Bayero Journal of Nursing and Health Care
bjnhc.nur@buk.edu.ng
Volume 5, Issue 1, June, 2023
Pages 1284-1293 ISSN: 2756-6501

Community Health Needs Assessment on Cervical Cancer Screening Uptake among Women of Reproductive Age in Ijero Local Government Area of Ekiti State

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Abstract

Introduction: Cervical cancer remains one of the leading causes of cancer contributing to high mortality and morbidity all over the world. However, early diagnosis with screening has been linked with good prognosis but different factors have been implicated in the poor uptake. Hence, a community health needs assessment about cervical cancer screening uptake among women of reproductive age in Ijero Local Government Area (LGA) of Ekiti State Nigeria was carried out. Methods: A descriptive cross-sectional design was used using a purposive sampling technique to administer a self-structured questionnaire to 132 respondents at the Ijero Local Government Council Secretariat, Ijero-Ekiti. Data were analysed using SPSS version 23. Results were presented in tables and figures. Results: The majority (85.5%) of the respondents were Christians. 72.5% were married. The vast majority (98.1) have heard about cervical cancer screening before but only 12.6% of the respondents had good knowledge about it. The utilization rate was found to be low (26.1%). Not knowing the test location (69.4%), finance (82.9%), lack of proximity (91.9%), not considering self as at risk (81.2%), and not having complaints about the cervix (90.9) were the main factors influence the utilization of the screening process. Conclusion: Knowledge and the utilization of women of reproductive age in Ijero LGA of Ekiti State is still poor. Healthcare workers and the government of the Ekiti State should ensure that the women of reproductive age are well equipped with the needed knowledge in order to make informed choices about their health.

Keywords: Cervical Cancer Screening, Cervical Cancer Screening Uptake, Community Health Needs Assessment, Women of reproductive age

https://dx.doi.org/10.4314/bjnhc.v5i1.22

Introduction

Cancer is the second leading cause of death globally, accounting for about 9.6 million deaths among men and women, or one in six deaths, in 2018 (World Health Organization (WHO), 2020). In 2015, the global

development agenda recognized that non-communicable diseases including cancers pose major health and development challenges therefore affecting sustainable development goals (Cancer and SDGs, 2019). In 2020, cancer became the leading cause of death globally accounting for nearly 10 million deaths (WHO, 2022).

According to WHO (2018), cervical cancer is the fourth most common type of cancer in women worldwide with about 570,000 new cases in 2018. Cervical cancer continues to cause the deaths of almost 270,000 women worldwide each year (Toye et al., 2017) and about 87% of these occur in developing countries, particularly in rural areas. In spite of the fact that cervical cancer is preventable, the incidence is expected to increase to almost double the current rate by 2025 (Toye et al., 2017).

Cervical cancer is a malignancy of the cervix caused by the presence of human papillomavirus (HPV) which interferes with the normal functioning of cells that will resulting in a distinct change in the epithelial cells of the transformation zone of the cervix (Solomon et al., 2019). About 99.7% of the recorded world cases are caused by the persistent effect of genital high-risk HPV infection (Okunade, 2019). Women above the age of 15 years about 267.9 million in Africa can develop cervical cancer (Lim & Ojo, 2017). Nigeria has an estimated five-year prevalence of 21.6% for cervical cancer (Idowu et al., 2016).

Cervical cancer screening has been shown to decrease the number of deaths resulting from cervical cancer by 80% or more (Arbyn et al., 2020). The Pap test/smear which looks for precancerous cells on the cervix and the HPV test which looks for the virus that causes cell changes are the two main screening tests for prevention and or early detection of cervical cancer (Centers for Disease Control and Prevention, 2019).

Although cervical cytology has shown a reduction in the incidence of cervical cancer due to its efficacy amongst countries with high population targets but has not been the cost-effective intervention of choice in the reduction of cervical cancer in women in low and middle-income countries (Casas et al., 2022).

The uptake of cervical screening is still low (13.3%) in Nigeria despite the prevalence of cervical and the availability of cervical screening (Oluwole et al., 2017). Uptake level in Ekiti state is 7.8% (Esan et al., 2019). This low level of screening uptake leads to late diagnosis of cervical cancer and therefore increases the rate of mortality and morbidity resulting from cervical cancer (Oluwole *et al*., 2017).

