



Attitude of Women of Childbearing Age Towards Cervical Cancer Screening in Nsukka, Enugu State: A Facility-Based Cross-Sectional Survey

Ukamaka Perpetua, Ugwu

Department of Human Kinetics and Health Education, Faculty of Education, University of Nigeria, Nsukka, Enugu State, Nigeria. +2348067324109

Abstract

Worldwide, positive attitude towards health care initiative such as cervical cancer screening (CCS), remains a healthy approach to disease prevention. This study investigated attitude of women of childbearing age towards CCS in Nsukka Local Government Area (LGA), Enugu State. It was a cross-sectional survey conducted in a population of 11,357 registered women between August 2022 and November 2022. Using a simple random sampling technique, a total of 400 women were sampled and surveyed. A self-structured questionnaire which demonstrated .89 reliability co-efficient index was used for data collection. All statistical data were computed using International Business Machine - Statistical Package for the Social Sciences (IBM-SPSS version 22). Mean score, standard deviation and one-way analysis of variance were used to analyse all the statistical data. The results were deemed significant at $p \leq 0.05$. It was found that women of childbearing age had negative attitude towards CCS ($\bar{x}=2.32$; $SD=0.40$). Based on parity, nulliparous ($\bar{x}=2.29$; $SD=0.45$), multiparous ($\bar{x}=2.32$; $SD=0.38$), primiparous ($\bar{x}=2.36$; $SD=0.37$) and grand-multiparous ($\bar{x}=2.36$; $SD=0.40$) women had negative attitude towards CCS. No significant difference was found between parity status and attitude of the women towards CCS ($F=0.487$; $p=0.692>0.05$). In conclusion, women of childbearing age had negative attitude towards CCS. Parity status had no significant influence on the women's attitude towards CCS, thus, the need for a collaboration between the Ministries of Health and Facility Management Board for organized programmes on women education and enlightenment on the significant benefits of CCS particularly in Nsukka LGA, Enugu State.

Keywords: facility-based cross-sectional design, women of childbearing age, cervical cancer screening, parity status, attitude.

Introduction

Worldwide, positive attitude towards health care initiative such as cervical cancer screening (CCS), remains a healthy approach to disease prevention. As one of the diseases associated with unprecedented increase in records of high mortality and morbidity, cervical cancer (CC) is a significant threat to women of childbearing age particularly in developing regions such as Nigeria (Morounke et al., 2017; Ferlay et al., 2018). Literature evidences show that approximately six million new cases and about 1.3 million deaths are recorded annually, with over 80 per cent occurring in developing countries (Morounke et al., 2017; Ferlay et al., 2018). Based on the world ranking index, CC is rated the seventh form of cancer, with a threatening prevalent rate of approximately 90 per cent (Holland & Stewart, 2018). Specifically, in sub-Saharan Africa, research evidence reveals an estimated seventy-one thousand new cases of invasive CC per year (Parkin et al., 2018). Viable statistical representations of CC cases revealed an estimated 250/100,000, with 10,000 mortality rates in Nigeria (Ferlay et al., 2013; Kikuchi et al., 2018). Also, approximately 40 million women of childbearing age were reported to be at high risk of developing CC with Enugu State and her sub-settings including Nsukka having over 30 per cent (Morounke et al., 2017; WHO,

2017). As a serious disease characterized by malignant tumor in the cervix of the female reproductive organ that kills normal body cells and often causes death, CC is the commonest form of genital malignancy with its active point on the neck of the uterus (Hsu et al., 2011). It is one of the uncontrollable proliferation of the cells of the cervix with a significant and enlarged tumor-like growth (Narayana et al., 2017). The disease manifests in stages which include normal stage, early stage, late stage 1B, and stage 11B. For easy identification, the various stages of CC manifestations present notable warning signals such as lower back pain, abnormal vaginal discharge, unexplained weight loss, vaginal bleeding, pelvic pain, pain during intercourse and swelling in legs as well as decrease in appetite (Women's Health, 2020). Some notable risk factors for CC are human papillomavirus (HPV) infection, immune system deficiency, herpes, smoking, age, socioeconomic factors, oral contraceptives, obesity and exposure to diethylstilbestrol (DES) (Cancer.Net, 2020).

