Psychological factors that influence cervical pre-cancer screening among women attending Mbagathi Level Four Hospital, Nairobi, Kenya

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ABSTRACT

Cervical cancer continues to be one of the major causes of morbidity and mortality among women in Kenya and screening uptake is low despite the availability of services. While previous research has shown certain barriers, such as fear, stigma, and lack of awareness, little has been done analysing the combined effect of psychological factors, confidence levels, and cues to action. This study fills this gap by examining the influence of these determinants on women's participation in cervical pre-cancer screening at Mbagathi Level four hospital. This research aimed to determine psychological factors that affect cervical pre-cancer screening for women who attend Mbagathi level four hospital, Nairobi, Kenya. The Health Belief Model provided the foundation for the study. The study was conducted at Mbagathi Level Four Hospital in Nairobi. Research design was analytical cross-section. The study population included women who were eligible for cervical cancer screening (1,500 women) which gave a sample size of 240 respondents. This was arrived at using systematic random sampling. Data collection was done with the aid of structured questionnaires and key informant interviews. Quantitative data was interpreted with the help of statistical software package version 27, and the descriptive statistics and the regression analysis were performed, while qualitative data was interpreted using the thematic approach. Results showed that psychological perceptions had a great impact on the behaviour of screening: 57.9 women considered screening uncomfortable, 67.1 feared the diagnosis, and 61.7 perceived stigma. On the contrary, 82.1% considered early detection important and 82.5% saw the screening as a personal responsibility. The results of the regression analysis showed that there were psychological factors which accounted for 11.9% variance in the screening uptake ($R^2 = 0.119$). Confidence levels were high, with more than 78% being very confident in sticking to schedules, communicating with providers and healthy behaviours. Cues to action like provider communication (74.2%) and media exposure (88.3%) increased awareness but are not a good independent predictor of uptake. The study concludes that psychological factors, confidence and cues to action play a large part in determining screening behaviour, although sociocultural factors and cost barriers are crucial. It recommends integrated interventions that will reduce fear and stigma, increase access to free or low-cost services and increase community sensitization through communication by providers, family support and consistent media campaigns to improve screening participation and early detection outcomes.

Keywords: Cervical Cancer Screening, Mbagathi Level Four Hospital, Nairobi, Psychological Factors

I. INTRODUCTION

Cervical cancer is a significant worldwide health problem that kills more than 340,000 women each year and is the fourth most prevalent type of cancer in the world (Global Cancer Observatory [GLOBOCAN], 2020). The significance of this burden was further highlighted by the World Health Organization (WHO) in 2018, where it was emphasized that one woman dies from cervical cancer every two minutes (WHO, 2018). This alarming mortality rate has made cervical cancer a vital public health priority with a need for immediate interventions to lessen the devastating impacts of this cancer.

In Sub-Saharan Africa (SSA), the disease takes a heavy toll, with a mortality rate of 23/100,000 women (Ngune *et al*., 2020). Limited healthcare infrastructure, poor coverage of screening and socio-cultural barriers are among the factors responsible for the high burden in the region. Despite cervical pre-cancer screening is one of the cost-effective preventive interventions, the uptake of cervical pre-cancer screening across SSA remains very low. A systematic review from 2000-2019 showed an estimated average screening rate of 12.9%, demonstrating the disconnect between the policies and the practice (Yimer *et al*., 2021). In Ethiopia, a national coverage for screening was reported at 14.9% (Desta *et al*., 2021), and it further presents the challenge in the region.

The situation in Kenya is not different from these regional trends with cervical cancer being the leading cause of cancer death among females causing 5,236 deaths annually or 11.9% cancer related death (Ferlay *et al*., 2018). Alarmingly, projections estimate that there will be a 50% rise in cervical cancer cases by 2030 when current trends continue. Screening uptake remains low with Ng'ang'a *et al*. (2018) reporting a national coverage of 16.4% uptake. These numbers highlight the need to tackle barriers to screening, especially those that are psychological, sociocultural and awareness related.

At the local level, Mbagathi Level Four Hospital in Nairobi has a diverse population of women coming from different socio-economic and cultural backgrounds. Despite the availability of screening services, the uptake of services is suboptimal. Psychological factors, including fear of the procedure, fear of test results, stigma of a positive diagnosis, and lack of spousal support have been found to be important determinants of screening behaviour (Lim & Ojo, 2017; Moshi *et al*., 2019; Orang'o *et al*., 2016). Perceptions of susceptibility, severity and self-efficacy also influence women's willingness to screen (Yimer *et al*., 2021; Gemeda *et al*., 2020). In addition, cues to action including health education, family influence and supportive policies play a pivotal role in motivating screening uptake (Abiodun *et al*., 2014; Rosser *et al*., 2015).

