

## Interpersonal Communication Barriers to Uptake of Cervical Cancer Screening in Uasin Gishu County, Kenya

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### ABSTRACT

*Cervical cancer is still a major health risk for women even though it is preventable. Its prevalence indicates lack of success with screening and early diagnosis. Considering most women who visit hospitals have advanced stages of the disease, deaths from this type of cancer will rise if immediate action is not taken. This study sought to determine the obstacles to interpersonal communication as a means for encouraging adoption of cervical cancer testing in Uasin Gishu County, Kenya. The study was conducted at the maternal child-health services and family planning clinic at the Moi Teaching and Referral Hospital. This cross-sectional study at MTRH's MCH-FP clinic investigated barriers to communication on cervical cancer and screening. Targeting women aged 18-65, the sample of 308 was drawn from the monthly population of 1,000. Six key informants and 20 focus group participants were chosen through purposive sampling. Systematic random sampling, selecting every 3rd respondent, was employed. The mixed methods approach provided comprehensive insights into communication challenges regarding cervical cancer and screening services. A questionnaire for women, two focused group discussions with ten women each, and a schedule of key informant interviews were used to gather data. The qualitative data was analysed thematically using NVivo version 12 software. For quantitative data, descriptive statistical analysis using SPSS version 29 was undertaken. The findings showed there was a significant inverse link between interpersonal communication barriers and cervical cancer testing uptake ( $r=-0.561$ ,  $p<0.001$ ). This implied that with significantly more perceived or experienced communication barriers reported, there was significantly less uptake of cervical cancer screening uptake. The interpersonal communication barriers identified in the study included low levels of knowledge about cervical cancer, limited understanding of screening benefits, fear and stigma of being found with cervical cancer and fear of the screening procedure, language barriers, myths and misconceptions about cervical cancer, poor relationship between the health care workers and clients stemming from age and gender and the women's religious beliefs. In order to enhance cervical cancer screening, better and more targeted information should be provided to address the barriers and specifically the low levels of knowledge that was recognized as a leading barrier in the study. A lack of adequate knowledge about the disease or the benefits of screening prevents women from participating in screening.*

**Keywords:** Cervical Cancer Screening, Barriers, Interpersonal Communication

### I. INTRODUCTION

The term "cervical cancer" describes the growth of abnormal cells in a woman's cervix; this condition is mainly caused by a protracted human papillomavirus (HPV) infection that is spread through intercourse (World Health Organization/Institute Catala Oncologia, 2017). Cancers can be differentiated based on the distinct cellular composition and anatomical site of occurrence (American Cancer Society [ACS], 2014). The development of cervical cancer happens when there arises uncontrolled growth of cells in the cervix, which is the lower and narrower part of the uterus (Centres for Disease Control and Prevention [CDC], 2012). The genesis of cervical cancer is attributed to the growth of highly abnormal cells in the cervix, the opening to the uterus or womb, as stated in the Cancer Report published by the World Health Organization in 2014. The key etiological factor is human papillomavirus (HPV), which is the prevailing sexually transmitted infection on a global scale (Population Reference Bureau, 2004). According to the CDC (2015), by using the human papillomavirus (HPV) vaccine, routine screening exams, and subsequent therapeutic interventions, the incidence of cervical cancer can be reduced.

Interpersonal communication happens at the individual level. According to DeVito (2019), while interpersonal communication occurs at the individual level, it is also bound by both the personal and social context. DeVito discusses the defining features of interpersonal communication, such as it being transactional, relational, multipurpose, ambiguous and unrepeatable, among others. He also examines contexts in which interpersonal communication occurs,

including the cultures involved and the features of perception of both self and others involved in the communication process. The work of DeVito offers a framework for understanding how interpersonal communication can work in the health sector. In relation to this study, the sources, channels, processes and content of interpersonal communication must integrate the unique features of the communication system, the women involved and the context of health care, especially cervical cancer related issues.