Evidences showing that CC screening and vaccination are the existing reliable preventive measures for CC abound (WHO, 2017; Kikuchi et al., 2018). This study focused on the CCS which is a universal measure accessible for all women of reproductive ages globally (WHO, 2017). In some countries such as Nigeria, it is the sole responsibility of the Ministries of Health to give approval and issue directives to conduct CCS exercise in collaboration with the healthcare professionals in various health facilities. As a personalized exercise-oriented activity, the attitude of the women is paramount. According to Nanbur et al. (2017), attitude is a way of feeling, thinking or behaviour. It also refers to as a set of affective reactions towards an object that predisposes the individual to behave in a certain manner towards the attitude object (CCS in this study) (Hemant et al., 2017). Given that a pool of similar studies had been conducted in other parts of the globe with limited data presenting the attitude of the most vulnerable group to CCS in Nsukka, this study becomes mostly needed particularly in the recent times where diseases with similar manifestations are on the increase. Therefore, this study investigated attitude of women of childbearing age towards CCS in Nsukka LGA, Enugu State. Aside bridging the existing research gaps, the findings of the study are expected to form the basis for designing programmes, interventions and seminars on cervical cancer screening for allwomen of reproductive ages particularly in Nsukka LGA, Enugu State.

Research Questions

The following research questions guided the study:

1. What is the attitude towards cervical cancer screening among women of childbearing age?
2. What is the attitude towards cervical cancer screening among women of childbearing age based on parity status?

Hypothesis

1. There is no significant difference in the attitude towards cervical cancer screening among women of childbearing age in Nsukka Local Government Area of Enugu State based on parity.

Methods and Materials

The study was a cross-sectional survey conducted in a population of 11,357 registered childbearing women between August 2022 and November 2022 (Nsukka LGA Population Statistics, 2022). Using a simple random sampling technique, a total of 400 women were sampled and surveyed. The sample size selection was based on the recommendation of

experts on arriving at a definite sample size when the population of the study participants runs in thousands (Cohen et al., 2011). All the respondents were recruited from accredited functional health facilities situated in the 20 political wards in Nsukka LGA, Enugu State (Federal Ministry of Health, 2019). The eligibility criteria were set at being within the age range of 15 to 49 years; and the declaration of interest by filling and signing the informed consent form. Those who were not eligible based on the stipulated eligibility criteria were excluded from the study.

A self-structured questionnaire named “Cervical Cancer Screening Attitude Questionnaire (CCSAQ) which demonstrated .89 reliability co-efficient index was used for data collection. The CCSAQ was successfully adapted from standardized instruments used in similar studies (Kazumnori et al., 2017; Blakemole, Hulshot & Sluiter, 2017; Nanbur et al., 2017; Gong et al., 2017; Gebraeli et al., 2017). The successful application of the instrument in similar studies formed the basis for its adaptation in the present study. The CCSAQ was compiled in simple English language and contained two main parts “A & B”. The part A contained information on parity status of the respondents while section B presented 16 statements addressing the attitudinal disposition of the respondents toward CCS with 4-point response options of Strongly Agree (SA-4); Agree (A-3), Disagree (D-2); and Strongly Disagree (SD-1). The reverse of the response options were set as negative. The CCSAQ was administered to the target audience at the health facilities with the help of five research assistants (RAs) who were three registered nurses and two community health workers. The RAs were briefed on the modalities for the administration and retrieval of the copies of CCSAQ. The completely filled copies were returned on the spot. No pay was made to the RAs and the participants for participating in the survey and thus, all forms of bias were thoroughly eliminated.

All statistical data were computed using International Business Machine - Statistical Package for the Social Sciences (IBM-SPSS version 22) (IBM, 2013). Mean score, and standard deviation were used to answer the research questions while one-way analysis of variance was applied in testing the null hypothesis of no significant difference. The results were deemed significant at p value ≤ 0.05 .

