Knowledge of Cervical Cancer Risk Factors among Female Civil Servants in Anambra State

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Abstract

Background: Cervical cancer remains a major cause of morbidity and mortality among women in the world. Early screening for cervical cancer is a key intervention in reduction of maternal deaths. Lack of knowledge and poor attitude towards the disease and risk factors can affect screening practice and development of preventive behaviour for cervical cancer. The aim of this study was establish knowledge of cervical cancer risk factors among female civil servants in Anambra State. The objectives of the study was to determine knowledge of cervical cancer risk factors and to determine the level of knowledge of cervical cancer screening methods among female civil servants.

Materials and Methods: The study adopted a cross sectional survey design. A self-designed structured and validated questionnaire with a reliability index of 0.75 was employed to elicit information from 335 female civil servants. Data collected were analyzed using percentage, mean, and ANOVA statistics.

Results: The findings of this study revealed an average of 148(47.28%) has knowledge of Cervical cancer risk factors while 165(52.72%), 121(38.66%) has knowledge of Cervical cancer signs and symptoms while 192(61.34%) has not. The respondents fear that the screening procedure is painful; and that they can contract the disease and risk stigmatization if they went for screening. The summary of ANOVA revealed that an F-value of 95.715 which has a df 312 is less than significance value at 0.000 (2-tailed) at .05 alpha level.

Conclusion: The study showed that the magnitude of risk factors and cervical screening practice is very low among female civil servants. It was also obvious that screening was readily available and accessible but fear of cervical cancer risk factors may aid women to change behaviors that put them at risk despite the signs and symptom she may be discerned.

Key Word: knowledge, cervical cancer, risk factors, female civil servants.

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I. Introduction

Cervical cancer is the second most common cancer among women in Sub-Saharan Africa (SSA).

It is preventable and, in most cases, curable, if identified in its early stages. Cervical cancer is caused by persistent infection with certain types of Human Papilloma Virus (HPV) and it is the second most common cancer in women. Cancer of cervix is a disease where cells of the cervix grow abnormally and if left untreated they become malignant or cancerous¹. It is the most common cause of cancer in the African Region where it accounts for 22% of all female cancers. In Africa, 34 out of every 100,000 women are diagnosed with cervical cancer and 23 out of every 100,000 women die from cervical cancer every year². In many parts of Africa, cervical cancer are not identified or treated until advanced stage.

There are various factors risk associated with cervical cancer, such as include biological, lifestyle, environmental and health service factors. The squamo- columnar junction (SC3) of the cervix undergoes metaphase during adolescence and that is the target of HPV³. This cervical HPV infection occurs in many women soon after commencing sexual intercourse⁴, hence the association between cervical cancer and early coitus. Increasing age is determinant of cervical cancer. The disease is common in women between 4th and 5th decade ⁵.Early commencement of sexual activity especially in adolescence is associated with greater risk of cervical cancer because of vulnerability to HPV infection⁶. Sexual debut before 18 or 20 years is a strong determinant of cervical cancer in later life. This is very important in Nigeria where more than 80% adolescents are sexually active by 20 years of age and legal age of consent is 13 or 16 years in different regions ⁷. Women having multiple sex partners are prone to HPV and cervical cancer.Unsafe sex is also a determinant of HPV infection against transmission of genital HPV⁸.

Several psychosocial factors also have been implicated in literature as contributory to the low uptake of cervical cancer screening services ⁹. These factors includes; ignorance of the existence of cervical cancer services, facility where the service is obtainable; or significance of the importance of service, fear, religious beliefs including taboo and perception that cervical cancer cannot be prevented ¹⁰

Less than 10% of women in Nigeria have had cervical screening as against 40% - 50% of women who are screened in developed countries ¹¹. Therefore, most women with the disease present late to hospitals at the invasive stage of the disease when therapy will only result in partial cure or no cure at all ⁶. Cervical screening is a health intervention used on population of women at risk of developing cervical cancer ¹². It is not undertaken to diagnose the disease but to identify individual with a high probability of having or developing the disease at precancerous stage. The individual may actually feel perfectly healthy and may see no reason to visit a health facility. Preventing the incidence of cancer causing Human Papilloma infection, significantly reduces the incidence of cervical cancer and the burden of sickness on women, family and the nation at large.