Efforts are been made by governmental and non-governmental organizations to increase cervical screening uptake through the creation of awareness and the establishment of screening centres (Idowu et al., 2016). Reducing the burden associated with cervical and other forms of cancer by promoting early recognition and screening will serve as a way to address socio-economic inequity and therefore promote sustainable development (Cancer and SDGs, 2019). This can only be achieved when a thorough community health needs assessment has been done.

However, researchers have shown that a number of factors have continued to influence the uptake: knowledge about the screening process, knowledge of cervical cancer, accessibility, poverty, lack of awareness, nature of the screening process, waiting period, spousal influence and poorly developed health care system (Maitanmi et al., 2023; Solomon et al., 2019; Oluwole *et al*., 2017). The factors influencing the uptake have been found to vary from one region to another based on several factors, hence the need to engage in community health needs assessment among women of reproductive age in Ijero LGA of Ekiti State.

Objective of the study

The main objective of this study was to do community health needs assessment about cervical cancer screening uptake among women of reproductive age in Ijero LGA of Ekiti State.

The specific objectives are to:

1. assess the level of knowledge about cervical cancer screening uptake among women of reproductive age in Ijero LGA of Ekiti State;
2. identify the utilization of cervical cancer screening among women of reproductive age in Ijero LGA of Ekiti State;
3. identify factors influencing the utilization of cervical cancer screening among women of reproductive age in Ijero LGA of Ekiti State.

Methodology

This study employed a descriptive cross-sectional research design using a purposive sampling technique to gather data from women of reproductive age in Ijero Local Government of Ekiti State which is a smaller city in Ekiti State (Compared with the Capital city) since studies have shown that uptake of cervical screening is lower in the rural region (Oluwole et al., 2017; Ndejjo et al., 2016).

The sample size used for the study was derived from the computation using a level of significance of 95%. The prevalence rate of cervical cancer in Nigeria is 9.7% (Globocan, 2020). Thus, the sample size was determined using; $N = Z^2Pq/(D)^2$. A sample size of 132 was derived though only 111 copies of the instrument were successfully retrieved and analysed. A purposive sampling technique was used in recruiting women of reproductive age into the study. Data were collected using a self-structured questionnaire. The Yoruba version of the instrument was also made available to the native speakers. To check the consistency and meaning of the Yoruba version, and language expert back-translated to English.

Ethical approvals were sought and obtained from Babcock University Health Research and Ethical Committee (BUHREC) with reference number BUHREC671/22, Ekiti State Ministry of Health and Human Services with approval number MOH/EKHREC/EA/P/44, and the gatekeepers at the market. Informed consent was also sought in writing and verbally from the respondents. Anonymity, confidentiality, voluntary participation and withdrawal were ensured.

Knowledge Translation

Carrying out a community needs assessment about cervical cancer screening uptake helped to determine the areas where efforts were needed in order to achieve better uptake of cervical cancer screening. This would therefore help in reducing or eradicating the burden of cervical cancer on the populace and the government.

Results

Table 1: Socio-Demographic Characteristics of the Respondents

Items	Frequency (n)	Percentage (%)
Age		
Less than 20	3	2.7
21-30	45	40.9
31-40	25	22.7
41-50	38	34.5
Religion		
Christianity	94	85.5
Islam	16	14.5

Ethnicity		
Yoruba	89	81.6
Igbo	10	9.2
Others	10	9.2
Marital Status		
Married	79	72.4
Single	27	24.8
Widow	3	2.8
Monthly Income		
< #50,000 (<$113.64)	21	20.0
#50,000- #100,000	16	15.2
($113.64-227.27)	38	36.2
#101,000-#150,000	15	14.3
($229.55-340.91)	15	14.3
#151,000-#200,000		
($343.18-454.55)		
Over #200,000 (>$454.55)		
Awareness		
Yes	103	98.1
No	2	1.9

Table 1 reveals that 45(40.9%) of the respondents are between the ages of 21 and 30 years, 94 (85.5%) are Christians, 89(81.7%) are Yorubas, 79(72.5%) are married, and 38(36.2%) earned monthly income between #101000 and #150000 ($229.55-340.91). The majority (98.1%) of the respondents have heard about cervical cancer screening before.