Results

Table 1

Mean Scores of Responses on Attitude towards CCS among Women of Childbearing Age (n=374)

S/N	Items	\bar{x}	SD
1.	I feel that cervical cancer screening (CCS) is effective in preventing cervical cancer	1.47	0.83
2.	I belief that CCS is reliable in preventing CC and reducing the incidence rate.	2.00	0.64
3.	I am afraid of cancer diseases of any kind talk more of accessing CCS services.	2.02	0.87
4.	I belief that cancer is not curable and thus there is no need to explore the screening services for early detection, prevention or treatment.	1.98	0.81
5.	I will be highly dissatisfied if a male doctor is assigned to perform the CCS in the facility.	2.15	0.83
6.	I am not comfortable with the dimensions of CCS in the facilities.	2.21	0.84
7.	I belief that CCS is for the married women who are having cervical issues.	2.24	0.91
8.	I feel that having CCS is unpleasant, Embarrassing and dissatisfying.	2.26	0.92
9.	It is very difficult to decide as a healthy person to go for CCS or receive treatment for CC.	2.20	0.88



10. I feel that cervical screening is quite unnecessary if there are no warning signs and symptoms in my body.	2.34	0.89
11. I believe that going for a CCS service is expensive.	2.40	0.91
12. I am afraid that something wrong will be detected if I go for CCS.	2.41	0.92
13. I am uneasy about talking about cancer and CCS.	2.54	0.92
14. I would be so worried if I am found with signs of cancer after the CCS.	2.68	0.89
15. I am afraid that my cervix organ may be harmed or negatively affected after accessing CCS.	2.88	0.92
16. I feel it is unnecessary to go only for CCS.	3.29	0.91
Overall	2.32	0.40

Note: Below 2.50 = negative attitude (NA); 2.50 and above = positive attitude (PA)

Data in Table 1 reveal the overall mean score of attitude towards CCS among women of childbearing age ($\bar{x}=2.32$; $SD=0.40$). This implies that women of childbearing age in Nsukka LGA, Enugu State had negative attitude towards CCS as shown by the mean scores of responses in Table 1. However, the respondents showed positive attitudes on the items 13, 14, 15, and 16 as contained in the Table.

Table 2

Mean Scores of Responses on Attitude towards CCS among Women of Childbearing Age based on Parity (n=374)

S/N	Items	Nullip(n=105)		Multip (n=186)		Primip(n=38)		GrandMult(n=45)	
		\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
1.	I feel that cervical cancer screening is effective in preventing CC.	1.45	0.81	1.41	0.75	1.71	0.93	1.56	1.08
2.	I believe that CCS is reliable in preventing CC and reducing the incidence rate.	2.03	0.63	1.92	0.62	2.18	0.73	2.13	0.66
3.	I am afraid of cancer diseases of any kind Talk more of accessing CCS services.	2.08	0.86	2.03	0.87	2.18	0.83	1.76	0.88
4.	I believe that cancer is not curable and thus there is no need to explore the screening services for early detection, prevention or treatment.	2.06	0.85	1.94	0.79	1.97	0.85	2.00	0.77
5.	I will be highly dissatisfied if a male doctor is assigned to perform the CCS in the facility.	2.02	0.84	2.19	0.84	2.18	0.80	2.22	0.82
6.	I am not comfortable with the dimensions of CCS in the facilities.	2.26	0.87	2.19	0.81	2.13	0.88	2.24	0.88
7.	I believe that CCS is for the married women who are having cervical issues.	2.36	0.92	2.20	0.90	2.11	0.98	2.20	0.89
8.	I feel that having CCS is unpleasant, embarrassing and dissatisfying.	2.21	0.95	2.28	0.91	2.45	0.95	2.18	0.86
9.	It is very difficult to decide as a healthy person to go for CCS or receive treatment for CC.	2.32	0.84	2.10	0.85	2.26	0.95	2.29	0.99
10.	I feel that cervical screening is quite unnecessary If there are no warning signs and symptoms in my body.	2.29	0.95	2.36	0.86	2.42	0.92	2.33	0.83
11.	I believe that going for a CCS service is expensive.	2.39	0.91	2.38	0.92	2.32	0.87	2.60	0.81
12.	I am afraid that something wrong will be								

