KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN ATTENDING ANTENATAL CLINIC AT UNIVERSITY COLLEGE HOSPITAL TOWARDS CAUSES AND METHODS OF PREVENTION OF CERVICAL CANCER

Abstract

Nigerian women of childbearing age who are sexually active are the at risk of cervical cancer (CC), since they may have been exposed to Human Papilloma virus. Majority of the women with invasive cervical cancer were never screened for this disease which is known to be a major cause of cancer deaths among women, especially in developing nations. Mortality and morbidity arising from non-communicable diseases like cancer have continued to pose threat to the life of women. Cervical cancer is one of the common cancers and is responsible for the death of many women. This study was therefore designed to investigate the knowledge of pregnant women attending antenatal clinic at University Teaching Hospital Ibadan about cervical cancer and their attitude towards its methods of prevention.

A descriptive cross-sectional design was adopted and a total of one hundred and forty-seven (147) pregnant women were selected at the antenatal clinic at University Teaching Hospital Ibadan using a simple random sampling method. Self-structured questionnaire was used to collected the date from the respondents while descriptive statistics was used to analyze the data. Respondents' ages ranged between 18 and 50 which is the average reproductive age of women, of which 80% had at least secondary school education while the remaining 20% had only primary school education.

The study confirmed that most of the respondents had heard about cervical cancer screening and know where it can be done. While the awareness of cervical; cancer is high unfortunately, the perception that it can be treated is quite low. Knowledge, attitude and perception of women

attending ante-natal clinic on cervical cancer screening often an important opportunity for comprehensive prevention and preventive strategies of the disease especially during the early stage if detected on time. Noteworthy is that majority of the respondents are aware of cervical cancer, however they are not aware of the vaccines that can help prevent it. Their knowledge of the relationship of cervical cancer is not accurate. Also, they don't know that women should be checked every three years by health professionals for cervical cancer. Similarly, they do not have enough information about the different types of test that should be carried out for the detection of cervical cancer.

Hence, there is a large gap between level of knowledge and attitude of pregnant women attending antenatal clinic at University Teaching Hospital Ibadan towards causes and methods of preventing cervical cancer. Efforts should be put in place to bridge this gap to reduce the incidence of women with cervical cancer

Keynotes: Cervical cancer, Screening test, knowledge, attitude, women

1. INTRODUCTION

"Cervical cancer is also known as cancer of the cervix (entrance of the uterus from the vagina). It is one of the most common cancers affecting women worldwide"[1]."According to the World Health Organization cervical cancer is the fourth most common cancer in women, after breast cancer, colorectal cancer and lung cancer are also the leading cause of cancer-related deaths in women in eastern, western, middle and southern Africa"[2].

"It remains an important health challenge at the national and global levels. It is the second most commonly diagnosed cancer and the leading cause of death from cancer among women in most developing countries"[3]."According to the cervical cancer action (CCA), approximately 500,000 new cases of cervical cancer are diagnosed each year, leading to 275,000 deaths from the disease

around the world"[4]."More than 80% of these cases occur among women in developing countries, with the highest incidence rates in Central and South America, the Caribbean, Sub-Saharan Africa, and Southern Asia. It is projected that by 2030, approximately 474,000 women will die from cervical cancer each year and more than 95% of those cancer deaths will be in low- and middle-income countries. In addition, the cervical cancer incidence rates are expected to double in Sub-Saharan Africa by 20303. Cervical cancer comprises approximately 15% of female cancers in the developing world compared with 3.6% in developed countries"[5]."Cervical cancer is the major cause of death among women in developing, countries, including Thailand, Vietnam, and Cambodia, primarily due to the lack of access to early screening"[6]. "Despite this fact, current health care efforts have been ineffective in reducing the mortality rates in these settings primarily because of the lack of effective resources and screening"[7,3,8].

"In the United States, an estimated 12,170 women will be diagnosed with invasive cervical cancer, and 4,220 women were projected to die from the disease in 20123. Among women in the United States, Hispanic women have the highest incidence rate of cervical cancer, followed by African American, White, American Indian/Alaska native, and Asian American/Pacific Islander women. However, African American women have the highest mortality rates. The overall cervical cancer death rate has declined by nearly 70% over the last several decades. The main reason for this change is attributed to prevention and early detection due to the increased use of Papanicolaou (Pap) smear screening3. Healthy People 2010 included the objectives that 97% of women aged 18 years and older should have received a Pap test in their lifetime and 90% of eligible women should have received Pap tests within the previous 3 years (U.S. Department of Health and Human Services9. However, it was indicated that the percentage of American women receiving recommended screening for cervical cancer did not meet the Healthy People 2010 objectives, with a screening rate of 83.0% (below the Healthy People 2020 target of 93.0%10. In addition, recommended screening rates for breast 3 cancer, cervical cancer, and colorectal cancer

were markedly lower among Asians than among Whites and African Americans. Hispanics were less likely to undergo screening for cervical and colorectal cancer" [9].

"In Ethiopia, cervical cancer ranked as the second leading cause of female cancer and also stands as the most common cancer among women aged from 15 to 44 years old. Hence, this study aimed to assess knowledge, attitude, and practice toward cervical cancer screening among women attending health facilities in central Ethiopia"[10].

"Cervical cancer (CC) is an extremely preventable and curable disease with early detection and treatment. Unfortunately, the practice of cervical cancer prevention (CCP) remains poor in resource constrained countries. This study aimed to identifyknowledge and attitude of pregnant women attending antenatal clinic at university college hospital towards causes and methods of prevention of cervical cancer"[11].

"Intensive global efforts are currently on-going to ensure the elimination of cervical cancer by 2030. To achieve this, identification of populations and settings to optimize implementation is important. Pregnant women in antenatal setting provide one of such opportunities"[12].

