Assessment of Knowledge and Attitude towards Cervical Cancer Screening among Women in Reproductive Age in Chawama Compound, Lusaka, Zambia

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Abstract

Cervical cancer is a cancer of the cervix, the organ connecting the uterus and the vagina. It is predominantly caused by human papilloma virus (HPV), which is a sexually transmittable infection-causing pathogen. The purpose of this study was to assess the knowledge and attitudes toward cervical cancer screening among women of the reproductive age group in the Chawama compound Lusaka district. A descriptive cross-sectional research design was used to collect data. The researcher used a questionnaire that included both structured and open-ended questions. Results: Results of this study showed knowledge 59 (73.75%) out of 80 respondents had good knowledge on cervical cancer. The study also revealed that (22%) 18 out of 80 respondents have been screened for cervical cancer, and (78%) 62 out of 80 respondents had never been screened for cervical cancer. The respondents who agreed that cultural beliefs could hinder women from going for cervical cancer were, 18 (22%) out of 80, and 62 (78%) out of 80 denied that cultural beliefs cannot hinder women from going for cervical cancer screening. There is therefore needed to create proper awareness and sensitization of cervical cancer screening as well as improve cervical cancer screening services.

Keywords: Attitude, Cervical cancer, Cervical cancer screening, Knowledge.

Introduction

Cervical cancer is a cancer of the cervix or neck of the uterus [1]. Human Papiloma Virus (HPV) is the leading cause of cervical cancer [2]. Women can reduce the risk of developing cervical cancer by having screening tests and receiving a vaccine that protects against HPV infection [3].

All women are at risk for cervical cancer, although it occurs most often in women between 35 and 55 years of age [4]. Several factors increase one's risk of developing cervical cancer, including having multiple sexual partners or a partner who has had multiple sexual partners, having a sexual partner with a history of penile or prostate cancer, early age of first sexual intercourse, smoking tobacco, low socio-economic status,

untreated chronic cervicitis, Sexually Transmitted Diseases (STDs) Contraceptive pills [2]. Cervical cancer is asymptomatic in the early stages. As the disease progresses, the woman may experience watery vaginal discharge and occasional blood spotting, especially after sexual intercourse. There may also be post-menopausal bleeding. With advanced disease, a dark Foul-smelling vaginal discharge may develop from the sloughing of epithelia tissue. Pain is usually a late symptom and can either be abdominal or pelvic [5].

Unlike many other types of cancers, cervical cancer can be prevented. The primary prevention of cervical cancer is through the prevention of the human papilloma virus (HPV) infection. The study was done by [6]. States that primary prevention is more challenging

 because infected women with HPV are asymptomatic, and no therapy eliminates the underlying infection.

In 2018, there were an estimated 570 000 new cases of cervical cancer, representing 6.6% of all female cancers, and 311,000 deaths from it worldwide [6]. It claims over a quarter of a million lives of women annually worldwide, from which 90% of deaths occur in the developing world [7]. In sub-Saharan Africa, cervical cancer is the number one cancer killer of women. Approximately 20% of the annual deaths caused by cervical cancer occur in women who reside in sub-Sahara Africa.

In Zambia alone, over 2000 cervical cancer cases are diagnosed each year, accounting for over 30% of new cancer cases with a mortality rate of above 35% [7]. For this reason, Zambia has been rated the second highest in sub—Saharan Africa (53.7 per 100,000 women), second only to Tanzania and the sixth highest in the whole world [8] in relation to the prevalence of cervical cancer.

Much like HIV, cervical cancer is a disease fueled by social, economic, and political inequities. Zambia has a poor functioning health care system, and insufficient funds are invested towards women's health activity which has led to massive ignorance on the importance of cervical cancer screening among the sexually active women in the country. Therein, the purpose of this study is to assess the knowledge and attitudes toward cervical cancer screening among women of reproductive age in Zambia's Chawama compound. This will help draw more insight into the level of knowledge and attitudes surrounding cervical cancer screening among women in Lusaka's suburban areas.

Study Justification Cervical cancer screening is an important determinant of cervical cancer prevention [6]. Numerous tools and technologies exist to prevent cervical cancer, but these interventions remain largely inaccessible to girls and women who need this service [6]. Countries that effectively use CCSS

have shown a decrease in cervical cancer cases. Britain is one of the countries with effective screening that prevents around 4,500 cervical cancer cases annually when it is still easily treatable [6]. However, the current coverage in Zambia is low at about 5% [11]. Cancer Diseases Hospital (CDH) has recorded 491 new cervical cancer cases for the period between 2013 and 2015, and more than 50% of these clients presented in either the 3rd or 4th stage of the disease. Therefore, screening of cervical cancer should be encouraged as an ongoing exercise so that the disease burden may be drastically reduced and eventually curbed. Early diagnosis of cervical cancer in women is paramount in the prevention of the disease [12]. Previous studies [6]) have shown gaps on the factors influencing the utilization of CCSS coupled with scarce information on this area of study. Therefore, this study will assist in generating data as a basis for subsequent studies to identify various factors that hinder women from utilizing CCSS. The information that will be collected in this study will further help reduce mortality among women of reproductive age as it will inform the policymakers on measures to be put in place to increase the access to cervical cancer services [9].