### 1.1 Statement of the Problem

In Kenya, the daily death rate from cervical cancer for women in their twenties is nine (Ministry of Public Health and Sanitation, 2017). The International Agency for Research on Cancer (IARC, 2018) reports that, in Kenya, cervical cancer is the primary cause of cancer-related deaths and the second most common cancer among women. The World Health Organization and the International Agency for Research on Cancer (WHO/ICO, 2017) estimate that Kenya is home to a population of approximately 13.45 million women of age 15 years or older and face the potential risk of acquiring cervical cancer. Therefore, without urgent interventions, deaths from the cancer will keep rising. This view is reiterated by a study that found that majority of the women turn up at the MTRH hospital with late-stage disease (Were et al., 2011). There are many reasons for this delay in screening, diagnosis, reporting and treatment of cervical cancer in Kenya. Interpersonal communication has been found to be an important means for spreading knowledge about cervical cancer and subsequently promoting regular screening among vulnerable women. Yet, no studies have examined the relationship between interpersonal communication barriers and uptake of testing for cervical cancer in Kenya. Therefore, this study examined interpersonal communication barriers that hinder cervical cancer screening adoption among women requesting medical care at MTRH, Kenya.

## II. LITERATURE REVIEW

### 2.1 Theoretical Review

The research was informed by Rogers' (2003) theory of diffusion of innovations (DOI). The DOI model has effectively facilitated numerous interdisciplinary endeavours in elucidating the phenomenon of social change. The theory elucidates the mechanisms through which novel concepts and methodologies disseminate across and across various communities (Rogers, 2003; Valente, 1995). According to Rogers (2003), diffusion refers to the transmission of an innovation through certain channels over a period of time among individuals within a social system.

The rate of adoption is influenced by the innovation at hand, communication channels, time, and the social system (Rogers, 2003). The richness of diffusion theory comes from its explicit measure of the role of external influences and social networks in the adoption decision (Valente, 1995). Innovations flow through social networks, which sometimes impede and sometimes accelerate behavioural spread (Valente, 1995). The premise, confirmed by considerable empirical research, is that new ideas and practices often spread through interpersonal contacts largely through interpersonal communication, especially if the interpersonal channel links two or more individuals who are near peers (Rogers, 2003). Diffusion theory, therefore, emphasizes interpersonal communication more than any other area of communication research (Rogers & Singhal, 1996).

Dearing and Kreuter (2010) suggest that diffusion is a social phenomenon that may or may not transpire subsequent to the transmission of knowledge pertaining to a novel practice, program, or policy. Due to the novelty of technological advancements, a significant number of individuals experience initial uncertainty towards them. Hence, individuals partake in interpersonal contact as a means to address and alleviate their state of uncertainty. Diffusion occurs as a result of interpersonal or collective communication within the confines of a social system. The initial distribution of information is a crucial step in ensuring that individuals become aware of a new innovation. However, it is important to note that simply providing knowledge is often not enough to generate attention, shape attitudes, and induce changes in behaviour (Dearing & Kreuter, 2010).

Social influence is often necessary to address the knowledge-attitude-practice gap, particularly when individuals perceive the innovation to be significant and are inclined to seek the opinions of others before making important decisions (Dearing & Kreuter, 2010). Social interactions play a crucial role in the dissemination of innovation, as individuals are influenced by one another through various means such as physical proximity, collaborative efforts (Goldstein et al., 2008), verbal communication, active listening, experimentation, and the emulation of observed behaviours (Bettencourt et al., 2008). Diffusion, then, is a dynamic process of change, involving both potential and actual users of innovations. The rate of diffusion of an idea is influenced by various factors. These factors encompass the decision-making process, attributes of innovation, communication channels, characteristics of the social system, promotional efforts by the change agent, and the characteristics of adopters, which are determined by patterns of similar behaviour (Rogers, 2003).

The efficacy of the DOI hypothesis has been proven in multiple domains, including as public health, agriculture, social work, marketing and communication (Sahin, 2006). The Diffusion of Innovations (DOI) framework has been widely utilized in the field of public health to facilitate the adoption of important interventions aimed at modifying the behaviour of a specific social system (Denis et al., 2002).

This theory is applicable to this study in that it is concerned with how diffusion (communication) of an innovation (cervical cancer screening) through certain channels (interpersonal channels) over a period (decision-making period to seek cancer screening) can be enhanced among women in Uasin Gishu County (social system-women's relationships). Interpersonal communication is a major factor in the spread of health-related information, which the DOI theory asserts. The changes in behaviour needed to halt cervical cancer epidemic constitute what Rogers has labelled a 'preventive innovation', defined as an idea that an individual adopts at one point in time to lower the probability that some future unwanted event may occur (Rogers, 2003).

