result, the government and other stakeholders should educate women on preventive measures to ensure women are less susceptible to cervical cancer. However, this study established that only 16 women considered the measures control cervical cancer to be excellent. Some eleven considered the measures as fair, 9 considered the measures to be very good, while at one considered the measures to be unnecessary in prevention of cervical cancer.

In line with this study findings, Rosenstock (1960) found that effective communication strategies influence an individual in perceiving the seriousness of cervical cancer so as to adopt proper health behavior to avert infection. Rosenstock further noted that an individual may be able to see not only medical and clinical consequences but also broader and more complex implications such as effects on her job, family and social relations. For example, engaging in sexual acts with many partners without the use of condoms is known to lead to transmission of HPV, the cervical cancer-causing virus.

Having multiple sex partners can also cause HIV. The attitude and belief on perceived susceptibility to the disease due to such behavior will determine whether the individual will engage in the behavior or not. Communication strategies therefore seek to change individual's perception on susceptibility to cervical cancer, severity and benefits of behavior change so as to change attitude and obtain a positive lifestyle for better health.

According to Schmitz and Becker (2012), a well communicated message which is visually or aurally stimulating becomes salient in our sphere of perception and gets peoples' attention. People tend to embrace information that interests them because they tend to be attracted to stimuli that meet their needs (Schmitz & Becker, 2012). Likewise, if the information about cervical cancer is well communicated to illiterate of women in Kenya, the information will become salient in the women's sphere of perception about cervical cancer thus attracting their attention to take caution on their behaviour, actions, and preventive measures.

About illiterate and women's feelings on whether cervical cancer has severe consequences on their health, Rosenstock (1960) noted it demands attention and positive attention thus women would respond to information of prevention and risk

factors depending on how severe they consider the disease to their health. An individual, for this case illiterate woman, may not determine to adopt a certain health behavior unless the severe consequence of cervical cancer is salient to her and the health issue at hand has great consequences on her and her family.

In addition, Schiavo (2007) noted that if women are unaware of the intensity of cervical cancer as a life-threatening disease and how to prevent it, then they may not take the appropriate action. Schiavo further argued that the perception an individual holds concerning the effects the disease has on one's states of affairs, be that economic, social and otherwise, influence the health behavior of that individual. These are the difficulties illiterate women in rural Kenya undergo due to the severe consequences of cervical cancer to their health.

Last but not least, Kreps (2013) noted that the communication strategies utilized need to articulate the benefits that follow after embracing the suggested health behavior. In this case, the strategies employed in communication to illiterate women in rural Kenya about cervical cancer should seek to influence their perception that they will benefit. As a result, the communication strategies would accrue from adopting the actions recommended. A positive disposition by women would help to reduce the risk of the seriousness of cervical cancer morbidity. Embracing the messages being communicated would translate to a healthy lifestyle which results in the chance for the woman to live a longer life.

Conclusions

The study made the following conclusions:

- i. Treatment of cancer diseases has become one of the major challenges facing many countries, especially developing countries. One of the leading causes of

high mortality rate among women is cervical cancer. This was caused by high health illiteracy among women especially in rural areas.

- ii. A majority of the illiterate women in rural Kenya were generally susceptible to cervical cancer thus the high chances of severe consequences on their health.
- iii. Illiterate rural women aged 35 years and 45 can acquire cervical cancer through sexually engaging with many partners, family planning, smoking, and poor diet.
- iv. Women could prevent or minimize the possibility of acquiring cancer through regular check-ups, having one partner, and observing proper hygiene.
- v. Women got information on cervical cancer in terms of the risk factors, preventive measures, and effects on health reached illiterate and women in rural Kenya through various communications strategies including verbal, non-verbal, and visuals.
- vi. Verbal communication methods of educating women on cervical cancer included but not limited to radio, health officers in hospitals, churches, Barazas, friends, face to face, and videos.
- vii. Non-verbal communication methods include facial expressions, physical distance, tone and body language. Visual communication methods include use of doctors and nurses, pictures, photographs, and videos or practical demonstrations.
- viii. Most illiterate women of Mbooni Sub-county felt enough has not been done to educate rural women about cervical cancer because many people have not been reached about cervical cancer, not all rural women go to hospital, and that rural women need more education on cancer.

- ix. The majority of the illiterate women of Mbooni Sub-county stated that the government was fairly responsible to ensure that women in rural areas are educated about cervical cancer.
- x. Verbal communication strategies were the commonly used strategies yet non-verbal ones, which accounts for more than 50% of information and visual strategies were highly ignored. That led to low awareness level about risk and preventive factors among the illiterate women.

