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**Healthcare Provider -Patient Communication Techniques and Cervical Cancer Management
at Moi Teaching and Referral Hospital Cancer Center**

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Abstract

Purpose: The study examined the effect of communication techniques in healthcare provider-patient communication on management of cervical cancer among women seeking treatment at Chandaria Centre, Moi Teaching and Referral hospital in Kenya. The main objectives of the study was to examine the contribution of healthcare provider-patient communication on management of cervical cancer among women seeking treatment at Moi teaching and referral hospital cancer centre.

Methodology: The study was supported by the health belief model. A descriptive research design was used through a mixed method approach to generate and analyze data. Systematic random sampling was used to select 320 respondents in the study for quantitative data while purposive sampling was used to identify 10 respondents for qualitative data. Structured questionnaires and interviews were used to generate data for the proposed study. Quantitative analyses was done using statistical package for social sciences (SPSS) tool version 25. Qualitative data was analyzed thematically in line with study themes/objectives.

Findings: The study found out that communication techniques applied by health care provider and patients had significant effects on the uptake of cervical cancer management among women seeking treatment at Moi Teaching and Referral hospital cancer centre.

Unique Contribution to Theory, Practice and Policy: The study recommended that there is need for significant improvements in communication strategies used by those dealing with patients, especially those suffering from terminal illnesses since their communicative responses had a significant impact on how they respond to treatment and management. The study also recommended that healthcare providers need to be sensitive to cross-cultural communication so as to reduce the incidences of misinterpretation.

Keywords: *Communication, Healthcare, Cancer Prevention, Fear, Stigma, Gender, Culture*

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INTRODUCTION

Cervical cancer is ranked number four among the cancers most affecting women in the world. It is estimated that there were 604 000 new cases and 342 000 deaths in 2020 from this type of cancer. Around 90% of the new cases and deaths worldwide in 2020 occurred in low- and middle-income countries (Mekuria, Edosa, Endashaw, Bala, Chaka, Deriba & Tesfa, 2021). Globally, statistics indicate that cervical cancer is one of the most devastating health hazards afflicting most women (Donatus et al., 2019). The statistics by the World Health Organization (WHO) illustrate a grim reflection of cervical cancer which, has been ranked fourth globally in terms of incidence and mortality among women with approximately 570,000 cases being diagnosed with cervical cancer in the year 2018 alone (Bray, Ferlay, Soerjomataram, Siegel, Torre & Jemal, 2018). These numbers were equivalent to 6.6% of all new cancer cases among females.

In Kenya, cervical cancer is ranked second after breast cancer. On the same note, cervical cancer is ranked first in terms of mortality, with an estimated 5236 women being diagnosed with cervical cancer in 2021 alone. These statistics refer to reported cases alone, meaning that the number could be higher. More than half of these women die from cervical cancer annually (Kenya HPV and related cancers fact sheet 2021). The cancer incidence burden is expected to rise to over 85% in sub-Saharan Africa by 2030. This alarming trend underscores the need to develop preventive and treatment mechanisms to handle this volatile epidemic. According to a study done by Wambalaba, Son, Wambalaba, Nyong'o and Nyong'o (2019) the annual incidence of cancer in Kenya is about 28000 new cases with an annual mortality of 22000 cases, in which 78.5% of the victims do not survive. In Kenya alone, cancer is the third cause of death after infectious diseases and cardiovascular diseases.

Health communication, according to Allahverdipour (2020), is viewed as the art and science of informing, influencing, and motivating people, organizations and the public about health concerns. Under ideal situations, health communication adopts a participatory approach and may be facilitated through collaborative learning, particularly for the receivers (patients). Health communication aims at the empowerment of the client in the dialogue for mutual learning purposes (Arghittu, Dettori, Dempsey, Deiana, Angelini, Bechini & Castiglia, 2021).

According to Kuraleva (2017) good healthcare provider-patient communication improves patients' compliance and overall satisfaction. The communication aspects that are very important in the process of sharing information with the patient and likely to lead to uptake of cervical cancer management and treatment include communicative behaviour that helps the patient to change attitude, the language use that ensures that communication is retained and understood, the communication techniques that are both observable and felt and the need to analyze the barriers so that they can be curbed as early as possible. This is what informs the basis of the proposed study.

Statement of the Problem

Cervical cancer is a major global health challenge particularly impacting woman. Despite being a preventable and curable disease, cervical cancer remains a devastating health hazard for many women globally (Donatus et al., 2019). There is an estimated 604,000 new cases and 342,000 deaths worldwide, and approximately 90% of these cases occurring in low- and middle-income countries (Mekuria et al., 2021).

Cervical cancer ranks as one of the most common cancers in Kenya, alongside breast, prostate, esophageal, and colorectal cancers, and it is the leading cause of cancer deaths in the country. The national cervical cancer screening rates are also distressingly below 5% (DHI, 2020) indicating significant public health concern. Kenya is experiencing significant morbidity and mortality rates in cervical cancer and is a significant health concern, with an estimated 5,236 women diagnosed, 3,211 dying annually from the disease, highlighting the urgency to address management measures (HPV

Information Centre fact sheet, 2023). This figure is projected to increase by 2.5% annually by 2025 especially if adequate prevention, management measures, and awareness are not implemented.

The low uptake of cervical cancer screening in Kenya is a multifaceted issue, deeply rooted in limited health education, socioeconomic constraints, cultural barriers, and a general low perceived risk of the disease. Studies conducted by Ng'ang'a et al. (2018) pinpoint the late diagnosis of cervical cancer to these factors, emphasizing that a significant segment of the population remains uninformed or misinformed about the importance and availability of screening services. This situation is further complicated by fear, stigma, and gender-specific concerns (Nyambane, 2016), which act as formidable obstacles to seeking timely medical advice and intervention. These studies posit the need for targeted strategies to increase screening among vulnerable groups, specifically younger, uneducated women in rural areas, by addressing both high-risk and low-risk lifestyles through effective one on one communication from a person in authority like a healthcare provider.

Despite cervical cancer's preventability and treatability, late-stage diagnoses, low screening uptake, and insufficient management persist. Previous local studies highlight a critical gap in the role of interpersonal communication between healthcare providers and patients, suggesting that ineffective communication may hinder cervical cancer management efforts (Mekuria et al., 2021) highlighted the need for effective provider client communication to create awareness of the disease in order to prevent it. In their research Ng'ang'a et al. (2018) emphasized the lack of knowledge and awareness of cervical cancer management among women; while recently Jerop, (2020) emphasized the importance of good communication in communicating life-threatening conditions like cervical cancer.

These studies underscore the pivotal role of effective interpersonal communication, and more particularly the health care provider-patient communication in the management of cervical cancer, highlighting that quality communication from significant people can lead to improved health outcomes such as adherence to therapy and a reduction in medical mishaps (Sebastian et al., 2016; Kantanda, 2018). This means that interpersonal communication especially from a doctor to patients can help greatly in the uptake of management on life threatening diseases like cervical cancer. Despite its importance, challenges persist in public healthcare settings where interactions often lack continuity and depth, limiting the effectiveness of cervical cancer care (Jerop 2020). Wambalaba et al. (2019) has stressed that many healthcare providers, despite their training, lack essential communication skills, impacting patient satisfaction and engagement with management negatively. Furthermore, the literature identifies a gap in research on communication techniques and barriers specific to cervical cancer care in Kenya, with a call for studies focusing on communicative behavior and language use between healthcare providers and patients (Jiang, 2017; Makau-Barasa et al., 2017). This research therefore sought to examine how communication techniques in healthcare provider-patient communication affect management of cervical cancer among women seeking treatment at the cancer Centre, Moi Teaching and Referral hospital in Kenya.

Objectives of the Study

The objective of this study was to examine how communication techniques in healthcare provider-patient communication affect management of cervical cancer among women seeking treatment at the cancer centre Moi Teaching and Referral hospital in Kenya. The study was guided by the following hypothesis.