Table 2: Knowledge of Women Towards Cervical Cancer Screening

Items	**Frequency (%)**	
	Yes	**No**
Cervical cancer is a disease that affects the opening of the womb (cervix)	39 (35.1)	72 (64.9)
Cervical cancer is caused by the human papillomavirus (HPV)	43 (38.7)	68 (61.3)
Pap smears are the most helpful way to detect pre-cancer and cancer of the cervix	40 (36.0)	71 (64.0)
Women should have Pap smears at least every three years	37 (33.3)	74 (66.7)
Pap smear is not able to detect pre-cancerous cells before manifestation of its symptoms	38 (34.2)	73 (65.8)
The purpose of the Pap smear is to detect abnormal cells in the cervix	44 (39.6)	67 (60.4)
Pap smear is not successful in reducing the incidence and mortality of cervical cancer	38 (34.2)	73 (65.8)
Pap smear can detect all types of female genital cancer	42 (37.8)	69 (62.2)
Pap smear is a non-invasive and relatively inexpensive method	41 (36.9)	70 (63.1)
Women should have Pap smear since the onset of sexual activity	35 (31.5)	76 (68.5)

Pap smears should be discontinued after menopause	44 (39.6)	67 (60.4)
If someone is having a normal Pap smear, she does not need Pap smears in the future	40 (36.0)	71 (64.0)
There is no need to have a Pap smear if it is not administered by the health personnel	35 (31.5)	76 (68.5)

Table 2 reveals that 39 (35.1%) of the respondents agreed that cervical cancer is a disease that affects the opening of the womb (cervix), 43(38.7%) of the respondents agreed that cervical cancer is caused by human papillomavirus (HPV), 40(36.0%) of the women agreed that pap smears are a most helpful way to detect pre-cancer and cancer of the cervix, 37(33.3%) of the women believed that women should have Pap smears at least every three years, 38(34.2%) of the women agreed that pap smear is not able to detect pre-cancerous cells before manifestation of its symptoms.