Recommendations

The study made the following recommendations:

- i. The government in collaboration with other stakeholders should come up with well-designed sensitization initiatives/programs aiming at educating illiterate rural women in Kenya about cervical cancer, the risk factors, and preventive measures.
- ii. The government of Kenya should be fully responsible in ensuring that rural illiterate women in Kenya take necessary steps or actions to know their status with regards to cancer especially cervical cancer.
- iii. When disseminating information about cervical cancer to illiterate rural women aged 35 years and above, the communicators should ensure that they integrate a variety of verbal, non-verbal and visual communication strategies in order to be effective and reach more people.
- iv. Due to severe consequences of cervical cancer on women's health, the government should take responsibility and ensure that it has done enough to educate rural women about cervical cancer.
- v. The women should be encouraged to avoid risk factors such as use of contraceptives, through education on cancer through radio since it reaches

most of the women in rural areas, and encourage women to go for screening and regular check-ups. Other communication strategies that would ensure illiterate and semi-literate women are education about cervical cancer include seminars and barazas. Thus, through various verbal, non-verbal, and visual communication strategies, illiterate women would be aware of cervical cancer, its risk factors, preventive measures, and its consequences to human health.

Areas for Further Research

This study concentrated in one administrative boundary, that is, Mbooni West Sub-county. Therefore, there is need for a further cross-sectional research covering a wider scope, that is, the whole of Kenya for wider and enhanced results and conclusions.

The study concentrated only on cervical cancer thus targeting only women in rural Kenya. It is therefore recommended that a further cross-section research should be conducted targeting the perception of both women and men. This will provide gender-balanced findings thus reliable and valid inferences and conclusions.

This study concerned itself in the first three elements of the HBM, i.e. perceived susceptibility, perceived severity and perceived benefits. Further research is recommended to cover the other three components of HBM which are: perceived barriers, cues to action and self-efficacy.

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APPENDICES

Appendix A: Interview Schedule

My name is Florence NthenyaKigen, a Master of Arts in Communication (Development Communications major) thesis student from Daystar University. I am conducting a research on the influence of communication strategies on the level of knowledge of cervical cancer among rural women who are of middle age, that is, between 35-45 years and have an education of Standard eight and below. The information obtained will be useful for better understanding of how your age group is knowledgeable about cervical cancer. This will enable the designing of a better intervention strategy on health issues among members of your age group by the Ministry of Health and health communicators. It will enable them to come up with appropriate policies on how to communicate better so as to improve the health of middle aged women in general. Your information will be treated with utmost confidentiality. You don't have to write your name.

Section A: Demographic data.

1. How old are you?
2. How many children do you have?
3. What kind of work do you do to earn your living?
4. If married how does your husband earn his living?

Section B: Knowledge of cervical cancer and attitude

- 5i. Have you heard of the disease called cervical cancer?

ii. Which part of the body does it affect?

6. What are the risk factors you know that may lead a woman to acquiring cervical cancer?

7. How can one prevent/ minimize possibility of acquiring cervical cancer?

Section C: Perceptions in terms of susceptibility, severity and benefits

8. Based on the information communicated to you about cervical cancer, how do you consider yourself susceptible to cervical cancer?

9. Based on the information communicated to you about cervical cancer, how do you perceive the disease to cause severe (serious) consequences on your health?

10. How do you consider the benefits of adopting positive lifestyle to avoid risks and adopt preventive measures of cervical cancer?

Section D: Communication strategies utilized

11. How did you come to know about cervical cancer?

12. What methods did they use to communicate to you about cervical cancer and how can you rate their way of communicating about the disease?

(i) Verbal (use of phones, face to face, radio or other strategies)

(ii) Nonverbal (By the communicators explaining about cervical cancer through use of gestures, facial expressions, physical distance through closely interacting with you, persuasive tone or any other)

(iii) Visuals (Through objects/ realia, photographs, video or practical demonstrations, doctors/ nurses and others)

13. Do you feel that enough has been done to educate rural women about cervical cancer?

ii. Why?

Section E: Conclusive Comments

14. What do you think should be done concerning educating rural women about cervical cancer?

15. What efforts have you done to ensure that you learn more about your personal health?

16. Do you think the government has done a lot to ensure that women in Mbooni West Sub-county are educated about cervical cancer? Comment on the effort demonstrated.