- **H₀:** Different communication techniques employed by healthcare providers do not significantly enhance patient response on management of cervical cancer among women seeking treatment at the cancer centre, Moi Teaching and Referral hospital in Kenya

LITERATURE REVIEW

The Health Belief Model

Based on the health Belief Model, people are influenced by their health-related states and, therefore, their actions and behaviour (Green, Murphy & Gryboski, 2020). In most cases, individuals will take action concerning their health when they perceive a threat or risk to their well-being (Wong et al., 2020). However, the action is only affected when the benefit far outweighs the risk or threat. Usually, the risk or threat can either be real or perceived. An individual's perceived susceptibility is the person's belief that they are at risk or on the verge of the disease or anticipated negative health outcome. Under normal circumstances, the individual will take action when he/ she believes to be at risk (Sulat, Prabandari, Sanusi, Hapsari & Santoso, 2018). On the contrary, when individuals know that they are not exposed to potential risks or are at low risk, they will tend to avoid taking action and act in ways that do not promote their health and well-being.

Based on the propositions from the HBM, it can be summarized that the patient's readiness to take action is based on the following elements. First is the susceptibility of the client to health risks. When an individual perceives that they are threatened by health risk, they are likely to take action. Secondly is the seriousness of the threat caused by the health-related problem (Jose and Manuel, 2020). The more seriousness posed by the perceived health risk, the greater the chances of taking action.

Thirdly is the comparison made by the patient concerning the benefits versus the costs or barriers posed by the health challenge (Green et al., 2020). The patient is likely to make choices that align with to avoid the high costs or risks associated with the health problem, while on the other hand, not taking action where the problem is, is perceived to be of lesser risk or consequence (Wong et al., 2021). From the assessment made concerning the elements evaluated in the decision point by the client, it is clear that the severity of the risk is pure as a result of the severity of the medical condition.

As noted by Guilford, McKinley & Turner (2017), an assessment of severity is mostly associated with related consequences such as death, disability and personal belief concerning the condition or the disease and how it affects life. On the other hand, perceived severity can also be influenced by one's responsibilities and personal factors, such as being self-employed or single parenting (Costa, 2020). Therefore, the perception that action will lead to results that are beneficial makes an individual take action (Carico et al., 2020). An important attribute of the decision-making process is the individuals' perceived barriers as the key determinants of behaviour change (Wong, Wong, Huang, Cheung, Law, Chong & Chan, 2020). These consist of an individual's perspectives of the obstacles in the way of behaviour change. The barriers may be tangible or intangible and may involve financial and other resource inputs. On the other hand, intangible barriers. Normally, the cue for action is related to an individual's self-efficacy, events, people or things that trigger an individual to change their behaviour.

Huang Dai and Tsu (2020) note that there are a number of environmental factors that may serve to trigger an individual to change. In this study, the assumption is that the medical care providers have an influence on the actions taken by patients and clients attending the cancer prevention and screening plans. Cues such as posters, social media postings, Short Message Services (SMS), and educational forums, among others, have the potential to influence the clients' perceptions. The other category of cues relates to the internal health state of an individual, such as the felt pain, discomfort, fatigue or related condition that causes one to behave in a certain manner (Sulat et al., 2018).

An individual's level of self-efficacy will most often dictate the level of behaviour change achieved. When an individual perceives that the benefit is positive and yet lacks the ability to make the necessary change is unlikely to change their behaviour (Lau, Khosrawipour, Kocbach, Mikolajczyk, Schubert, Bania & Khosrawipour, 2020). Therefore, self-doubt has a significant influence on one's ability to

effect and overcome the barriers or obstacles to behaviour change.

The Health Belief Model, initially developed by Rosenstock in 1960, as cited in Kreps (2013) was therefore relevant to this study. The theory was initially focused on explaining the reluctance among individuals to participate in health-related programmes geared towards the diagnosis and prevention of prevalent diseases. Based on the initial findings, it was noted that those in the upper social and economic class, the young, and those highly educated have a positive response to health-related campaigns with the flexibility to adopt recommendations.

The assumption for this model is that for change to be effected. It is important that individuals involved are aware of the severity of the risk or condition that is threatening their lives. Therefore, an individual is not likely to take healthy actions unless he/she believes that the threat exists, with significant consequences. The action by the individual is informed by the desire to reduce the intensity of the threat. The rationale for choosing this model is based on the chosen study population and the objectives of the study (Green et al., 2020). The concern and need for increasing uptake of cancer prevention necessitate studies on behaviour modification. The model will be used to examine the individual processes through communication techniques and their responsiveness to behaviour modification (Costa, 2020). Additionally, considering that the interview sessions will focus on individuals, the model is appropriate in assessing how the health practitioners individually make decisions about cancer diagnosis and prevention while conversing with their clients.

In summary, the HBM provides a guide to this study considering that some of the elements in the model were adopted for this study. In this research, the intention is to evaluate the communication and techniques adopted in order to determine their influence on the uptake of cervical cancer management among women attending MTRH cancer center.

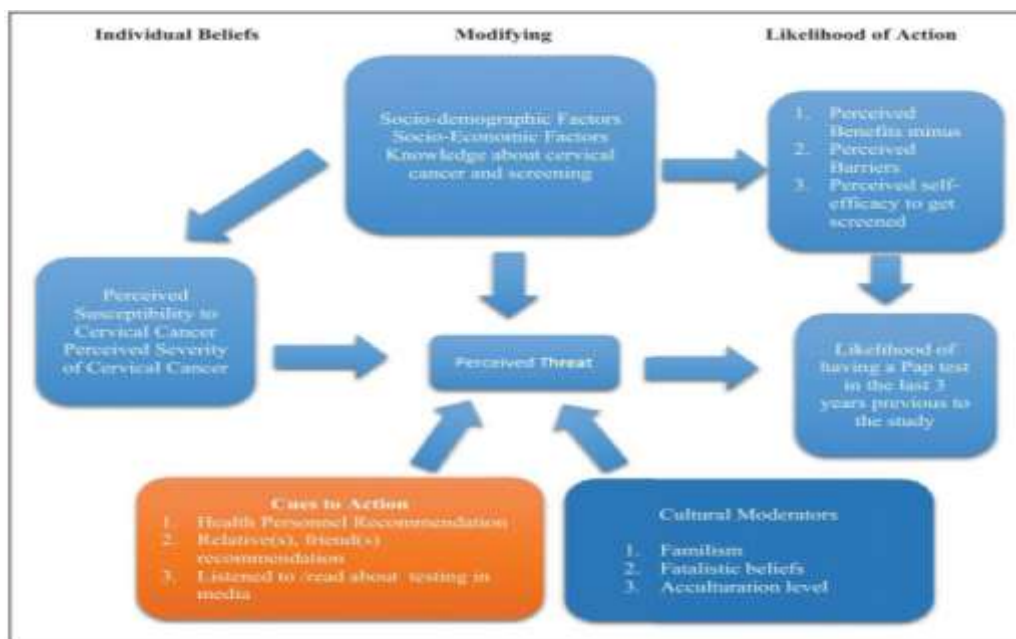
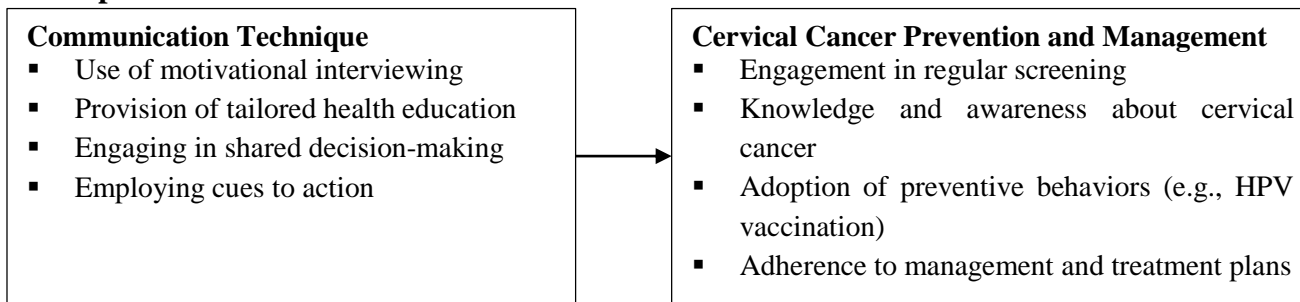


