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Utilization and barrier of cervical cancer screening among women in Nigeria

Zulkiflu Musa Argungu^{1*}, Ado Shehu², Deborah JY³, Jama MD⁴ and Usman Adamu Karaye⁵

Department of Nursing Sciences, Faculty of Allied Health, Usman Danfodiyo University, Sokoto, Nigeria^{1*}

Department of Nursing Sciences, Maryam Abacha American University of Niger Maradi²

Asokoro District Hospital, Julius Nyerere Street Asokoro Abuja, Nigeria³

Maitama General Hospital Abuja, Nigeria⁴

Department of Nursing Sciences, Yusuf Maitama Sule University Teaching Hospital Kano State, Nigeria⁵

Abstract

Globally, there are over 500,000 new cases of cervical cancer annually and over 270,000 deaths, accounting for 9% of female cancer deaths. 85% of cases occur in developing countries and Africa. The study focuses on assessing the knowledge and utilization of cervical cancer screening services among women in Kebbi state. Descriptive survey study utilized validated questionnaire developed by the researcher, 400 questionnaires were administered to women in Area who met the inclusion criteria using a systematic random sampling technique. Questionnaires were retrieved from respondent after successful completion. Data collection spanned a period of 14days. Data collected were coded and fed into computer using statistical package for social sciences (SPSS version 21.0). Descriptive statistics such as frequencies, proportions and confidence intervals were compared using the chi-square tests as appropriate. A P-value <0.05 was confidence statistically significance. The findings of the study revealed 71.3% of respondents were to be aware a cervical cancer and screening services but the rate of utilization is very low. There is a significant association between knowledge and utilization of cervical cancer screening services where $P < 0.002$, a significant association exist between barrier and knowledge of cervical cancer screening, furthermore a significant association exist between the barriers and utilization of cervical cancer screening services. The identified barriers are in conclusion, public enlightenment and motivation could reduce the burden of cervical cancer in the society.

Keywords: Utilization, barrier, cervical cancer, screening, Nigeria

Introduction

Cervical cancer is the most common malignancies among females worldwide, especially among women of 20–39 years of age. Its contribution to the cancer burden is significant across all cultures and economies [1]. Cervical cancer also accounts for over 270,000 deaths worldwide, an overwhelming majority of which occur in the less developed regions [2]. Cervical cancer remained the second leading cause of cancer deaths after breast cancer and the fifth most deadly cancer in women, accounting for approximately 10% of cancer deaths [3].

Globally, there are over 500,000 new cases of cervical cancer annually and over 270,000 deaths, accounting for 9% of female cancer deaths. 85% of cases occur in developing countries and Africa [4]. An estimated 1.4 million women worldwide are living with cervical cancer and 2 to 5 times more up to 7 million worldwide may have precancerous conditions that need to be identified and treated (Alliance Of Cervical Cancer Prevention- ACCP 2010). In the United Kingdom (UK), cervical cancer is the second most common cancer among females under 35 years of age, accounting for 702 new cases in 2007. According to the UK statistics report for 2010, 2,828 new cases were diagnosed in 2007 [5].

Furthermore, the WHO [1] report indicates that approximately 500 women develop cervical cancer, and 274 deaths occur yearly from cervical cancer in developing countries (WHO, 2008). More than 80% of the world's new cases and deaths due to cervical cancer occur in the developing world, and less than 5% of women in these settings are never screened for cervical cancer even once in their lifetime [6]. Cervical cancer is the most common cause of death among middle-aged women, with an estimated 529,409 new cases and 274,883 deaths in 2010 [5]. The hardest-hit regions are countries such as Central and Southern America, the Caribbean, Sub Saharan Africa and part of the Oceania and Asia with the highest incidence of over 30/100,000 women (ACCP, 2005).

In Nigeria, cervical cancer is the second most common female cancer with an age-standardized incidence rate of 34.5 per 100,000, with a mortality ratio of 0.6 [7].