According to American society of clinical Oncology ¹³, most women do not have any signs or symptoms of a precancerous. The possible signs or symptoms of cervical cancer include blood spots or light blending between or following periods, menstrual bleeding that is longer and heavier than usual,bleeding after intercourse, douching, or a pelvic examination, increased vaginal discharge, pain during sexual intercourse among others. According to ¹², symptoms of cervical cancer tend to be irregular, intermenstrual (between periods) or abnormal vaginal bleeding after several intercourse; back, leg or pelvic pain; fatigue; and a single swollen leg. More severe symptoms may arise at advanced stages

Cervical cancer is a major cause of death and a leading public health concern globally. Although a decline has been observed in cervical cancer incidence and deaths in the developed world over the past 20years, the story is different in developing countries including Nigeria. Cervical cancer is the second most common cause of death among women in Nigeria. Globocan2018 statistics on the state of cervical cancer in Nigeria presents 14,943 new cases and 10,403 deaths was registered in 5- years' prevalence. These statistics are worrisome and the situation may escalate if good steps are not taken. Most women report to the hospital with an advanced form of the disease.

Cervical cancer screening occurs in only a few selected sites and in disjointed projects rather than a fully-fledged national level program. Knowledge of the disease is very important, so that people will know and through motivation they can have positive attitude towards screening for premalignant cervical lesions and preventive methods such as vaccinating their young girls against HPV 16 and 18. Grim statistics show that over 60 Anambra women die of cancer and its related complications every year.

In 2014, a non- governmental organization held a health summit for women in AwkaLocal Government Area, where they conducted free cervical and breast screening and discovered that about 50 women were diagnosed of cervical and breast cancer. Despite all the preventive measures, sensitization and awareness programs adopted for the control of mortality caused by cervical cancer, it seems that the impact is not being felt especially in Anambra. Cervical cancer still claim lives which implies that there is a gap in knowledge of the disease. Therefore, this study seeks to determine knowledge of cervical cancer risk factors among female civil servants in Anambra State.

II. Materials and Methods

Study Design: This study used a cross-sectional descriptive survey method. According to ¹⁴ cross sectional survey design is a type of survey research design that generates data from a section of the population describing events based on their occurrence in the natural setting at a point in time.

Study Location:The study setting was Anambra State. Anambra is the eighth most populated state in the Federal Republic of Nigeria and the second most densely populated state in Nigeria after Lagos State. She consists of twenty one Local Government Area.

Sample Size:The study population was estimated to comprise of 335 female civil servants from seven governmental ministries. All the population was used for the study.

Procedure methodology: The instrument for data collection was a self-structured questionnaire titled Knowledge of Cervical Cancer Risk Factors among Female Civil Servants in Anambra State (KCCRF). Validity of the instrument was determined using face and content validity of the questionnaire which was established by the researcher's supervisor and two other lecturers. The reliability of the instrument was established through a pilot study. Data collected was analyzed using Pearson Product Moment correlation and Cronbach alpha, correlation yielded coefficients of 0.75.

Consent form was attached to copies of the questionnaire which were distributed to the respondents. Out of 335 copies of questionnaire distributed, 313 copies were returned. This represent 93.43% rate of return.

Percentage proportion were used to answer the research questions on knowledge of cervical cancer risk factors while Analysis of Variance (ANOVA) was used to test the hypotheses of no significant difference among the women at 0.05 alpha levels.

S/No	Cervical cancer risk factor	YES (%)	NO (%)
1	Prolonged use of oral contraceptives (birth control pills) can lead cervical cancer	153(48.88%)	160(51.12%)
2	Smoking exposes women to cervical cancer	156(49.84%)	157(50.16%)
3	Micronutrient deficiency is a risk factor to cervical cancer	176(56.23%)	137(43.77%)
4	Having multiple sexual partner exposes one to cervical cancer	154(49.20%)	159(50.80%)
5	Early exposure to sexual activity is a risk factor to cervical cancer	164(52.40%)	149(47.60%)
6	Unsafe sex practice is a risk factor to cervical cancer	167(53.35%)	146(46.65%)
7	Ones history of genital warts can lead cervical cancer.	147(46.96%)	166(53.03%)
8	Persistent human papillomavirus is the major cause of cervical cancer	165(52.72%)	148(47.28%)
9	Low socioeconomic status is a risk factor to cervical cancer	101(32.27%)	212(67.73%)
10	Family history of cancer is a risk factor to cervical cancer	100(31.95%)	213(68.05%)
	Average	148(47.28%)	165(52.72%)

III. Results
Table 1: Frequency and percentage responses on knowledge of cervical cancer risk factors among female
aivil corvents in Anombra State

Table 1: revealed an average of 148(47.28%) has knowledge of Cervical cancer risk factors while 165(52.72%) do not have the knowledge of Cervical cancer risk factors. Respondents withmicronutrient deficiency is a risk factor to cervical cancerwere highest in 176 (56.23%), followed by unsafe sex practice is the most risky factor to cervical cancer, 167 (53.35%), then persistent human papillomavirus is the major cause of cervical cancer 165 (52.72%) and finally early exposure to sexual activity is a risk factor to cervical cancer 164 (52.40%) However, family history of cancer is a risk factorwas considered least to cervical cancer 100 (31.95%). **Frequency and percentage responses on the level of knowledge of Cervical cancer signs and symptoms among female civil servants in Awka South Local Government Area of Anambra State**