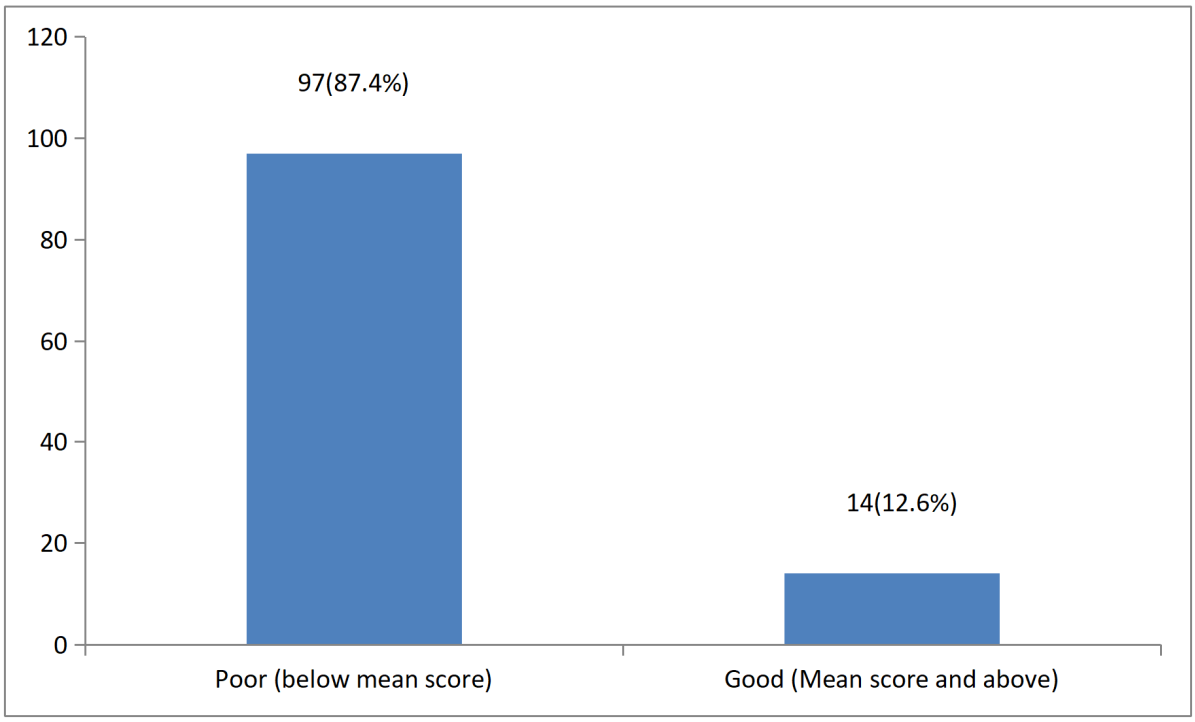

Figure 1: *Summary scale showing knowledge of the respondents about cervical cancer screening*

Figure 1 reveals that only 12.6% of the women had good knowledge of cervical cancer.

Table 3: Utilisation of Cervical Cancer Screening by the Respondents

Items	**Frequency (%)**	
	Yes	**No**
I like to regularly go for cervical cancer screening	40 (36.0)	71 (64.0)
I like to be vaccinated against cervical cancer	37 (33.3)	74 (66.7)
I understood what I stood to gain in cervical screening and vaccination so I went for it	38 (34.2)	73 (65.8)

information from friends said the procedure is painful but I still went for it	44 (39.6)	67 (60.4)
I understood what cervical screening and vaccination means, so I went for it	38 (34.2)	73 (65.8)
I am a childbearing mother; I need cervical screening and vaccination so I went for it	42 (37.8)	69 (62.2)
I have never heard of cervical cancer screening done	41 (36.9)	70 (63.1)

Table 3 reveals that 40 (36.0%) of the respondents like to regularly go for cervical cancer screening, 37(33.3%) of the women agreed that they would like to be vaccinated for cervical cancer, 38(34.2%) of the respondents claimed to understand what they stand to gain in cervical screening and vaccination so they went for it.