There is a high prevalence of cervical cancer in Zambia which has led to a high mortality rate among women. Cervical cancer affects the sexually active group of women that is between 15 to 49 years of age. In 2018, Zambia had the third highest incidence of cervical cancer in the world, with 66.4 new cases per 100,000 women, despite having established the cervical cancer prevention program in Zambia (CCPPZ) in 2006 [10]. In the community, knowledge and understanding of risk factors, signs, symptoms, and available services in the public health care system are low, and this is further compounded by poor health-seeking behavior. Community participation and behavioral change in cancer prevention and detection activities and cancer control programmes is also minimal [11, 20].

Therefore, Girls living in urban areas are more likely to engage in higher-risk sex (Nocondom use during sex, especially with a nonmarital, non-cohabiting partner). The proportion engaging in higher-risk sex is highest among adolescents at 96 percent, with 52 percent being females.

However, there is no study that has been conducted to assess the situation of Zambian adolescents in relation to other forms of abuse, such as economic and emotional abuse. Chawama compound, being a Peri-Urban area, is highly populated with people of low socioeconomic status. Hence most women who cannot afford to earn a living are involved in sexual activities as a way of earning income.

Materials and Methods

Research Design

In this study, a quantitative, cross-sectional descriptive study was used among women of childbearing age in Zambia's Chawama compound aimed at assessing the level of knowledge and attitude towards cervical cancer screening. A cross-sectional descriptive study design was used because the purpose of the study was to describe a population.

Study Population

The target population for this study was women of childbearing which is from 15 to 49 years of age.

Sampling Technique

In this study, Probability sampling was used in selecting the sample and the study settings; hence a sample size of 92 participants was done. The women were selected using simple random sampling as each element in the larger population had an equal chance of being selected into the sample.

Ethical Considerations

Ethical clearance from the Texila American University Research Ethics Committee was sought. Written consent was also sought from the respondents and the Lusaka District Health Office. Anonymity, confidentiality, and privacy was upheld during and after carrying out the research. The purpose, nature, and benefits of the study were explained to the participants.

Results

Socio-demographic Data

This section presents the demographic characteristics of the study respondents. The socio-demographic factors included were age, marital status, number of children, tribe, earnings, religious denomination, level of education, and occupation.

Table 1. Responses to Questions on Socio-Demographic Data

Variable	Frequency	Percentage (%)
Age		
15 -21	27	33.75
22-28	25	31.25
29-35	13	16.25
36-42	9	11.25
43-49	6	7.5
Marital Status	S	
Single	31	38.5
Married	46	57.5
Widowed	2	2.50
Divorced	1	1.25

Religious			
Christianity	79	98.75	
Muslim	1	1.25	
Level of Education			
Primary	15	18.75	
Secondary	55	68.75	
College	7	8.75	
University	2	2.50	
none	1	1.25	
Occupation			
Employed	18	22.50	
Not employed	62	77.50	

Respondents who had no education and those with primary education were categorized as all having low education. Respondents with secondary education, college, and university education were categorized as having high or moderate education.

Table 2. Responses to Knowledge on Predisposing Factors

What are the risk factors to cancer of the cervix	Frequency	Percentage (%)
Multiple Sexual partners	44	55
Low immunity due to HIV/AIDS	10	12.5
Smoking	4	5
Starting sex early	12	15
Those with sexually transmitted disease	6	7.5
I don't know	4	5
Total	80	100

Table 2 shows how much the participants knew about predisposing/risk factors to cancer of the cervix. The results showed that most of

the respondents (55%) said that women with multiple sexual partners were prone to the disease.

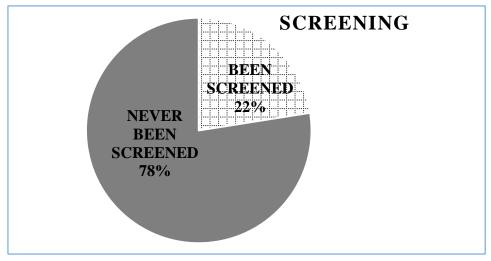


Figure 1. Responses to Questions on Attitude to Cervical Cancer Screening

Figure 1 shows that (22%) 18 out of 80 respondents have been screened for cervical

cancer, and (78%) 62 out of 80 respondents have never been screened for cervical cancer.

