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## CERVICAL CANCER EDUCATION FOR SUSTAINABLE DEVELOPMENT IN SOUTH WEST, NIGERIA

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**ABSTRACT:** The need for quick and timely intervention to prevent cervical cancer prevalence among the risk population and to reduce incidence and mortality rate due to cervical cancer is one of the object of Health promotion. The standard practice to reduce the frequency and mortality of cervical cancer is to screen the target population, ensure vaccination and to ensure prompt intervention. This descriptive survey determined cervical cancer education for sustainable development in South West, Nigeria. The sample for this study comprises of 600 respondents selected through multi stage sampling technique in South West, Nigeria. The variables studied include: knowledge of cervical cancer prevention, attitude towards screening vaccination and cultural heritage. The research instrument used was a self structured questionnaire, while student t- test, correlation analysis and ANOVA were used to test the formulated hypotheses at 0.05 level of significance. The result revealed that all identified variables significantly influence the cervical cancer prevention. It is therefore recommended that cervical cancer education should be included in the school curriculum and all reproductive activities in the clinical setting to enhance early reporting, reduce morbidity and mortality due to cervical cancer

**Key words:** Cervical cancer, Education, Sustainable development, Vaccination, Screening.

### INTRODUCTION

Cervical cancer is a major killer of women, especially in developing countries like Nigeria. Cervical cancer comprehensive cancer control encompasses all the steps from primary prevention with vaccines and secondary prevention which include screening for and management of precancerous lesions, treatment and palliative care. Human Papilloma Virus (HPV) is the causative organism of cervical cancer along side with other risk factors which include early sexual debut, multiple sexual partners, promiscuity, poverty, sexually transmitted diseases, compromised immunity and age specific sexual behavior (Oche, Kaoje, Gana, & Ango, 2013). HPV vaccines provide a great opportunity to decrease the incidence of cervical cancer within 20 years, but even with successful vaccination the need for screening will continue for women who have not yet been vaccinated as well as for those who have been vaccinated, as the vaccines cover only 80% of cancers. HPV

is much more prevalent in women younger than 25 or 30 years than in older women. HPV vaccine should be introduced where it is feasible and cost effective.

The primary target group is girls 9 -10 years to 13 years of age (3 doses over 6 months). HPV vaccination cannot be a stand-alone intervention but must be part of a coordinated cervical cancer and other HPV related disease prevention strategy. The opportunities for new and more effective combinations of strategies for prevention, detection and treatment of cervical cancer are many, HPV testing followed by visual inspection methods for test positive women could be used to cover a greater number of women and focus health worker time on women at risk (Nwankwo, Aniebue, Aguwa, Anarado, & Agunwah, 2011). It is important to note that all programmes that aims to reduce incidence of cervical cancer should provide screening and prompt treatment with interventions that is well approved in such area. The causative organism of cervical cancer is Human Papilloma Virus (HPV) and other risk factors which include sexual behaviour, life style, smoking, early sexual debut, multiple sexual partners, family type, socio- economic status, religion affiliation, location and neglect of positive cultural values like maintenance of virginity, effect of some drugs and promiscuity. Cervical cancer mortality is the second most common cancer among women of child bearing age. Nigeria was ranked 5<sup>th</sup> in the world and 2<sup>nd</sup> in Africa (WHO, 2010).

Cervical cancer is a public health issue that kills at least 250,000 women every year: 80% of women who die come from low and middle income countries. The huge disparity in morbidity and mortality from cervical cancer between high and low income populations is mainly due to poor access to, and poor quality of, cervical cancer prevention and control services (WHO, 2010). Widespread cervical cancer screening in the developed areas of the world has contributed to a decrease in the incidence of cervical cancer, primarily due to cytology screening and treatment of precancerous lesion. Lack of infrastructure in low resource areas has been an obstacle in under developed and developing countries. There should be an effective education for women and girls about cervical cancer prevention and care. Primary prevention for adolescent girls through safe, affordable and accessible vaccination. Secondary prevention for women through appropriate screening,



diagnosis and early treatment at the most appropriate point of care (Bosh, Lorincz, Munoz, Meijer, & Shah, 2002).

## PURPOSE OF THE STUDY

The purpose of this study is to find out influence of cervical cancer education on sustainable development and specifically to determine the influence of cervical cancer education on the awareness and attitude of women towards cervical cancer prevention.

## STATEMENT OF PROBLEM

Cervical cancer is largely preventable though most of the women die of the disease when they are in their workplace caring for their children, family and nation at large due to late reporting, late detection and poor organized screening protocols. In low resource countries many of the facilities for the treatment of cervical cancer do not exist, or if they do, the equipment is poorly maintained and will not provide either optimal or even suboptimal therapy. Late reporting lead to late detection with subsequent poor prognosis is common among low income and rural setting developing nations like Nigeria. Cervical cancer causes a lot of havoc to families and nations at large. It was observed that lack of cervical cancer education reduces the awareness and eagerness to obtain vaccination for the prevention of cervical cancer. The decline in our positive cultural values like maintenance of virginity by adolescents and total abstinence from sex increases the risk of getting cervical cancer through negative sexual behavior like unprotected multiple sexual partners. Hence, there is a great need to give cervical cancer education to population at risk.