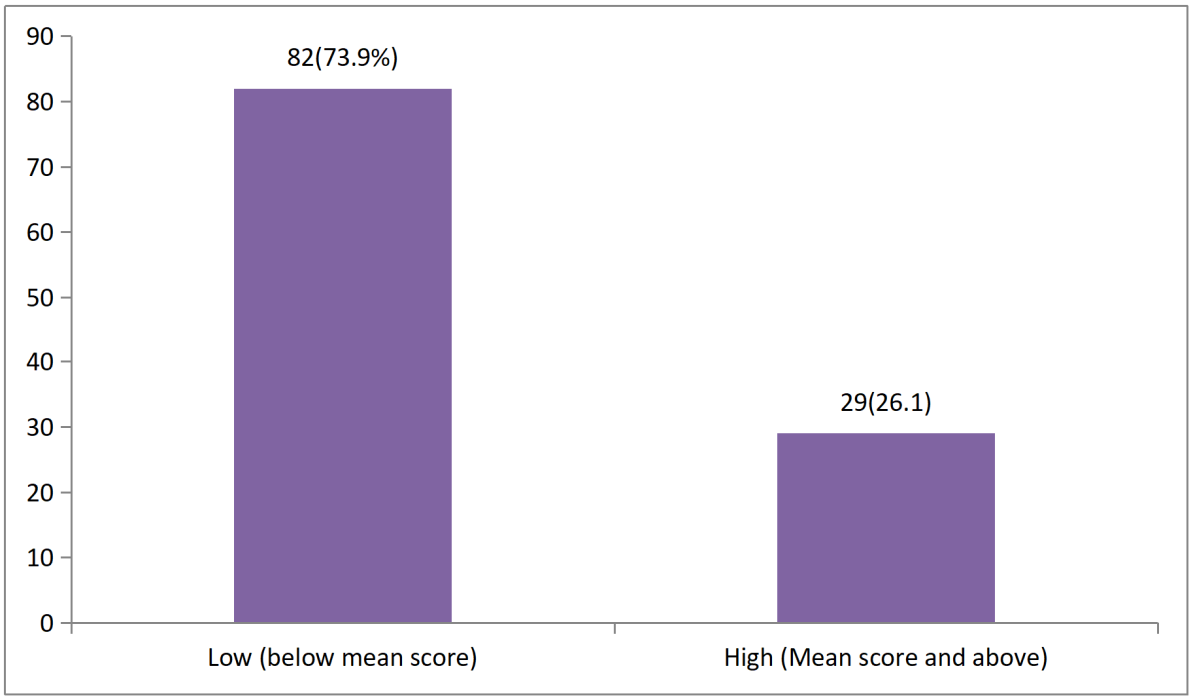

Figure 2: Summary Scale showing utilisation of cervical Cancer Screening by the Respondents

Figure 2 shows that only 26.1% of the respondents had a high utilization of cervical cancer screening.

Table 4: Reason for Utilisation/Non-Utilisation of Cervical Cancer Screening

Items	**Frequency (%)**	
	Yes	**No**
I don't know where it will be done	77 (69.4)	34 (30.6)
I lack adequate knowledge and information concerning cervical cancer screening	31 (27.9)	80 (72.1)
I don't have the money for such a test since I am not sick	92 (82.9)	19 (27.1)
I am not interested in the test	86 (77.5)	25(22.5)
I am afraid of the result	79 (71.2)	32 (28.8)

The test is not done close to my area	101 (91.9)	10 (9.1)
My religion does not support the test	65 (59.1)	45(41.9)
My culture does not support the test	70 (63.6)	40 (36.4)
I don't have time to go to the hospital	55 (50)	55 (50)
I don't consider myself at risk since I am not promiscuous	90 (81.2)	20 (18.8)
It is important for me to have regular cervical cancer screening.	45 (40.9)	65(59.1)
I will be willing to screen for cervical cancer if it is free	103 (93.6)	7 (6.4)
Screening does not help anyway	57 (51.8)	53 (49.2)
Since I don't have complaints about my cervix, there is no need to do any cervical screening	100 (90.9)	10 (9.1)
I don't need any hospital checkups except if I am sick	105 (95.5)	5 (4.5)

Table 4 shows the reasons for the utilisation/non-utilisation of cervical cancer screening. A vast majority 92 (82.9) agreed that they don't have the money for such tests since they are not sick. About three-quarters of 86 (77.5) of the respondents claimed that they were not interested in the test. A larger percentage 101 (91.9%) agreed that the test is not done close to their area. 90 (81.2) of the respondents do not consider themself as at risk. Almost all 103 (93.6) agreed that they are willing to screen for cervical cancer if it is free.

Discussion

The majority 94 (85.5%) are Christians as that is the religion often practised by most people from that area of Nigeria. Most 89(81.7%) are Yorubas as Ekiti state is in the western part of Nigeria which is predominantly dominated by the Yorubas.

The majority 103(98.1%) of the respondents have heard about pap smears though this did not translate to a good level of knowledge as only 12.6% of the respondents have a good level of knowledge. This is supported by the findings of Amu et al. (2019) who reported (18.1%) of the respondents having good knowledge. Maitanmi et al. (2020) also found that only 45.5% of the respondents in their study had good knowledge about self-sampling. This is in contrast with the findings of Olubodun et al. (2019) who reported low awareness about cervical cancer and HPV immunization. On the other hand, Owolabi and Adejumo (2021) found that 59.2% of the respondents had an adequate level of knowledge about cervical cancer screening which is also in line with the findings of Maitanmi et al. (2023).

This study found that the utilization of cervical cancer screening among the respondents is still low as only 26.1% utilize the screening process. This is in line with the findings of Ampofo et al. (2020) who reported high incidence and mortality of cervical cancer in Ghana and attributed it to low screening uptake (0.8%). Al-Amro (2020) also found out that women in Jordan had negative responses to cervical cancer screening uptake based on their perceived benefits rather than their knowledge about the screening. Okunowo et al. (2018) also reported low cervical cancer screening uptake.

