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FACTORS INFLUENCING UPTAKE OF CERVICAL CANCER SCREENING AMONG FEMALE SEX WORKERS AT NEW AFRICA HOUSE NEW START CENTRE, HARARE

BY

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Abstract

Cervical cancer is the fourth most common cancer globally and it is caused by the Human Papillomavirus (HPV). In low- and medium-income countries (LMIC), cervical cancer is the second most common type of cancer in women after breast cancer. Transmission is mainly through sexual contact. Consistent with global statistics which put new cervical cancer cases at 580 000 new cases in 2018 incidence and deaths from cervical cancer have been on the rise in Zimbabwe. The main aim of this study was to analyse individual, structural, and health-system-related factors influencing the uptake of cervical cancer screening by Female Sex Workers at the New Start Centre at New Africa House from October 2021 to March 2022. The study was conducted at the New Start Centre clinic at New Africa House in Harare central business district. The clinic is owned by Populations Solutions for Health (PSH) and offers HIV prevention and treatment and sexual reproductive health services with a focus on key populations. An analytical cross sectional study design was employed, and data was collected by the use of an interviewer administered questionnaire after the researcher had sought and received approval from PSH leadership and Africa University Research Ethics Committee (AUREC). A total of 52 study participants were interviewed. All of them were Female Sex Workers aged between 18 and 51 with a median age of 33. Twenty-seven (55%) of the participants reported that they had received cervical cancer screening services at least once in their lifetime while the other 25 had not. Female Sex Workers who were Christians (65%) were found statistically significantly associated with uptake of cervical cancer. Other variables that scored high, even though not statistically significant included one's perception of risk of cancer, knowledge about the screening method (88%), and provider preferences. Almost two thirds of the participants reported that they preferred being served by female providers. For those who reported that they had never been screened for cervical cancer 27 (52%), reasons given included fear of the procedure and fear of the screening result. Cost of the service as a structural factor was an enabler of uptake of the service. It can be concluded that, consistent with other available literature locally, regionally, and globally, cervical cancer screening uptake is equally a function of individual as well as it is of structural and health system related factors. Female sex workers are a high-risk group for developing cervical cancer due to their sexual practices. As a recommendation, cervical cancer screening should be easily accessible at health facilities that serve key populations through providing various screening modalities and ensuring that there are competent key population friendly service providers.

Keywords: Cervical Cancer, Female Sex Worker, Human Papilloma Virus

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Declaration Page

I declare that this dissertation is my original work except where sources have been cited and acknowledged. The work has never been submitted, nor will it be submitted to another university for the award of a degree

__Joyce Majongosi__ ____  12/05/2022

Student's Full Name Student's Signature (Date)

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Definition of Key Terms

Cervix: Lower part of the uterus connecting to the vagina (Dictionaries: National Cancer Institute, 2021)

Cancer: A disease caused by uncontrolled proliferation of cells of an organ (Dictionaries: National Cancer Institute, 2021)

Cervical Cancer: A malignant tumour of the cervix (Dictionaries: National Cancer Institute, 2021)

Female Sex Worker: A woman who engages in sex for payment (Overs, 2002)

Secondary Prevention: Screening done to detect diseases at their earliest stage (CDC, 2006)

List of Acronyms and Abbreviations

AIDS:	Acquired Immune Deficiency Syndrome
ART:	Antiretroviral treatment
HBM:	Health Belief Model
HIV:	Human Immunodeficiency Virus
HPV:	Human Papilloma Virus
FSW:	Female Sex Worker
LEEP:	Loop Electrosurgical Excision Procedure
LMIC:	Low to Medium Income Countries
MoHCC:	Ministry of Health and Childcare
MSM:	Men having Sex with Men
PrEP:	Pre-exposure prophylaxis
PSH	Population Solutions for Health
STI:	Sexually Transmitted Infection
SRH:	Sexual and Reproductive Health
VIAC:	Visual Inspection of the cervix with Acetic Acid
WHO:	World Health Organisation

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CHAPTER 1 INTRODUCTION

1.1 Introduction

Cervical cancer is the fourth most common cancer globally and it is caused by the Human Papillomavirus (HPV). In low- and medium-income countries (LMIC), cervical cancer is the second most common type of cancer in women after breast cancer (Fitzpatrick, et al., 2020).Transmission is mainly through sexual contact. Because of their increased sexual activity, female sex workers (FSWs) are at higher risk of cervical cancer hence the need for regular routine screening. Early screening is the best intervention to avert the devastating effect of the disease.

This chapter looked at the background against the study, the observed problem and sets the study objectives to be achieved. The researcher also justifies the reason for the choice of the study and why conducting the study among this population and study setting, under the delimitations section.

1.2 Background to the Study

Consistent with global statistics which put new cervical cancer cases at 580 000 new cases in 2018 incidence and deaths from cervical cancer have been on the rise in Zimbabwe (World Health Organization [WHO], 2021). More than 341843 women died of cervical cancer in 2020 with third world countries accounting for more than 90% of global cervical cancer cases (Muluneh, Atnafu, & Wassie, 2019). As such, countries such as Zimbabwe, Ethiopia and other African countries employed targeted and opportunistic approaches to screening of cervical cancer. Meanwhile, the WHO estimates that women living with HIV are 6 times more likely to have cervical cancer than those without HIV (WHO, 2020). In the same report it is reported that 5 % of all global cervical cancer patients are living with HIV, while the proportion increases in high HIV prevalence settings.

Measures recommended for prevention and control of cervical cancer include primary prevention methos such as vaccination against HPV, secondary prevention such as early screening of pre-cancerous lesions and tertiary prevention including diagnosis and treatment of cervical cancer (World Health Organization [WHO], 2021). While Zimbabwe introduced the primary prevention arm in 2018, the intervention targeted the 10–14-year age group (Mupfumira, 2018). This means that the FSWs, most of whom are above the age of 20 require the secondary prevention arm for the war to be won.

Cervical cancer screening centres are dotted across the country with nurses ably trained on offering the visual inspection of the cervix with acetic acid cervicography (VIAC) technique (Murewanhema, 2021). In addition, screening for the HPV is done through implementing partners of the Ministry of Health and Child Care (MOHCC) such as PSI Zimbabwe. Women who test positive for HPV are the further screened with the VIAC technique with those who are VIAC positive having the pre-cancerous lesions removed by the Loop Electrosurgical Excision Procedure (LEEP).

While the WHO recognizes that screening for precancerous lesions and the HPV is immensely useful in the prevention of cervical cancer and this message has been widely disseminated through various channels in Zimbabwe, uptake of the service remains generally low across all populations. Ilesanmi and Kehinde, (2018) found that uptake of cervical cancer screening was very low despite the high prevalence of HPV among the population in Nigeria. Similar findings, albeit on the whole Zimbabwe population were reported by Murewanhema, (2021). In the Zimbabwean context, if the uptake could be low among the general population, one wonders what the uptake was among FSWs.

Being a sexually transmitted infection, HPV is usually found in women shortly after the onset of sexual activity. Female Sex Workers thrive on numbers of sexual encounters and in most

cases, they even engage in unprotected sex for more money. This puts them at increased risk of sexually transmitted infections (STIs), HPV included. This means prevention and control strategies against cervical cancer must not exclude this key population at all costs.

The New Start Centre at New Africa House in Harare is one of the implementing partner-run clinic offering both HPV screening, VIAC and LEEP. In addition, the clinic is a key populations clinic offering services to both the general populations and key populations who include FSWs and men having sex with men (MSM) among others. It is within the organization's (PSI Zimbabwe) scope of service provision to ensure that every FSW in care on anti-retroviral treatment (ART) or pre-exposure prophylaxis (PrEP) are screened for HPV according to national guidelines.

Clinicians employed by the organization are allrounders offering HIV related services as well as sexual and reproductive health services to the clients. The mode of service delivery shifted from the passive mode where the clinic waits for clients to visit to a more direct approach in which the service providers literally hunt for the clients to offer them the services, HPV screening included. With such a robust service delivery model, it then becomes imperative to investigate the factors that may influence uptake of cervical cancer screening.

1.3 Statement of the Problem

Despite the MOHCC introducing, VIAC in 2011, there remains low uptake of the service in Zimbabwe in general. While uptake of cervical cancer screening remains a lowly 9%, prevalence of HPV in Zimbabwe is a whopping 24% (Nyamambi et al., 2020). The New Start Centre at New Africa House aims to screen at least 90% of women in their ART programme but the coverage currently stands at 70%. This is despite the fact that performance in that regard is monitored weekly, monthly and quarterly at site and organizational level. The 70% mentioned above may even include some women among the general population in care at the

clinic. It is therefore important to investigate the factors, be it individual or structural, influencing the uptake of cervical cancer screening among the FSWs.

1.4 Objectives

1.4.1 Broad Objective

The main aim of this study was to analyse the individual, structural and health-system-related factors influencing the uptake of cervical cancer screening by FSWs at the New Start Centre at New Africa House from October 2020 to September 2021.

1.4.2 Specific Objectives

This study seeks to:

i. analyse the individual factors associated with uptake of cervical cancer screening by Female Sex Workers at New Africa House from October 2020 to September 2021.
ii. determine the structural factors influencing cervical cancer screening uptake by Female Sex Workers at New Africa House from October 2020 to September 2021.
iii. identify the health system factors influencing uptake of cervical cancer screening by Female Sex Workers at New Africa House between October 2020 and September 2021.