Cross Tabulation Tables

Table 3. Relationship Between Age and Cervical Cancer Knowledge

What is your age?	Do you know about cancer of the cervix?		Total	P-value
	Yes	No		
15-21	17(62.96%)	10(37.04%)	27 (33.75%)	0.122
22-28	21(84%)	4(16%)	25(32.25%)	
29-35	12(92.31%)	1(7.69%)	13(16.25%)	
36-42	6(66.67%)	3(33.33%)	9(11.25)	
43-49	3(50%)	3(50%)	6(7.5%)	
Total	59(73.75%)	21(26.25%)	80(100%)	

Table 3 shows respondents aged between 29-35 years (92.31%) are likely to have more

knowledge about cervical cancer than other age groups.

Table 4. Relationship between Age and Attitude Towards Screening

What is your age?	Have you ever been screened for cervical cancer?		Total	P-value
	Yes	No		
15-21	4	23	27	
22-28	6	19	25	
29-35	3	10	13	0.743
36-42	3	6	9	
43-49	2	4	6	
Total	18	62	80	

Table 4 show that the respondents aged between 36 - 49 years (33.33%) are more likely

to seek cervical cancer screening services in comparison to those aged 15-35 years (20%)

Table 5. Relationship between Marital Status and Attitude towards Screening

What is your marital status?	Have you ever been screened for cervical for cancer?		Total	P-value
maritar status.	Yes No			
Single	3	28	31	0.125
Married	14	32	46	
Widowed	1	1	2	
Divorced	0	1	1	
Total	18	62	80	

Discussion

Demographic Characteristics of Respondents

The socio-demographic characteristics of the study population are shown in table 1. Most (33.75%) of the respondents interviewed were

within the age group 15-21 years, and 7.5% were in the age group 43-49 years. The higher percentage of the age group between 15 and 21 years can be attributed to the fact that the household population in Zambia has a greater number of younger people than older people [13].

The majority (57.5%) of the respondents in this study were married, and 1.25% were divorced (Table 2). The higher proportion of married Women can be attributed to the age of the women interviewed.

In this study, most (98.75%) of the respondents were Christians, and 1.25% were Muslims (Table 1). This could be attributed to the fact that Zambia is a Christian nation; hence most Zambians are Christians.

Table 2 shows that most (68.75%) of the respondents had secondary education, 1.25% had attained neither primary, secondary, nor college education. The above finding is higher than that of the 2011-2012 Zambian Demographic and Health survey, which shows that only 41.6% of the total population had some primary education and 29.2% secondary education [13]. The reasons could be that people are increasingly becoming aware of the importance of education now than before. The explanation of the findings concerning those who attained either secondary or college education (40.4%) could be that most of the girls got married after completing Primary education. This assumption agrees with the Central Statistics Office (2015) report, which shows that almost 46% of women aged 20 - 49 were married by age 18, been the age when they completed Primary education, and 66% were married by age 20.

According to the Living Conditions Monitoring Survey (2006), 64% of Zambians were classified as poor. The majority (77.5%) of the respondents in this study were unemployed, and only 22.5% were employed (Table 1). This agrees with [13], that shows that only (27%) of Zambian women are in informal employment.

Knowledge on Cervical Cancer

The study findings show that 73.75% of the respondents interviewed had adequate knowledge on cancer of the cervix, while 26.25% had inadequate knowledge. The above findings are similar to [14], where 93% of the

respondents had adequate knowledge on cervix cancer while only 37% had inadequate knowledge. Contrary to the finding of Ahmed S 2013, respondents exhibited a fair knowledge of cervical cancer and cervical cancer screening of (43.5%). However, their knowledge of risk factors was poor, there was generally a good attitude to cervical cancer screening of (80.4%), but their level of practice was low (15.4%).

Knowledge on the predisposing factors to cancer of the cervix (Table 2) was generally good. The results showed that most of the respondents (55%) said that women with multiple sexual partners were prone to the disease, 15% stated that starting sex at an early age could predispose a woman to cervical cancer. The other responses on predisposing factors for cervical cancer were that smoking could predispose a woman to cervical cancer (5%) and that low immunity due to HIV/AIDs could predispose a woman to cervical cancer (12.5%). Some of the respondents said those with sexually transmitted diseases (7.5%) and those who did not know (5%). The respondents who said that the cause was by multiple sexual partners could be because of the programmes of male circumcision and that those who were not circumcised had higher chances of transmitting the virus to their partners that was widely disseminated both on public and social media that encouraged males to go for the service as a way of preventing cervical cancer. The findings are like that of [15, 19] on the etiological factors of cervical cancer who found that 41% of the respondents mentioned multiple sexual partners as a predisposing factor to cervical cancer, and 36% of the respondents thought having a low immunity due to HIV/AIDs could predispose a woman to cervical cancer. In this study, young woman in the age group of 15-21 had more knowledge of cervical cancer as compared to the women in the age group of 22-49 years. According to a previous study [16], older women tend to be more concerned about their health and cancer of the cervix because in the past, cancer of the cervix affected older

women more than the young. In this study, it has been revealed that young women had more knowledge, and this can be attributed to the availability of technology and vast use of the internet, and other related health programs from the internet.