Given the high burden of cervical cancer in Kenya and low screening rates that have been observed nationally and locally it is imperative to investigate the psychological factors affecting cervical pre-cancer screening among women attending Mbagathi Level Four Hospital. Understanding these determinants will give critical information for barriers and motivators and will therefore inform tailored interventions aiming to improve the uptake of screening and thus ultimately the reduction of cervical cancer mortality.

1.1 Statement of the Problem

Cervical cancer is both preventable and curable if diagnosed early, but the number of people affected is expected to reach 700,000 by 2030 globally, with more than 1 million women currently asymptomatic and presenting late for treatment (WHO, 2018). In Sub-Saharan Africa screening uptake is at a critically low rate of 12.9% (Yimer *et al*., 2021) and in Kenya, coverage is as low as 16.4% (Ng'ang'a *et al*., 2018). Despite the efforts by the nation, annually screening rates range from 1% to 36% due to systemic gaps (Mwenda *et al*., 2022).

The Ministry of Health has set the target of 70% screening by the year 2030, but interventions have tended to focus on facility readiness, i.e., training of providers and provision of equipment, and have also ignored psychological barriers at the patient level. Fear of the procedure, stigma, low self-efficacy and poor perceptions of risk still remain unaddressed, which limits uptake. At Mbagathi Level Four Hospital that caters for women from various socio-economic and cultural backgrounds, it is important to understand some of these psychological determinants. This study addresses the knowledge gap by identifying psychological factors that affect screening behaviour in order to inform the development of a strategy to meet WHO's elimination goals.

1.2 Objective of the Study

To determine psychological factors that affect cervical pre-cancer screening for women who attend Mbagathi level four hospital, Nairobi, Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Health Belief Model

The Health Belief Model (HBM) developed by Rosenstock in 1974 is an excellent model for understanding preventive health behaviours such as cervical pre-cancer screening. The model assumes that health behaviour is determined by psychological perceptions that determine the readiness to act. Perceived susceptibility is a woman's perception of her risk of developing cervical cancer and perceived severity is the assessment of the severity of the disease. Studies in United States (Black *et al*., 2019) and Iran (Kasraeian *et al*., 2020) indicate that women who are aware of their susceptibility to cervical cancer and the consequences of death being more frequent are more likely to be screened.

Perceived benefits and perceived barriers are at the centre of decision-making. Women consider the benefits of early detection with barriers such as fear, stigma, embarrassment or misconceptions. In Nigeria, Modibbo *et al*. (2016) found that fear of pain and association with HIV testing decreased uptake and awareness of benefits increased participation. Cues to action, e.g., spousal support, health education, or provider recommendations serve as triggers that Ndejjo *et al*. (2016) attest to the influence of healthcare providers. Self-efficacy or confidence in the ability to undergo screening is equally critical as Gemeda *et al*. (2020) demonstrated in Ethiopia.

In Kenya, screening coverage is low at 16.4% (Ng'ang'a *et al*., 2018) with annual coverage rates ranging between 1-36% (Mwenda *et al*., 2022). At Mbagathi Hospital facility readiness has improved; however, the psychological determinants have not been sufficiently explored. This research applies HBM to identify these factors to fill in the gap and contribute towards Kenya's aim for 70% screening coverage by 2030.

2.2 Empirical Review

Globally, psychological barriers like embarrassment, fear and stigma have been widely reported. In the United States, an intimate nature of Pap smears deterred participation, women reported embarrassment and anxiety of pelvic examinations, according to Black *et al*. (2019). Similarly, Kasraeian *et al*. (2020) in Iran discussed fear of diagnosis and fatality as major deterrents. Studies in Asia and Europe also stressed on low self-efficacy and misconceptions about screening procedures as barriers, whereas trust in healthcare providers and family support emerged as motivators (Teng *et al*., 2014; Naz *et al*., 2019). These results highlight the universal importance of psychological factors on the behaviour of screening.