## 2.2 Empirical Review

The majority of studies conducted on impediments to the adoption of screening procedures concentrate on factors associated with demography, risk perception, and health systems (Akinlotan et al., 2017; Adedimeji et al., 2021; Ngari et al., 2021). Nevertheless, there has been limited research conducted on the subject of interpersonal communication difficulties. Hence, the literature evaluation in this particular subsection centres on difficulties pertaining to communication.

Nyambane (2016) examined the impact of electronic media on the promotion of cervical cancer knowledge among female clients accessing reproductive care at the Kenyatta National Hospital, Kenya. Several hurdles were observed in relation to cervical cancer, including a lack of comprehensive information regarding key topics, cultural views, and prevalent myths and prejudices. The study conducted by Nyambane focused on barriers within electronic media channels, whereas the present study investigated hurdles within interpersonal communication channels. However, the study that was evaluated sheds light on the obstacles to communication around cervical cancer. This analysis was valuable in assessing interpersonal communication barriers to women's understanding and utilization of cervical malignancy testing in Uasin Gishu County, Kenya.

In a study conducted by Kabiri and Komuhangi (2021), an examination of facilitators and obstacles to testing for cervical cancer among female bachelor's students of Makerere University revealed several noteworthy findings. Among the identified barriers were concerns regarding potential negative test results, a diminished perception of personal risk, and apprehension related to potential embarrassment, among other factors. The hurdles of fear and humiliation in participating in cervical cancer testing initiatives among African women in various countries have been consistently documented in the literature (Bukirwa et al., 2015; Kabiri & Komuhangi, 2021; Adewumi et al., 2022). The majority of women exhibit a preference for undergoing screening procedures in the presence of a female healthcare professional, such as a doctor or nurse. Some women may choose not to undergo screening tests due to the expected fear of pain associated with the process (Adewumi et al., 2022).

Various studies conducted in Uganda have documented the manifestation of fear in different contexts. These studies have identified several sources of fear, such as the apprehension of contracting infections due to the utilization of non-disposable speculums or inadequate sanitary practices (Hasahya et al., 2016; Paul et al., 2013; Teng et al., 2014). Additionally, concerns have been raised regarding the potential link between the procedure and the development of cancer (Teng et al., 2014), as well as the possibility of experiencing enlargement of the sexual parts (Nakimuli et al., 2012) or the removal of the uterus (Hasahya et al., 2016). These concerns occur as a result of the differing degrees of limited understanding regarding the screening process. Hence, elucidating the process via effective interpersonal communication channels has the potential to mitigate anxiety levels and enhance the acceptance of screening. Therefore, this study investigated the potential of interpersonal communication as a means to enhancing awareness and utilization of cervical cancer testing by women residing in Uasin Gishu County, Kenya.

Adewumi et al. (2022) studied the factors that impede or promote cervical cancer testing in Western Kenya. The findings of their research indicated that limited awareness and knowledge regarding cervical cancer, as well as healthcare providers' inadequate understanding and unease in addressing the sensitive topic of cervical cancer, were notable obstacles to the uptake of screening services. A significant proportion of women possess limited understanding of cervical cancer as a medical condition, as well as the accessibility and significance of cervical cancer screening services. These results are consistent with the research conducted by Gichangi et al. (2003) and Kidanto et al. (2002), which also shown that women possess a limited understanding of cervical cancer. The efficacy of utilizing mass communication channels for the transmission of health information to the general public may be limited in terms of its ability to reach the entire population. The dissemination of information regarding cervical cancer through mass media channels sometimes lacks comprehensive and nuanced coverage, resulting in an oversimplification of the topic.

Consequently, the primary achievement of such efforts is the generation of awareness rather than the desired modification of behaviour.

### III. METHODOLOGY

The research was undertaken at the maternal child health (MCH-FP) clinic at the Moi Teaching and Referral Hospital (MTRH), Uasin Gishu County, Kenya. The National Cervical Cancer Prevention Programme Strategic Plan stipulates that the basic service entry points for outreach and in-reach efforts in mass cervical cancer testing promotion in Kenya comprises Maternal Child Health-Family Planning (MCH-FP) clinics, Comprehensive Care Clinics (CCCs), and Obstetrics and gynaecology wards/clinics (Ministry of Public Health and Sanitation [MPHS], 2012a). The choice of the MCH-FP clinic for this study was thus informed by its function as a key entry point for cervical cancer testing.