THANK YOU

Appendix B: Makulyo ma Kuneenania

Kwamasyitwanitawa Florence NthenyaKigen, nikaandikiliya Master's, Development Communication kuma Daystar University. Niendeenakwikaukunilikiliundu aka ma

muikawakatima kisomo o

kininikyaitheokitavitukakilasikyanyanyamakatikatiwamiaka 35-45,

mesiyiuluwaKanzayai vuyausyai. Uvoouwiithiwawivatayiuluwakuelewaundumivu

undilyeyakisomoyiuluwakanzayai vuyausyai itumite aka aa ma

muikauumethiwamesiyiuluwakanzayai vuyausyai. Yitethesyayiuluwakumanthanzianze

osyakumavikia aka aani

Ministryya Uimanakumanyamitalatalayaundu wakwailyauneenaniamuseokwaalameko

nanasyanauneenayausuna aka kwondu wakwailyaumimawa aka aa.

Ndukaandikeisyitwayakuateo o uyenda.

Kilungu A.: Utalo.

1. Wiukuuwamiakayianaata?

2. Winasyanasyianaata?

3. Ukunaawiamwau?

4. Muumewakunakeakunaawiamwau?

Section B: Umanyi na mawonyiuluwakanzayausyai

5.i. Niwisiuwauwakanzayausyai?

ii. Ikwataakilungu kiva kiyamwii?

6. Ni maundumaumatumaamunduakwatwaniuwauusu?

7. Munduatonyakwikaatakwisiiianianauwauusu?

Section C: Unduuneenaniauwinduaamawoni

8. Kwianananonduumanyiteyiuluwauwauusuwakanzayaivu,
wionawinamuisyowianaatayiuluwakukwatwaniuwauusu?

9. Kwianananaumanyiulaukwatite, nukwonauwauwakanzayaivuutonyakuetaumuisyomu
nenenthiniwauimawakuwakimwii?

10. Kwianananawoniwaku,
wionamauseoalamatonyakumanwanakuwinduamikalilenakuatiiavundisyowakusiiiaka
nzayausyai ta mailyaata?

Section D: Nziasyamauneenaniaiiasyatumikie

11. Wamanyieyiuluwakanzayaivukwisilanzianisyiku?

1. Ni, Nziasyivasyatumikiekuumanyithyayiuluwauwauwakanzayaivuyausyainau
tonyakuwetaatayiuluwasyo.

(i) Kuneena (kwakutumiasyindu tasimu, vitio, kuneenania, letionaingi)

(ii) kwanziaitesyakuneena (kwakutumiakuneenaniauthyukwauthyu, meko,
wasyanaingi)

(iii) Syindusyakwona (mavisa, visa, vitio, kwoniananamekonaingi)

13. Nukwonanikwikitweunduwanienikana aka mavundiw'eyiuluwakanzayausyai?

Niki?

14Wionaniwauwailitekwikwani kana aka

matonyekumanyithwayiuluwakanzayaivuyausyai?

Section E Mawoninakuminukilya

15. Ni wau we mwene wikitenikanautonyekwimanyisyayiuluwakanzayaivuyausyai?

16. Nukwonasilikalitayikitevitiiyaniekuvundisyaaka ma Mbooni West
yiuluwakanzayaivuyausyai?.

DAYSTAR UNIVERSITY

Appendix C: Focus Group Discussion Guide

My name is Florence NthenyaKigen, a Master of Arts in Communication (Development Communications major) thesis student from Daystar University. I am conducting a research on the influence of communication strategies on the awareness of cervical cancer among rural women who are of middle age, that is, between 35-45 years and have not attained the level of education above class eight. The information obtained will be useful for better understanding of how your age group is knowledgeable about cervical cancer. This will enable the designing of a better intervention strategy on health issues among members of your age group by the Ministry of Health and health communicators. It will enable them to come up with appropriate policies on how to communicate better so as to improve the health of middle aged women in general. Your information will be treated with utmost confidentiality. The discussion will take approximately 40 minutes. You are free to terminate your participation at whatever time you wish during the interview.

1. What is cervical cancer?
2. What part of the body does it affect?
3. What causes cervical cancer?
4. Who are at the risk of developing cervical cancer?

5. Do you know any person in your area who has suffered or is suffering from cervical cancer?

6. What are the risk factors that predispose one to have cervical cancer?

7. State some of the ways in which one can avoid/ minimize chances of contracting cervical cancer.

8. How have you come to know about cervical cancer?

9.i. Are there other ways you have learned about cervical cancer?

ii. Name them.

10. What do you like about each of these ways of learning about cervical cancer?

11. How has this teaching on cervical cancer made you to see yourself as being susceptible to the disease?

12. To what extent has this information communicated to you made you to perceive the disease as able to cause severe/ serious consequences in your health.