In Sub-Saharan Africa stigma and fear dominate as barriers. Lim and Ojo (2017) reported on how cervical cancer was often blamed on promiscuity or curses and resulted in women not screening. Modibbo *et al*. (2016) in Nigeria identified fear of pain, anxiety of being tested HIV, and embarrassment as some of the deterrents. A systematic review by Mafiana *et al*. (2022) confirmed negative perceptions and emotional discomfort are key factors in the low uptake with average rates of screening being 12.9%. From these studies, there is an emphasis for the need for culturally sensitive interventions to address psychological barriers for African contexts.

In Kenya, the screening uptake is still low with national screening coverage at 16.4% (Ng'ang'a *et al*., 2018). And recent studies confirm that there are persistent psychological barriers. Mose *et al* (2025) in Coastal Kenya showed that fear of positive results, stigma and misconceptions led to low participation in screening. Orang'o *et al*. (2016) and Morema *et al*. (2014) reported lack of awareness and fear of pain as reasons why women were reluctant to get screened. Trust to healthcare providers as well as spousal support were identified as motivators (Ndejjo *et al*., 2016). These findings suggest the role of psychological, social, and cultural factors in determining screening behaviour.

At Mbagathi Hospital, awareness and uptake is low in studies reporting that women are embarrassed, stigmatized and have misconceptions as barriers. Facility-level interventions, including provider training and providing equipment, have increased readiness, but psychological determinants on the patient level are understudied. Existing research has centred on awareness and socio-cultural factors and there remains a void in the psychological dimensions (fear, stigma, self-efficacy, trust in providers, spousal support) that affect screening uptake. This study aims to fill this gap by identifying psychological factors among women attending Mbagathi Hospital to provide specific interventions to reach Kenya's target of 70% screening coverage by 2030.

III. METHODOLOGY

The study was done at Mbagathi Level Four Hospital, Nairobi County. Established in the 1950s, the hospital has grown to be a county referral facility servicing an estimated 1 million people, mostly from underprivileged communities, including those bordering the Kibera slums. The hospital offers maternal and child health services, as well as cervical cancer

screening services, and therefore provided an ideal setting to investigate psychological factors associated with screening uptake.

An analytical cross-sectional design was adopted. This design allowed the researcher to investigate associations between psychological factors such as fear, stigma, self-efficacy, and perceived susceptibility and uptake of cervical pre-cancer screening by women attending the hospital.

The target population was women aged 25-49 years seeking services at the mother and Child Health (MCH) Clinic. This age group was chosen according to Kenya's national guidelines that show that it is the population most at-risk for cervical cancer. The catchment area of the hospital comprised of around 270,000 women in this age bracket (Kenya National Bureau of Statistics [KNBS], 2019).

A systematic random sampling pattern was applied. With approximately 1,500 women attending the MCH clinic every month, every 6th eligible individual was recruited in order to ensure unbiased representation. The sample size was determined with Fisher's formula, with a prevalence of 16.4% for screening (Ng'ang'a *et al*., 2018), a confidence level of 95% and a margin of error of 5%. The sample size obtained was 213 participants. Data collection was carried out through semi-structured questionnaires, which were drawn based on the conceptual framework and distributed through Google Forms. Key informant interviews of healthcare providers and community health workers were used to supplement the data.

Validity was ensured through pretesting on Mama Lucy Level Four Hospital. Reliability was increased by including three research assistants in the training in ethical data collection and by standardizing procedures to reduce the likelihood of bias. Data were cleaned and analysed using the statistical package, version 27.0 of the statistical software package. Descriptive statistics were used to summarise participant characteristics and linear regression was used to examine associations between psychological factors and screening uptake. Logistic regression was used to examine the predictive factors of screening behaviour and significance level was set at $p < 0.05$.

Ethical approval was obtained from the Mount Kenya Research Ethics Committee, and National Commission for Science, Technology and Innovation. Informed consent was obtained from all participants who were assured of confidentiality and freedom to withdraw without prejudice. Data was anonymized and securely stored, and findings were shared with stakeholders to support the development of policies and practise.

IV. RESULTS & DISCUSSION

4.1 Results

4.1.1 Psychological Factors that determine pre cervical cancer screening

The results demonstrate that psychological perceptions strongly influence women's attitude towards cervical pre-cancer screening. Most of the respondents (57.9%) strongly agreed that screening is uncomfortable with a mean score of 4.16 (SD = 1.189) highlighting that discomfort is a significant barrier. Fear of diagnosis was much more apparent. 67.1% strongly agreed and mean was found to be 4.41 (SD = 1.006), it is clear anxiety of being diagnosed with cervical cancer is a huge deterrent. Stigma was also found to be important, with 61.7% strongly agreeing that cervical cancer patients are stigmatised, and a mean of 4.27 (SD = 1.080).