The developing countries have carried a disproportionate share of the burden, with 80% of the 250,000 cervical cancer deaths in 2005 occurring in the less developed countries (1, 8). Possible reasons for low participation in cervical cancer screening include; ignorance of the existence of such test, inadequate knowledge about the importance of

screening or lack of risk awareness and the risk factors to the development of cervical cancer, absence of symptoms and lack of awareness of the screening centres where such services are obtainable, and lack of motivation to get screened [9].

Otolorin and Sule [10] reported that in Nigeria, cervical cancer affects 29 women per 100,000 women. Some factors have been implicated in this tragic and unnecessary loss of lives. In Benin City Nigeria, carcinoma of the cervix constitute 74.6% of all malignant gynaecological tumours with stage 11b and above constituting 67.6% of all cases. In Zaria, it accounted for 66.2% with advanced carcinoma of the cervix stage 11b and above making up 58.7% of the cases.

Most women find it challenging to participate in cervical cancer screening services due to various factors such as non-availability of screening services, fear of being diagnosed with cancer, coping with cancer and lack of awareness about cervical cancer and screening services [11]. In a study conducted in Singapore by Seow [11], many women who were aware of Pap smear did not perceive themselves to be at risk and therefore did not indicate the future intention to have a smear. The study further revealed that a means of increasing utilization of screening for cervical cancer for both women who had a smear and those who had not had a smear are culture-specific and must address the appropriate health beliefs and attitudes. Similarly, a study conducted by Wong *et al.* [12] at Guy's hospital in London, to gain an insight into women's attitude towards and awareness of smear testing for cervical cancer, embarrassment and discomfort played a part in women's decision in not returning for a regular smear.

In another study conducted by Dzuba *et al.* [13] to explore the utilization of self-collection of samples for Human Papilloma Virus (HPV) testing in comparison with that of the Pap test in Mexico, 98% of women reported privacy and comfort with the self-sampling procedure than a Pap test as it consistently provoked more discomfort, pain, and embarrassment than self-sampling. It was concluded that incorporation of self-collected samples to detect HPV could encourage participation in screening programmes among those women who reject the Pap test because of the necessary pelvic examination [13]. Gebru, Gerbaba and Dirar [14] stated that mothers age had a significant association with cervical cancer screening. Use of the service was significantly associated with the mother's age greater than 30 years which were about eighty-three times more likely to use the service than those whose age is less than 30 years. A study in Hong Kong carried out by Mutyaba, Miro and Weiderpass [15] among Chinese women is not similar to the above study. It shows that younger women were more likely to attend cervical cancer screening.

Basu, Sarkar, Mukherjees, Goshal and Mittal [16] in their study that was conducted in China are on the opinion that cervical screening was significantly correlated with health perception. Those women who have less than five children were less likely to be screened than those women who had more than five children. Similarly, from the studies conducted in Kenya and South Africa, women were reported as having powerful and quite frightening images of cancer. These fears may contribute to a woman's reluctance to get screened. Images were associated with words such as

"devour or eating", "putridity", or "plague". For instance, women in Kenya described the inevitability of cervical cancer and the belief that (at a minimum), their womb will be "cut out", resulting in the loss of womanhood and sexuality [17].

In South Africa, the pelvic examination is referred to as "hanging the legs" and women refer to the experience as "surrendering oneself. In this setting, a cervical examination is especially problematic. A positive cervical screening test implies that a woman is somehow "dirty" or promiscuous" which will lead to reduced utilization of screening services (Bingham *et al.*, 2016).

In a study conducted by Aniebue and Aniebue [18], it was revealed that the practice of cervical cancer screening was still very low among female university students. They further stated that The most common reasons for never being screened include; ignorance of the existence of screening services, lack of doctor's recommendation and absence of symptoms. In Zambia, Mkumba [19] conducted a study to assess the safety, acceptability, and feasibility of implementing cervical cancer screening program using visual inspection with acetic acid. It was established that it was feasible to implement the cervical cancer screening program in Zambia.