"Cervical cancer is the most common genital cancer and one of the leading causes of death among female population. Fortunately, this cancer is preventable by screening for premalignant lesions but this is rarely provided and hardly utilized"[13].

"cervical cancer is the most common genital tract malignancy among women in Nigeria. Cancer of the cervix is preceded by a curable premalignant stage which can be detected by screening. The disease can also be prevented by Human papillomavirus (HPV) immunization. Women living in slums usually have poor reproductive health knowledge and poor health behaviours. Mostly of low socioeconomic status, these women are at higher risk of cervical cancer"[14].

"Healthy People 2020 was released in December 2010, highlighting objectives for health promotion and disease prevention. One of these areas involves cancer (there are 20 cancer objectives), and the Healthy People goal is to reduce the number of new cancer cases as well as

disability and death caused by cancer. The Healthy People 2020 objective for cervical cancer is to reduce the death rate from a 2007 baseline of 2.4 deaths per 100,000 women (age adjusted to the year 2000 standard population) to the target rate of 2.2 deaths per 100,000 women (10% reduction in death rates"[9]. "Cervical cancer screening guidelines, a woman should start receiving regular Pap tests at the age of 21. If the Pap test results are normal, the Pap tests can be done less often, according to the judgment of the health care provider. Women aged 21 to 29 years should be screened for cervical cancer with a Pap test at least every 3 years, regardless of sexual activity. Women aged 30 to 65 years may choose to have a human papillomavirus (HPV) test in addition to the Pap test (co-testing) every 5 years or the Pap test alone every 3 years. Following adequate negative prior screening, women older than age 65 may not need to have a Pap test, according to the judgment of the health care provider. In the United States, there is no centralized government program for cervical cancer screening; however, numerous government programs and agencies provide funding. Additionally, the U.S. Preventive Services Task Force and health professions societies publish guidelines for screening programs".[9]

"The prevalence of cervical cancer, based on WHO's 2018 estimates, is about 604,237 cases were diagnosed worldwide. Just like most carcinomas, the actual cause of cervical cancer is unknown. Cervical cancer is the cause of 311,000 deaths each year (WHO, 2018). WHO also estimates that cervical cancer affects about 16 out of every 100,000 women worldwide each year and causes death in about 9 out of every 100,000 women each year. This indicates that about half of women diagnosed with cervical cancer actually die of the disease. There is therefore no gainsaying about the fact that cervical cancer is a very serious health issue, which requires urgent attention"[15].

Though so many scholars have worked on this disease to ensure that it comes to an end or it reduces the number of death in circulations. Nevertheless, instead of the number to be reduced it is more increasing as a result of lack of knowledge and understanding of the disease. This is the

gap that this study is trying to fill, which is knowledge and attitude of pregnant women attending clinic at UCH towards causes and method of prevention of cervical cancer.

1.1 Main Objective

The broad objective is The objective of this study is to investigate the knowledge of pregnant women attending antenatal clinic at University College Hospital Ibadan about cervical cancer and their attitude towards its methods of prevention:

1.2 Specific Objectives

The specific objectives of the study were to:

i. To investigate the number of women having cervical cancer.

ii. To determine whether the pregnant women have the knowledge of cervical cancer.

iii. To discover the causes of cervical among pregnant women.

iv. To establish the perception of pregnant women on cervical cancer.

v. To bring about solution that could reduce this disease.

1.3 Research Questions

This study was conducted to answer the following questions:

i. How many pregnant women have involved in cervical cancer?

ii. What is the level of knowledge of pregnant women about cervical cancer and the causes?

iii. What are the possible causes of cervical cancer among women?

iv. What are attributes of pregnant women towards the methods of prevention of cervical cancer?

v. What are the available preventing methods for within reproductive age?

2. MATERIALS AND METHODS

2.1 The Study area

A survey research design was adopted for this study. This is the systematic and specific collection of data from a relevant population that is familiar with the ideas relating to the objectives of the study selected with the use of a standardized questionnaire that was administered. The use of this method is aimed at investigating the knowledge of pregnant women attending antenatal clinic at University College Hospital Ibadan about cervical cancer and their attitude towards its methods of prevention.The population of this study comprised of all the pregnant women attending antenatal clinic of the University College Hospital, Ibadan within a period of three weeks when the research questionnaire was administered. The preferred choice of most pregnant women is the University College Hospital (UCH), located in the heart of Ibadan. Most pregnant women attending antenatal care prefer UCH, not only because of the presence of experienced physicians, but because they have scientific equipment that can aid survival in cases of emergency. Hence, the influx of pregnant women to attend antenatal care at UCH compared to other hospitals in Ibadan is very high and the best place to carry out this research. It is estimated that a sample size population of one hundred and fifty respondents will be obtained within a period of three weeks.

2.2 Sampling techniques and sample size

The sampling technique employed in this study is the random sampling technique. This sampling technique was adopted purposely to give every respondent the opportunity irrespective of their

age, religion and ethnical background. The prospective mothers were approached over a period of three weeks to administer the questionnaire. While some obliged to fill it, some in hesitation and some turned down the request to fill it in. One questionnaire was not returned during the process while two were not properly filled.

Table 1: Table of the population of Interest

Age group (in years)	First Birth	Second Birth	Third Birth	Total
20 and Below	6	0	0	6
21-25	7	13	2	22
26-30	15	22	9	46
31-35	7	19	26	52
36-40	1	3	10	14
45 and Above	1	1	4	6
Total	37	57	51	146

The questionnaires were administered to the respondents regardless their ethnical or religious background. From Table 1 above, out of a total of one hundred and fifty (150) questionnaires administered, a total number of one hundred and forty-six (146) was correctly filled and returned. This signifies that there was a 97.3% return rate. Of the questionnaires returned, the table above also shows that 25.34% of the respondents are just having their first child, 39.04% their second child and

34.93% are having their third. Age group 26-30 (31.50%) and 31-35 (35.62%) boast of having the highest number of child birth which of course indicates that the two group are the most reproductive group. It is also obvious from the table that age group 20 and below has 4.11% child birth and age group 21-25 has 15.07%. Age group 26-30 and 31-35 has the highest number of births of 31.51% and 35.62% respectively. The table also indicate that age group 36-40 and age group 45 and above has 9.59% and 10.96% child birth respectively.