On the good side, psychological motivators were present. An overwhelming 82.1% strongly agreed that early detection is taken seriously with a high mean of 4.75 (SD = 0.603) while 82.5% strongly believed that screening is a personal responsibility with mean of 4.71 (SD = 0.724). These low standard deviations indicate high levels of consensus among the respondents.

The aggregate mean of 4.53 (SD = 0.696) is confirming that psychological factors as a whole play a very influential role in determining screening uptake. In summary, while fear, stigma and discomfort pose barriers to participation, powerful drivers of beliefs in early detection and individual responsibility are also present that play a powerful role in motivating screening behaviour highlighting the dual role of psychological perceptions in determining screening behaviour.

Table 1

Psychological factors that determine pre-cervical cancer screening

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
Cervical pre-cancer screening is a very uncomfortable procedure	5.40%	5.40%	15.00%	16.30%	57.90%	4.16	1.189
I fear being diagnosed with cervical cancer	2.50%	4.60%	9.60%	16.30%	67.10%	4.41	1.006
Cervical cancer patients are stigmatized	2.10%	7.10%	14.60%	14.60%	61.70%	4.27	1.08
I consider early detection of cervical cancer through screening very seriously	0.00%	1.70%	3.80%	12.50%	82.10%	4.75	0.603
I believe that getting a cervical cancer screening is a personal responsibility	1.30%	0.80%	5.80%	9.60%	82.50%	4.71	0.724
Aggregate Psychological factors that determine cervical cancer screening	0.00%	0.80%	9.20%	26.70%	63.30%	4.53	0.696

These quantitative patterns are reflected in actual clinic interactions reported by key informants. Barriers such as discomfort and fear are prominent as women tend to delay, being symptomatic:

> *"I see too often women who come for screening only after they have symptoms such as unusual bleeding or abdominal pain. They told me they knew something was wrong, so they decided to have it checked. It is generally the discomfort that drives them to action."*

Fear is the motive of preventive action in others:

> *"Many women tell me that they are afraid of cervical cancer and want to detect it in the early stages. Fear of the disease itself is what spurs them to action."*

Positive motivators relate to high agreement of early detection, responsibility:

> *"You get women who come out of curiosity, saying, she just wants to know her health status. To some, they felt it was their responsibility to take care of themselves, so they choose screening."*

Personal loss makes the perceived severity increase:

> *"I remember a woman who said that she had lost her cousin to cervical cancer and she didn't want to suffer the same fate. Personal loss makes the risk very real and creates an incentive to act."*

4.1.2 Regression Model of Psychological Factors that Determine Pre-Cervical Cancer Screening

The regression analysis shows that psychological factors have a significant effect on the uptake of cervical pre-cancer screening among women. The model resulted in an R value of 0.346, which indicated the presence of a moderate positive relationship between psychological factors and screening behaviour. The R Square of 0.119 indicates that psychological factors account for approximately 11.9% of the variance in screening uptake, which means that they are important but not the only determinants.

The results of the Anova tests prove the statistical significance of the model, the F value is 32.274 with p value of 0.000, indicating that psychological factors are reliable predictors of screening uptake. The coefficient analysis also supports that psychological factors had a positive unstandardized coefficient (B = 0.348) and a standardised Beta of 0.346, both of which are statistically significant (p = 0.000). This means that for each unit increase in positive psychological perception, the uptake of screening will increase by 0.348 units.

Table 2

Regression Model of Psychological Factors that Determine Pre-Cervical Cancer Screening

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.346[a]	.119	.116	.659

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.019	1	14.019	32.274	.000[b]
	Residual	103.381	238	.434		
	Total	117.400	239			

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.876	.280		10.259	.000
	Psychological factors that determine pre-cervical cancer screening	.348	.061	.346	5.681	.000

a. Dependent Variable: Aggregate cervical pre-cancer screening

4.1.3 Ever Heard of a Person Who Died of Cancer of the Cervix

Figure I shows the awareness of respondents about the deaths by cervical cancer within their social circles. Of the total respondents (240 respondents), 47.9% has heard of someone who died due to cervical cancer, which shows that there is a considerable level of awareness regarding the deadly nature of the disease. On the other hand, 52.1% have not heard about such cases. The result of this is shown in Figure 1.