In Nigeria, About 250,000 women die of cancer annually said by wife of the executive governor of Kebbi State and also the founder Medicaid cancer foundation Dr Zainab Atiku Bagudu. She said this during a walk to create awareness on cancer in Abuja with the theme walk-away cancer in October 2017 intending to save 250 women who die from cancer annually. She stated that in the last six years, the Medicaid cancer foundation which she puts in place has so far freely screened 15,000 women suffering from cancer-related diseases especially in Abuja and other parts of northern Nigeria in 2015. Similarly, she said that cervical cancer is 99% preventable, but yet it kills over 26 women daily. Moreover, in Kebbi State so many seminars were organized by Dr Zainab Atiku Bagudu in which a large number of nurses and midwives from different hospitals around the state including general hospital Argungu were trained on cervical cancer screening. However, there is a low percentage of the utilization of cervical cancer screening services in Argungu local government. Therefore, this study is aim to determine the level of utilization of cervical cancer screening among women in farin tanki area Argungu.

Method and Procedure

Research Design

Descriptive survey method of research was adopted for this study. The prospective method of data collection was used, which involved the administration of a structural questionnaire to the respondent.

Research Setting

The area for study is Farin Tanki Area, Argungu local government. Farin Tanki is an area located in Kokani South region of Argungu. The head of the area is Alhaji Samaila Muhammad Maiyaki. According to national population commission (2016), the area has an estimated population of 5370 people, and the predominant language is Hausa. It is near Emirate primary school. There were four primary

schools and three secondary schools in the area. Most of the people in the area are civil servants, and there are also farmers and businessmen. There is also road, power supply, shops and mini-market. There is also a big white water tank that supplies not only the area but including most of Argungu.

Sampling Techniques

The sampling technique used in the study was a simple random sampling technique. This method was chosen because it gives the subjects in the population equal chance of being selected.

Instrument for Data Collection

A structured questionnaire was used to collect or gather information from the respondent. The questionnaire comprises two sections, A and B. Section A comprises of personal data of the respondent such as age, sex, religion, educational background, occupation, marital status and tribe. Section B comprises of question items that test the level of the utilization of cervical cancer screening services using five Likert rating format for each of the three research questions.

Method of Data Analysis

Statistical analysis used was frequency distribution table and mean, the essence of representing this in the table and mean which allow easy comparison of information collected and equally give room for drawing an inference based on the analysis of data collected.

Ethical Consideration

Rules and regulations guiding were duly observed. The researcher obtained an introduction letter from the school and permission from the head of the area before carrying out the research study. The respondent was assured of their confidentiality of all information provided mainly for the study in respect of the information given out in the questionnaire distributed to them in order to get honest and reliable responses.

Result

Section:-Socio-demographic data

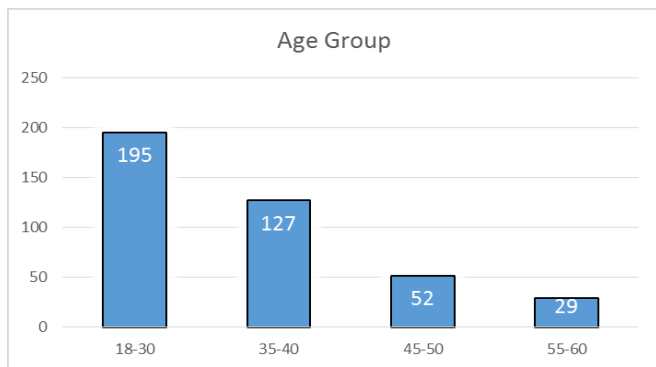


Fig 1: Age group of the respondents

The above figure shows that age range of the respondent within 18-30 has the highest frequency of 195 and percentage of 48.4% and age range of 55-60 has the lowest frequency of 29 and percentage of 7.2%.