13. How has this information been able to make perceive the benefits of adopting healthy behavior of avoiding the risks and embracing the preventive measures?

14. Do you feel that enough has been done to educate rural women about cervical cancer?

ii. Why?

15. What do you think should be done concerning educating rural women about cervical cancer?

16. What efforts have you done to ensure that you learn more about your personal health?

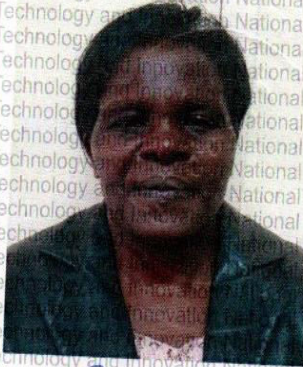
17. Do you think the government has done a lot to ensure that women in Mbooni West Sub-county are educated about cervical cancer? Comment on the effort demonstrated.

THANK YOU

Appendix D: Research Permit

THIS IS TO CERTIFY THAT:
MS. FLORENCE NTHENYA KIGEN
of DAYSTAR UNIVERSITY, 9-90100
Machakos, has been permitted to
conduct research in Makueni County
on the topic: HOW COMMUNICATION
STRATEGIES AFFECT THE LEVEL OF
KNOWLEDGE AND PERCEPTION OF
CERVICAL CANCER AMONG ILLITERATE
AND SEMI LITERATE WOMEN IN MBOONI
WEST SUB-COUNTY, KENYA
for the period ending:
30th October, 2019

Permit No : NACOSTI/P/18/14454/25804
Date Of Issue : 3rd November, 2018
Fee Received :Ksh 1000



[Signature]
Applicant's Signature

[Signature]
Director General
National Commission for Science,
Technology & Innovation

DAYSTAR

Appendix E: Ethical Clearance

DAYSTAR UNIVERSITY
Excellence • Transformation • Servant Leadership

Athi River Campus
P.O. Box 17 - 90145
Daystar University, Kenya
Tel: 045 6622601 (2) (3)
Fax: 045 6622420
Email: admissions@daystar.ac.ke

Nairobi Campus
P.O. Box 44400 - 00100,
Nairobi, Kenya
Tel: 020 2723 002 (3) (4)
Fax: 020 2728338
Email: admissions@daystar.ac.ke

www.daystar.ac.ke

Daystar University Ethics Review Board

Our Ref. DU-ERB/24/09/ 2018 /00176

Date: 24-09-2018

Florence N Kigen

Dear Florence,

HOW COMMUNICATION STRATEGIES AFFECT THE LEVEL OF KNOWLEDGE AND PERCEPTION OF CERVICAL CANCER AMONG ILLITERATE AND SEMI-ILLITERATE WOMEN IN MBOONI WEST SUB-COUNTY, KENYA

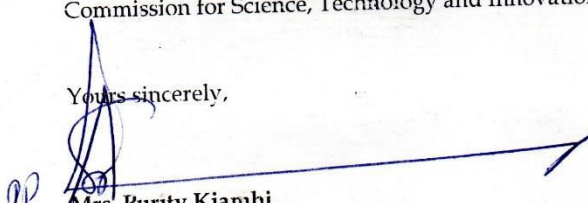
Reference is made to your request dated 05-09-2018 for ethical approval of your proposal by Daystar University Ethics Review Board.

We are pleased to inform you that ethical review has been done and approval granted. In line with the research projects policy, you will be required to submit a copy of the final research findings to the Board for records.

This approval is valid for a year from 24-09-2018

This approval does not exempt you from obtaining a research permit from the National Commission for Science, Technology and Innovation (NACOSTI).

Yours sincerely,


Mrs. Purity Kiambi,
Secretary, Daystar University Ethics Review Board

"...until the day dawn and the daystar arise in your hearts"
2 Peter 1.19 KJV

Appendix F: Anti-plagiarism Report

Proposal 2018			
ORIGINALITY REPORT			
5%	5%	3%	4%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
1	www.ajhsjournal.or.ke Internet Source		2%
2	Submitted to Daystar University Student Paper		<1%
3	iiste.org Internet Source		<1%
4	clinmedjournals.org Internet Source		<1%
5	Submitted to Mount Kenya University Student Paper		<1%
6	Submitted to Brunswick High School Student Paper		<1%
7	kemri.org Internet Source		<1%
8	Submitted to University of Wales Swansea Student Paper		<1%
9	Submitted to Chester College of Higher Education		<1%