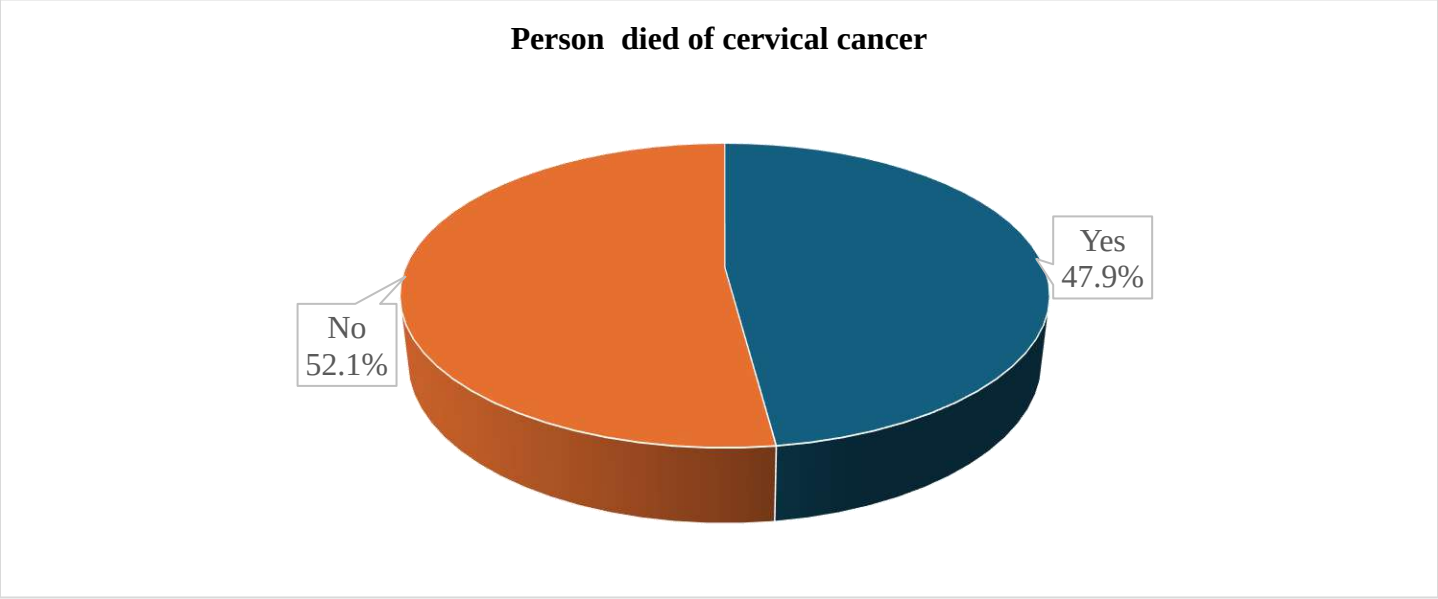

Figure 1

Ever Heard of a Person Who Died of Cancer of the Cervix

4.1.4 Cervical Screening Services are Readily Available

Figure II indicate that almost half of the respondents (47.9%) have heard of a person that died of cervical cancer. On the other hand, a little more than half of the respondents (52.1%) have not come across such an experience.