This study also found that there are some factors responsible for the poor utilization of cervical cancer screening as seen in Table 4. A vast majority 92 (82.9) said that they don't have the money for such tests since they are not sick. About three-quarters 86 (77.5) are not interested in the test. A larger percentage 101 (91.9%) claimed that the test was not done close to their area. 90 (81.2) do not consider themself as at risk. Almost all 103 (93.6) are willing to screen for cervical cancer if it is free. This is in tandem with the findings of Gonul et al. (2019) who reported that the knowledge, awareness, and perceived susceptibility, seriousness, and barriers of

cervical cancer had a significant influence on the decision to be screened among women in Turkey. Some of the factors reported by Owolabi and Adejumo (2021); lack of time, fear of lack of privacy and confidentiality, fear of discomfort or pain during the procedure, fear of positive result, inaccessibility of the cervical screening services facility, cost of the screening, inadequate information about cervical cancer screening center, fear of unsafe and infected procedure, fear and beliefs of adverse effect of pap smear, distance of working unit from screening center location and spiritual assurance that I can never be a victim of cervical cancer were also found out in this recent study. The high cost of the screening process was a factor reported by Ampofo et al. (2020).

Conclusion

Knowledge and utilization about cervical cancer and the screening process is still not encouraging in Ekiti state. The government of Ekiti State should ensure that the women of reproductive age are well equipped with the needed knowledge on cervical cancer screening in order to make informed choices about their health.

Recommendations

Community campaigns in order to raise more awareness about cervical cancer and the screening process should be advocated among women of reproductive age.

References

Al-Amro, S. Q., Gharaibeh, M. K., and Oweis, A. I. (2020). Factors associated with cervical cancer screening uptake: implications for the health of women in Jordan. *Infectious Diseases in Obstetrics and Gynecology,* 2020

Ampofo, A. G., Adumatta, A. D., Owusu, E., and Awuviry-Newton, K. (2020). A cross-sectional study of barriers to cervical cancer screening uptake in Ghana: An application of the health belief model. *PloS one,* 15(4), e0231459

Amu, E.O., Ndugba, S. C., and Olatona, F. A. (2019). Knowledge of Cervical Cancer and Attitude to Cervical Cancer Screening among Women in Somolu Local Government Area, Lagos, Nigeria. *Journal of Community Medicine and Primary Health Care,* 31 (1), 76-85

Arbyn, M., Weiderpass, E., Bruni, L., de Sanjosé, S., Saraiya, M., Ferlay, J., & Bray, F. (2020). Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis. *The Lancet Global Health*, 8(2), e191-e203.

Bisi-Onyemaechi, A. I., Chikani,U. N. and Nduagubam, O. (2018). Reducing the incidence of cervical cancer: knowledge and attitudes of caregivers in Nigerian city to human papillomavirus vaccination. Infectious Agents and Cancer, 13 (29). doi: 10.1186/s13027-018-0202-9

Cancer and SDGs. (2019). Retrieved from https://www.uicc.org/what-we-do/advocacy/global-commitment/cancer-and-sdgs

Casas, C. P. R., Albuquerque, R. D. C. R. D., Loureiro, R. B., Gollner, A. M., Freitas, M. G. D., Duque, G. P. D. N., & Viscondi, J. Y. K. (2022). Cervical cancer screening in low and middle-income countries: A systematic review of economic evaluation studies. *Clinics,* 77

Centres for Disease Control and Prevention. (2019). Retrieved from https://www.cdc.gov/cancer/cervical/basic_info/screening.htm

Cervical Cancer. (2020). Retrieved from https://www.unaids.org/en/cervical_cancer

Cervical_Cancer_Screening._(2017)._Retrieved_from_https://medlineplus.gov/cervicalcancerscreening.html

Esan, D.T., Fasoro, A. A., Olaiya, F. M., Bello, C. B. (2019). Awareness and Utilization of Cervical Cancer Screening among Women in an Urban Area in Southwestern

Nigeria. *Online Journal of Health and Allied Sciences,* 18(3)

Ezem, B. U. (2007). Awareness and uptake of cervical cancer screening in Owerri, South-Eastern Nigeria. *Annals of African Medicine,* 6 (3)

Gonul, K. U. R. T., and Akyuz, A. (2019). Evaluating the effectiveness of interventions on increasing participation in cervical cancer screening. *The Journal of Nursing Research,* 27(5), e40.