## RESEARCH HYPOTHESES

The following null hypotheses were formulated and tested at 0.05 level of significance:

1. Attitude of the respondents towards cervical cancer prevention is not significantly dependent on cervical cancer education
2. Cervical cancer prevention is not significantly dependent on cervical cancer education
3. There is no correlation between Cultural heritage of the respondents towards cervical cancer prevention and cervical cancer education.
4. There is no relationship between eagerness for vaccination among the respondents for cervical cancer prevention and cervical cancer education

- There is no significant correlation between cervical cancer education and sustainable development

## METHODOLOGY

The research design for this study is survey of descriptive type. The population for this study comprised of all women of reproductive age between 18 – 60 years. The sample for this study were 600 respondents purposively selected in the six states of south west, Nigeria. The sampling technique for this study is multi stage sampling technique. The first stage is random selection of three (3) state out of 6 in South West. The second stage comprises of random selection of 2 Local Government Areas (LGAs) in each of the three states selected for the study. The third stage is purposive selection of 100 respondents from each of the LGAs making a total of 600 respondents. The instrument for this study was self-designed questionnaire comprises of five sections. Section A elicited information on social demographic data, section B elicited information on knowledge of cervical cancer, section C elicited information on attitude of the respondents towards prevention, section D elicited information on awareness of the respondents on preventive strategies while section E elicited information on the relationship between cervical cancer education and sustainable development. The face and content validity was ensured. Test and retest reliability method was used to ensure the reliability of the instrument. The reliability coefficient of 0.87 was obtained using Pearson Moment Correlation Coefficient. The data for this study were analysed item by item using inferential statistics for all the research hypotheses and same tested at 0.05 level of significance. The questionnaire were distributed to the respondents by the researchers and same collected on the spot. 93.5% return rate was achieved while 6.5% suffered mortality.

## RESULTS AND DISCUSSION OF FINDINGS

Table 1: Attitude of the Respondents towards Cervical Cancer Prevention

Variable	N	Mean	SD	Df	t-cal	t-table
Attitude towards cervical cancer prevention	561	7.76	2.12	560	75.289*	1.960
Cervical cancer education	561	25.72	5.96	560	75.289*	1.960

\*P<0.05



Table 1 shows that  $t_{cal}$  (75.289) is greater than  $t_{table}$  (1.960) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant strong positive relationship between cervical cancer education and attitude towards cervical cancer prevention. This implies that cervical cancer education increases positive attitude towards cervical cancer prevention.

**Table 2: Relationship between Cervical Cancer Prevention and Cervical Cancer Education**

Variable	N	Mean	SD	Df	t cal	t tab
Cervical cancer prevention	561	8.14	1.97	560	72.300*	1.960
Cervical cancer education	561	25.72	5.96	560	72.300	1.960

\* $P < 0.05$

Table 2 shows that  $t_{cal}$  (72.300) is greater than  $t_{table}$  (1.960) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant strong positive relationship between cervical cancer prevention and cervical cancer education. This implies that cervical cancer education increases prevention of cervical cancer.

**Table 3: Cultural Heritage of the Respondents towards Cervical Cancer Prevention and Cervical Cancer Education**

Variable	N	Mean	SD	r cal	r tab	Remarks
Cultural heritage of the respondents	561	7.80	1.95	0.354*	0.195	Sig
Cervical cancer education	561	25.72	5.96	0.354*	0.195	Sig

\* $p < 0.05$

Table 3 shows that  $r_{cal}$  (0.354) is greater than  $r_{table}$  (0.195) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant positive relationship between cultural heritage for cervical cancer prevention and cervical cancer education. This implies that positive cultural heritage enhances the prevention of cervical cancer thereby reducing the mortality rate due to cervical cancer.

**Table 4: Showing Respondents eagerness for cervical cancer vaccination and cervical cancer education**

Variable	N	Mean	SD	r cal	r table
Eagerness for cervical cancer	561	11.03	2.901	0.236*	0.195

vaccination					
Cervical cancer education	561	25.72	5.96	0.236*	0.195

\*P < 0.05

Table 4 shows that  $r_{cal}$  (0.236) is greater than  $r_{table}$  (0.195) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant positive relationship between eagerness for vaccination for cervical cancer prevention and cervical cancer education. This implies that cervical cancer education increases eagerness for cervical cancer vaccination for the prevention of cervical cancer.