detected If I go for CCS.	2.53	0.87	2.31	0.93	2.37	1.00	2.60	0.94
13. I am uneasy about talking about cancer and CCS.	2.45	0.94	2.61	0.88	2.34	0.94	2.64	1.00
14. I would be so worried if I am found with signs of cancer after the CCS.	2.41	0.98	2.81	0.82	2.79	0.81	2.73	0.86
15. I am afraid that my cervix organ may be harmed or negatively affected after accessing CCS.	2.66	0.91	2.99	0.84	2.87	1.09	2.93	0.99
16. I feel it is unnecessary to go only for CCS	3.10	0.98	3.35	0.84	3.42	0.89	3.36	0.91
Overall	2.29	0.45	2.32	0.38	2.36	0.37	2.36	0.40

Note: Below 2.50 = negative attitude (NA); 2.50 and above = positive attitude (PA)

Data in Table 2 reveal that overall, attitude towards CCS among women of childbearing age of different parity groups in Nsukka LGA, Enugu State was negative (nulliparous = 2.29; multiparous = 2.32; primiparous = 2.36; grandmultiparous = 2.36).

Table 3
One-way Analysis of Variance Testing No Significant Difference in the Attitude towards CCS among Women of Childbearing Age in Nsukka LGA of Enugu State based on Parity Status (n=374)

Attitude towards Dec CCS	Source of Variance	Sum of Squares	df	Mean Square	F	p-value
Attitude towards	Between Groups	0.235	3	0.078	0.487	0.692 NS
	Within Groups	59.604	370	0.161		
	Total	59.839	373			

Table 3 shows the calculated f-value and the corresponding p-value of attitude towards CCS among women of childbearing age in Nsukka LGA of Enugu State based on parity status (F=0.487; p=0.692) which is greater than 0.05 significance at 3 and 374 degrees of freedom. The null hypothesis of no significant difference in the attitude towards CCS among women of childbearing age in Nsukka LGA of Enugu State based on parity status was therefore accepted. This implies that the attitude towards CCS among the respondents did not differ significantly based on parity status.

Discussion

This survey presented that the attitude of women of childbearing age towards CCS in Nsukka LGA, Enugu State was negative. The unexpected finding could be linked to the fact that a good number of the women in the study location may not have interest in public healthcare initiative or intervention such as screening. It could also be attributed to cultural values, religious beliefs and faith which motivates individuals and make them to believe that with faith and zero interest in diseases, one cannot contract them. In line with the findings of other scholars, Kazumnori et al. (2017) reported negative attitude towards CCS among pregnant women in Mozambique. Also, a descriptive survey of pregnant women in Accra region of Ghana, revealed unfavourable attitude of the participants towards CCS (Blakemole et al., 2017). According to Nanbur et al. (2017), pregnant women accessing tertiary healthcare facilities in Doha had negative attitude towards CCS. A similar survey revealed that some selected Japanese pregnant women attending public healthcare facilities had unfavorable attitude towards CCS (Gong et al., 2017).

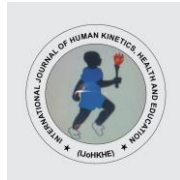
In contrast with the present study findings, Gebraeli et al. (2017) reported that childbearing mothers in Ethiopia had positive attitude towards CCS. A cross-sectional survey involving women of childbearing age in rural area of Rangareddy District of Telangana, revealed positive attitude towards CCS (Menadise et al., 2017). The variations in the findings demonstrate the wider gap existing between the participants' quality of knowledge regarding CCS and their attitudinal dispositions. The negative attitude as recorded could be linked to other co-existing variables in the present study location such as culture and religious affiliation. To some extent, these variables might have played indirect roles in redirecting or remolding the participants' attitude towards the study phenomenon. For instance, Nsukka LGA is a peaceful setting that allows for diversity in both culture and religion. By implication, some cultural practices in the locality might have a misinterpretation of CCS initiative as a taboo and thus discouraging the women from having positive attitude towards it. On the other hand, certain doctrines in religion such as the Islam prohibits members from embracing western innovations particularly on health matters and thus can aggravate negative attitude towards such initiative.