Table 2: Table of Questionnaire Return Rate

Status	Number of Questionnaires	Percentage
Completely Filled	146	97.30%
Incomplete	3	2.00%
Not returned	1	0.70%
Total	150	100%

2.3 Data collection Procedure and Analysis

Copies of the questionnaire were administered to pregnant women who came for ante natal care at the University Staff College Hospital before the nurses attended to them in the early hours of the morning. Copies were retrieved immediately from the prospective mothers upon completion of the responses by the respondents.The analysis of data collected was based on the use of simple descriptive statistical analysis of frequency counts and percentages. A Chi-squared test based on the statistical output from analyzed data will also be used to draw valid conclusions from the

hypothesis set up. Figures and tables were also used to present findings. Inference and recommendations were then drawn from them.

3.0 RESULTS AND DISCUSSION

The result of data analyses was presented in this order; questionnaire administration and return rate, demographic characteristics of the respondents, answers to research questions, interpretation of result and discussions to findings.

3.2 Questionnaire administration and return rate

A total of one hundred and fifty (150) questionnaires were distributed to the respondents who will be compressed into three different age groups namely: 20 years to 29 years, 30 years- 39 years and 40 years to 49 years without considering their religious, ethnical and social background. A total of one hundred and forty-eight copies were returned and used for this analysis, giving a response rate of 98.0%. (Table 1). The table also indicated that 29 respondents (19.67%) of age group 21years to 29 years returned the completely filled questionnaire, 67 out of 148 which was returned belong to the age group of 30 years to 39 years, which is the highest group that was available during the antenatal and questionnaires was administered on. The group also boasted of a return rate of 45.30%, while the group within the age bracket of 41 years to 49 years had a return rate of 52 (35.13%).

Table 3 Distribution, administration of questionnaire and return rate.

AGE GROUP	RETURNED	%
20 years - 29 years	29	19.67%
30 years- 39years	67	45.30%

40 years- 49years	52	35.13%

The administration of the questionnaire and the return rate according to the age group can be illustrated in the pie-chart below:

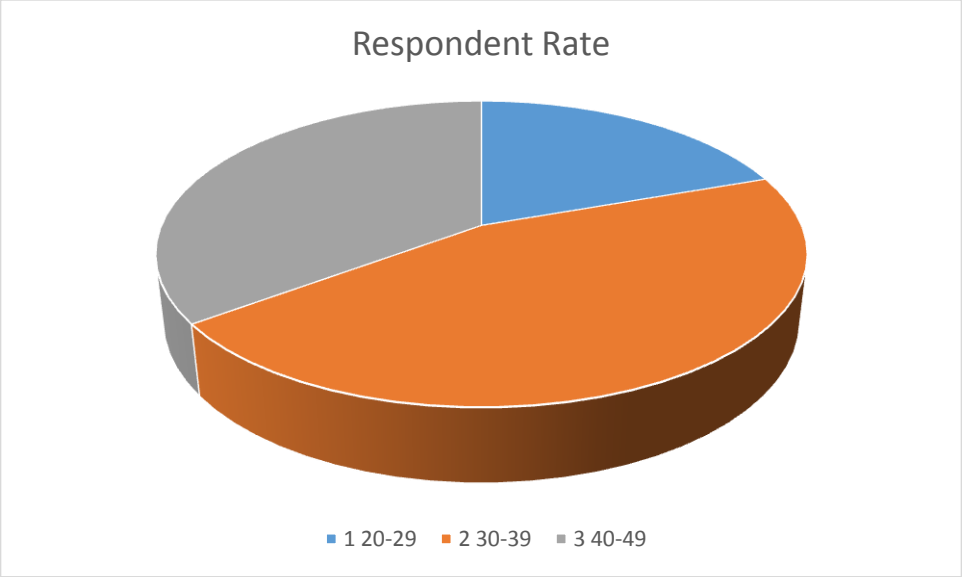

Fig. 1: Pie chart showing the return rate of the questionnaires from each age group.

The pie chart above illustrates the return rate of the administered questionnaires to the respondents, it can be observed that age group 31-35 years has the highest return rate with a total number of 29 questionnaires and a return rate of 67 and 52 respectively for the age groups of 21 years- 29 years and 31 years -39 years.

It should be noted that the respondent age group was not considered before administering the questionnaire, hence the ages of the respondent of the three questionnaire that was not returned could not be ascertained.

3.3 Socio-demographic Characteristics of the Respondent

Table 4 reveals that the mean of the whole respondent is 35.34 with a standard deviation of ±6.46. The population of age group 21 years – 29 has a total number of 29 (19.6%) filled and returned

questionnaires, 31 years - 39 years with 67 (45.3%) and age group 40 years to 49 years 52 (35.1%). The implication of this is that group 31years -39 years had the highest number of prospective mothers within the time frame this questionnaire was administered. The Table also shows that 32.4% of the respondent live around Bodija, 25.0% around Yemetu and 42.6% live within other areas in Ibadan. The highest level of education attained by 8.1% of the respondents is the primary school education while 18.9% attended Secondary school, which was their highest level of education. The highest percentage of the respondent 73.0% had up to tertiary school education. Furthermore, their mean age as at first mirage and standard deviation are 27.9 and ±4.2 respectively.