Idowu, A., Olowookere, S.A., Fagbemi, A. T. and Ogunlaja, O. A. (2016). Determinants of Cervical Cancer Screening Uptake among Women in Ilorin, North Central Nigeria: A Community-Based Study. Journal of Cancer Epidemiology. https://doi.org/10.1155/2016/6469240

Kristensson, J. H., Sander, B. B., Euler-Chelpin, M. and Lynge, E. (2014). Predictors of non-participation in cervical screening in Denmark. *Cancer Epidemiology*, 38 (2), 74-180

Maitanmi, J. O., Fabiyi, T. E., Eniola, O., Sansi, T. O., Blessing, J. O., Maitanmi, B., Ojewale, M. O., Dairo, A. A., Adebiyi, D. A., & Akingbade, O. (2023). Knowledge and acceptability of cervical cancer screening among female undergraduates in Babcock University Ilishan-Remo, Ogun State, Nigeria. *Ecancermedicalscience,* 17, (1502). https://doi.org/10.3332/ecancer.2023.1502

Maitanmi, J. O. Oyeniyi, I. S., Olubiyi, S. K., & Maitanmi, B. T. (2020). Knowledge and acceptance of self-sample collection for cervical cancer screening among female staff of Babcock University, Ilishan-Remo, Ogun State, Nigeria. *Bayero Journal of Nursing and Health Care,* 2 (1), 469-476

Okunowo, A. A., Daramola, E. S., Soibi-Harry, A. P., Ezenwankwo, F. C., Kuku, J. O., Okunade, K. S., and Anorlu, R. I. (2018). Women's knowledge of cervical cancer and uptake of Pap smear testing and the factors influencing it in a Nigerian tertiary hospital. *Journal of Cancer Research and Practice*, 5(3), 105-111

Olubodun, T., Odukoya, O. O., and Balogun, M. R. (2019). Knowledge, attitude and practice of cervical cancer prevention, among women residing in an urban slum in Lagos, South West, Nigeria. *Pan African Medical Journal,* 32(1)

Ndejjo, R.., Mukama, T., Musabyimana, A., and Musoke, D. (2016). Uptake of Cervical Cancer Screening and Associated Factors among Women in Rural Uganda: A Cross-Sectional Study. *PLoS ONE,* 11(2). doi.org/10.1371/journal.pone.0149696

Oluwole, E.O., Mohammed, A.S., Akinyinka, M. R., and Salako, O. (2017). Cervical Cancer Awareness and Screening Uptake among Rural Women in Lagos, Nigeria. *Journal of Community Medicine and Primary Health Care,* 29 (1)

Owolabi, B.A. and Adejumo, P. O. (2021). Utilization of Cervical Cancer Screening Service Among Nurses in Ekiti State, Nigeria. *Cancer Research Journal.* 9(1), 71-78. doi: 10.11648/j.crj.20210901.19

Plummer, M., de Martel, C., Vignat, J., Ferlay, J., Bray, F., and Franceschi, S. (2016). Global burden of cancers attributable to infections in 2012: a synthetic analysis. *Lancet Glob Health*. 4(9), e609-16. doi: 10.1016/S2214-109X(16)30143-7.

Sauro, J. (2015). Five types of qualitative methods._Retrieved_from_https://measuringu.com/qual-methods/

Solomon, K., Tamire, M. and Kaba, M. (2019). Predictors of cervical cancer screening practice among HIV positive women attending adult anti-retroviral treatment clinics in Bishoftu town, Ethiopia: the application of a health belief model. *BMC Cancer*, 989 (19)

Toye, M. A., Okunade, K. S. , Roberts A. A., Salako, O., Oridota, E. S., and Onajole, A.T. (2017). Knowledge, perceptions and practice of cervical cancer prevention among female public secondary school teachers in Mushin local government area of Lagos State, Nigeria. *The Pan African Medical Journal,* 28(221). doi:10.11604/pamj.10/11/2017 .28.221.13980

World_Health_Organisation._(2020)._Retrieved_from_https://www.who.int/health-topics/cancer#tab=tab_1