The parity status of the women had significant influence on their attitudinal dispositions towards CCSS. Surprisingly, the nulliparous, multiparous, primiparous and grand-multiparous women recorded negative attitude towards CCS. Also, no significant difference was associated with parity status of the women on their attitude towards CCS. The unexpected finding is evidence-based as it shows that all the women surveyed had negative attitude towards CCS regardless of parity status. This finding could be attributed to poor understanding and limited awareness regarding the CCS among the populace particularly in Nsukka LGA. The understanding of cc as a deadly and incurable disease requires that all women should have positive attitude towards any preventing measure as considered reliable for the disease. In accordance with other findings, Kazumnori et al. (2017) reported that the nulliparous, grand-multiparous and multiparous pregnant women accessing tertiary healthcare facilities had negative attitude towards CCS. In contrary, Bellady et al. (2017) reported that primiparous pregnant women in India had positive attitude towards CCS. Negative attitude of the women towards CCS as shown in this study could also be misleading as majority of the women may have the desire to access the screening service. Nsukka is heterogeneous and allows for multiple religions such as Christianity, Islam and Traditional/Paganism. Such diversities and heterogeneous disposition might have contributed immensely in influencing the attitude of the women negatively towards CCS.

Some major limitations are recorded in the present study. For instance, only women of childbearing age accessing healthcare facilities in Nsukka LGA, Enugu, were surveyed. This target population is not comprehensive enough and cannot serve a true representation of the women's attitude towards CCS. Therefore, there is need for a similar survey to encompass all the women of childbearing ages at homes, facilities, churches and communities including market places. A self-structured questionnaire was the only instrument used for data collection and thus limiting the survey to quantitative data collection and analysis. Thus, there is need to adopt qualitative approaches such as interview guide or focus group discussion to enable the respondents share their views and experiences regarding the study phenomenon.

Conclusion

Women of childbearing age had negative attitude towards CCS in Nsukka LGA, Enugu State. The nulliparous, multiparous, primiparous and grandmultiparous women of childbearing age had negative attitude towards CCS. Parity status is not a very important factor considered in women's attitude towards CCS.



Recommendations

The following recommendations are pertinent in this study:

1. Cervical cancer screening education based on parity status should be developed by the government to enhance attitude regarding cervical cancer screening by the women of childbearing age.
2. There is need for public enlightenment and mass education of the public and women of childbearing age in particular to enhance peoples' attitude towards CCS by the government institutions.
3. Routine seminars and workshops focusing of the aetiology of cervical cancer, health consequences, adverse effects on the sufferers and importance of screening should be organized by the government, individuals and concerned bodies for all women of childbearing age regardless of socio-demographic differences.

References

- Bellady, H., Traih, R., Wellaant, E., & Loopy, M. (2017). Knowledge and attitude towards cervical cancer screening among pregnant women accessing antenatal care services in tertiary healthcare facilities in India. *Indian Journal of Cancer Diseases*, 12(6), 544-556.
- Blakemole, J., Hulshot, A., & Sluiter, Q. (2017). Knowledge and attitude towards cervical cancer screening among pregnant women accessing tertiary healthcare facilities in Accra region of Ghana. *International Journal of Tropical Medicines and Research*, 82(2), 334-345.
- Cancer.Net (2020). *Cervical Cancer: Risk Factors*. Information from ASCO.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). London: Routledge.
- Federal Ministry of Health (2019). Nigeria Health Facility Registry. Federal Capital Territory, Abuja. <https://hfr.health.gov.ng>.
- Ferlay, G., Shin, R., Bray, M., Forman, N., Mathers, V., & Parkin, V. (2018). Comparison of papanicolaou (Pap) test rates across Ontario and factors associated with cervical screening. *Canadian Journal of Public Health*, 96,140–144.
- Gebraeli, J., Amin, B., Leila, N., & Abadi, R. (2017). Knowledge and attitude towards cervical cancer screening among childbearing mothers attending tertiary health facilities in Ethiopia. *Journal of Cancer and Health*, 78(3), 155-166.
- Gong, L., Han, O., Yin, A., Yang, R., Zhuang, E., Chen, S., & Lu, N. (2017). Knowledge and attitude towards cervical cancer screening among selected Japanese pregnant women attending public healthcare facilities. *Japanese Journal of Cancer, Health and Diseases*, 51(33), 242-254.