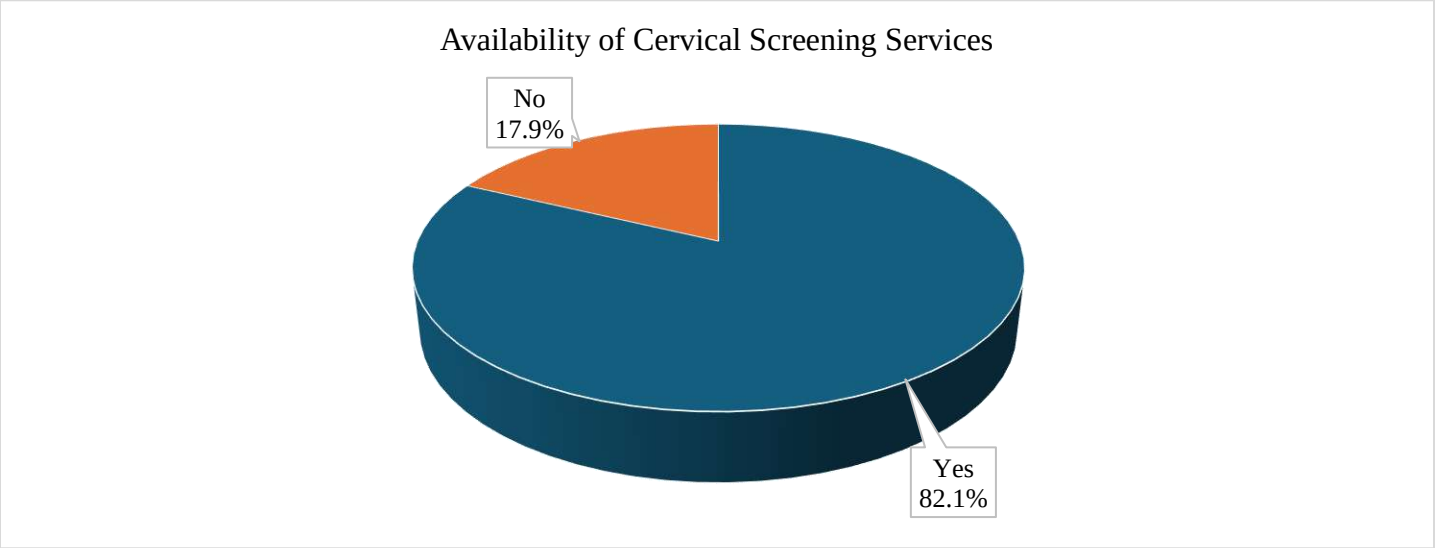

Figure 2
Cervical screening services are readily available

4.1.5 Confidence Levels of Women Regarding Various Aspects of Cervical Cancer Screening

The findings reveal that the women expressed high level of confidence in engaging with cervical cancer screening and cervical cancer screening preventive behaviours. A majority (78.8%) said they are very confident in following their screening schedule appointments with a mean of 2.73 (*SD* = 0.562). This represents great commitment to meeting screening schedules upon enrolment.

Confidence in communicating with healthcare providers was even higher (81.7% of respondents said they were very confident of communicating their concerns or questions about screening or treatment). The mean score of 2.79 (*SD* = 0.476) indicates a high level of agreement that trust and openness with providers is well entrenched.

Similarly, 85.0% of women displayed very high confidence in maintaining healthy lifestyle behaviours to lower the risk of cervical cancer. 2.83 (*SD* = 0.416) was the highest mean score. This suggests that preventive health behaviours are accepted and widely practiced.

Table 3
Confidence level with cervical cancer screening

Confidence level	Not confident	Somehow confident	Very confident	Mean	Std Deviation
I am confident I can follow my screening schedule appointments.	5.8%	15.4%	78.8%	2.73	.562
I am confident to talk to my healthcare provider about any concerns or questions regarding cervical cancer screening or treatment.	2.9%	15.4%	81.7%	2.79	.476
I am confident in maintaining healthy lifestyle behaviours that can reduce the risk of developing cervical cancer.	1.7%	13.3%	85.0%	2.83	.416

4.2 Cues to Action

The results indicate that external reminders and communication play an important role in the psychological readiness of women to get cervical pre-cancer screening. A majority of respondents (72.9%) said existing measures to remind women about screening were in place while 74.2% confirmed that health providers talked to them actively about screening. These cues have the direct effect of reducing psychological barriers including fear and stigma because they reinforce awareness and normalise behaviour.

Similarly, 71.7% reported that they were reminded to attend screening, which increases self-efficacy and personal responsibility - two key psychological motivators. Media message was the most influential cue and 88.3% of the women reported exposure. This wide reaching is important in terms of the significance of public campaigns in addressing misconceptions and reducing anxiety associated with screening.

Table 4

Cues to action

Cues to action		Frequency	Per cent
Existing measures to remind women about cervical cancer screening	Yes	175	72.9
	No	65	27.1
Health providers talk to women about cervical cancer screening	Yes	178	74.2
	No	62	25.8
Remind women to come for cervical pre-cancer screening	Yes	172	71.7
	No	68	28.3
Seen media messages about cervical cancer screening	Yes	212	88.3
	No	28	11.7

Key informants confirm the role of education, community, and media as cues, and draw attention to awareness gaps:

> *"Most women report that they were informed about cervical cancer screening during health talks at the clinic or during radio programmes. Education really makes the difference."*
>
> *"Media campaigns are also important. Some heard a program about cervical cancer on the radio and that's what got them thinking about screening. But such campaigns are not frequent enough."*

Community and family influences are important:

> *"I have seen that often women come because a friend or relative urged them along. Family support is a great motivator. Also, community support is important. Women often refer to church groups or CHVs who encourage them. These efforts on a local scale really matter."*