Table 4: Socio-demographics of Pregnant women attending Ante Natal Clinic

Socio-demographic characteristics	**Frequency (%)**
Mean age(±SD)	35.34 (±6.46)
Age group (years)	
20-29	29(19.6)
30-39	67(45.3)
40-49	52(35.1)
Domicile	
Bodija	48(32.4)
Yemetu	37(25.0)
Others	63(42.6)
Education	
Primary	12(8.1)
Secondary	28(18.9)
Tertiary	108(73.0)
Mean age at first marriage (±SD)	27.9(±4.2)
Age at marriage	

<25 years	24(16.2)
25-29 years	85(57.4)
30-34 years	25(16.9)
35 years and above	14(9.4)
First pregnancy	
Yes	45(30.4)
No	103(69.6)

3.4 Answers to Research Questions

3.4.1: Research Question one: What is Your Level of Knowledge about Cervical Cancer?

Table 5 below presents the respondents answers to determine the level of their knowledge on Cervical Cancer. A good percentage of the population which amounts to74.3% have a good knowledge of cervical cancer while the remaining 25.7% has a poor knowledge. The analysis shows that 13.2% within the age group of 20 years-29 years has a poor knowledge while 21.8% of the same group has a good knowledge of the virus. Similarly, within the age group of 30 years – 39 years 42.1% has a poor knowledge while 46.4% has a good knowledge of the virus and in the last category of age group of 40 years – 49 years, 44.7% and 31.8% both have a poor and good knowledge respectively. Noteworthy is the fact that the age group has a Chi-square value of 2.536 and a p-value of 0.281

In this domicile category, Bodija, Yemetu and other environs boasts of having 36.8%, 31.6 and 31.6% respectively. This percentages of course represent a poor knowledge of Cervical cancer in comparison the locations of the respondent while 30.9%, 22.7% and 40.6% of the same location represents good knowledge of the virus.

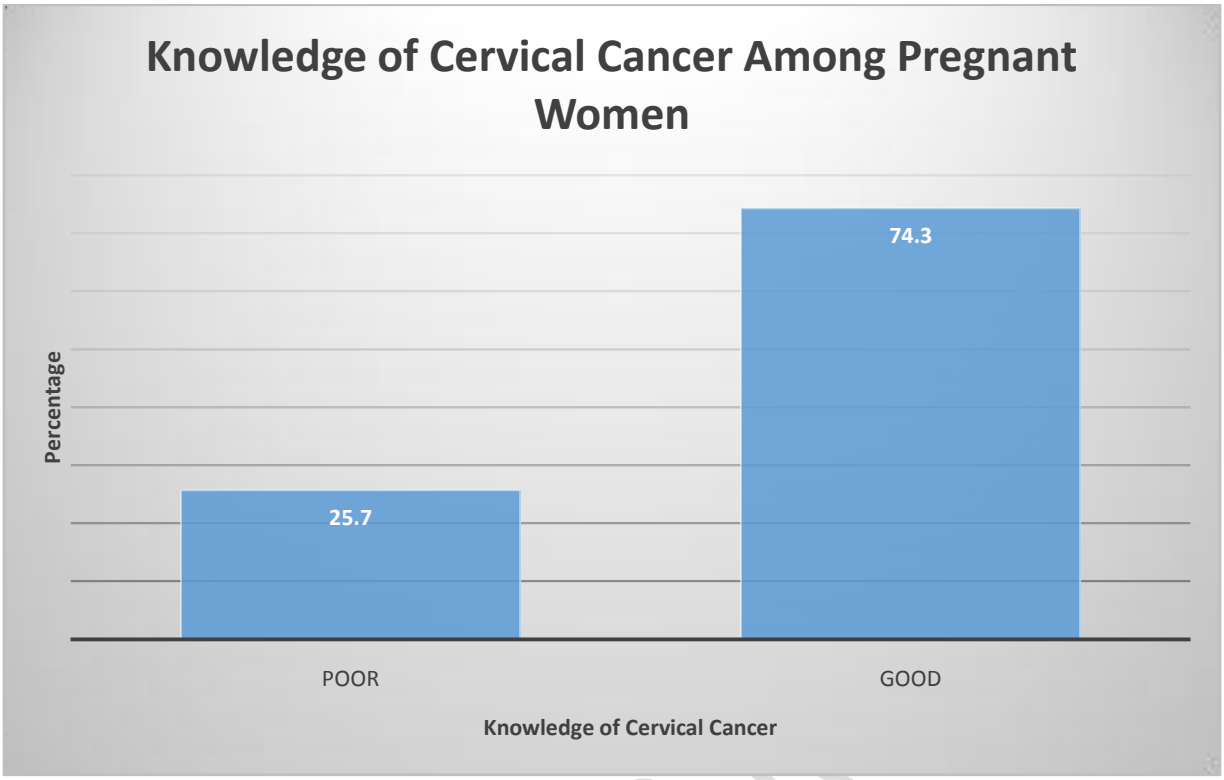

Fig 2: A chart representing the knowledge of the respondents on Cervical Cancer.

From Figure 2 above, the bar graph shows that the percentage of the respondents with good knowledge out numbers those with poor knowledge which is 74.3% as against 25.7%

It can also be noted that the domicile has a Chi-square value of 2.642 and a p-value of 0.267. From our hypothesis which states as thus:

H_{01}: There is no significant relationship between the pregnant women's age and their knowledge of the causes of cervical cancer.

H_{02}: There is significant relationship between the pregnant women's age and their knowledge of the causes of cervical cancer.

We can see from Table 5, that the overall general knowledge of cervical cancer of the respondents are well represented.

Since the categorical p-values as stated in Table 5 below are all greater than 0.05, we can conclude reasonably that the knowledge of the respondents in relation with their age, domicile, education and age at marriage are independent of each other and that there is no statistical relationship between the categorical variables.