- Hemant, S., Subhash, G., Lapannia, E., Selicav, L., & Mohammed, M. (2017). Knowledge and attitude towards cervical cancer screening among pregnant women accessing tertiary healthcare facilities in Accra, Ghana. *International Journal of Reproductive Health and Diseases*, 91(3), 187-201.
- Holland, F., & Stewart, B. (2018). American Indian women's talking circle: A cervical cancer screening and prevention project. *Cancer*, 78(7), 1592–1597.
- Hsu, Y. Y., Cheng, Y. M., Hsu, K. F., Fetzer, S. J. & Chou, C. Y. (2011). Knowledge and beliefs about cervical cancer and human papillomavirus among Taiwanese undergraduate women. *Oncology of Nursing Forum*, 38, 297-304
- Kazumnori, J., Makiko, K., Akizumi, R., Akiko, L., Yuko, E., & Teruichi, W. (2017). Knowledge and attitude towards cervical cancer screening among pregnant women accessing tertiary healthcare facilities in Mozambique. *International Journal of Health and Diseases*, 7(2), 144-153.
- Kikuchi, I., Makaya, G., Ikeda, E., Narita, A., Tekeda, J., & Nish, S. (2018). Knowledge and attitude towards cervical cancer screening among women of childbearing age accessing professional care services in General Hospital Kwoi, Kaduna State of Nigeria". *Nigerian Journal of Reproductive Diseases and Health*, 2(3), 144-152.
- Menadise, U., Fakipik, T., Filipe, Y., & Khatibat, R. (2017). Knowledge and attitude towards cervical cancer screening among women of childbearing age accessing tertiary healthcare facilities in rural area of Rangareddy district of Telangana. *Advances in Cancer Research and Health*, 65(33), 412-424.
- Moronunke, A., Ayorinde, N., Benedict, C., Adedayo, U., & Adewale, S. (2017). Risks for incident human papillomavirus and low-grade squamous intraepithelial lesion development in young females. *JAMA*, 285, 2995-3002.
- Nanbur, J., Ringkat, H., Bulndi, W., Abimiku, M., Planks, S., Lelic, G., & Maniag, B. (2017). Knowledge and attitude towards cervical cancer screening among pregnant women accessing tertiary healthcare facilities in Doha. *Journal of Scientific Studies, Research and Diseases*, 8(7), 133-142.
- Narayana, G., Suchitra, M.J., Sunanda, G., Ramaiah, J. D., Kumar, B. P., & Veerabhadrappe, K.V. (2017). Knowledge, attitude and practice toward cervical cancer among women attending Obstetrics and Gynecology Department: a cross-sectional, hospital-based survey in South India. *Indian Journal of Cancer*, 54, 481-487
- Nsukka Local Government Area Population Statistics. (2022). *Records of Registered Women of Childbearing Age in Healthcare Facilities in Nsukka*. Nsukka LGA.



Parkin, J., Sitas, U., Chirenje, T., Stein, R., Abratt, L., & Wabinga, K. (2018). *Estimation of the New Invasive Cervical Cancer in Sub-Sahara Africa: theoretical perspectives*. New Delhi: Lustiby and Jessy Books.

Women's Health. (2020). *The picture of the cervix*. 2020 WebMD

World Health Organization. (2017). *Reports on prevalence and estimates of cancer cases in developing world*. World Health Organization. Geneva.