Figure 1: Health Belief Model

Adopted from A modified health belief model: Cues to cervical cancer screening. Source. Reproduced and the modified from Janz, Champion, and Strecher (2002)

Conceptual Framework



Independent Variables

Dependent Variable

Figure 1: Conceptual Framework

Review of Variables

Communication Techniques

The communication techniques utilized at the screening, prevention and treatment vary widely based on several factors. First and foremost is level of awareness among women and their level of education (Johns, 2015). Communication techniques provide the blueprint of how communication is relayed and shared between the sender and the receiver (Johns, 2015). A communication technique may also be viewed as a plan meant to achieve communication objectives (Spacey, 2015). In her findings, Spacey notes that communication techniques have four components; first is the goal that communication is to achieve the intentions of the program. Second, a communication technique has a target audience involving all the identifiable participants in the study. The third component relates to the communication plan. This provides an outline of how communication techniques will be achieved. The communication plan may entail a schedule of responsibilities. Lastly, communication includes channels that represent the physical medium used to convey information signals. As noted by Spacey (2015), there are three forms of communication techniques which have also been adapted for this study.

Motivational interviewing (MI) is a counselling method that involves enhancing a patient's motivation to change by means of four guiding principles, represented by the acronym RULE: Resist the righting reflex; Understand the patient's own motivations; Listen with empathy; and Empower the patient. Motivational interviewing establishes a supportive relationship between the therapist and the client with the goal of helping the client develop a positive attitude towards change. In this way, the client feels empowered to take positive actions in addressing their addiction.

MI has four fundamental processes. These processes describe the “flow” of the conversation although we may move back and forth among processes as needed: Engaging: This is the foundation of MI. The goal is to establish a productive working relationship through careful listening to understand and accurately reflect the person’s experience and perspective while affirming strengths and supporting autonomy. Focusing: In this process an agenda is negotiated that draws on both the client and practitioner expertise to agree on a shared purpose, which gives the clinician permission to move into a directional conversation about change. Evoking: In this process the clinician gently explores and helps the person to build their own “why” of change through eliciting the client’s ideas and motivations. Ambivalence is normalized, explored without judgement and, as a result, may be resolved. This process requires skillful attention to the person’s talk about change. Planning: Planning explores the “how” of change where the MI practitioner supports the person to consolidate commitment to change and develop a plan based on the person’s own insights and expertise. This process is optional and may not be required, but if it is the timing and readiness of the client for

planning is important.

In 1998, the World Health Organization described therapeutic patient education (TPE) as ‘educational activities essential to the management of pathological conditions, managed by healthcare providers (HCPs), duly trained in the education of patients and designed to help a patient (or a group of patients and their families) to manage their treatment and prevent avoidable complications, while keeping or improving their quality of life’ (WHO, 2018). TPE covers organized activities, including psychosocial support, designed to make patients fully aware of their disease and to inform them about care, hospital organization and procedures as well as health- and disease-related behaviours (Haute Autorité de Santé (HAS), (2017). TPE can be a way to cope with change in self-identity and to plan, pace and prioritize (van Dongen et al., 2020). The patients’ reflexivity is emphasized to define their own goals and action plans. It also aims to develop self-knowledge and critical thinking skills that contribute to the ability to make choices and to exist in a social environment (Castellà-Creus et al., 2019).

Tailoring refers to any of a number of methods for creating communications individualized for their receivers, with the expectation that this individualization will lead to larger intended effects of these communications’ Hawkins et al., (2008). For Hawkins et al., health communications can be segmented into three levels: mass communication (standardized content), targeted communication (constitution of homogeneous groups to deliver an adapted content) and tailored communication (individually tailored intervention with an adapted content to individual needs). According to Petty and Cacioppo’s (2018) Elaboration Likelihood Model of Persuasion, people will more carefully consider the elements of a message and thoughtfully process information if they perceive it to be personally relevant.

The principles of using tailored communication states that by tailoring content, superfluous information is eliminated. People pay more attention to information that they perceive to be personally relevant, and this information process is more likely to have an effect. Information that addresses the unique needs of a person will be useful in helping them become and stay motivated and will promote desired life-style changes (Hyland-Wood et al., 2021). Comprehension is expected to improve, and exchanges on the content and changes in behaviours and attitudes will be enhanced. Communication between patients and HCPs is the basis for any individualization process in TPE interventions. Thus, tailoring requires effective efficient communication behaviour. Research on medical communication helps in understanding the complexity of clinical situations in which physicians understand the individual characteristics and the emotional, cognitive and behavioral responses of the patient to respond appropriately (Rat et al., 2018; Stewart et al., 2024).

Patient-centered care, patient engagement, and shared decision-making (SDM) are increasingly referenced terms in medical literature and lay health care discussions. It highlighted patient-centeredness as one of 6 aims for improving high-quality health care delivery, where patient-centered care is respectful and responsive to individual preferences, needs, and values and patient values guide clinical decisions (Gupta, 2023). SDM is now described as “the pinnacle of patient-centered care” (Liu et al., 2024). SDM reflects collaboration between patients and physicians, which considers patients’ values and preferences alongside evidence to make the best decisions. Patient engagement describes meaningful patient involvement in different aspects of care including research, guideline development, and clinical encounters.

At the base of the shared decision-making (SDM) model, there is respect for the principle of individual self-determination (Ryan & Deci, 2000) as a desirable goal for patients, and professionals should strive to achieve this goal. In this model, patients and healthcare professionals (physicians, nurses, etc.) make decisions together, using the best available evidence (Elwyn et al., 2010). Patients are encouraged to think about their clinical exams, available treatments, choice of options, and the benefits or downsides of every choice in order to communicate their preferences and help healthcare professionals in the

decision-making process. The SDM model respects patients' autonomy and promotes their participation by building good relationships and respecting both individual competence and interdependence on others (Elwyn et al., 2012). These ethical principles extend the concept of informed consent as something that goes beyond the mere transfer of information but includes respect for informed preferences (King & Moulton, 2006).

A cue, whether verbal or nonverbal, is always an indirect signal that a patient uses to try to alert the doctor to a question or concern. Its value, however, lies in the doctor's analysis of the cue (Prins et al., 2023). An estimated 85% of diagnoses in general medicine can be made from analysis of the symptoms (Lussier & Richard, 2009). Therefore, careful listening is an essential skill for FPs to master. During a consultation, there are often numerous cues from patients that indicate they have more to say than what has been said outright, but time constraints prevent doctors from exploring them all.

Follow-up is the act of contacting a patient or caregiver at a later, specified date to check on the patient's progress since her last appointment. Appropriate follow up can help you to identify misunderstandings and answer questions or make further assessments and adjust treatments (Naik & Biradar, 2021). As medical reimbursement is more closely tied to quality and outcomes, patient follow-up is essential and must not be overlooked. Follow-up is a vital part of ongoing patient safety. It allows for subsequent investigations to be checked and acted upon, encourages specialist review of patients, and ensures that patients with chronic conditions receive the appropriate secondary care input (Wimble & Yeong, 2012). Follow-up care involves regular medical checkups, which may include a physical exam, blood tests, and imaging tests. Follow-up care checks for health problems that may occur months or years after treatment ends, including the development of other types of cancer. Follow-up care is given after positive screening test results, such as a positive Pap test result. In cancer patients, one purpose of follow-up care is checking to see if the cancer has come back or has spread to other parts of the body (Filetti et al., 2020).