Table 5: Knowledge of respondents on Cervical Cancer

	Knowledge			
	Poor	**Good**	**Chi-square**	**p-value**
Age group (years)				
20-29	5(13.2)	24(21.8)	2.536	0.281
30-39	16(42.1)	51(46.4)		
40-49	17(44.7)	35(31.8)		
Domicile				
Bodija	14(36.8)	34(30.9)	2.642	0.267
Yemetu	12(31.6)	51(22.7)		
Others	12(31.6)	51(46.6)		
Education				
Primary	2(5.3)	10(9.0)	0.634	0.727
Secondary	8(21.1)	20(18.2)		
Tertiary	28(73.7)	80(72.7)		
Age at marriage				
<25 years	4(11.1)	18(16.2)	2.691	0.442
25-29 years	23(63.9)	62(56.4)		
30-34 years	4(11.1)	21(19.1)		
35 years and above	5(13.5)	9(18.2)		

First pregnancy				
Yes	14(31.4)	31(28.2)	0.136	0.712
No	24(68.6)	79(71.8)		

3.4.2: Research Question two: What is your attitude towards the Methods of Cervical Cancer?

As far as the attitude of women towards Cervical Cancer is concerned, 7.0% of the respondent within the age bracket of 20years -29 years have poor attitude towards Cervical cancer and 28.4% are deeply concerned about it. Within the age bracket of 30 years -39 years 38.6% had good attitude, that is they care and are worried in the case of having Cervical cancer while54.9% which is a large percentage are indifferent about the virus. Similarly, Within the age group of 40 years – 49 years, a large percentage (38.6%) exhibit a poor attitude while 33.0% had good attitude towards the virus. It should also be noted that majority of the respondents (43.9%) with poor attitude live at Bodija while those with good attitude living within Bodija amount to 26.1%. In Yemetu, those with good attitude and bad attitude towards the virus just slightly differs from each other. They are 24.1% and 24.6 respectively, while in other environs in Ibadan, %0% of the respondents has positive attitude and 31.6% a poor one. Education as can be seen in table 5 has a great influence on the attitude on the respondents, it was thus observed that 72.2% of the respondent are with good attitude while 57.0% a poor attitude. Both 15.9% and 11.6% with good attitude attained both secondary and primary school education as their highest form of education and 22.8% and 3.5% have poor attitude. These statistics implies that education has a strong impact on the attitude of humans in general. The table also indicate that among the age groups, that their age at marriage has significant contribution to their attitude. 8.9% and 19.5% of the respondents have both poor and good knowledge respectively, these are those less than twenty-

five years of age and 62.5% and 55.2% similarly have both poor and good knowledge respectively. Equal number of those within the age group of 30-34 years and 35 years and above (14.3% each) have poor knowledge while on the other hand 18.4% and 6.0% of these same age group have good knowledge as indicated in table 5.

Table 6: Respondents Age and Attitude to Cervical Cancer among pregnant women.

	Attitude			
	Poor	**Good**	**Chi-square**	**p-value**
Age group (years)				
20-29	4(7.0)	25(28.4)	10.14	**0.006**
30-39	31(54.9)	34(38.6)		
40-49	22(38.6)	29(33.0)		
Domicile				
Bodija	25(43.9)	23(26.1)	6.035	0.049
Yemetu	14(24.6)	21(24.1)		
Others	18(31.6)	44(50.0)		
Education				
Primary	2(3.5)	10(11.6)		
Secondary	13(22.8)	14(15.9)		
Tertiary	42(57.0)	64(72.7)		
Age at marriage				
<25 years	5(8.9)	17(19.5)	5.051	0.168
25-29 years	35(62.5)	48(55.2)		
30-34 years	8(14.3)	16(18.4)		
35 years and above	8(14.3)	6(6.0)		

First pregnancy				
Yes	17(30.9)	24(27.6)	0.181	0.670
No	38(69.1)	63(72.4)		

H_{11}: There is no significant difference between the pregnant women's age and their attitude towards its methods of prevention of cervical cancer.

H_{12}: There is significant difference between the pregnant women's age and their attitude towards its methods of prevention of cervical cancer.

It should be noted that from the table above, the Chi-square and p-value of the students age against their attitude is 10.14 and 0.006 respectively. This simply implies from the p-value, that age and the respondent's attitude are not independent on each other, hence we can conclude that there is a statistical relationship between the two variables (age and attitude).

3.4.3: Research Question three: What do you know about the possible causes of Cervical Cancer?

Table 7 below shows that responses from the respondents has been merged into three which are namely: Agree (Strongly agree and agree), Disagree (Strongly disagree and disagree) and undecided. The table shows that 66.4% agrees, that having sexual intercourse as a teenager can cause cervical cancer later in life as to 19.2% and 14.4% who are undecided. 78.8% also agree that having sex with many men can cause Cervical cancer while 10.3% and 11.0% are undecided. Similarly, 57.5% and 20.5% agrees and disagree respectively polygamy can increase the risk of having Cervical cancer while 21.9% are undecided. Having a husband who is a smoker can increase the risk of Cervical cancer, so agrees 57.5% while 20.5% and 21.9%

disagrees and are undecided respectively. 60.3% agrees that Information of cervical cancer is not wide spread enough while 24% and 15.8% disagrees and undecided. 49.3% also agree that if untreated, sexually transmitted disease can increase the risk of cancer, 54.7% disagrees and 14.7% are undecided. 67.8% of the respondents also believe women within the reproductive age are vulnerable to having cervical cancer while 19.2% disagrees and 13.0% are undecided. 52.5% believes that recurrent vaginal bleeding is a possible cause for cancer, 33.6% disagrees and others are undecided. 33.1% agrees to the fact that bleeding during or after sex can be an indicator for Cervical cancer. Fowl smelling vaginal discharge is a warning for cervical cancer, so agreed by 33.8% while 31.2 and 34.5% disagrees and are undecided.