The results that younger women are more knowledgeable on cervical cancer is like [17] study.

Attitude towards Cervical Cancer Screening

Consistence cervical towards cancer screening among the respondents as indicated in Figure 1 that most 62 (78%) of the respondents had never gone for cervical cancer screening. 18 (22%) were examined or had gone once after experiencing the signs and symptoms. The reasons could be that the elderly women are more health conscious and likely to seek medical services due to failing health attributed to a degenerative process that comes along with old age in comparison to those in the age group 15-21 (14.8%) who had a poor attitude towards screening because their immunity was intact. Similarly, a study conducted by [18] revealed poor and uptake of cervical cancer screening among women.

According to table 7, the findings show that married women (14%) had a good attitude towards cervical cancer screening as compared to the single (3%). The reasons for the married having a good attitude could be that they are more inquisitive about their health as many leave room for doubt about their husband's faithfulness while others get inspired by their husbands to go for screening services.

Limitation of Study

It was not possible to conduct the study on a large scale with a large sample size due to limited resources and the time in which the study was to be completed and submitted to Texila American University. This means that the study findings cannot be generalized to a larger population of Zambia.

The limitation of this study is also inherent in the research design which has been chosen. In this study, design observations are done at a single point in time compared to other designs where observations are carried out several times and allow the research investigator to examine changes over time.

There are few studies that have been done on this topic in Zambia. This made it difficult to make comparisons with other local researchers and to determine the differences or similarities in the findings.

Another limitation is that participation in this study was voluntary. Therefore, most of the respondents were those who showed more interest in the topic.

Since it was not self-administered, it may have led to dishonesty in respondents since cervical cancer may be considered a sensitive topic.

Conclusion

The study was carried out to determine the levels of knowledge and attitude on cervical cancer and cervical cancer screening among women aged 15 - 49 years in the Chawama compound.

The study findings show that 73.75% of the respondents interviewed had good knowledge on cancer of the cervix, 26.25% had little or no knowledge on cancer of the cervix, and heard people talk about cervical cancer, but they were ignorant of the full information on the same while consistency towards cervical cancer screening among the respondents indicated that most 62 (78%) of the respondents had never gone for cervical cancer screening, 18 (22%) were examined or had gone once after experiencing the signs and symptoms.

Of the respondents interviewed, 36-42 (33.3%) had a good attitude on cancer of the cervix the reasons could be that elderly women are more health conscious and likely to seek medical services due to failing health attributed to a degenerative process that comes along with old age in comparison to those in the age group

15-21(14.8%) who had a poor attitude towards screening because their immunity was intact.

The study was carried out to investigate into the knowledge and practices of women towards menopause in the Choma district southern province. Data was collected from 50 respondents using a structured interview schedule. The finding of this study indicated that the majority 36(72%) of the respondents, had inadequate knowledge on menopause. This is due to inadequate information given to women on menopause once they visit a health facility, as results reviewed that 90% did not receive information from the health facility.

This study has reviewed that there is a relationship between knowledge and practice, as shown by the p-value 0.000 in table 6. 24(48%) of the respondents with good practices had adequate knowledge on menopause.

The findings also showed that there is statistical significance between practice and health-seeking behavior, as shown by a p-value of 0.004 in table 7. 37(74%) of the respondents had bad practices with bad health-seeking behavior. Those who had bad practices towards menopause still consider menopause to be a secret. Therefore, more information and education should be given to women regarding menopause.

There was no statistical significance between practice and education, as shown by the p-value

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of 0.109 in table 8. The study showed that of those that attended high (tertiary, secondary) levels of education 15(30%) had bad practices towards menopause. This was due to a lack of health education, and low levels of education as most of the respondents attained primary education, and others had never been to school. Therefore, it is important for healthcare intensify their Information, providers to Education, and Communication (IEC) to the community on Menopause. The majority of the respondents were not provided information and reported that the information from the healthcare facilities was, unhelpful and, therefore not good. These results therefore reviewed that the information at the health facilities regarding menopause is inadequate and therefore need for healthcare staff to provide more information on menopause.

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Competing Interests

The authors declare no competing interests in this manuscript.

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