Uptake of Cervical Cancer Management

The uptake of cervical cancer prevention and treatment is described as the adoption or usage of strategies and plans to prevent cervical cancer. The early detection of cancer through in-depth screening is an important component of reducing cervical cancer spread and mortality (Young & Robb, 2021). Screening for cervical cancer, which is an established program worldwide, helps to look for pre-cancers or cell variations on the cervix that may become cervical cancer if not treated properly (Mukama et al., 2017). Screening tests that include HPV tests, enable the healthcare provider to look for the human papillomavirus that causes, cell variations or changes. The uptake of cervical cancer screening is low owing to a lack of awareness, cultural beliefs and negative perception towards cancer (Fentie, Tadesse, & Gebretekle, 2020).

The recommended frequency for health screenings (as well as what kind of screenings one needs) depends on your age, gender, lifestyle, and medical background. For example, the older you get, the more one is at risk of certain types of cancer, so you should be screened at least once a year. However, the key to making actual wellness screenings more effective is consistency. It also helps remove the trepidation some people feel; when everything is out in the open, there's less to worry about (Elyoussfi, 2021). This process, when done consistently, also improves engagement. When a provider is seen as an expensive, uncomfortable necessity, patients are less likely to make an appointment. Likewise, when patients are less hesitant to make appointments, they don't get the care they need — and can even face preventable illnesses. Regular screenings make it easier to determine when more in-depth tests are necessary or lifestyle changes are needed, ideally long before a problem becomes acute (Woof, Ruane, French, Ulph, Qureshi, Khan & Donnelly, 2020).

HPV vaccination works extremely well. HPV vaccine has the potential to prevent more than 90% of HPV-attributable cancers. Since HPV vaccination was first recommended in 2006, infections with HPV types that cause most HPV cancers and genital warts have dropped 88% among teen girls and 81% among young adult women. The HPV vaccine is 97 percent effective in preventing cervical cancer and cell changes that could lead to cancer. Plus, it's almost 100 percent effective in preventing external genital warts (Woof et al., 2020).

Hou (2021) carried out a study focusing on healthcare provider-patient cancer screening communication in China. The study's main object was to ascertain the essence of caregiver experiences and the history of family on doctor-patient screening among Chinese adults attending churches. A cross-sectional study was espoused in this study. A sample of 372 Chinese adults was involved in the study. When gathering data from sampled Chinese adults, questionnaires were used (Hou, 2021). The findings exhibited that healthcare provider-patient communication programs or techniques were reliant on marital factors, age, history of a family seeking medical aid, and experience of the primary caregiver. In the study, it was found that language and cultural issues, especially among Chinese immigrants, posed challenges to effective healthcare provider-patient communications techniques (Hou, 2021).

In another study conducted by Cao et al. (2017) in China, doctor communication was the central issue in respect of the disclosure of information to cancer patients. The rationale of the study was to establish the association between early cancer disclosure communication with doctors, hope and trust in doctors, and patients suffering from cancer in China. A survey of 192 cancer patients was done (Cao et al., 2017). The study found that the techniques that doctors used to divulge information to cancer patients were pegged on emotional support from family and doctors themselves during the diagnosis stage. The foregoing influenced the doctors' provision of multiple treatment options and discussions on the effects of each treatment option with patients (Cao et al., 2017).

Moji et al. (2020) undertook a study addressing doctor-patient communication in Nigeria. The rationale of the study was to examine the patient-doctor communication results among patients in Enugu and Ebonyi states. The study was particularly concerned with patients in 2 national tertiary hospitals in the two states. Data were obtained from 300 patients using a structured questionnaire. The findings revealed that doctors used an authoritative communication style with minimal patient involvement, which led to patient dissatisfaction (Mgboji et al., 2020). Further, doctors espoused a paternalistic approach to communicating with their patients. The study concluded that communicative behaviour and style affected the level of patient satisfaction. The study recommended a patient-centered communication style in addressing patient concerns (Mgboji et al., 2020).

In Mali, Hurley et al. (2017) delved into patient-provider communication styles in Bamako. The main objective was to examine the patient-provider communication styles among healthcare providers. A survey involving 69 patients and 17 healthcare providers was done. In-depth interviews and focus group discussions were used to collect data. In the study, it was established that the manner or style in which doctors disseminate information or react to emotions affected patient adherence relating to chronic care (Hurley et al., 2017). Further, in the study, it was determined that communication techniques or communicating in ways that involved patient stigmatization, scolding, or belittling hampered effective care dissemination in healthcare facilities. The study emphasized improvement of patient-provider communication skills to enhance health services delivery (Hurley et al., 2017).

Otachi (2010) carried out a study touching on doctor-patient communication in Kenya. The study's main aim was to find out the elements that influence the doctor-patient interaction at Nairobi Women's Hospital. The female survivors of gender-based violence were targeted. Data was collected through observation and interviews. It was found that doctors used negotiation in doctor-patient communication while interacting with patients regarding treatment plans (Otachi, 2010). In some

cases, doctors would not negotiate but rush clients through procedures or give them cards. Negotiation strategy was observed to be a key tool for doctors while interacting with patients. A study done by Ochuodho (2011) assessed the doctor-patient communication at Meridian Medical Clinic in Nairobi, Kenya. The major goal was to examine the factors, barriers and ways to enhance doctor-patient communication. The study used qualitative and quantitative techniques to gather data from 200 selected patients. Questionnaires and in-depth interviews aided in sourcing data from the selected patients (Ochuodho, 2011). In this study, it was noted that the use of interactive techniques in doctor-patient communication was commonly used to enhance self-disclosure, seek information or create trust or relational closeness with patients. Further, by using an interactive strategy proxied by active questioning, self-disclosure, and verbal and non-verbal communication, the efficacy of honest explanations of diagnosis and compliance with recommended treatment procedures is achieved (Ochuodho, 2011).

METHODOLOGY

This study adopted descriptive research design. This study employed a pragmatic research philosophy. The study was conducted at Chandaria Centre at MTRH located in Eldoret Uasin Gishu County in Kenya. According to the Ministry of health data on hospital infrastructure in Kenya, the facility provides outpatient, inpatient, and specialized healthcare to a wide population. According to an MTRH operational manual of 2022, on average, 150 cervical cancer patients visited the facility per day and were referred to the trained healthcare providers within the service access sites licensed to provide cancer diagnosis and treatment Chandaria cancer center. The target population for this study was therefore comprising of all healthcare providers attending to and all the 4500 treatment and prevention services at MTRH who are aged between 18 and 65 years per month (MTRH Health Information Records, 2020). The number of women targeted was arrived at based on the assumption that data was to be collected within one month, while the age interval assumed that the women are sexually active and susceptible to cervical cancer infection through the HPV virus. The sampling frame was obtained from a list of healthcare providers and from women seeking treatment services at MTRH within the month of the study. The study adopted a two-stage sampling design. For quantitative data the sample was acquired using systematic random sampling. For qualitative data the study obtained data from the 10 healthcare providers who in this case were selected purposively.

The study used structured questionnaires and interview schedules Mugenda and Mugenda (2009) assert that questionnaires are deemed to be the most suitable tools for collecting data from literate and geographically dispersed respondents. The choice of this instrument was influenced by the nature of the data to be obtained, the sensitivity of data, and the time available, as guided by the research objectives. The questionnaire included objects measured on a 5-point Likert scale involving the research constructs.

The researcher comprehended, synthesized, and theorized to determine the correlation of data and then made sense of that data by reading to get used to the significant statements that pertain to the experience under investigation. For quantitative data analysis, the collected filled questionnaires were verified to ensure that non-responses associated with incomplete questionnaires and responses that do not tally with study objectives were effectively cleared. The verification reduced outliers which would otherwise compromise the study results. The analysis was facilitated by the use of the Statistical Package for Social Sciences (SPSS) tool version 25 for windows. Specifically, descriptive, and inferential statistics were used in the analysis. Descriptive statistics included measures of distribution (frequencies and percentages), measures of central tendencies (means), measures of dispersion (standard deviations) and Pearson correlations. Inferential statistics included multivariate analysis.