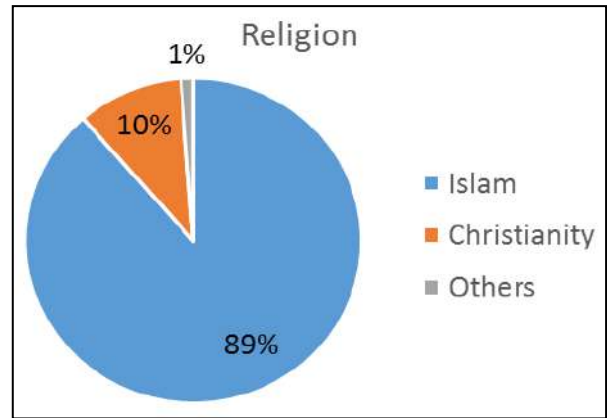


Fig 2: Religion of the respondents

The above figure shows that most of the respondents were Muslims, for Islam had frequency of 355 and percentage of 88.5% while Christianity had frequency of 41 and 10.2%.

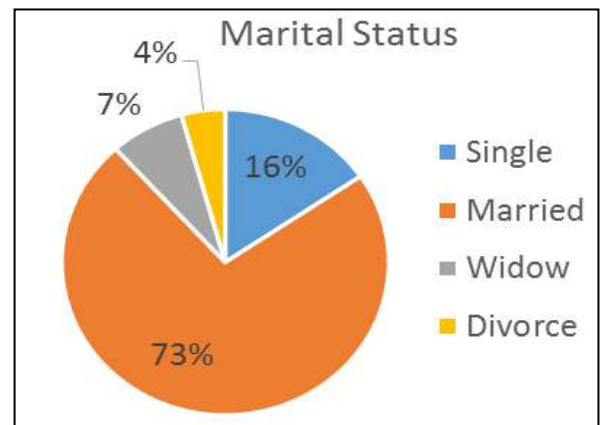


Fig 3: Marital Status of the respondents

From the above findings it is indicated that married women had the highest frequency of 28 and percentage of 72.8% where divorced women had the lowest percentage of 4.3%.

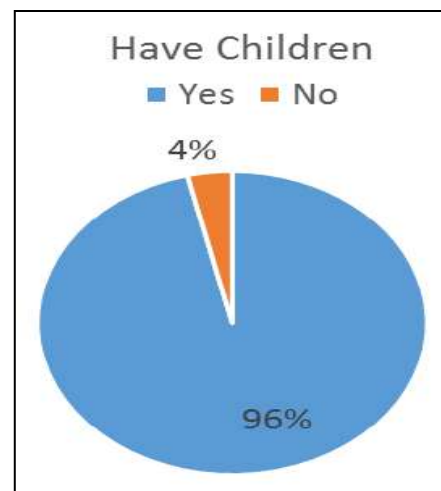


Fig 4: Percentage of women with children

As seen above 83.2% of the women have children while 16.8% of them doesn't have children.

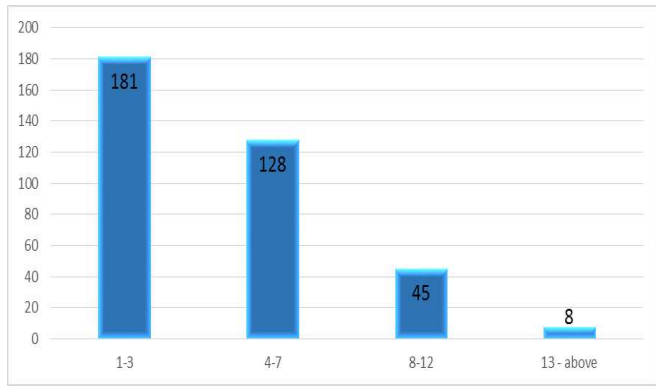


Fig 5: Percentage of deliveries

From above findings it shows that women that had 1-3 children were more with frequency of 181 and percentage of 50.0% while those that have 13 and above children have the least percentage of 12.2%.