1.5 Research Questions

i. What are the individual factors which influence the uptake of cervical cancer screening by female sex workers at New Africa House?
ii. Which are the structural factors what influence uptake of cervical cancer screening by female sex workers?

iii. What effect do health system factors have on the uptake of cervical cancer screening by female sex workers at New Africa House?

1.6 Significance of the Study

In the understanding that the coverage, as far as cervical cancer screening is not at the desired level at organization and national level, the study findings will add to the much-needed information for decision making. While a lot has been said about the factors which influence cervical cancer screening uptake in the general population, among rural and urban women and many other facets of the population, not much is known about the influencing factors among female sex workers. Hence, this will add to the body of literature on this important subject. While the approach to cervical cancer screening has been blanket, this may also help inform whether there is need for targeted approach to selected populations.

1.7 Delimitations

Even though the NAH clinic offers services, cervical cancer screening included, to all populations, the researcher narrowed down to FSWs only because this is an area that has little data available. The New Start Centre at New Africa house was chosen as the study site owing to the high numbers of FSWs served at the clinic. The FSWs come from all over Harare, giving the study sample a fair bit of representativeness. All FSWs whether on ART or PrEP were considered for the study owing to their risks associated with their trade. In addition, FSWs were chosen as the study population because of their high risk of contracting HPV.

1.8 Limitations

While the researcher put all measures possible to address potential limitations to the study it is inevitable that not all were be catered for hence had an influence on the study. Some of the limitations included the current COVID-19 environment. Although Zimbabwe is literally speaking, out of the fourth wave people are still unsure what the future holds hence visit to the

facility was still not at optimal levels. This hampered the efforts to get accurate information from the FSWs face to face. Despite the FSWs coming from various corners of Harare, generalisability of the findings to all FSWs may be difficult since the study left out those who do not visit the clinic. Possibly reasons for them not to visit the clinic may also be the same why they may not get screened for cervical cancer in the first place.

1.9 Chapter Summary

In this chapter the researcher introduced the study as well as its purpose then gave the background of the study as a phenomenon pinned around female sex workers. The researcher thus proceeded to give the problem statement which was followed by the objectives of the study which was framed into general and specific objectives hence all being guided by the working title. Following this, the chapter outlined the research questions and significance of the study which narrowed down to factors positively influencing cervical cancer screening uptake among female sex workers at New Africa House clinic. Finally, the chapter gave delimitations, explaining why the population and the study site were chose and limitations of the study.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

For any study to be scientifically sound, it must be premised on available body of knowledge. This makes it of paramount importance to review literature related to the proposed study. In this chapter the researcher starts by proposing a theoretical framework for the study. The researcher chose the health belief model to explore the factors affecting the uptake of cervical cancer screening. Having described the health belief model, the researcher will then explain the relevance of the framework to the study by reviewing related literature in line with the study objectives. The researcher looked at local, regional, and global literature on the subject, marrying the study objectives with the available knowledge.

2.2 Theoretical Framework – The Health Belief Model

The Health Belief Model (HBM) is one of the models that were developed as the United States public health researchers designed psychology models to enhance health education programmes (Abraham & Sheeran, 2016). Simply put, the HBM postulates that for one to behave in a certain way on health matters, their beliefs play a huge part. There are 6 concepts of the HMB which are:

a. Perceived Susceptibility – People are more likely to take action or decide to take up a health programme if they believe they are susceptible or rather they can be affected by the negative consequences of their action.
b. Perceived Severity – If people believe that the problem being sought to be addressed has devastating effects, they are more likely to participate in the fight against the problem.
c. Perceived Benefits – One's opinion on the value or usefulness of an intervention will determine their acceptance or rejection of the intervention.

d. Perceived Barriers – When one anticipates what can/may stop them from accepting an intervention they are more likely to mitigate against the barriers or give in prematurely hence reject an intervention.
e. Health motivation – Also known as self-efficacy refers to one's belief or confidence in their ability to take up a health intervention and this also impacts on one's decision to accept or reject the intervention.
f. Cues to Action – There are events, activities or people that influence one to change their perception and decide on talking up an intervention

In addition to the above-mentioned concepts, other factors such as demographic characteristics and psychological variables also influence one's decision one way or the other. Uptake of cervical cancer screening, like any other intervention is also influenced by these factors. Figure 1 below is an illustration of the health belief model.

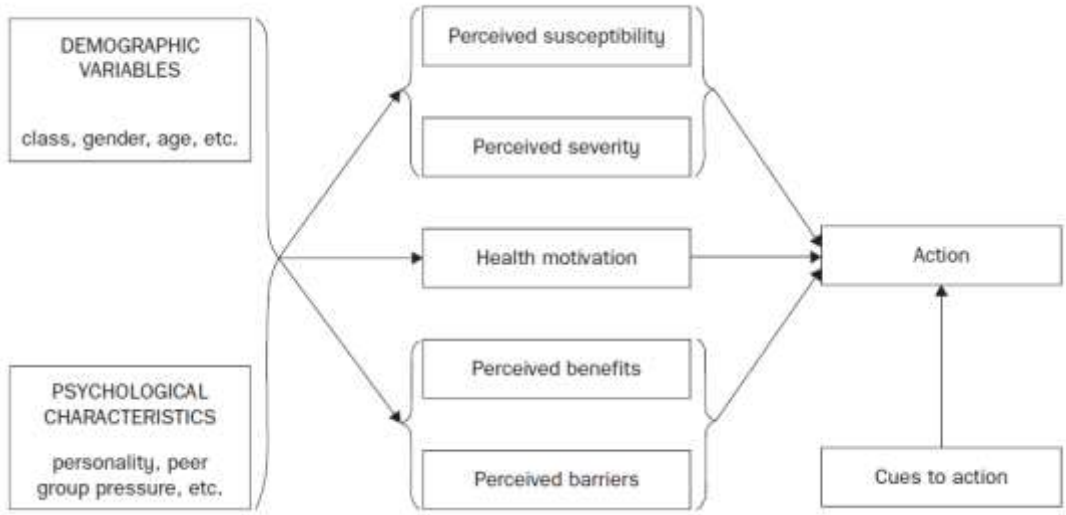


Figure 1.1: The Health Belief Model (Source: Abraham and Sheena 2016)

Bringing this into the study, individual factors such as age, social class and personality influence one's perception on susceptibility to cervical cancer and how severe they believe cervical cancer is. In addition, they also affect one's perception on the benefits of early screening in mitigating the effects of cervical cancer and what they believe was the barriers to

their access of the service. This in turn affects the decision to be screened early for cervical cancer. Some events such as peers showing someone their cervical cancer screening results or even family members or close friends' death from cervical cancer are some of the cues to action which can make someone make the decision to be screened for cervical cancer.

2.3 Relevance of the Theoretical Framework to the Study

Having described the HBM above, it is now important to look at available literature on factors influencing uptake of cervical cancer screening among women in line with the study objectives.

2.3.1 Individual Factors Affecting Uptake of Cervical Cancer Screening

Cervical cancer screening, just like other secondary prevention measures is meant to detect cervical cancer early in otherwise healthy individuals. Generally, secondary prevention suffers when the individual believes that they can only visit a clinic or health care centre if they are unwell. Clients who are not sick may not visit the health care centres for such services for fear of contracting other infections such as COVID-19 (Murewanhema, 2021). This view is also shared by Tapera et al. (2019) who also found that healthy women who rarely visited hospitals or doctors were less likely to have been screened for cervical cancer.

Mupepi, Sampselle, & Johnson, (2011) found that women with low educational status percieved their risk of cervical cancer as incredibly low as they opined that it does not run in their history. In Kenya, Ngari, Nyamiaka, & Mukami (2021) also found similar findings where women of low educational level were associated with poor knowledge of the existence of cervical cancer screening services and the benefits of the screening. This was also the case in Ghana as reported by Ampofo, Adumatta, Owusu, & Awuviry-Newton, (2020). One of the cues to action noted by the same authors was that those who sought screening services did so after noticing some unusual discharge.

Lack of awareness on cervical cancer screening was also reported to be a barrier to cervical cancer screening services uptake by Fenti, Tadesse, & Gebretekle (2020) in Ethiopia. The lack of awareness ranges from lack of knowledge of risk of the cervical cancer, how it can be transmitted as well as if, when and how often one has to be screened for cervical cancer. A negative perception towards cancer in general means that one will not likely go for screening, according to the same study in Ethiopia. This seems a widespread problem in the African continent.

In Ghana again it was noted that women who were employed were more likely to take up cervical cancer screening than those who were unemployed (Ampofo et al., 2020). Another hindrance to cervical cancer screening as reported by Ampofo et al. (2020) was marital status with married women being less likely to be screened for cervical cancer. Possibly this has got to do with what the spouse will say after hearing that his wife has been screened for cervical cancer.

Perception on severity of cervical cancer and benefits of screening were found to be significantly associated with uptake of cervical cancer screening among women in Jordan (Al-amro, Gharaibeh, & Oweis, 2020). Women who perceive their risk and benefits highly respectively are more likely to be screened for cervical cancer. Furthermore, Al-amro (2020) found that women of more years in marriage were more likely to utilize screening services than those with less years in marriage. Considering that most of the FSWs are not married, this leaves this crucial group at risk of not accessing the services if this was to be the case among the population to be investigated.