Qualitative data was analyzed thematically by reading through a data set (such as transcripts from in-

depth interviews or focus groups) and identifying patterns in meaning across the data to derive themes is what it entails. Thematic analysis is an active process of reflexivity in which the researcher's personal experience is central to deriving meaning from data. Thematic analysis is an adaptable method of qualitative analysis that allows researchers to derive new insights and concepts from data. This means that the researcher organized the feedback into themes that were analyzed.

RESULTS AND DISCUSSIONS

Descriptive Statistics

This section presents the results of the descriptive statistical analyses of the data and their interpretations. The descriptive statistics helped to develop the basic features of the study and form the basis of virtually every quantitative analysis of the data. The results were presented in terms of the study objectives.

Communication Techniques

The purpose of the study was to examine how communication techniques in healthcare provider-patient communication affect the uptake of cervical cancer management among women seeking treatment at Moi Teaching and Referral Hospital cancer center in Kenya. This variable was described in terms of; Use of motivational interviewing, Provision of tailored health education, Engaging in shared decision-making, and employing cues to action (reminders, follow-ups). A five-point Likert scale was used to rate responses of this variable and it ranged from; 1 = strongly disagree to 5 = strongly agree and was analyzed on the basis of the mean score and standard deviation. The closer the mean score on each item was to 5, the more the agreement concerning the statement. A score around 2.5 would indicate uncertainty while scores significantly below 2.5 would suggest disagreement regarding the statement posed. The findings are presented in Table 1.

Table 1: Communication Techniques

V3	SD F(%)	D F(%)	UD F(%)	A F(%)	SA F(%)	Mean	Std. Dev
Healthcare providers use a variety of methods to explain cervical cancer prevention (e.g., verbal, visual aids).	240(92.5)	19(7.5)	0(0)	0(0)	0(0)	1.08	0.265
Follow-up questions are often used to ensure I understand information about cervical cancer.	3(1.3)	213(82.5)	0(0)	0(0)	42(16.3)	1.48	1.179
I receive consistent information about cervical cancer from different healthcare providers.	23(8.8)	233(90)	0(0)	0(0)	3(1.3)	1.95	0.447
Demonstrations (e.g., models, diagrams) are used to explain cervical cancer and its prevention.	26(10)	19(7.5)	6(2.5)	191(73.8)	16(6.3)	3.59	1.064
Healthcare providers tailor their communication techniques to my level of understanding.	217(83.8)	29(11.3)	0(0)	13(5)	0(0)	1.26	0.707
Feedback is sought from me to gauge my understanding of cervical cancer prevention.	204(78.8)	36(13.8)	0(0)	19(7.5)	0(0)	1.36	0.83
The pace of communication about cervical cancer is appropriate for my comprehension.	243(93.8)	16(6.3)	0(0)	0(0)	0(0)	1.06	0.244
I feel involved in the decision-making process regarding cervical cancer prevention strategies.	236(91.3)	13(5)	0(0)	0(0)	10(3.8)	1.2	0.786
Overall Mean and Standard deviation						2.0	0.7

In examining the communication techniques used by healthcare providers at the Chandaria cancer center MTRH, the descriptive statistics in Table 1 revealed a significant discrepancy between expected and actual practices. The overall mean score of 2.0 (SD = 0.7) across various communication behaviors points to a general dissatisfaction among patients. For instance, respondents generally disagreed that healthcare providers use a variety of methods to explain cervical cancer prevention (e.g., verbal, visual aids) (M = 1.08, SD = 0.265). However, there were indications that follow-up questions were not often used by the healthcare providers to ensure the patients understand information about cervical cancer (M = 1.48, SD = 1.46). Most patients, however, indicated that they rarely received consistent information about cervical cancer from different healthcare providers (M = 1.95, SD = 0.447). There were indications that healthcare providers used demonstrations (e.g., models, diagrams) to explain cervical cancer and its prevention (M = 3.59, SD = 1.064). These findings suggest that healthcare providers were inconsistent in their communication techniques with the cervical patients.

Patients raised issues with lack of tailored communication techniques to their level of understanding (M = 1.26, SD = 0.707). Most patients disagreed that feedback is sought from me to gauge my

understanding of cervical cancer prevention ($M = 1.36$, $SD = 0.83$). There was also a general feeling that the pace of communication about cervical cancer was not appropriate for my comprehension ($M = 1.06$, $SD = 0.244$). Most patients also felt excluded in the decision-making process regarding cervical cancer prevention strategies ($M = 1.2$, $SD = 0.786$). These findings suggest a potential breach in the fundamental principles of effective healthcare communication, as theorized by the Social Exchange Theory (Cropanzano & Mitchell, 2005), which posits that positive interactions are essential for reciprocal relationships.

The current state of communication techniques aligns poorly with the ideals of mutual benefit and trust that facilitate the uptake of health interventions, such as cervical cancer management, as patients might perceive a lack of engagement and support from their healthcare providers. This disconnect is further supported by extant literature that underscores the importance of non-verbal cues and provider attentiveness in fostering a conducive environment for patient education and participation in healthcare decisions (Cao, et al., 2017; Hou, 2021). The present study's findings resonate with these scholarly works, underscoring the need for enhanced communication techniques that prioritize patient engagement, aligning with the study's objectives and supporting the theoretical underpinnings that advocate effective exchange as a catalyst for healthcare uptake (Holmes, 1981; Johns, 2015).

The descriptive analysis for "Communication Techniques" showed a mean of 2.0 and a standard deviation of 0.7, indicating a moderate level of satisfaction with current communication practices. This ties back to the TCA themes, where the majority of healthcare providers recognize the utility of educational materials and the importance of rapport building (e.g., greeting patients) to enhance communication. However, constraints such as time limitations and lack of resources for visual aids (as indicated by the variation in responses to the use of visual aids) suggest that while the intent for effective communication is there, practical implementation is not always optimal.

The patients also indicated that feedback was not sought from them to gauge their understanding of cervical cancer prevention (mean = 1.36). Therefore, it is evident that there was lack of responsive feedback in the HCPs – patients' interaction. Buser et al., (2018) explains that patient feedback is not only a way to measure patient satisfaction, but also a way to improve patient care and outcomes. By collecting and analyzing patient feedback, doctors can gain valuable insights into the patient's needs, preferences, expectations, and experiences of medical care. Patient feedback is the process of collecting and analyzing the opinions and experiences of patients regarding their medical care. It can help doctors understand patients' needs, preferences, expectations, and satisfaction levels. It can also help doctors improve their communication skills, clinical decision-making, empathy, and professionalism. Ultimately, patient feedback can lead to better patient outcomes, such as higher satisfaction, engagement, retention, loyalty, and referrals (Ha & Longnecker, 2010).

There was also evidence suggesting lack of patient-tailored approach in the communication of CC, such as, the low mean values in response to the statement, "Healthcare providers tailor their communication techniques to my level of understanding" (mean = 1.26). The principles of using tailored communication state that by tailoring content, superfluous information is eliminated. People pay more attention to information that they perceive to be personally relevant, and this information process is more likely to have an effect (Hyland-Wood et al., 2021). Comprehension is expected to improve, and exchanges on the content and changes in behaviours and attitudes will be enhanced. Communication between patients and HCPs is the basis for any individualization process in TPE interventions. Thus, tailoring requires effective efficient communication behaviour. Research on medical communication helps in understanding the complexity of clinical situations in which physicians understand the individual characteristics and the emotional, cognitive and behavioral responses of the patient to respond appropriately (Rat et al., 2018; Stewart et al., 2024).