Descriptive cross-sectional research design was employed along with a mixed methods research approach. This mixing of approaches yielded rich data on the barriers to communication of information on cervical cancer and screening services. Every woman who is between the ages of 18 and 65 visiting MCH-FP at MTRH constituted the target population. The target therefore consisted of 1,000 women per month as per MTRH Medical Records (2018). MPHS (2012b) prescribes cervical cancer testing for all women aged 25-49 years and 18-65 years for those living with HIV and are sexually active. As such, this research targeted women aged 18-65 years.

The study's sample size was calculated using the formula suggested by Gall, Gall, and Borg (2007). Therefore, from the average monthly population of 1000 women attending the MCH-FP clinic, 308 participants were drawn. Purposive sampling was appropriated to select six key informants for the qualitative data, taking into account their social standing and capacity to provide specific, specialized information on the relationship between cervical cancer and interpersonal communication. For the focus groups, 20 participants were picked, comprising two FGDs each of 10 respondents. The study employed systematic random sampling method, selecting every 3<sup>rd</sup> respondent, to realize the sample size.

To gather quantitative data, questionnaires were deployed while key informants' interviews and FGDs were employed to collate qualitative data. Data from the questionnaires was evaluated descriptively with the aid of SPSS (version 29.0) to generate descriptive and inferential measures. Quantitative data was evaluated and presented thematically with the help of NVivo software.

### IV. FINDINGS & DISCUSSIONS

#### 4.1 Interpersonal Communication Barriers

The study endeavoured to determine interpersonal communication barriers in relation to uptake of cervical cancer testing. To achieve this aim, the respondents were asked to indicate the extent of their agreement on some of the reasons women hardly embraced cervical cancer testing. The responses were as presented in Table 1.

**Table 1**  
*Interpersonal Communication Barriers*

Communication barriers	M	SA	A	U	D	SD
Lack of knowledge about cervical cancer i.e., causes, risk factors	4.48	244(79.2)	26(8.4)	2(0.7)	14(4.6)	22(7.1)
Lack of awareness that screening is meant for all sexually active women of reproductive age	4.17	219(71.1)	12(3.9)	16(5.2)	33(10.7)	28(9.1)
Limited understanding about where to be screened, the purpose of screening and benefits	4.44	244(79.2)	8(2.6)	20(6.5)	19(6.2)	17(5.5)
Language barriers	2.19	82(26.6)	4(1.3)	6(1.95)	19(6.2)	197(64.0)
Misconceptions and myths about cervical cancer	4.48	216(70.1)	60(19.5)	8(2.6)	8(2.6)	16(5.2)
Cultural beliefs about cancer	3.61	148(48.1)	74(24.0)	22(7.1)	26(8.4)	38(12.3)
Religious beliefs	2.1	38(12.3)	26(8.4)	24 (7.8)	82(26.6)	138(44.8)
Fear of finding cancer	4.86	266(86.4)	36(11.7)	4 (1.3)	0(0)	2(0.6)
Fear of vaginal examination	4.77	258(83.8)	36(11.7)	8 (2.6)	6(1.9)	0(0)
Negative attitude towards screening	4.51	180(58.4)	98(31.8)	18(5.8)	4(1.3)	8(2.6)

\*\*M-Mean, SA-Strongly Agree, A-Agree, U-Undecided, D-Disagree, SD-Strongly Disagree

Table 1 shows that, overall, the majority generally affirmed with the barriers as listed. This implied that most of the listed barriers in Table 1 were major barriers to the uptake of cervical cancer testing by the respondents. The main obstacles identified were lack of knowledge about the cancer (4.48), lack of awareness that screening is meant for all sexually active women of reproductive age (4.17), limited information on where to go for screening, the purpose of screening and benefits (4.44). The barriers cited by the least number of respondents were religious beliefs about cancer (2.1) and language barrier (2.2).

The above results cohered with information from the key informants, which revealed that inadequate information on cervical cancer was a major barrier. The key informants noted that most women lacked adequate information about cervical cancer to convince them to go for screening. Among the barriers to screening mentioned by the key informants were also myths and misconceptions about cervical cancer, such as it being caused by witchcraft or being a demonic disease. They further noted that the women lacked adequate information about the screening procedures. The low levels of education were considered a contributing factor to women's knowledge of cervical cancer. Finally, overreliance on mass media, which presented scanty information on the illness, was also mentioned as a barrier to women's awareness levels on and adoption of cervical cancer testing.