Individual factors reported as barriers to cancer screening in England included embarrassment, fear of pain and fear of the test outcome (Waller, Bartoszek, Marlow, & Wardle, 2009).

2.3.2 Structural Factors Associated with Uptake of Cervical Cancer Screening

Structural determinants of uptake of healthcare services include customs and societal norms, accessibility of the healthcare facility, national policies, and affordability of the service. In Zimbabwe, cervical cancer used to be done in the form of the PAP smear, a test which was not reachable to the general poor. Over time, Zimbabwe has made strides in making the service available with the introduction of VIAC and most recently HPV screening (Mupfumira, 2018). In addition, awareness campaigns to conscientize the public on the dangers of cervical cancer and the benefits of early screening have taken an upward trajectory (Tapera, et al., 2019).

While perceptions on risks of cancer and benefits of screening were higher among Jordanian women, that did not translate to increased uptake of the service (Al-amro et al., 2020). This was so largely due to the structural factors. The PAP smear was more available in private healthcare settings than public healthcare settings yet most of the women could not afford private healthcare services.

The COVID-19 pandemic brought almost everything to a standstill. The nationwide lockdowns instituted in Zimbabwe resulted in little activity in healthcare settings too (Murewanhema, 2021). Even for those women who braved the restrictions, transport to healthcare centres was a nightmare hence they ended up letting it pass. In addition, poor transports services, communication challenges due to bad roads and lack of digital networks further reduced facility visits hence indirectly reduced utilization of the cervical cancer screening services according to Murewanhema (2021).

Women in Ethiopia attributed low uptake of the service to inaccessibility of the service, both in terms of distance to healthcare centres and the price of the service (Fenti et al.,2020). Accessibility as a challenge was also reported in Kenya (Ngari, Nyamiaka , & Mukami, 2021), Nigeria (Ilesanmi & Kehinde, 2018) and Ghana. While accessibility has improved in

Zimbabwe, it remains a problem in some parts of the country with distance of the healthcare centres, availability or unavailability of the service and price of the service where available being the most reported challenges by (Nyamambi et al., 2020).

While in Zimbabwe, the cervical cancer screening services have been made relatively accessible due to the introduction of the VIAC and HPV screening (Mupfumira, 2018), in other countries these more accessible alternatives are not readily available. Yet another structural factor that influences one's decision to utilize cervical cancer screening is religion. Tapera et al. (2019) found women affiliated to Protestant churches more likely to be screened compared to other major religions. Cultural and religious beliefs were also found to influence cervical cancer screening in Ethiopia (Fenti et al, 2020) and Nigeria (Ilesanmi & Kehinde, 2018).

Generally, FSWs shy away from public health care settings for fear of stigma from the public and the service providers. This is the reason why they have poorer health outcomes than the general population. This is a perceived barrier by the FSWs stemming from assumed or lived realities.

2.3.3 Health System Factors Associated with Uptake of Cervical Cancer Screening

The health care delivery system is a crucial component in the fight against cervical cancer. The people may have the right perceptions on the benefits of the intervention but if the health care delivery system does not match the expectations of the customers, it will not help much.

Previously the PAP smear was the only available method for detecting cervical cancer but the advent of the VIAV and HPV screening have made the accessibility of the service better (Mupepi et al., 2011). The tests also have an improved turnaround time as short as one day which encourages women to want to be screened for, they know they will receive their results early (Kuguyo, 2017).

Despite the improved availability of the services, barriers remain within the healthcare delivery system which hinder or slow the uptake of the service. Some women are not comfortable being screened by male nurses (Muluneh et al., 2019). While the nursing profession is generally a female dominated profession, men have been taking up the profession and some may be trained in HPV or VIAC screening, a situation some clients may not be comfortable with. Ampofo et al. (2020) in Ghana also noted that the gender of the screener was a significant barrier to uptake of cervical cancer screening services. In Jordan, female service provider preference was also found to be a predictor of utilization of cervical cancer screening services (Al-amro, 2020) while Nyamambi et al. (2020) also found similar findings in Zimbabwe.

While knowledge about the dangers of cervical cancer and the benefits of early screening are individual perception factors, the healthcare system contributes a great deal to this. Information provision is an important cornerstone of every healthcare programme. As such healthcare providers who have not been trained in cervical cancer screening may find it difficult to sell the intervention to naïve clients (Mupepi et al., 2011). This necessitates the thought that cervical cancer screening should be included in the training curriculum for clinical staff. The view is also shared by Fentie et al. (2020).

Provider-initiated desire to be screened was also found to be important in improving utilization of screening services in Jordan (Al-amro, 2020). This was evidenced by high numbers among physician-recommended clients and healthcare provider encouraged clients among those screened for cervical cancer. This means that the anticipation is that as FSWs visit the clinic especially for their ART-related services, it is an opportunity to offer them the cervical cancer screening service. In El Salvador, cervical cancer screening statistics showed an upward trend after health education (Alfaro et al., 2015)

The importance of the quality of any service to the uptake can never be overemphasized. As such quality of care in the eyes of the clients is crucial in the utilization of the services according to Ngari et al. (2021). This is premised on the realization that testimonies by peers are believed by clients more than health education programmes. Nyamambi et al. (2020) also stress the importance of health system related factors in the utilization cervical cancer screening services.

2.4 Chapter Summary

In this chapter, the researcher presented the theoretical framework based on the Health Belief Model to try to explain how individual perceptions influenced by different sociodemographic and psychological characteristics determine one's decision to utilize cervical cancer screening services. After that, the researcher presented literature on the subject showing what different local regional and global sources say on the factors determining the utilization of cervical cancer screening services. The literature review was done following the study objective, which are to determine the individual factors, structural factors and health system related factors determining the utilization of cervical cancer screening services. From the reviewed literature, it was evident that data on factors which influence uptake of cervical cancer screening in Zimbabwe is scare hence the need to carry out this research to add to the body of literature.

CHAPTER 3 METHODOLOGY

3.1 Introduction

This chapter describes the proposed study design, setting, population, the sample size and sampling procedure, instruments and the methods of data collection that were used during the study. The researcher also explains the chosen methods and the rationale for selecting the methods. Also, to be presented in this chapter are the ethical considerations.

3.2 Study Setting

The study was conducted at the New Start Centre at New Africa House in the Harare Central Business District. The clinic offers integrated HIV related and SRH services to clients from all over the country with priority given to key populations who include the Female Sex Workers. Services are offered at the static site or in the community through the differentiated service delivery model. SRH services offered at the clinic include family planning services (both long and short acting methods), cervical cancer screening (HPV and VAIC), Cryotherapy and Thermal Ablation, Loop Electrosurgical Excision Procedure (LEEP) for treatment of precancerous lesions of the cervix and treatment of sexually transmitted infections.

3.3 Study Design

An analytical cross sectional study design was employed in this study. A cross-sectional study gives a snapshot of the phenomenon under study in the limited time and while the analytical nature of the study enables for deeper interrogation of the presence or absence of association between the uptake of the cervical cancer screening services and observed enablers or barriers.

3.4 Population and Sampling

3.4.1 Study Population

The study population comprised of all FSWs enrolled in the ART and PrEP programme at New Africa House New Start Centre. The female sex workers come from all residential areas within the Harare Metropolitan Province. As at the 30 September 2021 the total number of female sex workers in care at NAH was 1563.

3.4.2 Sample size

The formula $n=z^2pq/d^2$ was used to calculate the sample from the population, where n is the sample size, z is the test statistic at 95% confidence level, p is the estimated proportion taking up the service while q is 1-p and d is the precision. In this study, at 95% confidence level, z=1.96, p was taken from researched regional literature which put cervical cancer uptake in Zimbabwe at 9.4% and q = 1-0.128 = 0.916 while d is 0.075.

Based on the above computations, the estimated sample size was $(1.96^2 x 0.094 x 0.916)/ (0.075^2)$ = 58. This means that a minimum 58 study subjects were enrolled into the study. In addition, key informants who include integrated HIV care nurses and pharmacy staff were purposively selected to participate in the study.

3.4.3 Sampling Procedure

Simple random sampling was used to select the study sample. The sampling frame was downloaded from the Bahmni Electronic Medical Record system (EMR) in excel format. The random function was used to select 58 study participants using Microsoft excel.

3.4.4 Inclusion and Exclusion Criteria

Female sex workers coded as such in the EMR system who are aged 18 years and above were included in the study while FSWs aged less than 18 years were excluded from the study. For key informants, all Integrated HIV Care nurses and pharmacy staff were eligible for selection.

3.5.1 Data Collection Instruments

A semi structured interviewer administered questionnaire was used to collect data from the study participants. The semi-structured interviewer administered questionnaire was the ideal tool because it is inexpensive. It had three sections addressing individual, structural and health system factors influencing uptake of cervical cancer screening among sex workers. The questions were either be in English or Shona depending on the language that the participant understands. The semi structured interviewer administered questionnaire contained open ended and closed questions.