S/No	Cervical cancer signs and symptoms	YES (%)	NO (%)
1	Abnormal or irregular vaginal bleeding (bleeding between periods, after a pelvic exam, after sexual intercourse, after douching, or after menopause) could be a sign of cervical cancer.	117(37.38%)	196(62.62%)
2	Painful sexual intercourse could suggest a sign of cervical cancer.	133(42.49%)	176(56.23%)
3	Heavy or unusual vaginal discharge (may be watery, thick, or have a foul odor) is a sign of cervical cancer.	127(40.58%)	186(59.42%)
4	Pelvic pain not related to your menstrual cycle is a sign of cervical cancer.	112(35.78%)	210(64.22%)
5	Increased urinary frequency suggest a sign of cervical cancer.	104(33.23%)	209(67.77%)
6	Painful urination is a sign of cervical cancer	114(36.42%)	199(63.58%)

Knowledge Of Cervical	Cancer Risk Factors	Among Female	Civil Servants I	In Anambra State
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7	Personal vaginal examination is a good way to be alert of signs and symptoms of cervical cancer	137(43.77%)	180(57.51%)
	Average	121(38.66%)	192(61.34%)

One hundred and one (121, 38.66%) out of three hundred and thirteen (313) of respondents indicated that they have knowledge of Cervical cancer signs and symptoms while 192 (61.34%) have no knowledge. The respondents agreed that the best way of knowing cervical cancer signs and symptoms among female is by personal vaginal examination 137 (43.77%) with no knowledge of 180 (57.51%) while increased urinary frequency was the least way of knowing signs and symptoms of cervical cancer 104 (33.23%).

Summary of ANOVA Analysis on the cervical cancer risk factors among female civil servants in Anambra State.

Table 3					
Sources of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1919.958	2	959.979	95.715	.000
Within Groups	3109.147	310	10.030		
Total	5029.105	312			

The Analysis of variance of difference in the cervical cancer risk factors among female civil servants yielded the summary of mean square of 959.979(between groups) and 10.030(within groups). The table revealed that the F-calculated value of 95,715 is greater than the F- critical value of 0.00 with the df of (2 & 312), and at .05 level of significance. Hence, null hypothesis, which that there was no significant difference in cervical cancer among female civil servants with respect to risk factor was rejected in favour of the alternative hypothesis.

IV. Discussion of Findings

The findings revealed that micronutrient deficiency (56.23%) and unsafe sex practice (53.35%) is the most risky factor to cervical cancer, whilefamily history of cancer (31.95%) and low socioeconomic status (32.27%) was considered least to cervical cancer. Early commencement of sexual activity especially in adolescence is associated with greater risk of cervical cancer because of vulnerability to HPV infection ⁶. This is in line with the earlier deduction. Also, unsafe sex is a determinant of HPV infection and cervical cancer. Condom use offers partial protection against transmission of genital HPV ⁸. This implies that when unprotected sex is minimized, especially among unmarried people, it will minimize the risk of having cervical cancer at old age. Also, educating teenagers on the risk involved in early sexual life will save them from contacting HPV infection which will eventually expose them to the risk of cervical cancer in future.

Knowledge of cancer risk factors among the female civil servants sampled is generally low as found in a study by ¹⁵. Only about 47.28% were able to recognize and identify some a risk factor. Also, most of the women correctly identified only 4 of the 10 established risk factors that were used for this study. This odd situation may be accounted for poor impression held by the respondents about their vulnerability to knowledge of cervical cancer risk factors.

One hundred and one (121, 38.66%) out of three hundred and thirteen (313) of respondents indicated that they have knowledge of Cervical cancer signs and symptoms while 192 (61.34%) have no knowledge. The findings revealed that the best prevention practice to cervical cancer is going for treatment once there are any sign and symptoms of STIs, while using HPV vaccination to prevent cervical cancer was least considered. Abnormal or irregular bleeding and STIs sign may become complicated and grave, and it degenerates in the worst case scenario into cancer of the cervix.Organized screening programs for detection of cervical dysplasia to prevent cervical cancer have been shown both to reduce the number of new cancer cases and enhance cancer survival ¹⁶. This study agrees with the present findings. A study was carried out by¹⁷, on cervical cancer awareness and preventive practices: A challenge for female Urban slum Dwellers in Lagos, Nigeria. The study showed that only (4.2%) women in the study were aware of cervical cancer and none of them believed that they were at risk of developing the disease. Most (73.3%) were willing to undergo a cervical cancer screening. This implies that proper sensitization and education on symptoms & signs of cervical cancer will encourage women to always undergo cancer screening test.