Barriers to access and cost are prominent:

> *"Whenever we organise free medical camps, the turnout is much higher. Cost is a big barrier, so free services are a great incentive to them."*

Awareness gaps persist:

> *"Honestly, many women tell me that they don't know of any programmes for cervical cancer screening. This indicates a huge gap in community sensitization. Those that are aware speak of church health talks or community health volunteers or organisations such as Beth Mugo's foundation. These programmes help but they are not widely known."*

4.2.1 Association between Cues to Action and Cervical Cancer Pre-Screening

The regression analysis shows that cues to action, in combination with psychological, sociocultural and risk-related factors, influence cervical pre-cancer screening uptake. In Model 1, the variance explained by the predictors was 11.9% (R^2 = 0.119), while sociocultural factors (β = 0.293, $p < 0.001$) and cervical cancer features (β = 0.207, p = 0.002) proved to be significant predictors of cervical cancer. Psychological factors had a weaker but non-significant effect (β = 0.106, p = 0.123).

When cues to action were added in Model 2 the explanatory power slightly increased to 24.7% (R^2 = 0.247), suggesting that reminders, communication from providers, and exposure to media are contributing to screening behaviour. However, the coefficient for cues to action was negative and not statistically significant (β = -0.070, p = 0.220), indicating that whilst cues are important in shaping awareness, for other things being equal, it does not predict the uptake of a screening option independently.

Table 5

Association between cues to action and cervical cancer pre-screening

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.493[a]	.243	.230	.615	
2	.497[b]	.247	.231	.614	
ANOVA					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.481	4	7.120	18.818	.000[b]
	Residual	88.919	235	.378		
	Total	117.400	239			
2	Regression	29.051	5	5.810	15.389	.000[c]
	Residual	88.349	234	.378		
	Total	117.400	239			

Coefficients						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	1.730	.370		4.675	.000
	Risk factors for cervical cancer	.049	.064	.049	.766	.444
	Cervical cancer feature	.251	.080	.207	3.152	.002
	Sociocultural factors that determine pre-cervical cancer screening	.212	.048	.293	4.463	.000
	Psychological factors that determine pre-cervical cancer screening	.107	.069	.106	1.549	.123
2	(Constant)	1.877	.388		4.831	.000
	Risk factors for cervical cancer	.047	.064	.047	.739	.461
	Cervical cancer feature	.262	.080	.216	3.277	.001
	Sociocultural factors that determine pre-cervical cancer screening	.208	.048	.287	4.368	.000
	Psychological factors that determine pre-cervical cancer screening	.103	.069	.102	1.490	.138
	Cues to action	-.135	.110	-.070	-1.229	.220

a. Dependent Variable: Aggregate cervical pre-cancer screening

4.3 Discussion

The results related to the psychological factors show a two folded influence on cervical pre-cancer screening behaviour. On one hand, factors that discourage participating include discomfort (mean = 4.16), fear of diagnosis (mean = 4.41), and stigma (mean = 4.27), which are similar to other studies in Nigeria by Modibbo *et al*. (2016) and Gemeda *et al*. (2020) in Ethiopia, that found fear and stigma as major deterrents. These results indicate that negative psychological perception is still a major hurdle in Kenya which is also consistent with Orang'o *et al*. (2016) who reported that fear of positive results was an obstacle to uptake of screening. On the other hand, there were strong motivators as well in that early detection (mean = 4.75) and personal responsibility (mean = 4.71) had high consensus. This is similar to those reported by Kasraeian *et al*. (2020) in Iran, in which an understanding of severity and responsibility promoted screening, and is consistent with the constructs of perceived benefits and self-efficacy of the Health Belief Model.

The combining of key informant observations reinforce these quantitative patterns. Women often postpone screening until symptoms develop due to barriers of discomfort and fear, although others are driven by fear of the disease, curiosity or personal responsibility. These stories are similar to evidence from around the world that fear can be a deterrent and a motivator depending on the context. The high focus on early detection and responsibility in this study implies interventions should focus on reducing stigma and discomfort and boosting positive motivators. This is consistent with regional recommendations that culturally sensitive education and provider communication are key in helping to change psychological readiness to actual uptake of screening.