Pilot Study

The questionnaire was pre-tested at the Chitungwiza New Start Centre, a sister clinic offering similar services, to check for validity. Pretesting was done on five sex workers who have the same characteristics with those attended at Harare clinic. Feedback from the pre-testing was used to adapt and improve the questionnaire to suit the study participants' literacy levels and deleting or rephrasing ambiguous questions.

An interview guide was used to collect qualitative data from the key informants.

3.5.2 Data Collection Procedure

The researcher checked the Bahmni EMR system for scheduled visits of the study participants. For those participants whose next visit date fell outside the study data collection timeline, they were called on their mobile phones to book an appointment. Data collection was done over 15 working days from the first of April 2022. The collected data was kept private and safe in a

lockable cabinet and was also entered into a password-protected excel sheet with study participants coded for anonymity. The researcher continued the process until the sample size was reached.

3.5.3 Study Variables

Independent variables included all demographic factors such as age, religion, level of education, marital status and structural factors such as health worker attitude, availability of materials and any other barriers or facilitators to uptake of cervical cancer screening as reported by the FSWs.

The main dependent variable was uptake or rejection of cervical cancer screening services.

3.5.4 COVID-19 Prevention

During the data collection process, COVID-19 prevention protocols was observed, and these included wearing proper face masks, physical distancing, sanitizing hands in between handling study material including stationary. Interviews was limited to a maximum of 15 minutes per individual to minimize exposure time.

3.6 Data Organization and Analysis

Data collected from the physical questionnaires was transcribed into and excel sheet and responses dichotomized and coded. The excel sheet was exported into Epi info for data analysis. Data was presented using frequency tables and graphs for demographic characteristics and logistic regression was used to analyse factors influencing the uptake of cervical cancer screening. Odds ratios, confidence intervals and p-values were used to describe association between uptake and the various factors.

3.7 Ethical Considerations

Permission to carry out the study at the site was sought from the PSH leadership while ethical clearance was sought from the Africa University Research Ethics Committee (AUREC). The pillars of ethics, that is beneficence, non-maleficence, justice was observed during the study process. The study participants were not coerced or coerced into participating in the study. On the day of the visit, the study participant was taken through the informed consent process if they agree to be part of the study. All those agreeing to participate in the study were taken through an informed consent process to ensure they understand the study and voluntarily participate. Once the consent form is signed, the interview was conducted using the semi-structured interviewer administered questionnaire that is written in the language participants understand. Confidentiality was maintained throughout data collection and there was no coercion and participants were free to withdraw at any time with no prejudice.

3.8 Chapter Summary

This chapter looked at the study design that was employed, the study setting were the study was carried out and the population under study. The researcher also gave an insight of the sample size calculation and the sampling procedure. Study variables were explained and so was the data collection procedure and how the data was organized and analysed. The ethical considerations were also discussed in this chapter.

CHAPTER 4 DATA PRESENTATION, ANALYSIS AND INTEPRETATION

4.1 Introduction

In this chapter, the researcher presents the results of the study. Descriptive statistics on sociodemographic characteristics of the study participants was presented. The researcher also presents the results of analytical statistics done in form of tables and graphs. Results will also be interpreted to give meaning to the outcomes of the statistical analyses.

4.2 Data Presentation and Analysis

4.2.1 Participants' Demographic characteristics

Table 4.1 below shows the demographic characteristics of the 52 participants aggregated by whether they have been screened for cervical cancer or not.

Table 4.1 Participants' Demographic Characteristics (n=52)

Category		Screened		Not screened		Total	Cumulative Percent
		Frequency	Percent	Frequency	Percent		
Age Range	<20	1	2%	1	2%	2	4%
	20-29	10	19%	4	8%	14	27%
	30-39	9	17%	13	25%	22	42%
	40-49	6	12%	6	12%	12	23%
	50+	1	2%	1	2%	2	4%
Education	None	2	4%	0	0%	2	4%
	Primary	5	10%	7	13%	12	23%
	Secondary	15	29%	16	31%	31	60%
	Tertiary	5	10%	2	3%	7	13%
Employment Status	Formal Private	5	10%	2	3%	7	13%
	Informal	7	13%	11	21%	18	35%
	Unemployed	15	29%	12	23%	27	52%
Marital Status	Divorced	11	21%	8	15%	19	37%
	Married	1	2%		0%	1	2%
	Single	13	25%	9	17%	22	42%
	Widow	2	4%	8	15%	10	19%
Religion	ATR	2	4%	6	12%	8	16%
	Christian	22	42%	12	23%	34	65%

	Muslim	0	0%	1	2%	1	2%
	None	3	6%	6	11%	9	17%

The total number of study participants who were successfully interviewed was 52. Of these, 27(52%) reported that they been screened for cervical cancer at least once in their life while 25 (48%) said they had never been screened for cervical cancer before.

The participants' age ranged from 18 to 51 with a median age of 33. Overall, most of the participants (42%) were in the age range 30-39 years. For those who have ever been screened for cervical cancer, 19% were in the 30-49 age group while an almost identical percentage was in the 20–29-year age category. Fifty percent of the participants (inter-quartile range) were between the age 28 and 40.

Ninety-six percent of the FSWs attained at least Primary level education with only 2(4%) reporting that they had not had any level of education. For those with secondary level education, the proportion of those who have been screened and those who have never been screened were almost identical, 29% and 31% respectively. The situation was the same across all levels of education, for example 10% and 12% had been screened and never been screened before in the primary school category.

As far as employment status was concerned, 87% of the participants were either not employed or were informally employed while only 13% had formal employment. Formally employed participants who reported that they have ever been screened for cervical cancer constituted 10% of the total participants compared to 4% who had not been screened. The scenario was reversed for the informally employed participants with more (21%) reporting that they had never been screened than those who had been screened before (11%).

Ninety-eight percent of the participants were either single, widowed or divorced while only 1 participant (2%) was married. Proportions of those screened and those not screened showed

some variation by marital status with 21% and 15% percent among those divorced respectively, 25% and 17% for the single category and 4% and 15% respectively for the widowed group.

Most of the participants (65%) were Christians of all denominations, 15% subscribed to the African Traditional Religion (ART) and 17% reported that they did belong to any religion while only one participant was a practicing Muslim. Christians who had ever been screened for cervical cancer constituted 42% of the total participants while similar proportions were observed between the ATR and non-religious groups who did not have cervical cancer screening, at 11% each.

4.2.2 Individual Factors Influencing Cervical Cancer Screening Uptake

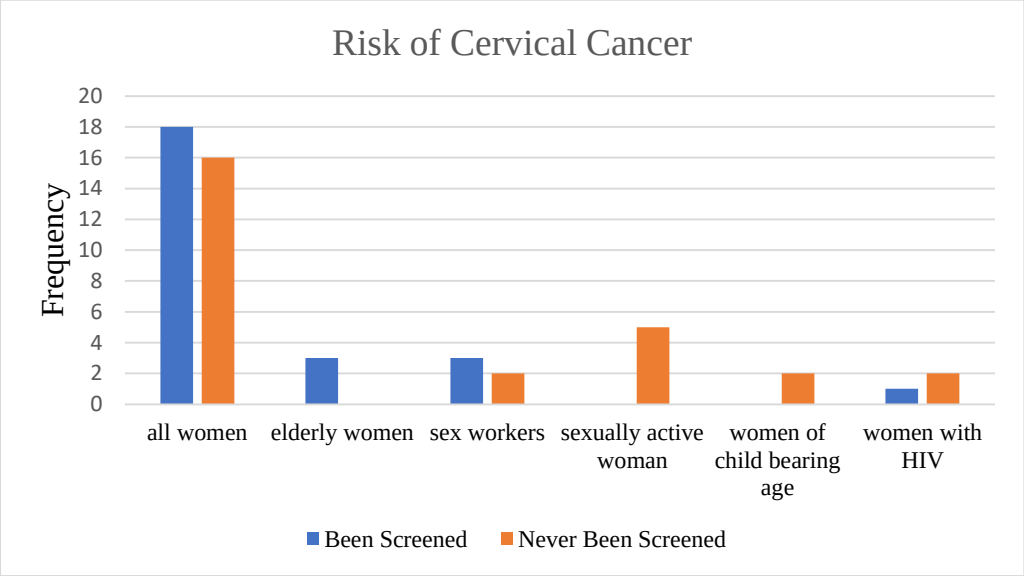
The individual factors that were assessed for their influence on one's decision to take up cervical cancer screening or not included the demographic factors above and other personal preferences and attributes. Of the above demographic factors, only religion was found significantly associated with uptake of cervical cancer screening. Christians were 4 times more likely to take up cervical cancer screening than other religious groups (OR 4.0, p-value 0.0278). Table 4.2 below shows the statistical outputs from the logistic regression on demographic factors.

Table 4.2 Logistic Regression Outputs

Term	Odds Ratio	95% CI		Z-Statistic	P-Value
Age	0.9691	0.8963	1.0478	-0.7877	0.43
Education	1.1112	0.3261	3.7864	0.1685	0.8662
Employment Status	2.6118	0.4581	14.8902	1.081	0.2797
Marital Status	70.668	0	>1.0E12	0.0412	0.9672
Religion	4.0594	1.165	14.1449	2.1998	0.0278

The participants were also asked about their cervical cancer risk perception. Fig 4.1 below shows the responses of the participants to the question of who they thought was at risk of getting cervical cancer.