*There is also lack of adequate information about cervical cancer. There are so many myths and misconceptions about cervical cancer in that many believe it is a curse or demonic in a way (KII, Facility B, 02). There is lack of knowledge and information on cervical cancer because many of them are not aware of it. Failure to understand what cervical cancer all is about and people imagining that they cannot get the disease. I am thinking of the low levels of education that hinder understanding on diseases like cancer. There are no simplified terms in reference to cancer in general. Lastly, there is heavy reliance on mass media which presents scanty information on cervical cancer to women (KII, Facility B, 01).*

The above sentiments were affirmed by the FGD participants who noted that many women lacked the requisite knowledge on cervical cancer. They further mentioned that inadequate knowledge about the cancer was a barrier to women's uptake of testing.

*Lack of knowledge on cervical cancer and screening - Some simply have no information about it; risk factors, symptoms, and places where screening services are offered (FGD, 02).*

The above study results agreed with those from previous studies. Lack of knowledge on cervical cancer and testing processes in low- and middle-income countries have been reported as a common hindrance to adoption of screening (Islam et al., 2015; Montgomery et al., 2014; Sudenga et al., 2013). The other communication barrier to uptake of cervical cancer screening identified in the current study was fear of both the screening procedure and positive diagnosis of cervical cancer. As such, due to the stress that came with contemplating the procedures of screening and the possibility of cervical cancer diagnosis, some women avoid screening altogether. As one respondent explained:

*Fear of finding out that they have cancer (FGD, 01). Fear of the screening process – Some people fears the intrusiveness and discomfort that you feel during screening. I even think it may cause unnecessary health risks especially to the reproductive system (FGD, 02). Some have many misconceptions about cervical cancer for example things like screening process is painful and that it could cause cervical cancer (FGD, 02).*

From the interviews with the key informants, it was also noted that the main barrier to communication and adoption of cervical cancer testing was fear. Specifically, the interviewees mentioned fear of screening procedures. They said some women believed that the screening procedures were painful and uncomfortable. Others feared being actually diagnosed with cervical cancer. In addition, other women feared that the health care providers would breach confidentiality and disclose information to especially family members who would not approve of screening.

*There are so many communication-related barriers to screening; to start with there is the fear of unknown. Others fear the procedure of being screened even among the elites; they think that the process is painful and nasty. There is also the fear of confidentiality being breached. I mean that there are women who fear that those doing the screening like the nurses may share your results with other people (KII, Facility A, 01). Fear of the unknown in that some women are afraid of finding out that they have cancer. Some say that they fear the screening procedure. Assuming it is a male providing the screening services, some women may fear being attended to by a man (KII, Facility B, 03).*

The findings concurred with those of Islam et al. (2015), which identified the perceived screening barriers to include dread of the screening process, shame or embarrassment associated with it, and fear of finding positive screening outcomes.

Language barrier was cited as a hindrance to adoption of cervical cancer by one of the key informants.

*It is hard to explain cervical cancer to a woman who barely understands Kiswahili leave alone English language. The terminologies used are hard. People living with disabilities like the deaf may also be disadvantaged since translating to them using sign language may be hard (KII, Facility B, 01).*

Problems of access to testing services were further reported as a barrier to uptake of cervical cancer checks. For instance, the key informants stated that some women lacked money to facilitate transport to seek health care facilities for screening services. Subsequently, the long distance to health care facilities was a critical barrier to screening for such women. There was also lack of information on locations of testing centres. Meanwhile, some women said they were too busy to find time to go for cervical cancer check-ups.

*Some women lack money for transport to health facilities and for consultation. Here in MTRH they pay a consultation of 150 shillings before screening which may be hindering them because of the low economic levels of some women (KII, Facility B, 01). Some of the women also lack information on where to access the services. Some complain that the facilities are far apart i.e., MCH/FP clinic and room 29 where screening is done are far apart. Some may keep postponing to another day and end up not doing it. Some may not know the days for screening though some of them ask when they are coming for clinics (KII, Facility B, 03). They include being too busy to create time for screening. Nowadays women hustle to feed their families, and many are the working class and are committed in offices from 8am to 5pm (KII, Facility B, 02).*

One respondent stated that there was no need to go for screening since there was faithfulness in their marriage.

*I don't think I need it because my husband is faithful and I am also, so we are not at risk (FGD, 02).*

The relationship between the client and the provider was further mentioned as a possible hindrance to women's uptake of screening. Some women said they were uncomfortable with being screened by a male health care provider. Age and gender difference between the client and the health care provider were mentioned as barriers that negatively impaired with women's adoption of cancer checks.