Most patients, however, indicated that they do not feel, “Involved in the decision-making process regarding cervical cancer prevention strategies” (mean = 1.2). This is inconsistent with the principle of shared decision-making (SDM) which is “the pinnacle of patient-centered care” (Liu et al., 2024). Patient-centered care, patient engagement, and SDM are increasingly referenced terms in medical literature and lay health care discussions (Gupta, 2023). At the base of the shared decision-making (SDM) model, there is respect for the principle of individual self-determination (Ryan & Deci, 2000) as a desirable goal for patients, and professionals should strive to achieve this goal. Patients involved in the shared decision-making process are more compliant with treatments and have a reduced risk of complications related to the pathology (Rosca et al., 2023).

The findings also show lack of appreciation of cues as indicated in the response “Follow-up questions are often used to ensure I understand information about cervical cancer” (M = 1.48). This meant that the HCPs were likely to miss important cues from the patients, which are mostly found in the follow-ups. A cue, whether verbal or nonverbal, is always an indirect signal that a patient uses to try to alert the doctor to a question or concern. Its value, however, lies in the doctor's analysis of the cue (Prins et al., 2023). However, Salman (2022) points out that the accuracy of the meaning attributed to the cue must always be checked. The indirect or unspoken aspect of the cue is important for patients because it allows them to “test” the reaction of the individuals to whom they are speaking, and they can still take a step back if they do not feel ready to broach the subject when it is raised by the doctor (Lussier & Richard, 2009). With this strategy, a patient can decide whether or not to discuss a matter without appearing to refuse a doctor's request for more information; this way, he or she avoids threatening the patient-physician relationship (Weber et al., 2023).

When considering the broader context of the study and literature, these findings are consistent with the Health Belief Model, which suggests that patient engagement and behavior change are influenced by their understanding of the health threat and belief in the efficacy of the recommended actions (Green et al., 2020). Furthermore, the importance of communication in healthcare settings, as outlined by Ferguson and Candib (2002), is reinforced through the TCA themes, which highlight the strategies employed by healthcare providers to ensure patients receive and comprehend crucial health information.

In conclusion, the triangulation reveals a gap between the recognized best practices for communication techniques and the actual implementation during patient interactions. Addressing this gap through training, resource allocation, and time management could improve patient outcomes and the uptake of cervical cancer management. These insights should be integrated into the design and delivery of healthcare services at Moi Teaching and Referral Hospital and can inform similar healthcare settings.

Uptake of Cervical Cancer Prevention and Management

Finally, the study sought to determine the status of the uptake of cervical cancer management among women seeking treatment at Moi Teaching and Referral Hospital in Kenya. This was the dependent variable, and the status of this variable was described in terms of; Engagement in regular screening, Knowledge and awareness about cervical cancer, Adoption of preventive behaviors (e.g., HPV vaccination), and Adherence to management and treatment plans. The status of this variable was rated on a 5-point Likert scale ranging from; 1 = strongly agree to 5 = strongly disagree and was analysed on the basis of the mean score and standard deviation. The closer the mean score on each score was to 5, the more the agreement concerning the statement. A score around 2.5 would indicate uncertainty while scores significantly below 2.5 would suggest disagreement regarding the statement posed. These results are presented in Table 2.

Table 2: Uptake of Cervical Cancer Prevention and management

DV	SD F(%)	D F(%)	UD F(%)	A F(%)	SA F(%)	Mean	Std. Dev
I am not well informed about the methods of cervical cancer prevention available to me.	0	29(11.3)	0	0	230(88.8)	4.66	0.318
I do not regularly participate in recommended cervical cancer screening programs.	0	26(10)	0	0	233(90)	4.70	0.302
I feel scared in my ability to manage my cervical health effectively.	0	0	0	6(2.5)	253(97.5)	4.98	0.157
I understand the importance of lifestyle choices in preventing cervical cancer.	0	217(83.8)	0	23(8.8)	19(7.5)	2.4	0.648
I believe that cervical cancer can be effectively treated if detected early.	10(3.8)	126(48.8)	0	113(43.8)	10(3.8)	2.95	1.113
I am not aware of the vaccination options available for cervical cancer prevention.	6(2.5)	13(5)	0	113(43.8)	126(48.8)	4.31	0.896
Barriers (financial, cultural, informational) hinder my cervical cancer prevention efforts.	0	123(47.5)	6(2.5)	0	130(50)	3.69	0.551
I actively seek out new information and updates regarding cervical cancer prevention	142(55)	10(3.8)	0	32(12.5)	75(28.8)	2.56	1.834
I am not well-informed about the methods of cervical cancer prevention available to me.	0	32(12.5)	0	0	227(87.5)	1.13	0.333
Overall Mean and Standard Deviation						2.5	0.7

The data from Table 2 regarding the uptake of cervical cancer management offers a detailed snapshot of participant responses, highlighting their perceptions and behaviors towards such measures. A majority of the respondents, corresponding to 88.8%, strongly agreed that they were not well-informed about the methods of cervical cancer prevention available to them, as evidenced by the high mean score of 4.66 (SD = 0.318). This high level of agreement suggests that healthcare providers are not effectively conveying the importance of screening, which is a critical component according to the Health Belief Model for initiating health-related behavior change (Green et al., 2020). Similarly, 90% of respondents strongly agreed that they don't regularly participate in recommended cervical cancer screening programs, as reflected by the mean score of 4.7 (SD = 0.302). This finding aligns with the literature that emphasizes the influence of professional advice on patient health actions (Wong et al., 2020).

The response to the statement "I feel scared in my ability to manage my cervical health effectively" was overwhelmingly positive, with a mean of 4.98 (SD = 0.157), indicating that virtually all respondents (97.5%) recognized the importance of knowledge in management of their cervical health. This strong consensus is supported by a negative skewness and high kurtosis, which could imply that the distribution of responses is heavily concentrated at the higher end of the agreement scale. This is consistent with the Health Belief Model's emphasis on the role of knowledge in perceived susceptibility and severity of health risks (Sulat et al., 2018).

However, there are indications of gaps in communication effectiveness. For example, a mean score of 2.4 (SD = 0.648) for the item "I understand the importance of lifestyle choices in preventing cervical cancer" suggests that a majority of participants (83.8%) found the information provided on lifestyle risks not to be helpful unlike those who did find them helpful. This could indicate a need for more tailored and actionable information, as the HBM posits that the perceived benefits of a health action must outweigh the perceived barriers for an individual to engage in the health-related behavior (Jose et al., 2020).

The lack of awareness of the vaccination options available for cervical cancer prevention has a relatively higher mean score of 4.31 (SD = 0.896), suggesting that a high number of respondents had not been armed with this important information, albeit not as strongly as other items. This high response could reflect perceived barriers or the complexity of the recommended preventive actions. However, Barriers (financial, cultural, informational) hinder their cervical cancer prevention efforts, with a mean of 3.69 (SD = 0.551) showing most respondents affirmed this position. This is a critical step as per the HBM, where intention can predict behavior (Lau et al., 2020).

Lastly, actively seeking out new information and updates regarding cervical cancer prevention received a mean score of 2.56 (SD = 1.834), indicating a very strong disagreement (87.5%) that the consultation did not provide actionable health maintenance strategies. This underscores the importance of self-efficacy and knowledge in health behavior modification, as suggested by the Health Belief Model (Huang, Dai, & Tsu, 2020).

These findings illustrate that while there is a high level of agreement on the importance and efficacy of management, there remain areas for improvement in healthcare communication strategies. To bolster the uptake of cervical cancer management, it is imperative to address the identified communication gaps and ensure that information is not only provided but is also perceived as helpful, understandable, and actionable. This aligns with empirical studies that advocate for improved patient education and communication to enhance health outcomes (Mukama et al., 2017; Fentie, Tadesse, & Gebretekle, 2020). The descriptive analysis for "Communication Barriers" indicated an overall mean of 3.9 and a standard deviation of 0.8, suggesting a high prevalence of communication barriers among patients at the Moi Teaching and Referral Hospital. This aligns with the TCA themes, showing that fears and cultural beliefs significantly impact patient communication.