**Table 5: Showing Pearson's Product Moment Correlation on Cervical Cancer Education and Sustainable Development**

Variable	N	Mean	SD	$r_{cal}$	$r_{tab}$
Cervical cancer education	561	10.38	2.915	0.473*	0.196
Sustainable development	561	25.72	5.96	0.473*	0.196

\*p < 0.05

Table 5 shows that  $r_{cal}$  (0.473) is greater than  $r_{table}$  (0.196) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is significant positive relationship between cervical cancer education and sustainable development. This implies that cervical cancer education increases the prevention and control of cervical cancer among the population at risk thereby increases the sustainable development goals.

### Discussion of Findings

The finding from this study shows that  $t_{cal}$  (75.289) is greater than  $t_{table}$  (1.960) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant strong positive relationship between cervical cancer education and attitude towards cervical cancer prevention. This present study is in agreement with the study conducted by Bosch, Lorincz, Munoz, Meijer and Shah (2002) when carried out a study on the causal relation between human papillomavirus and cervical cancer. The findings of this study is also in conformity with the documentation of WHO (2010) on strengthening cervical cancer prevention and control. Oche, Kaoje, Gana, and Ango (2013) ; Makama, Musabyimana, Halage and Musoke (2017) reported about attitude of Health workers in Sokoto State, Nigeria towards cervical cancer prevention as not too impressive. There should be an



appropriate and adequate cervical cancer education to ensure positive attitude towards cervical cancer prevention.

The findings on prevention of cervical cancer and cervical cancer education shows that  $t_{cal}$  (72.300) is greater than  $t_{table}$  (1.960) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant strong positive relationship between cervical cancer prevention and cervical cancer education. This present study is in line with the findings of Balogun, Odukoya and Ujomu (2012); Oche, Kaoje, Gana and Ango. (2013); and Hoque and Hoque. Knowledge of information about cervical cancer increases the likelihood of prevention of cervical cancer. Cervical cancer education improves the screening practices of the population at risk as documented by WHO (2010). If there is early reporting and screening, the cervical cancer prevention will be made simple and promote good prognosis thereby reducing the mortality rate (Kaoje, Gana & Ango 2013).

The result of this finding on the relationship between the positive cultural heritage like maintenance of virginity and cervical cancer prevention shows that  $r_{cal}$  (0.354) is greater than  $r_{table}$  (0.195) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant positive relationship between cultural heritage for cervical cancer prevention and cervical cancer education. This present study negate the findings and documentation of Adewole, Benedet, Crain and Follen (2005) Nwankwo, Aniebue, Aguwa, Anarado, and Agunwah (2011) on cultural heritage and prevention of cervical cancer. WHO/IARC/APHRC (2012) affirmed the variation in the frequency and prevalence of cervical cancer based on geographical location, race and ethnic group.

Table 4 shows that  $r_{cal}$  (0.236) is greater than  $r_{table}$  (0.195) at 0.05 level of significance. The null hypothesis is rejected. Thus, there is a significant positive relationship between eagerness for vaccination for cervical cancer prevention and cervical cancer education. This present study is in accordance with the findings of Nwankwo, Aniebue, Aguwa, Anarado and Agunwah (2011) ; Abiodun, Fatungase and Olu- Abiodun (2014) on the need for constant and appropriate cervical education to improve vaccination and screening to reduce the incidence and frequency of cervical cancer in our nation.

The findings of this study revealed that cervical cancer education increases the awareness on cervical cancer prevention thereby promoting the sustainable development. This present study is in agreement with the findings of Abiodun, Fatungase and Olu- Abiodun (2014) when conducting study on knowledge, perception and predictors of uptake of cervical cancer screening among rural Nigerian women. Cervical cancer education has positive correlation on sustainable development .As the cervical cancer education increases then the sustainable development increases thereby the prevention is on the increase. The findings of this study corroborate the findings of Makama, Ndejjo, Musabyimana, Halage and Musoke (2017).

## CONCLUSION

Based on the findings of this study the researcher hereby concluded as follows:

- Cervical cancer education increases positive attitude towards cervical cancer prevention.
- Cervical cancer education increase knowledge of information for the prevention of cervical cancer.
- Positive cultural heritage like maintenance of virginity in adolescents helps in the prevention of cervical cancer.
- Cervical cancer education increases eagerness for cervical cancer vaccination for the prevention of cervical cancer.
- Cervical cancer education increases sustainable development thereby reducing the morbidity and mortality of cervical cancer in our environment

## RECOMMENDATIONS

Based on the findings of this study the following recommendation were made:

- cervical cancer education should be included in the school curriculum
- cervical cancer vaccine should be included in routine immunisation
- there should be more enlightenment campaign, public orientation, awareness and advocacy
- all reproductive activities in the clinical setting should be tailored to enhance early reporting ,reduce morbidity and mortality due to cervical cancer
- Positive cultural heritage like maintenance of virginity should be promoted and rewarded





- There should be good communication skills between the clients and health care providers
- There should be a continuous and comprehensive cervical cancer education at all tiers for sustainable development. It is therefore recommended that cervical cancer education should be included in the school curriculum and all reproductive activities in the clinical setting to enhance early reporting, reduce morbidity and mortality due to cervical cancer

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