The results of the regression analysis indicate that the psychological factors are statistically significant predictors of cervical pre-cancer screening uptake, but these factors can account for a very small percentage of the variance (11.9%). This suggests that although perceptions such as fear, stigma, discomfort and responsibility are important, other determinants such as sociocultural influences, awareness levels and structural barriers also play an important role in determining screening

behaviour. These results are consistent with studies in Sub-Saharan Africa as well are Modibbo *et al*. (2016) in Nigeria and Gemeda *et al*. (2020) in Ethiopia showed that psychological barriers alone could not explain the low screening rates since cultural norms and access issues also contributed. Similarly, Orang'o *et al*. (2016) in Kenya pointed out fear and stigma as very significant but interlinked with wider social and information gaps. Thus, the importance of multifaceted interventions is highlighted through regression analysis: the psychological barriers should be reduced while working on the sociocultural and systemic factors to create a meaningful change in screening uptake.

The results of awareness on cervical cancer deaths show that almost half of the respondents (47.9%) had heard of someone who died of the disease, while slightly more than half of the respondents (52.1%) had not. This indicates that despite cervical cancer being known as a serious health threat in many social circles, there is still a significant percentage of women that have never been exposed to the consequences of the same. Such mixed levels of awareness may affect psychological perceptions differently: some with personal or social exposure to fatalities may perceive greater susceptibility and severity to fatalities, to the extent that it motivates them to screen, while some with no personal or social exposure to fatalities may underestimate the risk. This pattern is consistent with evidence from Sub-Saharan Africa, including that of Lim and Ojo (2017), who report that personal experiences with cancer increased the perceived severity of cancer and encouraged action to prevent it.

Confidence levels were, however, consistently high on all measures. Most women had high levels of confidence in following screening schedules (78.8%), communicating with healthcare providers (81.7%) and maintaining healthy lifestyle behaviours (85.0%). These results show evidence of strong self-efficacy, an important construct in the Health Belief Model, which indicates that psychological readiness to act exists. Similar results were found by Gemeda *et al*. (2020) in Ethiopia in which self-efficacy was strong associated with screening uptake. The implication is that interventions at Mbagathi Hospital must address less on building confidence, which was already high, and more on barriers such as fear, stigma and discomfort, while taking advantage of existing confidence to translate psychological readiness into consistent screening behaviour.

The findings in regard to awareness of cervical cancer fatalities indicate that almost half of the respondents (47.9%) had heard of someone who died from the disease while slightly over half of the respondents (52.1%) had not. This mixed level of awareness indicates that although cervical cancer awareness is acknowledged as a serious health threat within many social circles, there is a significant level of women who may underestimate the severity of the disease due to lack of direct exposure. Studies such as Lim and Ojo (2017) in Sub-Saharan Africa confirm that personal experiences with cancer fatalities increase perceived severity and susceptibility which often result in motivation to prevent. Conversely, some women who are not exposed to such may not perceive the need to go for screening, hence the need for community sensitization programmes to fill this awareness gap.

Confidence levels, however, were consistently high across all measures and 78.8% of women were very confident in following screening schedules, 81.7% were confident communicating with healthcare providers and 85.0% were confident in maintaining healthy lifestyle behaviours. These findings demonstrate strong self-efficacy, a critical construct in the Health Belief Model, and are similar to Gemeda *et al*. (2020) findings in Ethiopia, who found that self-efficacy was a good predictor of screening uptake. The implication is that women at Mbagathi Hospital are psychologically prepared to take action, but the uptake can be impeded by barriers e.g. fear, stigma, and cost. Interventions should therefore focus on reducing these barriers but building on high confidence levels to turn readiness into consistent screening behaviour.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study concludes that psychological factors, confidence level, cues to action influence cervical pre-cancer screening behaviour largely among women at Mbagathi Hospital. While fear, stigma and discomfort are barriers to uptake, powerful motivators are strong beliefs in early detection and personal responsibility. High confidence in provider communication and lifestyle practices reflects high self-efficacy but there are gaps to awareness and cost barriers. Regression analysis indicates that psychological factors and cues to action make meaningful contributions but need to be combined with sociocultural influences in order to optimise screening uptake.

5.2 Recommendation

The most effective suggestion is to conceptualise the integrated intervention that minimises psychological barriers while maximising positive motivators. Health programs should be oriented towards community sensitization campaigns to overcome fear, stigma and misconceptions, with free or low-cost screening services to overcome cost barriers. At the same time, exploiting the high confidence and sense of responsibility among women through provider communication, family

and community support and consistent media messaging will convert psychological readiness to sustained screening uptake. This multi-pronged approach is the way to ensure better participation and results in early detection.

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