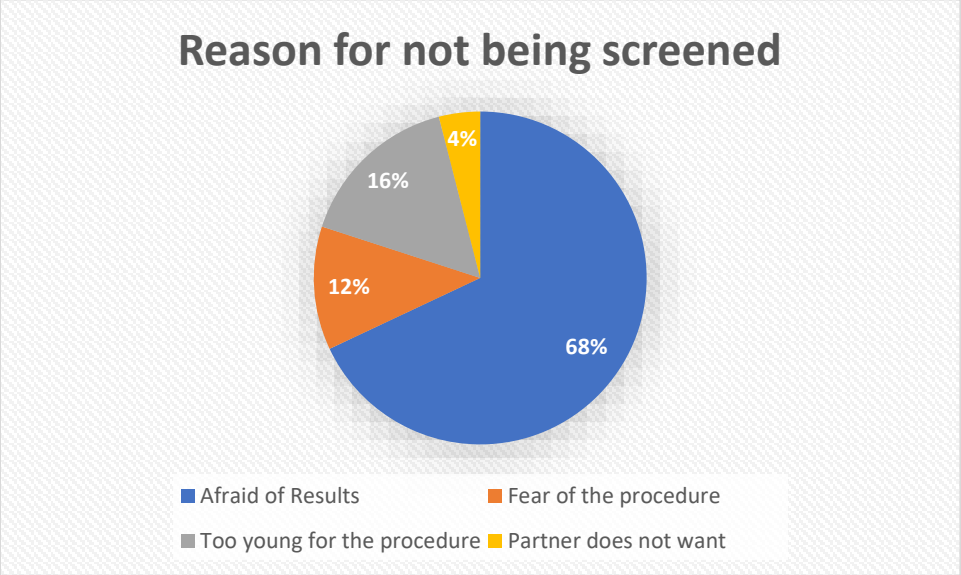
Figure 4.1 Perception of Risk of Cervical Cancer (n=52)



As the graph shows, the participants gave different responses to the question. The majority (34) though believed that all women were at risk of cervical cancer, while some believed it affected the elderly more and yet again others thinking sex workers and sexually active women were at higher risk. All of the 7 participants who reported that sexually active women and women of childbearing age were the most at risk of developing cervical cancer had never been screened before.

Study participants who had never had cervical cancer screening gave reasons why they were unwilling to have the test. Sixty-eight percent of these reported that they were afraid of the results while 16% believed that they were too young for the procedure, probably implying that the procedure is for the elderly as reported when questioned on risk perception. Another 12% said that they were afraid of the procedure itself while 1(4%) reported that their partner does not allow them. Fig 4.2 below is the illustration of these responses.

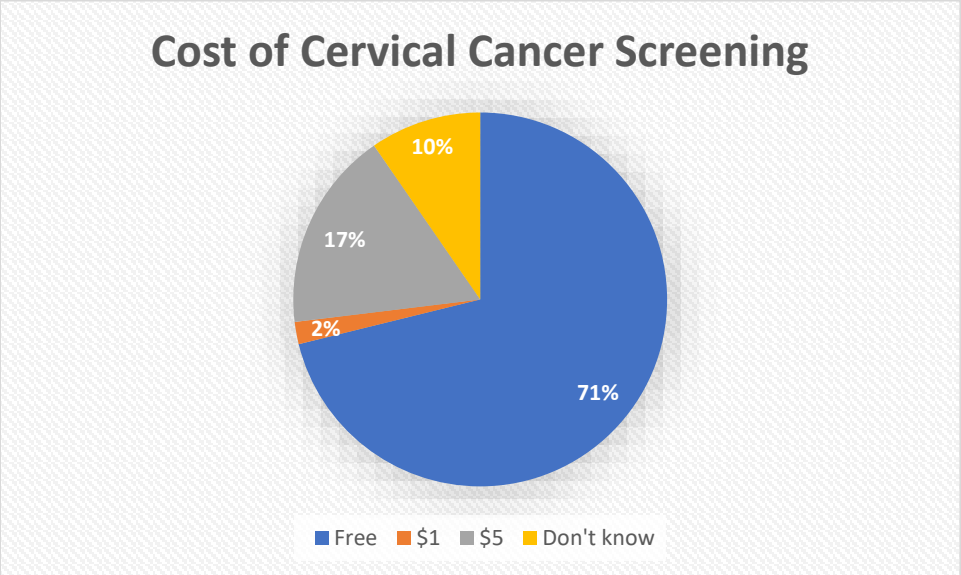
Figure 4.2 Reasons for Not Being Screened for Cervical Cancer (n=52)



4.2.3 Structural Factors Influencing Uptake of Cervical Cancer Screening

Structural factors that were investigated for their influence on uptake of cervical cancer screening include accessibility of the service, accessibility of the health facilities as well as the cost of the service. For FSWs in care at the NAH, the service is offered for free. Participants were asked about what they thought the price for the test was. All those who had been screened reported that the test was done for free yet those who had never been screened gave varying responses. Figure 4.3 below shows the responses of all the 52 participants when asked about the cost of the service. Even though all those who were screened knew the correct response for the cost, there was no significant association between knowledge of the cost and uptake of the service (OR 1.5, p-value 0.879).

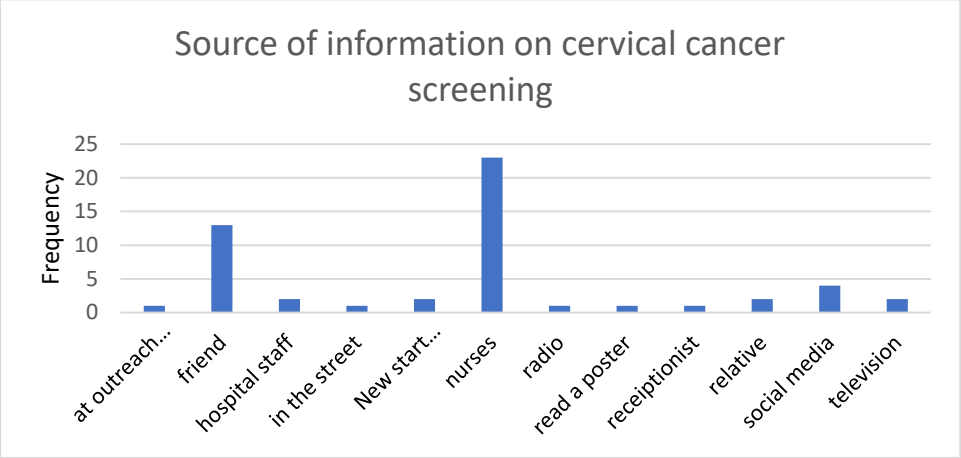
Figure 4.3 Perception on Cost of Cervical Cancer Screening (n=52)



Seventy-two percent of those who had never been screened for cervical cancer screening rated the service very accessible while the remaining 28% rated it as inaccessible. For those who had been screened before, 89% reported that they viewed cervical cancer screening service as easily accessible while 11% deemed it inaccessible. Just like the response on cost, no significant association was found between service accessibility (OR 3.1, p-value 0.1340).

Another structural factor that was examined was flow of information. This was measured by asking the participants how they got to know about cervical cancer screening. Responses ranged from hospital staff, radio and newspaper, relatives, and friends among others. Figure 4.4 shows the presentation of the responses in a bar chart.

Figure 4.4 Source of Information on Cervical Cancer Screening (n=52)

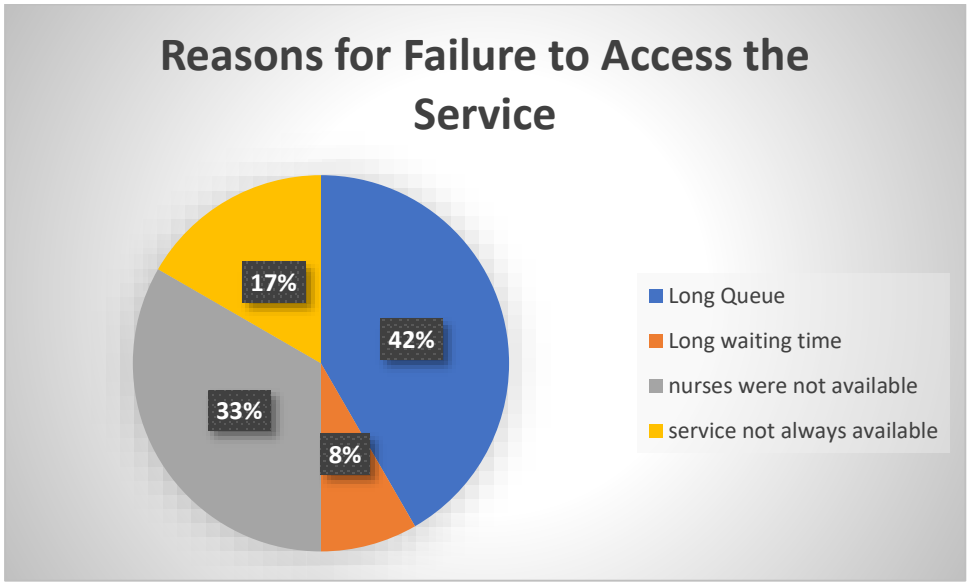


4.2.4 Health System Related Factors Influencing Uptake of Cervical Cancer Screening

To assess whether healthcare delivery system itself plays a huge part in influencing decision on uptake of the service, attributes that were evaluated included previous experience of having failed to access the service when needing it, preference of healthcare provider, perceived quality of service and information provision at every visit to the facility.