*In cases where a health worker could be older or younger than the clients and vice versa, it is hard to discuss a topic like cervical cancer. This makes them not understand each other and fear being screened or just get embarrassed to undress in front of the healthcare worker. Gender is also a hindering factor. I am talking about a case of a male nurse who must attend to a female client. Clients shy off from asking a male health provider questions on cervical cancer. Concentrating on the topic cervical cancer may even be a problem when they are being taught (KII, Facility B, 05).*

Akinyemiju et al. (2015) observed in a study conducted in Nigeria that females were inclined to accept screening if it was done by another female. In contrast, the absence of a gender preference for physicians was found to be associated with increasing rates of screening among Ethiopian women (Nigussie et al., 2019).

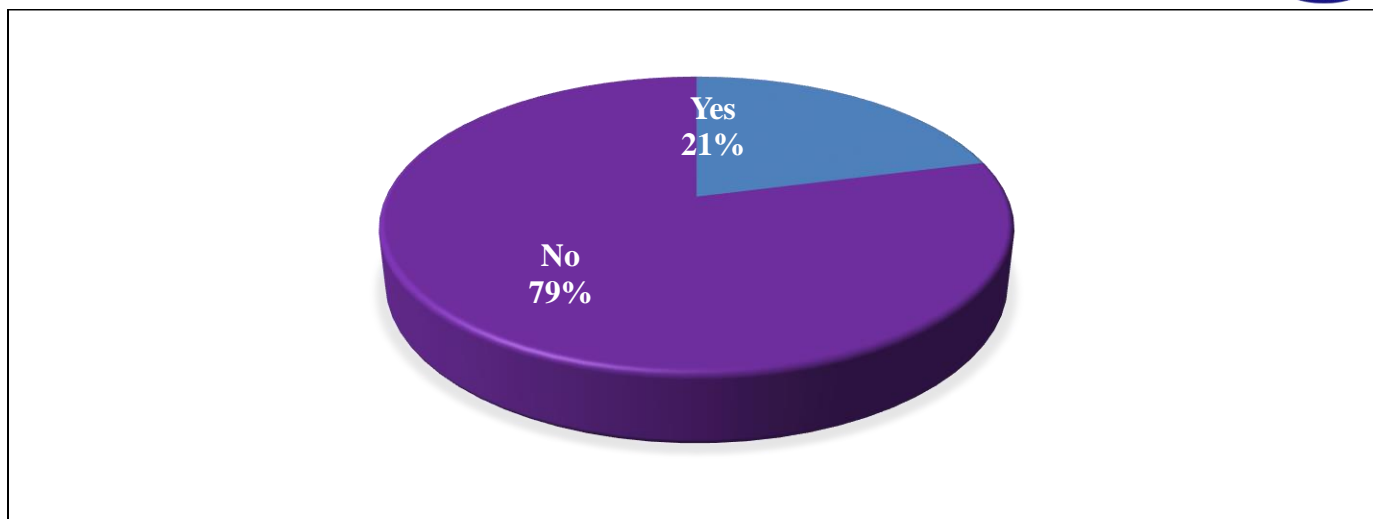
Finally, in the current study, the shortage of health care workers was noted as an obstacle uptake of cervical cancer checks. For instance, due to their overloaded work schedules, some health care providers said they could hardly make time to sensitize women clients about cervical cancer and screening.

*If a client comes for MCH-FP services and has not been attended to, they may not concentrate if you engage them in other talks that are unrelated to what they came for. This becomes a barrier to communicating cervical cancer messages. Health workers do not have spare time since they handle so many duties and clients. It can be so overwhelming adding cervical cancer talks since it is not their core business, it therefore becomes a challenge. There is concentration on what clients came for in MCH-FP subsection (KII, Facility B, 05). We regret that we have not been aggressive in creating awareness about cervical cancer and screening, especially among the women seeking services at the MCH-FP clinic. It should be us doing the sensitization but since we have a lot of work here; it is rarely done (KII, Facility B, 03).*

Another challenge also mentioned by the providers was the difficulty to integrate cervical cancer testing into MCH-FP clinic due to shortage of staff. Nessler et al. (2021) have found that the poor organization of the healthcare system is a primary barrier to the administration of Pap smear by primary health care providers.