Table 7: Responses of the possible causes of Cervical Cancer.

REASEARCH QUESTIONS	**Agree n(%)**	**Disagree n(%)**	**Undecided n(%)**
Having sexual intercourse as a teenager can cause cervical cancer later in life	97(66.4)	28(19.2)	21(14.4)
Having sex with many men can cause cervical cancer.	115(78.8)	15(10.3)	16(11.0)
If my husband has many wives it increases my risk of having cervical cancer.	84(57.5)	30(20.5)	32(21.9)
If my husband smokes cigarettes it increases my risk of having cervical cancer.	45(30.4)	81(54.7)	22(14.7)
If a woman has Untreated sexually transmitted disease, it increases her risk of having cervical cancer.	72(49.3)	41(28.1)	33(22.6)
Information of cervical cancer is not	88(60.3)	35(24.0)	23(15.8)

wide spread enough.

Women within reproductive age are vulnerable to having cervical cancer	99(67.8)	28(19.2)	19(13.0)
Recurrent vaginal bleeding is a possible cause for cancer	77(52.7)	49(33.6)	20(13.7)
Bleeding during or cervical after sex (contact bleeding) can be an indicator for cervical cancer	49(33.1)	51(34.4)	48(32.4)
Fowl smelling vaginal discharge is a warning sign for cervical cancer	50(33.8)	47(31.2)	51(34.5)

The figure below shows the level knowledge of preventive measures of Cervical Cancer. It can be observed that, 53% of the respondent has a good or correct knowledge of the methods of Cervical cancer prevention while 47% who disagrees and are undecided do not has a good knowledge. We can thus reasonably conclude that respondents have an average knowledge of the possible causes of Cervical Cancer.

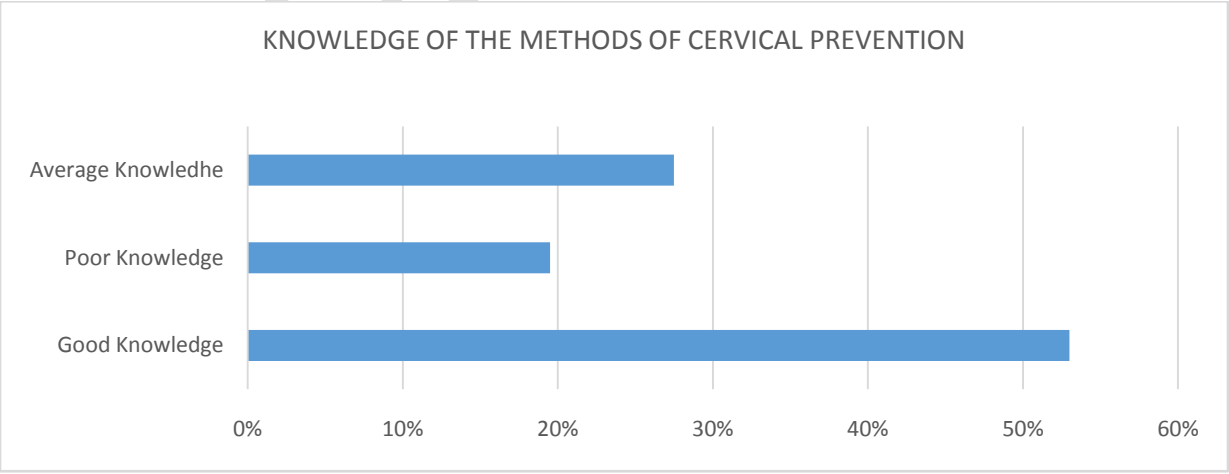

Fig 3: Chart of the Responses Knowledge of the possible Methods of Prevention of Cervical Cancer.

3.4.4: Research Question four: What are the available preventive measures of Cervical Cancer?

Table 8 below highlights the available preventive methods of cervical cancer. It should be noted that responses under Strongly agreed and Agreed has been merged together as Agreed, so also Strongly Disagreed and Disagreed for easy computation. The table indicates that 6.8% of the respondents do not know whether avoiding having multiple sexual partners can prevent a woman from having cervical cancer, 32.2% and 61% strongly disagrees an strongly agrees respectively. It is Strongly agreed by 26.7% from the table that avoiding having early sexual intercourse can prevent a woman from having cervical cancer whereas 13.7% are indifferent about it while 59.6% strongly disagrees with it. Also, 85.6% strongly disagrees that smoking can prevent a woman from having cervical cancer, 14% are undecided, 13.0% strongly agrees. Similarly, 77.4% strongly agree that it is useful tool for early detection of cervical cancer. However, 4.1% are undecided about it while 18.1% disagrees. 96.6% have never done a pap smear test as at against only 3.4% who have been tested. Additionally, only 32.2% agrees that pap smear test should be done at least three times in a year, while 40.4% are undecided and 27.4% and 4.8% strongly disagree. As outlined in the table, a good number of 65.8% strongly agree, while 19.9% are undecided about having pap smear test during menstrual flow which is the best time while 14.4% strongly disagrees. A good portion of the respondents, that is 85.6% strongly agree that pap smear test should be done by the doctor while 17.5% are don't know and 6.8% strongly disagree. In case abnormality in pap smear test 65.8% strongly agree and to do some further laboratory tests, 19.2% are undecided while 15.0% disagree and to do further test. 69.6% also strongly agree that early detection of cervical cancer is also beneficial as it will encourage quick pap smear test whereas 11.6% are undecided while 18.5% strongly disagree. A good fraction of

the respondent i.e. 69.6% strongly agree that there is always a relief in case of detection after a pap smear test. 9.8% are undecided, 13% strongly disagrees respectively.

Table 8: Responses to available preventive measures of Cervical Cancer.