The proportion of study participants who had never been screened who had failed to access the service at least once (24%) and that of those who had been screened but also having failed to access the service (23%) were very much identical. There was no statistically significant association between previous failure to access the service and uptake (OR 1.2, p-value 0.235). For those who reported that they had failed to access the service at least once before, the reasons given are shown in figure 4.5 below

Figure 4.5 Reasons for Failure to Access Service (n=52)



Of all the participants, 89% reported the quality of service between good and excellent with only 11 % saying that they could not rate the quality of the service. Crucially, none of the participants rated service provision as bad.

Fifty-seven percent of the participants preferred being served by female providers, 28% said they did not mind being served by either male or female providers while 15% preferred being served by male nurses. Some of those who preferred male nurses said they believe male providers to be very loving and caring during their execution of duty. On the other hand, those who preferred female providers cited the fact that they are shy to be served by males and find it easy to be served by female. Yet on the group who did not mind either gender said they believed they are trained professionals regardless of their gender.

4.3 Discussion of Results

These findings show that the study sample was normally distributed, consistent with the population of FSWs at NAH. In addition, the interquartile range of 28-40 shows that the crucial age category in terms of deciding to get screened and have early intervention if they are found positive, was considered. In line with the assertion that Zimbabwe is a high literacy country,

96% of the participants had attained at least primary level education, making it easy to interact with them during the interviews.

The study participants rated all the aspects of individual level factors higher indicating that they are aware of the dangers of cervical cancer and have an informed need to maintain a negative status. The knowledge at individual level of why one has to take up cervical cancer has a huge bearing on the cervical cancer landscape. This also shows that the clients served at the clinic are well informed, they are not just prescribed the service by their providers.

Not much structural factors were investigated but for those that were, it shows that they are equally as important as individual factors. The role of the life partners could not be determined as only one participant was married. Accessibility was measured by the participant perception and not necessarily an assessment of the structural accessibility itself. The participant perception is important though as it determines whether the participant attempts to get the service or not.

The nursing service includes both male and female service providers. While these findings showed variability in provider preference, there was balance between the categories. At the facility though, cervical cancer screening is done mainly by the female nurses, so since a combined 65% said they either preferred being served by female providers or they did not mind the gender of the service provider, provider gender was of little influence.

4.5 Chapter Summary

The chapter presented the study findings based on the main study objectives. The questions and objectives were pinned around the following issues: individual level factors influencing cervical cancer screening uptake among FSWs, structural level factors and health system related factors influencing uptake of cervical cancer screening. Descriptive statistics were presented in terms of frequencies and means. Graphs and tables were used to illustrate the

findings more simply and clearly. The chapter ended with a brief discussion of the study findings and their interpretation in line with the study objectives. A more detailed discussion of results comparing them to known local, regional, and global literature was presented in the next chapter as the researcher summarises and concludes the study report.

CHAPTER 5 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Having presented the study findings in the previous chapter, the researcher discusses what the results mean in the context of service provision at New Africa House clinic, in Zimbabwe, regionally and globally. The researcher makes inferences on the significance of such results while making recommendations to the service providers, PSH management and the Ministry of Health and Childcare policy makers. The chapter ends with the researcher deriving areas for further study based on the study findings.

5.2 Discussion

5.2.1 Individual Factors Influencing Uptake of Cervical Cancer Screening

The median age of the participants was 28-40 years, findings which are consistent with the population distribution of women in Zimbabwe. A study in Ethiopia also found similar age distribution among the participants with a median age of 26-40 years (Fenti et al, 2020). That there were similar proportion among the median age group of those who had been screened and those who had never been screened coupled with the fact that there was not any association between age and uptake is also consistent with finding from that study by Fenti et al. (2020).

Marital status was skewed to the single, divorced and widowed more than the married or cohabiting. As such, the study could not attribute this demographic factor to increased or decreased uptake of cervical cancer screening. This could probably be due to the fact that all the study participants were FSWs who probably entered into the trade after divorce of losing their loved one. The only participant who was married reported that they were not screened because the partner did not want or recommend the service. This is in line with findings by Ampofo et al. (2020) in Ghana who also report that marital status was found to be a hindrance to uptake of cervical cancer screening

Knowledge or perception of the dangers of cervical cancer has been reported to be a factor influencing uptake. This is basically a function of one's literacy level as much as it is of other structural factors. In that regard, the study found high literacy rate among participants with a consequent high uptake among the participants. However even the paltry lowly literate participants also had the service done contrary to findings by Mupepi et al. (2011) and Ngari et al. (2011) who found low educational level women to have a low uptake of the service.

Religion was significantly associated with an increased uptake of the service with Christians more than 4 times likely to take up the service compared to other participants of different religious affiliation. This could be attributed to the role the church is taking to educate women on their health consciousness. The fact that religion has an influence on health-seeking behaviours was also noted by Lofters et al., (2017) who found increased uptake among Muslim women in Onmtario, Canada.

Employment status was not found significantyly associated with uptake of cervical cancer screening among the study participants, contrary to findings by Ampofo et al. (2020). In the Ghana study, employed women were found more likely to take cervical cancer screening compared to their unemployed counterparts. In Zimbabwe it could also be like that but the population under study was more biased towards the unemployed as most of the FSWs were not employed so that inference could not be made.

Perception of severity of the procedure as well as the effects of knowing one's status played a huge role in the FSWs chosing not to be screening for cervical cancer. Among those who did not receive the service, the two major reasons that came out were fear of the results and fear of the procedure. These sentiments were also shared by Waller et al. (2009) who reported that in England, the reasons why women did not want to be screened for cervical cancer included fear

of the procedure and the results. This fear could also be a result of limited knowledge on how the procedure itself is done.

5.2.3 Structural Factors Influemcing Cervical Cancer Screening Uptake

Cost of the test, in most cases is one striking hindrance to accessing any service. Cervical cancer screening at the NAH new start centre is offered for free for FSWs in care at the clinic. However, the general population pays $5. It is against this background that 54% of the participants had accessed the service. This is a very low-income population that may chicken out of a crucial decision if they consider the cost prohibitive. Most of those who opted not to have the service either reported that they did not know the price of the test, or they knew about the $5 paid by the general population. In Ethiopia, Fenti et al (2020) found cost of cervical cancer screening very prohibitive while in Zimbabwe, in addition to inaccessibility, cost was found to be high, where the service was accessible according to Nyamambi et al. (20200.

While this study found that the service was very accessible to the participants in general, there can be no denying the fact that this was largely due to the set-up of the facility. As a result, the findings do not match those of Nyamambi et al. (2020) who opined that accessibility was a challenge. This different could be attributed to the different service delivery models of the settings in the two studies.

These findings further buttress the assertion by Mupfumira et al. (2018) that Zimbabwe has made great strides in conscientizing the public on the dangers of cervical cancer and Tapera et al. (2019) who reported that there is an upward trajectory in the country on the awareness on cervical cancer screening.

5.2.3 Health System-related Factors Influencing Uptake of Cervical Cancer Screening

The service maybe accessible, affordable, and available but some health system related factors play a significant role in influencing uptake of the service. Muluneh et al. (2020) and Ampofo

et al. (2019) agreed that some clients were not comfortable being served by male clients. Similar findings were also obtained in this study where 57% preferred the female gender even though there was a 15% proportion of those who preferred the male gender. As a result, this study had no significant association between gender and uptake of cervical cancer screening.

Fifty percent of the participants who reported that at one point they failed to access the service when they needed it gave reasons related to long queues and long waiting time. This means that even if the service is available, timeliness is also a factor to consider as this can be a hindrance and those who would have made the decision to take up the service are lost out.

While health information provision is crucial at every service point, 32% of the participants reported that it is not being provided at every visit while the other 68% revealed that they receive health education at every visit. A-amro (2020) reported that if health information is provided, it initiated uptake of the service and is key if the programme is to be a success. Mupepi (2011) said that inadequately trained providers may find it difficult to disseminate such information. In this regard, this study finding point to a need to assess the staff complement and their training needs to ensure that everyone is comfortable to sell the service to the clients.

5.3 Conclusions

From these findings, it can be concluded that uptake of cervical, cancer screening is a function of individual, structural and health-system related factors. Zimbabwe has made huge strides in the fight against the deadly effects of cervical cancer and the most important part of this is health education and awareness across various media platforms which has left the population an informed lot. Populations Solutions for Health New Africa House Clinic's integration of service makes it easier for clients to access their services. One biggest enabler of the uptake was the low or no cost of the service and it should be upheld and sustained.

Overall, the study met and addressed the study objectives satisfactorily.

5.4 Implications

The fact that there was 54% uptake among the study participants reflect on the strength of the healthcare delivery mode at the facility which is integrated. Gains such as these need to be strengthened and upheld as this is a sustainable way to move forward towards reducing the detrimental effects of cervical cancer among Zimbabwean women. This means policy makers can look at the successes of this model to roll it out to the whole country with huge anticipation of similar success stories. The study findings further strengthen the need to empower the FSWs with knowledge on cervical cancer impact on livelihoods and its prevention, as they are the ones with ultimate decision on whether to take up cervical cancer screening or not.