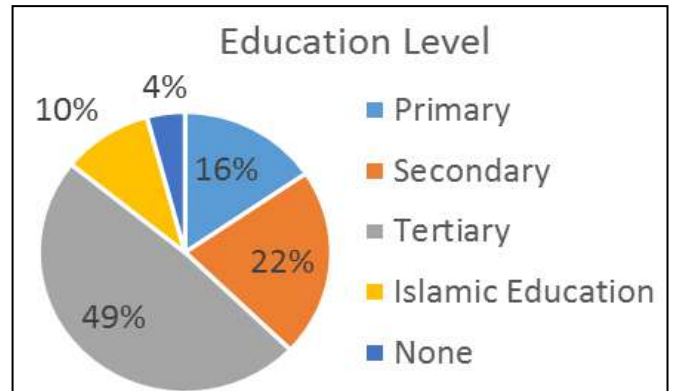


Fig 7: Level of education of the respondents

From the above figure it shows that women with tertiary level of education were more with the frequency of 195 and percentage of 48.6% then secondary level had 21.7% primary 15.5%, Islamic education 10.0% and none 4.2%.

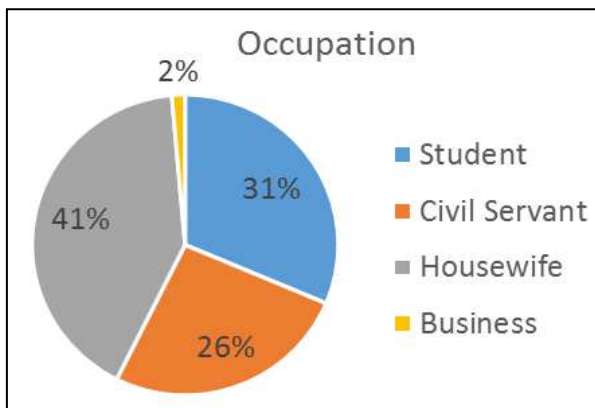


Fig 6: Occupation of the respondents

This finding shows that majority of the women were housewives with frequency of 139 and percentage of 35.5%, followed by students with percentage of 27%, civil servants 22.4% and Business women with least percentage of 15.1%.

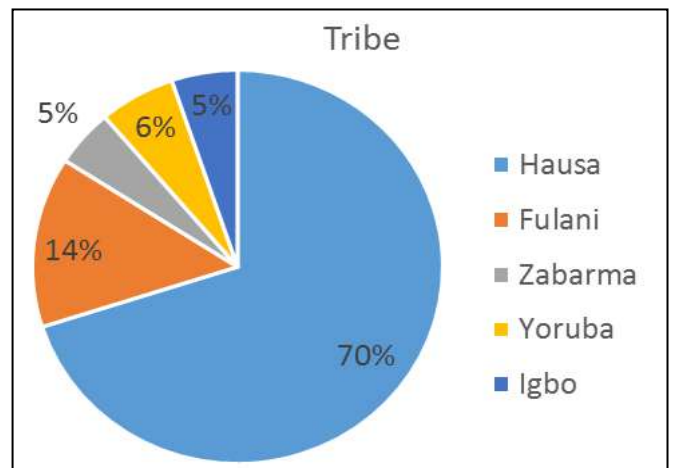


Fig 8: Tribe of the respondents

This findings shows that Hausa tribe women were more in the area with frequency of 282 and 70.0%

Table 1: Utilization of Cervical Cancer Screening Services

Utilization	Frequency	Percentage
Are women that were aware of Pap Smear not having the future Intention to be screened.		
Yes	285	71.4
No	114	28.6
Can embarrassment influence decision of women in not returning for a regular Pap Smear		
Yes	289	72.6
No	109	27.4
Would there be privacy in self sampling procedure than Pap Smear in screening centers		
Yes	316	79.2
No	83	20.8
Could self collected samples to detect Human Papilloma virus encourage participation in screening program		
Yes	310	77.3
No	91	22.7
Were women above 30 years more likely to use the service that those that are less than 30 years		
Yes	198	49.9
No	199	50.1
Are women that are have less than 5 children less likely to go for screening that those who have more than 5 children		
Yes	208	52.4
No	189	47.6
Is positive CC screening test indicate that a woman is promiscuous or dirty		
Yes	139	35.0
No	258	65.0