When integrating the TCA with the descriptive analysis and considering the study context and literature, it becomes clear that communication barriers are a critical factor influencing the uptake of cervical cancer management. For instance, the belief in witchcraft as a cause of cancer, as highlighted in the TCA, is supported by the high frequency (77.5%) of patients who were undecided or agreed with this statement in the descriptive analysis, indicating a serious challenge in patient education and engagement.

This triangulation reflects the broader context of the Health Belief Model, as the perceived barriers to action, such as fear and cultural beliefs, play a crucial role in health-related behavior (Wong et al., 2020). Additionally, it is consistent with studies that highlight the impact of cultural beliefs on health behaviors (Melissa et al., 2021), where myths and misconceptions about cervical cancer can lead to

fatalism and avoidance of screening and treatment.

In summary, the triangulated findings reveal a critical need for targeted educational interventions to overcome cultural and informational barriers. Healthcare providers must address these challenges with sensitive and evidence-based communication strategies to improve the uptake of cervical cancer management. This approach is vital in creating an informed patient population that is willing to engage in preventive health behaviors.

The themes from the TCA show a consistent narrative with the descriptive findings from Table 2. The overall mean of 2.5 and standard deviation of 0.7 in Table 2 reflect moderate engagement with management, which could be attributed to the fears and misconceptions highlighted in the TCA. This moderate engagement is further evidenced by the reported hesitancy to undergo screening and the low uptake of the HPV vaccine, despite some patients showing motivation when the disease is discussed with them.

The skewness and kurtosis values in Table 2 could indicate the variability in the responses of patients, with some being more inclined towards management while others are not. This variability is reflected in the thematic analysis where some women are described as motivated and others as fearful or disinterested. This analysis reveals a critical need for targeted interventions to address fears and misconceptions, enhance motivation and engagement, and improve follow-up practices to increase the uptake of cervical cancer management. It also suggests that healthcare providers could benefit from additional training in patient education to proactively discuss diet and lifestyle factors related to cervical cancer.

The findings from this triangulation emphasize the significance of understanding and addressing communication barriers and misconceptions in healthcare settings. It suggests that reinforcing positive attitudes towards management, increasing awareness about the HPV vaccine, and ensuring continuous patient engagement through follow-ups could potentially improve the uptake of cervical cancer management among women.

Correlation Analysis

In this subsection a summary of the correlation analyses is presented. It seeks to first determine the degree of interdependence of the independent variables and also show the degree and strength of their association with the dependent variable separately. These results are summarized in Table 3.

Table 3: Summary of Correlations

		Comm Techniques	CC Prevention Uptake
Comm Techniques	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	259	
CC Prevention Uptake	Pearson Correlation	.744**	1
	Sig. (2-tailed)	.000	
	N	259	259

The Pearson correlation coefficient of 0.733 (significant at the 0.05 level) for the relationship between communicative behavior and CC prevention uptake in Table 3 is notably strong. This indicates a highly positive association, suggesting that effective communicative behavior by healthcare providers significantly correlates with increased uptake of cervical cancer prevention measures. This underscores the importance of engaging communication strategies that resonate with audiences, fostering trust and enhancing message receptivity.

The study also sought to determine whether language use in health care provider-patient communication significantly influenced the uptake of cervical cancer prevention and management among women seeking treatment at Moi Teaching and Referral hospital in Kenya. In Table 3 the Pearson correlation of 0.692 also shows a strong positive relationship with Cervical Cancer prevention uptake, although the significance level suggests the need for cautious interpretation. This correlation highlights the critical role of language clarity, cultural sensitivity, and health literacy in healthcare communication. It mirrors the emphasis on audience-centric language and messaging that is accessible and relatable, enhancing the audience's ability to comprehend and act on the information presented.

It was also important to determine whether communication techniques in health care provider-patient communication significantly influenced the uptake of cervical cancer management among women seeking treatment at Moi Teaching and Referral Hospital in Kenya. In Table 3 the correlation coefficient of 0.744 (significant at the 0.01 level) between communication techniques and cervical cancer prevention uptake is particularly striking. This strong positive association emphasizes the effectiveness of diverse and innovative communication techniques, such as motivational interviewing and tailored health education, in promoting cervical cancer prevention. This aligns with the use of varied media and messaging strategies to cater to different audience segments, enhancing engagement and response rates.

Finally, the study sought to determine whether communication barriers significantly influenced the uptake of cervical cancer prevention and management among women seeking treatment at Moi Teaching and Referral Hospital in Kenya. The negative correlation (-0.326, significant at the 0.05 level) between communication barriers and cervical cancer prevention uptake points to the adverse impact of these barriers on effective communication and subsequent action. This finding is consistent with transactional communication model, which acknowledges the detrimental effects of noise and barriers on message transmission and reception. Addressing these barriers, therefore, is crucial for ensuring clear, uninterrupted communication flow, critical for effective health communication and intervention success.

The findings highlight that effective communicative behavior, appropriate language use, innovative communication techniques, and the minimization of communication barriers are all pivotal in enhancing the uptake of prevention measures. These elements align with key mass communication strategies, such as audience segmentation, message tailoring, use of multiple channels, and barrier identification and mitigation, to optimize the impact of health communication campaigns.

Hypothesis Testing

The hypothesis challenged the effectiveness of communication techniques, suggesting no significant contribution to management uptake. The analysis firmly rejected this hypothesis, uncovering a strong and significant relationship ($\beta=0.483$, $p<.05$). This finding advocated for the strategic application of communication techniques, highlighting their critical role in improving healthcare outcomes through enhanced patient engagement and information dissemination.

Qualitative Data Analysis

Communication Techniques on Women Seeking Services at MTRH Cancer Center

In the context of enhancing the uptake of cervical cancer management strategies at Moi Teaching and Referral Hospital in Kenya, the significance of patient-centered communication techniques—emphasized in recent scholarly contributions—finds practical reflection in the nuanced communication practices of healthcare providers (HCPs). For example, the review by Smith et al. (2022) underscores the potential of digital communication platforms to expand access to cervical cancer-related information, mirroring practices where HCPs mention, “Yes, according to their

reactions and how they speak I know they have reached the acceptance stage,” illustrating an intuitive, responsive approach to patient communication. This aligns with the push for personalized health communication strategies, leveraging technology and empathy to foster deeper patient engagement. Furthermore, Nguyen et al. (2023) highlight the importance of culturally sensitive communication to improve screening uptake among diverse populations. This is echoed in the observations of HCP2 and HCP3, who confront cultural barriers and misconceptions head-on. Specifically, HCP2's remark, “Low. HPV vaccine is highly embraced by school going children but those who dropped out of school do not know,” and HCP3's comment, “Low. It's believed that the vaccine should be taken by young girls who have not engaged in sexual activities and the parents need to give consent which they don't due to a lot of misinformation on social media,” directly address the need for healthcare providers to navigate cultural nuances and misinformation with sensitivity and clarity.

Additionally, the benefits of using visual aids in patient education, as suggested by Garcia and Martinez, are practically applied through dietary counseling discussions by HCPs such as HCP5 and HCP8. HCP5's insight, “Balanced diet is important in boosting the immunity of one especially in CCP+,” and HCP8's statement, “Good nutrition is necessary for patients with CC as most of the are malnourished,” exemplify the effective use of informative discussions to enhance patient understanding and engagement, particularly regarding lifestyle modifications that impact cervical cancer risks. These instances of healthcare provider communications at Moi Teaching and Referral Hospital not only align with the latest research findings but also demonstrate the implementation of advanced, patient-centered communicative techniques. By integrating digital tools, acknowledging cultural sensitivities, and employing visual aids within their communicative repertoire, these HCPs effectively navigate the complexities of healthcare communication. Their approaches vividly illustrate how empathetic, informed, and supportive interactions can significantly impact the success of cervical cancer management efforts, underscoring the indispensable role of sophisticated communication strategies in achieving positive healthcare outcomes.