	RESEARCH QUESTIONS	SA	D	SD
48	Avoiding multiple sexual partners can prevent a woman from having cervical cancer.	47(32.2)	10(6.8)	89(61.0)
49	Avoiding having early sexual intercourse can prevent a woman from having cervical cancer.	39(26.7)	20(13.7)	87(59.6)
50	Smoking can prevent a woman from having cervical cancer.	19(13.0)	2(1.4)	125(85.6)
51	It is a useful tool for early detection of cervical cancer.	113(77.4)	6(4.1)	27(18.5)
52	I have undergone pap smear test.	5(3.4)	0(0)	141(96.6)
53	Pap smear test should be done at least three times in a year.	47(32.2)	59(40.4)	40(27.4)
54	The best time for doing pap smear test is during menstrual flow.	96(65.8)	29(19.9)	21(14.4)
55	Pap smear test should be done by doctor.	125(85.6)	11(7.5)	10(6.8)
56	In case of abnormality in pap smear test, do some further laboratory tests.	96(65.8)	28(19.2)	22(15.1)
57	Early detection of cervical cancer is a benefit OF pap smear test.	102(69.6)	17(11.6)	27(18.5)
58	There is always a relief in case of detection after a pap smear test.	114(78.1)	13(9.8)	19(13.0)

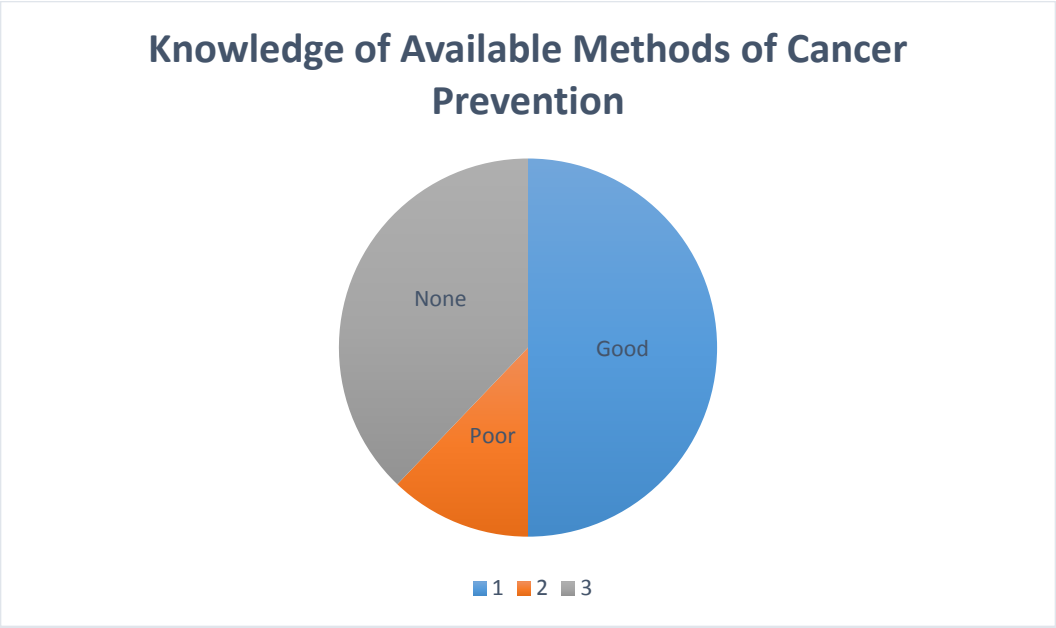

Fig 4: Chart of Knowledge of Available Methods of Prevention of Cervical Cancer

4.0

From the research question one, it is obvious that majority of the respondents are aware of cervical cancer, however they are not aware of the vaccines that can help prevent it. Their knowledge of the relationship of cervical cancer and menstruation and is not accurate. Also, they don't know that women should be checked every three years by health professionals for cervical cancer. Similarly, they do not have enough information about the different types of test that should be carried out for the detection of cervical cancer. Similarly, from research question two we can reasonably conclude that a good percentage of the respondents have little or no accurate knowledge about cervical cancer, their responses shows that while a few has never heard of cervical cancer before, a good number doesn't know the symptoms associated with the disease and signs to watch out for to get screened for the disease.

Research question three shows that since the respondents do not have valid and accurate information about cervical cancer, they are ignorant and indifferent towards the methods of cervical cancer which are namely; the causes and the risk.

Lastly, research question four indicate that half of the respondent don't even know the available preventive measures of cervical cancer. Their knowledge of the preventive measures of Cervical Cancer available is extra low. These ones have never heard of pap smear test, how it is administered and who can administer it. Also, they do not know the age range at which it is prevalent, the best time to go for the test and what they should avoid to prevent it.

5.0 Summary and Conclusion

The study confirmed that most of the respondent had heard about cervical cancer screening and know where it can be done. While the awareness of cervical cancer is high unfortunately, the perception that it can be treated is quite low. Age and level of education showed significant association screening for cervical cancer. Educational programs and encouraging participation in cervical cancer screening should be considered for all women, also involving the use of close peers and friends to educate the women on the importance of screening program will go a long way to help. It is also recommended that health workers should play a vital role in educating the women in this area during ante-natal visits as most of the women studied still lacked basic information on the cause, prevention, and risk factors of the disease.