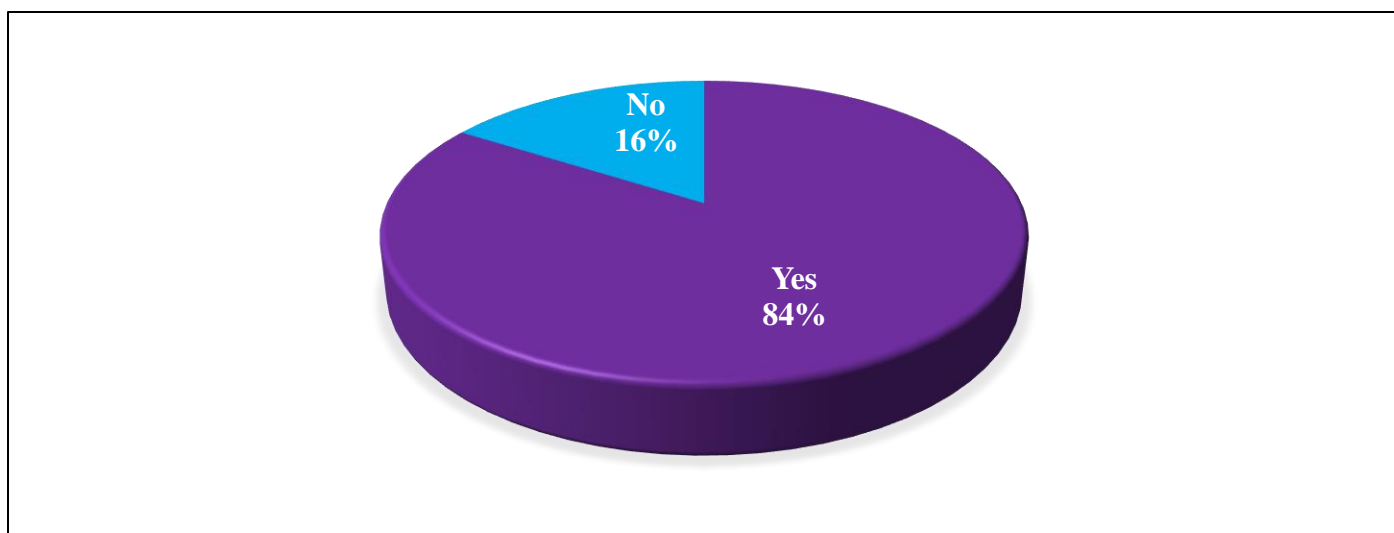
#### **4.2 Uptake of Cervical Cancer Screening**

To determine the uptake levels of cervical cancer screening, the respondents were asked to indicate whether or not they had ever been screened for cervical cancer. The findings were as presented in Figure 1.



**Figure 1**  
*Distribution of those Screened for Cervical Cancer*

The results depicted in Figure 1 reveal that a significant proportion, specifically 244 individuals (79.2%) out of the total sample size of 308 respondents, reported never having had cervical cancer screening. Conversely, 64 respondents (20.8%) reported having been screened for cervical cancer. The findings suggest that there was a limited adoption of cervical cancer screening among the female population at MTRH. The study aimed to investigate whether individuals who have undergone cervical cancer screening had received the screening within the previous three-year period. The participants' answers were consolidated and presented in a summarized form, as depicted in Figure 2.



**Figure 2**  
*Cervical Cancer Screening within the Past 3 Years*

The findings indicate that, out of 66 women who had been screened for cervical cancer, majority, 54(84.4%), had been screened within the last 3 years while 12(15.6%) had taken more than three years before going back for the test. These findings show that some women do not abide by the timelines recommended for subsequent screening.

Findings from the FGDs also showed that there was low uptake of cervical cancer screening among women. Majority of the women who took part in the FGDs said they had not been screened for cervical cancer. A few walk-in cervical cancer screenings were reported. However, majority of those who accepted to be screened had gynaecological issues. The FGD participants attributed the low uptake of screening to the fear of positive results and lack of adequate information about cervical cancer. On their part, the key informants reported that uptake levels normally improve after outreach activities are done.

*According to the health records that I keep, the level of uptake of cervical cancer and screening was 20% by mid of the year i.e., June 2019. In the month of July 2019, out of the 148 women who attended the*

*Family planning clinic, 34 women were screened for cervical cancer. This is equivalent to about 23% which is a slight increase (KII, Facility B, 04). The uptake levels are not bad, but it is still low across the county majorly because of the lack of awareness. Normally the uptake improves after outreach campaigns are done. They rarely come to health facilities for testing voluntarily” (KII, Facility A, 02).*

The remarks above concurred with findings from previous literature. According to Gatumo et al. (2018), cervical cancer screening uptake in Kenya is low. Several other studies have shown that despite awareness of cervical cancer being high, the perception that it can be treated is quite low, and there is much fear of the screening outcomes (Dozie et al., 2021; Ng'ang'a et al., 2018).