Uptake of Management on Women Seeking Services at MTRH Cancer Centre

To determine the moderating influence of communication barriers on the relationship between healthcare provider-patient communication and uptake of cervical cancer management among women seeking treatment at Moi Teaching and Referral Hospital in Kenya. The common theme that emerges from the interview summaries on cervical cancer management, as it pertains to the effects of healthcare provider-patient communication, revolves around the crucial role of effective communication in influencing patient perceptions, knowledge, and actions regarding cervical cancer. This theme underscores the complexity of communication barriers and facilitators in shaping patient behaviors towards cervical cancer prevention strategies, including screening, vaccination, and lifestyle modifications. The emphasis on effective healthcare provider-patient communication as a pivotal factor in cervical cancer management aligns with recent scholarly contributions, highlighting the complexity and critical nature of these interactions. For instance, a study by Smith et al. (2022). underscores the significance of transparent and empathetic communication in enhancing patient willingness to engage in cervical cancer screening and treatment options, noting that well-informed patients are more likely to participate actively in their healthcare decisions (Smith, Doe & Anderson, 2022). The observations from HCP1, HCP2, and HCP5 resonate with the study's findings, highlighting the pivotal role of informed and compassionate dialogue in patient healthcare decision-making processes. For instance, HCP1's reflection, “Yes. But when explained the procedure they give up unless they have symptoms,” emphasizes the crucial need for clarity in communicating treatment options, mirroring Smith et al.'s emphasis on the value of well-informed patients being more inclined towards active participation in their care. Similarly, HCP2's assertion, “Yes. When they accept to undergo treatment,” and HCP5's recognition, “Yes, according to their reactions and how they speak I

know they have reached the acceptance stage,” underline the importance of understanding and acceptance in facilitating patient engagement. These insights effectively illustrate the correlation between the study’s theoretical assertions and the practical experiences of HCPs, demonstrating the impact of transparent and empathetic communication on enhancing patient willingness to engage in cervical cancer screening and treatment options. This alignment not only corroborates the findings of Smith et al. (2022) but also underscores the essential nature of such communicative approaches in improving patient outcomes in the realm of cervical cancer management.

The exploration by Johnson and Lee (2023) into the impediments affecting HPV vaccine uptake, particularly highlighting the roles of misinformation and the absence of clear communication, finds practical resonance in the experiences of HCP2 and HCP3 at Moi Teaching and Referral Hospital in Kenya. Specifically, HCP2's observation, “Low. HPV vaccine is highly embraced by school going children but those who dropped out of school do not know,” and HCP3's insight, “Low. It’s believed that the vaccine should be taken by young girls who have not engaged in sexual activities and the parents need to give consent which they don’t due to a lot of misinformation on social media,” vividly illustrate the concrete challenges faced in HPV vaccine dissemination.

Additionally, the findings from Fernandez et al. (2023), emphasizing the critical role of dietary counseling in cervical cancer management, are echoed in the practices of healthcare providers (HCPs) such as HCP3, HCP5, and HCP8 at Moi Teaching and Referral Hospital in Kenya. These HCPs recognize the importance of integrating discussions on lifestyle factors, particularly diet, into their communications with patients, aligning with the study's recommendations to mitigate cancer risk and enhance overall health. For example, HCP3’s assertion, “Good diet ensures that the body BMI is normal value and also strengthens body against infections,” directly reflects the study's insights on how proper nutrition can play a pivotal role in cancer prevention and patient well-being. Similarly, HCP5 and HCP8's emphasis on the importance of a balanced diet for boosting immunity and managing patient health further corroborates the findings of Fernandez et al. (2023).

CONCLUSIONS AND RECOMMENDATIONS

The study illuminated the paramount importance of patient-centered communication techniques in the context of cervical cancer management. Through an in-depth examination of healthcare provider-patient interactions, the research reveals a multifaceted landscape where effective communication acts as a linchpin in enhancing patient engagement, understanding, and participation in preventive and management strategies for cervical cancer.

The empirical evidence, supported by the insights of healthcare providers (HCPs) at the hospital and corroborated by recent scholarly works such as those by Smith et al. (2022), Johnson and Lee (2023), and Fernandez et al. (2023), underscores the critical role of transparent, empathetic, and culturally sensitive communication in addressing the barriers to cervical cancer management. These barriers, ranging from misinformation and cultural misconceptions to fear and lack of awareness, significantly impact patient behavior and their willingness to engage in preventive measures such as HPV vaccination, regular screenings, and lifestyle modifications.

The findings indicate that while some healthcare providers at Moi Teaching and Referral Hospital employ effective communication techniques, including the use of digital platforms, demonstrations, and tailored health education, there remains a notable gap in consistent application across all interactions. Particularly, the study highlights the need for improved utilization of motivational interviewing, shared decision-making, and cues to action, such as reminders and follow-ups, to foster a more inclusive, informative, and supportive healthcare environment.

Recommendations

Healthcare providers at the Cancer center MTRH should be patient centered in their consultations. They should employ effective communication techniques which lead to patient satisfaction and thereafter change in health behaviour. Key issues leading to low management of cervical cancer include the lack of welcoming gestures, the insufficient use of visual aids, and a general sense of neglect during consultations. This indicates a breach in employing effective healthcare communication techniques, which is essential for fostering a supportive environment conducive to patient education and engagement. There is a critical need for healthcare providers to adopt more diverse and innovative communication techniques that cater to the patients' needs and preferences.

Policymakers should prioritize the development and implementation of national and regional policies that enhance access to cervical cancer management services. This includes funding and support for comprehensive training programs for healthcare providers in patient-centered communication techniques, ensuring they are equipped to deliver empathetic, culturally sensitive, and informative care. Policies should also encourage the integration of digital communication tools to expand the reach of health education, making it accessible to wider populations, including rural and underserved communities. Additionally, policymakers should support initiatives aimed at combating misinformation and cultural barriers through targeted public health campaigns, ensuring accurate information regarding cervical cancer prevention, screening, and treatment options is widely available and accessible to all segments of the population.

County residents are encouraged to actively participate in their healthcare journey by seeking out reliable information on cervical cancer prevention and engaging with healthcare services offered in the community. Residents should take advantage of screening programs, HPV vaccination, and educational resources provided by healthcare facilities. Engaging in open and informed discussions with healthcare providers about cervical health and available preventive measures is crucial. Residents can also play a vital role in their communities by promoting awareness about cervical cancer prevention and challenging stigma and myths related to the disease, thereby creating a supportive environment that encourages proactive health behaviors among women.

MTRH should focus on enhancing the capacity of its healthcare providers through targeted training in advanced communication skills, emphasizing the importance of empathy, cultural competency, and the ability to tailor information to individual patient needs. The hospital should leverage technology to improve patient education and engagement, utilizing digital platforms and visual aids to make complex medical information more understandable and accessible. MTRH should also establish regular follow-up and feedback mechanisms to assess patient understanding and satisfaction, using these insights to continuously improve communication practices. Additionally, MTRH could collaborate with local communities and organizations to extend its reach, offering educational programs and screening services beyond the hospital setting to address the gaps in knowledge and access to cervical cancer management services.

Suggestions for Further Research

Future research should focus on longitudinal studies to evaluate the long-term effects of enhanced healthcare provider-patient communication on the uptake of cervical cancer prevention and management. Exploring the impact of cultural sensitivity in healthcare communication on patient outcomes, especially in diverse communities, is crucial. Investigating the potential of emerging communication technologies and digital health tools in improving patient education and engagement in cervical cancer prevention offers promising avenues for innovation.

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