5.5 Recommendations

Based on the above findings, the researcher recommends the following:

- Scaling up of the cervical cancer screening services to public health institutions and especially the rural primary healthcare facility.
- As the self-collection of the HPV sample for cervical cancer screening is being piloted at New Africa House Clinic, it is important to look at the strengths of such an intervention. This is particularly so because some of the female sex workers said they were shy to be screened by male providers. It therefore makes it imperative that this intervention is rolled out without further delay to increase access of cervical cancer screening and self care among the at risk population.
- Population Solutions for Health Management should train all Integrated HIV Care Nurses on cervical cancer screening to ensure that the Female Sex Workers do no fail to access the service due to unavailability of trained providers.
- Continued subsidizing of cervical cancer screening and related services to do away with the structural barrier – cost.

- Nursing training institutions must consider revising the training curriculum for general nurses to incorporating cervical cancer screening in the training program. This will ensure that all health facilities are manned by nurses who are competent in providing cervical cancer screening services.

5.6 Suggestions for Further Research

One of the advantages the researcher had was that these clients were interviewed once they had already visited the clinic. It is worth investigating to what the outcome would be like if the study is conducted on those who would not have visited the healthcare facility. This is so because the health seeking behavior may play a huge part in one making that decision, probably explaining why there was such huge uptake.

While some of the participants who had not taken up the service expressed fear of the procedure, further study can be done on those who have already taken the service to establish what their quality-of-care experiences were and whether they would still come back for subsequent screening and also recommend the service to their peers.

Still looking at those who would have taken up the service, there is need to investigate to what extent those who tested positive for precancerous lesions were further assisted in terms of psychological support and ensuring that they receive follow on care and treatment.

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Appendix A: English Informed Condent Form

Informed Consent Form for Female Sex Workers at New Africa House

Principle Investigator: Joyce Majongosi
Name of Organization: Africa University

Name of Project: Factors Influencing the Uptake of Cervical Cancer Screening Services among Female Sex Workers at New Africa House in Harare

Introduction

I am Joyce Majongosi working for PSI Zimbabwe and pursuing my studies in the Bachelor of Nursing (Honours) degree with Africa University. I am doing a research on factors influencing uptake of cervical cancer by Female Sex Workers. I am going to give you information regarding this study and invite you to be part of the study. Participation is voluntary and you have the right to decline participation at any time. If you understand the information I am going to share with you and feel that you want to be part of the study, I will ask you to sign at the end of the form to show that you understood the information and your participation is voluntary.

Purpose of the research

Cervical cancer is one of the deadliest killers of women the world over. It is best prevented if it is detected early. This study aims to look at factors that influence the uptake of cervical cancer screening services among female sex workers, Findings may be used to improve the services so that more women especially female sex workers are screened for cervical cancer early.

Type of Research Intervention

The research will involve me asking you a few questions for about 30minutes. The questions involve your experiences in the sex work industry. Some of the questions involve personal and confidential information. Feel free to stop me at any question if you feel uncomfortable with the questions.

Benefits

There is no financial benefit for you participating in the study but the information we get may be used by policy makers to ensure you lead a healthy life.

Reimbursements
For participating in this study, you are not going to be paid.

Confidentiality

All the information you provide was kept very confidential and nothing in the study report was traceable to you. No one who is not part of the study will access this information. The report will not include your name.

Sharing the Results

The results of the study was shared with PSI Zimbabwe management and Africa University faculty, but nothing in the report was attributable to you.

Right to Refuse or Withdraw

As mentioned earlier, you have the right to refuse or withdraw from the study at any time. You will not be penalized for that.

Who to Contact?

If ever you think or find something you may want to discuss or share after the interview, feel free to contact me or any of your clinicians. You may ask me any questions if you want.

Part II: Certificate of Consent

Having been invited to take part in the study, I have read the above information and understood it. I was given a chance to ask questions where I did not understand, and the questions were answered to my satisfaction. I therefore, voluntarily consent to take part in the study.

Name of Participant_____

Signature of Participant _____

Date _____

Day/month/year

Statement by the researcher/person taking consent

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent_____

Signature of Researcher /person taking the consent_____

Date _____

Day/month/year

Appendix B: Shona Informed Consent Form

Gwaro remvumo yekupinda mutsvakurudzo

Mudzidzi: Joyce Majongosi
Zita rechikoro: Africa University

Zita reongororo: Ongororo yezvinhu zvingatadzisa kana kubatsira pasarudzo yekutariswa gomarara remuromo wechibereko muvanhu vari mubasa rekutengesa bonde

Nhanganyaya

Zita rangu ndinonzi Joyce Majongosi, ndinoshandira sangano rePSI Zimabwe uye ndiri mudzidzi pachikoro cheAfrica University ndichiita zvidzidzo zvekuva mazvikokota mune zvehutano hweruzhinji. Ndiri kuda kuita wongororo yesvinhu zvingatadzisa kana kubatsira pakusarudza kuongororwa gomarara remuromo wechibereko muvanhu vari mubasa rekutenges bonde. Ndichakupai ruzivo rwezveongororo iyi zvizere nekukukumbirai kupinda muongororo iyi kana makasununguka. Kupinda kwenyu muongororo iyi ndekwekuzvidira, hakumanikidzwi uye makasununguka kuramba kupinda kana kubuda muongororo pamunodira. Kana muchinge manzwisisa zviri maererano neongororo iyi uye muchinzwa kuti munoda kupinda muongororo iyi ndichakukumbirai kuti mugoisa runyoro rwenyu kumapeto kwegwaro rino kuratidza kuti mapinda muongororo muchiziva uye musina kumanikidzwa.

Chinangwa cheongororo

Gomarara remuromo wechibereko ndechimwe chezvirwere zvapedza vanhukadzi pasi pose. Chirwere ichi chinogona kudzivirirwa kana chikaongororwa nekukurumidza. Zvichabuda muongororo iyi zvinoita kuti vanoona nezveutano vagadzire zvirongwa zvinoita kuti vanhu vade uye vaongororwe gomarara remuromo wechibereko nekukurumidza.

Maitirwe eongororo

Muongororo muchabvunzwa mibvunzo ingatora chinguva chinenge minhasvi makumi matatu. Mibvunzo iyi inosanganisira zvimwe zvamunosangana nazvo mubasa rekutengesa bonde. Mimwe yemibvunzo yacho inogona kuva yezvakakosha nezvakavanzika zvenyu. Sunungukai kundimisa pane upi zvawo mubvunzo kana monzwa kumanikidzika kupindura mubvunzo wacho.

Mubairo

Kupinda muongororo iyi hakuna mubairo wemari kana chimwe chinhu. Zvichabuda muongororo zvinogona kushandiswa nevatungamiri kuti basa renyu rive rakareruka risina njodzi.

Tsindidzo

Humbowo huchabuda muongororo nenhaurwa dzose zviri pakati penyu neni. Hakuna mumwe munhu asiri muongororo ino achaona zvatataurirana. Gwaro nyorwa richabuda muongororo iyi harizoratidzi zvatataurirana izvi uye hapana chichanongedza kwamuri.

Kugoverwa kwezvichabuda muongororo

Zvichabuda muongororo zvichapiwa kuvatungamiri vePSI Zimbabwe nevadzidzisi vekuAfrica University. Imi munogona kuziva zvabuda musarudzo pamunouya

Kodzero yekuramba kana kubuda muongororo

Sekurehwa kwazvamboitwa kwekutanga kwegwaro rino mune kodzero yekuramba kupinda muongororo kana kubudira pamunoda. Hamuzombopiwa mhosva yekuramba kana kubuda muongororo.

Kana mukada wekutaura naye

Mukanzwa kuda kubvunza mimwe mubvunzo nyangwe mushure menhaurirano ino sunungukai kundibvunza kana kubvunza vana mazvikokota venyu vanokubatsirai pachipatara pano. Kana pane zvimwe zvamungada kubvunza bvunzai zvenyu.

CHITUPA CHEMVUMO YEKUPINDA MUONGORORO

Mushure mekunge ndaziviswa nezveongororo iyi uye ndakumbirwa kupinda muongororo, ndaverenga mashoko akanyorwa pamusoro apo ndikaanzwisisa. Ndapiwa mukana wekubvunza pandanga ndisinganzwisise uye zvatsanangurwa zvandigutsa. Nekudaro ndinozvipira zvisina kumanikidzwa kupinda muongororo iyi.

Zita remubatsiri muongororo_____

Rupawo rwemubatsiri_____

Zuva _____

Zuva/Mwedzi/Gore

Mashoko emudzidzi

Ndinotsidza kuti mubatsiri uyu ndamupa humbowo huzere hweongororo iyi uye mibvunzo yaabvunza ndapindura nemazvo sekugona kwangu. Ndinotsidzazve kuti mubatsiri haana kunyengedzwa kana kumanikidzwa kupinda muongororo asi apinda nekuda nekunzwisisa kwake.

Rimwe gwaro rakadai rapiwa mubatsiri uyu.