Can frightening images contribute to women reluctance of being screened	Yes	319	80.8
	No	76	19.2
Does lack of awareness of screening service and doctor's recommendation make women not to go for screening	Yes	287	73.0
	No	106	27.0
Could availability of appropriate personnel contribute to utilization of screening service	Yes	319	82.9
	No	66	17.1

The above table shows that women were not utilizing screening services despite being aware of it because some women doesn't perceive themselves to be of and risk having frightening images while some women mentioned embarrassment can influence the women decision in not returning for a regular pap smear they also indicate appropriate personnel and self-collected samples to detect HPV will encourage utilization of screening services.

Chi Square Values

Knowledge * Utilization	
Df	1
X ²	9.142
P-Value	0.002

*Significant at $p < 0.05$

Utilization * Barrier	
Df	2
X ²	10.076
P-Value	0.006

*Significant at $p < 0.05$

Discussion

It was discovered that 71% of women even being aware of the screening services doesn't utilize it because they did not perceived themselves to be at risk, this is in line with the study conducted in Singapore by Seow^[11] who found out that women who were aware of pap smear did not perceive themselves to be at risk and therefore did not indicate the future intention to have a smear. The study further revealed that a means of increasing utilization of screening for cervical cancer for both women who had a smear and those who had not had a smear are culture specific and must address the appropriate health beliefs and attitudes.

If was also observed that embracement influence decision of women in not returning for a regular smear, this is similar with the study carried out by Wong^[12] at Guy's hospital in London to gain an insight into women's attitude towards and awareness of smear testing for cervical cancer, embarrassment and discomfort played part in women's decision in not returning for a regular smear, the respondents stated that self-collected samples to detect human papilloma virus encourages participation in screening programme which is coincide with the study conducted by Dzuba, Diaz, Allen, Leonard and Salmeron^[13] to explore the utilization of self-collection of samples to detect human papulloma virus (HPV) testing in comparison with that of the pap test in Mexico. 98% of women reported privacy and comport with the self-sampling procedure than a pap test as it consistently provoked more discomfort, pain and embarrassment than self-sampling. It was concluded that in cooperation of self-collected samples to detect HPV

could encourage participation in screening programmes among those women who reject the pap test because of the necessary pelvic examination.

In this study it was found that women who are above 30 years are more likely to use the service than those that are less than 30 years which is similar to the study by Gebru, Gerbaba and Dirar^[14] stated that mothers age had significantly association with cervical cancer screening. Use of the service was significantly associated with the mothers age greater than 30 years which were about 83 times more likely to use the service than those whose age is less than 30 years. In this study it was also found that women that have less than 5 children were less likely to use the service than those who have more than 5 children. This study is related to the study conducted in China by Basu, Sarkar, Mukherjees, Goshal and muttal^[16] which are on the opinion that those women who have more than 5 children are more likely to use the service than those that have less than 5 children.

Implication for Nursing

It is of great benefit to women in Farin Tanki area Argungu local government of Kebbi state especially if the problems identified are directed to the Kebbi State ministry of health and state Government at large that can take measures to handle them. It will serve as a means of improving knowledge to women in not only Farin Tanki but entire Argungu and Kebbi State at large.

Conclusion

The findings of the study revealed that women are aware of the cervical cancer screening services they are also aware that cervical cancer is not cause by having too many children and this screening is not cleansing or scraping of the womb. This study in general reveals the knowledge utilization of cervical cancer screening services among women in Farin Tanki Area Argungu Kebbi state. The researcher was able to look into the subject matter and the study finally revealed that women were aware of cervical cancer but are not utilizing the service.

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