Knowledge, attitude and perception of women attending ante-natal clinic on cervical cancer screening offers an important opportunity for comprehensive prevention and preventive strategies of the disease especially during the early stage if detected on time. The assessed socio-demographic characteristics include age, marital status, level of education and occupation. Based on age, most of the pregnant women were within the age bracket of 26–30 years. This age

bracket is widely agreed to be the most fertile stage within the reproductive age range of women. Most of them have heard about cervical cancer screening and know where it can be conducted. The result of greater proportion of the respondents that heard of cervical cancer screening contrasts most reports from Nigerian communities who found that the majority of respondents never heard of cervical cancer screening. In a conducted a study among market women in Ibadan and only 19.7% were aware of cervical cancer screening. In a study in Aba, Abia State, only 16% of the respondents had knowledge of screening services. Higher percentage of respondents recorded in the study who have heard about cervical cancer screening may be as a result of the primary healthcare settings where the study was conducted. This may have helped in educating the pregnant women. Studies on hospital workers had similar reports to this study. In addition, a study on female health workers in Ilorin showed the level of awareness to be 69.8%. Most of the respondents received information on cervical cancer screening from their friends, whereas the least source was media (newspaper, TV, radio, posters etc.)

5.1 Recommendations

These facts point out to the fact that the major barrier is lack of information or misinformation. This can be improved upon if the following recommendations are put in place:

1. A five to ten minutes' awareness should be created every week by health to inform women who come for antenatal care about cervical cancer.

2. Pregnant should be mandated to go for cervical cancer screening at a convenient time.

3. Awareness should be created on national Television stations, Radio stations and on Newspapers twice in a month to educate all about cervical cancer.

4. Cervical cancer screening should be done at subsidized rate regularly.

5. Private organizations should be encouraged to invest and support government policies on cervical cancer.

5.3 Suggestions for further studies

Further test should be carried out with a larger sample size to improve the accuracy of the result, it should not be limited to University College Hospital alone, because the menace of cer4ical cancer affects all women regardless their ethnicity, racial or language background.

REFERENCES

1. WHO: WHO. Comprehensive cervical cancer control.A guide to essential practice, pp. 9–38, WHO Library Cataloguing-in-publication data, 2018.
2. Li, X., Hu, S. Y., He, Y., Hernandez Donoso, L., Qu, K. Q., Van Kriekinge, G., & Zhao, F. H.: Systematic literature review of risk factors for cervical cancer in the South African population. Women's Health 2018, 14. https://doi.org/10.1177/1745506518816599
3. Amu E, Ndugba S, and Olatona F: Knowledge of cervical cancer and attitude to cervical cancer screening among women in Somolu local government area, Lagos, cervical screening J Community Med Prim Heal Care 2019, 31(1) 76–85.
4. American Association for Cancer Research: "Global burden of cancer in women, current status, trends, and interventions," Cancer Epidemiol Biomarkers Prevention, vol. 26, no. 4, pp. 444–457, 2017. View at: Google Scholar
5. Arbyn M, Weiderpass E, and Bruni L, et al: Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis Lancet Glob Health 8(2) e191–e203 . 2020. https://doi.org/10.1016/S2214-109X(19)30482-6 PMCID: 7025157
6. Bray, F: Transitions in human development and the global cancer burden. In: Wild, C.P., Stewart, B. (Eds.), World Cancer Report 2014. International Agency for Research on Cancer, Lyon.
7. International Agency for Cancer Research/World Health Organization, Nigeria Factsheet: Globocan: https://gco.iarc.fr/today/data/factsheets/populations/566-nigeria-fact-sheets.pdf (accessed 5 October 2019).
8. Murfin, J., Irvine, F., Meechan- Rogers, R., &Swift, A: Education, income and occupation and their influence on the uptake of cervical cancer prevention strategies: A systematic review. Journal of Clinical Nursing, 29.2019, https://doi.org/10.1111/jocn.15094

9. World Health Organization: Human papillomavirus (HPV) and cervical cancer Fact sheet: Available from: https://www.who.int/news-room/fact-sheets/detail/human-papillomavirus-(hpv)-and-cervical-cancer. [Last accessed on 2020 Apr 14].

10. Tulu Gebisa, Elias TeferiBala, and BerhanuSenbetaDeriba: Knowledge, Attitude, and Practice Toward Cervical Cancer Screening Among Women Attending Health Facilities in Central Ethiopia.Cancer Control, Volume 29, January-December 2022. https://doi.org/10.1177/10732748221076680.

11. Adebayo M D Agboola and Oluwasomidoyin O Bello:The determinants of knowledge of cervical cancer, attitude towards screening and practice of cervical cancer prevention amongst antenatal attendees in Ibadan, Southwest Nigeria. ecancer 2021, 15:1225 https://doi.org/10.3332/ecancer.2021.1225

12. Ifebude Joshua Ebuka, IdowuOluwasegun Caleb, AwoludeOlutosinAlaba: Knowledge and Attitude of Pregnant Women Attending Antenatal Clinic to Cervical Cancer Screening in Pregnancy in Ibadan, Nigeria. International Journal of Clinical Oncology and Cancer Research. Vol. 7, No. 3, 2022, pp. 64-69. doi: 10.11648/j.ijcocr.20220703.13.

13. SaadAliyu Ahmed, KabiruSabitu, Suleiman HadejiaIdris, Rukaiya Ahmed: Knowledge, attitude and practice of cervical cancer screening among market women in Zaria, Nigeria.Nigerian Medical Journal | Vol. 54 | Issue 5 | September-October | 2013. Website: www.nigeriamedj.com. DOI:10.4103/0300-1652.122337.

14. Tope Olubodun, OluwakemiOloladeOdukoya and MobolanleRasheedatBalogunet: Knowledge, attitude and practice of cervical cancer prevention, among women residing in an urban slum in Lagos, South West, Nigeria. Pan African Medical Journal. 2019;32:130. doi: 10.11604/pamj.2019.32.130.14432

15. Sowemimo O, Ojo O, Fasubaa O: Cervical cancer screening and practice in low resource countries: Nigeria as a case study Trop. J. Obstet. Gynaecol., 34 (3) (2017), p. 170, 10.4103/tjog.tjog_66_17 View Record in ScopusGoogle Scholar