Zita remudzidzi_____

Rupawo rwemudzidzi_____

Zuva _____

Zuva/Mwedzi/Gore

Appendix C: Interviwer semi structured interview guide (English)

Topic: Factors influencing the uptake of Cervical Cancer Screening among female sex workers in Harare.

Respondent Code:_____

Interviewer Name: _____

Introduction

"Hello, _____, (Participant's name) My name is Joyce Majongosi from Africa University. I am going to ask you the following questions according to our agreement in the informed consent form.

The interview will take us no more than 30 minutes

SECTION A: DEMOGRAPHIC INFORMATION

1. Age ☐

2. Marital Status:

Married ☐ Never married ☐ Divorced/Separated ☐

3. Number of Children: ☐

4. Age at entry into sex work ☐

5. Educational level:

Never ☐ Primary ☐

Secondary ☐ Tertiary ☐

6. Religion: ☐

7. Employment status:

Unemployed ☐ Informal ☐

Formal public ☐ Formal private ☐

Other details: ……..……..

SECTION B: Understanding Cervical Cancer and its Prevention and Treatment

Prompts:

1. What do you understand by cervical cancer? .....
   .....
   .....

2. Who told you about cervical cancer screening when you heard about it the first time?.....
3. How does one get cervical cancer?
   .....
   .....
   .....
4. Who is at high risk of cervical cancer?
   .....
   .....
5. How is cervical cancer prevented?
   .....
   .....
   .....
6. What do you understand by cervical cancer screening?.....
   .....
7. Which methods of cervical cancer screening do you know?.....
   .....
8. Do you think cervical cancer screening is helpful in preventing or reducing the effects of cervical cancer?
   .....
   .....

SECTION C: Determinants of Cervical Cancer Screening Uptake Health System Factors

Prompts:

1. Have you ever had cervical cancer screening done on you? Yes/No
2. If yes, what was the screening method?.....
3. How much does cervical cancer screening cost?.....
4. Who do you prefer to serve you between Male and Female clinicians? Give Reasons.....
   .....
5. How easy or difficult is it to access cervical cancer screening services? (give reasons).....

6. Do health care providers give you information on cervical cancer screening at every visit? Yes/No
7. How would you rate the quality of the cervical cancer screening services at NAH?.....
8. Have you ever failed to get the cervical cancer screening service when you needed it? Yes /No

   If Yes, what were the reasons?.....

Thank you for participating in this interview

Appendix D: Gwaro rebvunzurudzo (Shona)

Musoro Wenyaya: Zvingakonzera kugamuchirwa kana kusagamuchirwa kwechiroingwa chekuongororwa gomarara remuromo wechibereko.

Mucherechedzo wemuongororwi: _____

Zita remubvunzurudzi: _____

Introduction

"Kwaziwai, _____, Zita rangu ndinonzi Joyce Majongosi ndiri mudzidzi pakorichi ye Africa University. Ndichakubvunzai mibvunzo inotevera zvichiendera nezvatawirirana mugwaro retenderano.

Nhaurirano ino inogona kutora nguva ingaita minhasvi makumi matatu.

CHIKAMU A: ZVIRI MAERERANO NEMUONGORORWI

1. Makore ekuberekwa ☐
2. Chimiro pakuwanikwa:
   Ndakaroorwa ☐ Handina kuroorwa ☐ Takasiyana/Ndakafirwa ☐
3. Mune vana vangani: ☐
4. Makore pamakatanga kutengesa bonde ☐
5. Danho redzidzo:
   Handina kuenda kuchikoro ☐ Primary ☐
   Secondary ☐ Korichi ☐
6. Zvechitendero: ☐
7. Munoshanda here:
   Handishandi ☐ Ndinozviitira ☐
   Muhurumende ☐ Kambani yakazvimirira ☐

Rumwe ruzivo:

……..……..

Chikamu B: Runzwisiso rwezve gomarara remuromo wechibereko, kudzivirirwa nekurapwa kwaro

9. Chii chamunonzwisisa pamusoro pegomarara remuromo

wechibereko? .....
.....
.....
.....

10. Pamakatanga kunzwa nezvekuongororwa gomarara remuromo wechibereko, ndiani akakuzivisai?

    .....

11. Gomarara remuromo wechibereko rinowanikwa nenzira dzipi?

    .....
    .....
    .....

12. Ndiani ari panjodzi huru yegomarara remuromo wechibereko?

    .....
    .....

13. Gomarara remuromo wechibereko rinodzivirirwa sei?

    .....
    .....
    .....

14. Ndezvipi zvamunonzwisisa maererano nekuongororwa kwegomarara remuromo
    wechibereko?.....
    .....
    .....

15. Ndedzipi nzira dzekuongororwa kwegomarara remuromo wechibereko dzamunoziva?.....
    .....
    .....

16. Munofunga kukurumidza kuongororwa kunobatsira zvakadii kudzivirira gomarara remuromo wechibereko?

    .....
    .....

CHIKAMU C: Zvinokonzera kugamuchirwa kana kurambwa kwechirongwa chekuongororwa kwegomarara remuromo wechibereko

9. Makamboongororwa gomarara remuromo wechibereko here? Hongu/Kwete
10. Kana mati hongu, makashandisirwa nzira ipi?.....
11. Kuongororwa gomarara remuromo wechibereko kunobhadharwa marii?.....
12. Mungada kubatsirwa nevakoti vechirume here kana kuti vechidzimai? Ipai zvikonzero.....
    .....
    ....
13. Zvakaoma kana kureruka zvakadii kuwana rubatsiro rwekuongororwa gomarara remuromo wechibereko? (Ipai zvikonzero) .....
14. Vana mazvikokota vezveutano vanokuudzai ruzivo rwakakwana here maererano nekuongororwa gomarara remuromo wechibereko? Hongu/Kwete

15. Mabatsirirwe amunoita muchirongwa chekuongororwa gomarara remuromo wechibereko mungaaisa pachiyero chakadii?.....
16. Makambokundikana kuwana rubatsiro rwekuongororwa gomarara remuromo wechibereko pamairuda here? Hongu /Kwete
    Kana mati hongu, ipai zvikonzero?.....

Ndinokutendai nekutora rupande mutsvakurudzo ino.

Appendix E: Data collection Approval Letter

Population Solutions for Health

04 January 2022

To whom it may concern

Dear Sir/Madam

Ref: Approval Letter to conduct study at Population Solutions for Health New Africa House Newstart Center

Research Topic: To determine the factors influencing uptake of cervical cancer screening among sex workers at New Africa House Clinic in Harare.

This letter serves to inform you that Population Solutions for Health (PSH) has granted permission to Joyce Mujongoi to carry out the above mentioned study at Population Solutions for Health New Africa House Newstart Centre for academic purposes only.

The investigator is mandated to observe ethical standards of the highest degree and will be required to seek ethical approval from the local Institutional Review Board (IRB) ahead of any work starting and to also acknowledge PSH and our major donors in the final project report. Further, the applicant should sign a PSH oath of confidentiality form should the study require that the applicant collects identifiable data. All study costs should be borne by the researcher.

The information gathered in the study should only be used for academic purposes and the applicant will be obliged to share study findings with key program members at PSH, the donors and community of practice.

Yours faithfully

Director Evidence

Appendix F: AUREC Approval Letter

AFRICA UNIVERSITY
Investing in Africa's future

AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)

P.O. Box 1320 Mutare, Zimbabwe, Off Nyanga Road, Old Mutare-Tel (+263-20) 60075/60026/61611 Fax: (+263 20) 61785 website: www.africau.edu

Ref: AU2400/22 4 March, 2022

JOYCE MAJONGOSI
C/O CBPLG
Africa University
Box 1320
MUTARE

RE: FACTORS INFLUENCING UPTAKE OF CERVICAL CANCER SCREENING AMONG FEMALE SEX WORKERS AT NEW AFRICA HOUSE NEW START CENTRE, HARARE

Thank you for the above titled proposal that you submitted to the Africa University Research Ethics Committee for review. Please be advised that AUREC has reviewed and approved your application to conduct the above research.

The approval is based on the following.
a) Research proposal
b) Data collection instruments
c) Informed consent guide

- **APPROVAL NUMBER** AUREC 2400/22
  This number should be used on all correspondences, consent forms, and appropriate documents.
- **AUREC MEETING DATE** NA
- **APPROVAL DATE** March 4, 2021
- **EXPIRATION DATE** March 4, 2022
- **TYPE OF MEETING** Expedited
  After the expiration date this research may only continue upon renewal. For purposes of renewal, a progress report on a standard AUREC form should be submitted a month before expiration date.
- **SERIOUS ADVERSE EVENTS** All serious problems having to do with subject safety must be reported to AUREC within 3 working days on standard AUREC form.
- **MODIFICATIONS** Prior AUREC approval is required before implementing any changes in the proposal (including changes in the consent documents)
- **TERMINATION OF STUDY** Upon termination of the study a report has to be submitted to AUREC.

AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE (AUREC)
APPROVED
P.O. BOX 1320, MUTARE, ZIMBABWE

Yours Faithfully

MARY CHINZOU –
ASSISTANT RESEARCH OFFICER: FOR CHAIRPERSON
AFRICA UNIVERSITY RESEARCH ETHICS COMMITTEE