Previous researchers also recommend that improvement strategies on cervical cancer screening uptake in low- and- middle-income countries should be accompanied by educational interventions aimed at enhancing knowledge and understanding of cervical cancer and screening (Islam et al., 2017). Studies in Ethiopia (Akinyemiju et al., 2015) and South Africa (Bante et al., 2019) found that counselling sessions about screening was associated with uptake of the service.

Further analysis of the study findings was done using Pearson correlation coefficient analysis to determine the relationship between interpersonal communication barriers and cervical cancer screening uptake. Table 2 presents the analysis results.

**Table 2**

*Interpersonal Communication Barriers and Uptake of Cervical Cancer Screening*

		Interpersonal communication Barriers	Cancer screening adoption
<b>Interpersonal communication Barriers</b>	Pearson Correlation	1	-.561**
	Sig. (2-tailed)		<.001
	N	<b>308</b>	<b>308</b>
<b>Cancer screening adoption</b>	Pearson Correlation	-.561**	1
	Sig. (2-tailed)	<.001	
	N	<b>308</b>	<b>308</b>

\*\* . Correlation is significant at the 0.05 level (2-tailed).

Table 2 depicts a significant inverse link between interpersonal communication barriers and cervical cancer testing uptake ( $r = -0.561, p < 0.001$ ). This implied that with significantly more perceived or experienced communication barriers reported, there was significantly less uptake of cervical cancer screening uptake. Previous studies corroborate these findings. For instance, in their study, Islam et al. (2015) noted that perceived screening barriers, such as lack of knowledge, money or financial concerns, difficulties accessing screening and religious or cultural beliefs, hindered uptake of screening. The other barriers Islam et al. noted in their study included stigma, spousal disapproval and marital discord.

Stigma can decrease screening and treatment uptake by diminishing the perception of personal risk, which results in increased HPV-risk behaviours (Ginjupalli et al., 2022). Additional research has indicated that male partners have a desire to actively participate in decision-making about cervical cancer screening. Nevertheless, the individuals possessed a restricted understanding regarding the process of screening and maintained inflexible attitudes towards societal expectations of gender, which subsequently influenced their endorsement of cervical cancer screening (Chapola et al., 2021; Kim, Kim & Kim, 2018; Lewis et al., 2020; Rosser et al., 2014). Previous studies have indicated that the presence of negative attitudes among women, along with their perceived susceptibility to developing cervical cancer and perceived hurdles, can diminish the probability of engaging in cervical cancer screening (Bayu et al., 2016; Idowu et al., 2016; Nigussie et al., 2019). Conversely, Bante et al. (2019) found that a favourable mind set was associated with higher levels of service consumption in Ethiopia.

## V. CONCLUSIONS & RECOMMENDATIONS

### 5.1 Conclusions

The major barriers identified were insufficient knowledge and information about cervical cancer. Other barriers noted by the women were: lack of information that screening is meant for all sexually active women of reproductive age; limited understanding about where to be screened, the purpose and benefits of screening. From the key informant interviews and the FGD sessions, the main barriers mentioned were those related to language,



specifically about finding the appropriate vocabulary to discuss cancer. Myths and misconceptions about cervical cancer, such as it being caused by witchcraft and being a demonic disease, were also noted barriers to screening uptake. The respondents also mentioned fear of positive results after screening and fear of the screening procedure. In addition, poor relationship between health care workers stemming from age and gender differences was noted as some of the barriers to women's uptake of cervical cancer screening. Women expressed discomfort with being screened by a male health care worker. The respondents also stated that it was hard to discuss a taboo topic like cervical cancer in some contexts. Some religious beliefs were also mentioned as a hindrance to adoption of screening.

## 5.2 Recommendations

There is a need for curriculum review in all health training institutions in order to put communication training, especially interpersonal communication aspects on a higher pedestal both in depth and scope in order equip the trainees with skills of disseminating health messages. Moreover, policies in the Kenyan health sector should be broken down into actionable points through interpersonal communication to overcome the barriers discussed and to increase the likelihood of the suggested interventions being adopted right from county levels to national levels.

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