Using a 0.05 level of significance and ANOVA calculation, to examine factors that correlate with cervical cancer risk factors, it was observed that the null hypothesis rejected, Table 3. In particular, 6 out of 10 items of the female civil servants show statistically significant influence on cervical cancer risk factors. The implication of this observation lies in the psychosocial factors that influence the uptake of cervical cancer screening and HPV vaccination¹⁸

This study agree with ¹⁹in their study cervical cancer knowledge, belief and prevention/screening practices among women in Taraba, revealed that no significant difference was found in the knowledge, beliefs and practices of the women based on their educational status.

Above all the maintenance of a good lifestyle free from sexually transmitted infections, multiple sex partners, early exposure to sex, and having a sex partner, smoking were some of the risks factors they were strongly advised on to prevent the development of cervical cancer.

V. Conclusion

Based on the findings, the researcher concluded that knowledge of cervical cancer risk factors among female civil servants in Anambra State was significant in terms of potential risk factors and signs and symptoms. Therefore, active involvement by the women in knowledge of cervical cancer risk factors activities can be achieved ifproper sensitization and education on and signs symptoms of cervical cancer, screening test and risk involved in early sexual life are consistently communicated through difference mediums. This will save them from contacting HPV infection which will eventually expose them to the risk of cervical cancer in future.

References

- [1]. Centers for Disease Control and Prevention (CDC), (2013). *Basic Information on gynecologic cancers*. U.S Department of Health and Human Services.
- [2]. World Health Organization (WHO) (2017) Regional Committee for Africa. Cancer of the cervix in the African Region: current situation and way forward. https://apps.who.int/iris/handle/10665/1684.
- [3]. Julinawati,S. Cawley,D. Domegan,C. Brenner,M. and Rowan,NJ. (2013) "A review of the perceived barriers within the health belief model on Pap smear screening as a cervical cancer prevention measure," *Journal of Asian Scientific Research*, vol.3, no. 6, pp. 677–692.
- [5]. Jradi H. and Bawazir, A. (2019) "Knowledge, attitudes, and practices among Saudi women regarding cervical cancer, human papillomavirus (HPV) and corresponding vaccine," *Vaccine*, vol. 37, no. 3, pp. 530–537.
- [6]. Nwobodo, E. and Malami, S. (2015) Knowledge and practice of cervical screening among female health workers in Sokoto North Western Nigeria. Niger Postgraduate Med. J,2015 Dec. 12 (4) 225.7 http://www.ncbi.n/m.nh.gov/pubmed/16380734 retrieved 11/10/2011
- [7]. Odetola D. (2011). Knowledge, Attitude and practice of cervical cancer screening among women in primary Health Care Centres of Ibadan South-east Local Government Area, Oyo-State. *West African Journal of Nursing* May 2011, 22(1), 2 12.
- [8]. Centers for Disease Control and Prevention (CDC) (2018). Questions and answers. Human papillomavirus (HPV).
- [9]. Aboyeji PA., Ijaiya MDA, Jimoh AGA. Knowledge, attitude and practice of cervical cancer as screening procedure for cervical cancer in Ilorin, *Nigeria. Tropical Journal of ObstetGynaecol.* 2004;21:114-7.
- [10]. Nnodu O, Erinosho L, Jamda M, Olaniyi O, Adelaiye R, Lawson L, et al. Knowledge and attitudes towards cervical cancer and human papillomavirus: a Nigerian pilot study. *African Journal ofHealth*. 2010;14:95-108.
- [11]. Curado MP, Edwards B, Shin HR et al (2007). *Cancer Incidence in five Continents*, Vol. IX. IARC Scientific Publications No. 160. Lyon, France: International Agency for Research on Cancer Press.
- [12]. World Health Organization (WHO) 2018. European guidelines for quality assurance in cervical cancer screening.
- [13]. American Cancer Society (ACS) (2019). An educational companion for Cancer Statistics 2019, a scientific paper published in the American Cancer Society journal, CA: A Cancer journal for Clinicians.
- [14]. Elendu, I. C. (2010). Fundamentals of research and statistics for students in human kinetics and other educational disciplines. Port Harcourt.
- [15]. Getahun, F., Mazengia, F., Abuhay, M., &Birhanu, Z. (2013).Comprehensive knowledge about cervical cancer is low among women in Northwest Ethiopia. *BMC Cancer*, 13, Article 2.
- [16]. Arbyn M, Castellsague X, de Sanjosé S, et al. (2017) Worldwide burden of cervical cancer in 2008. Ann Oncol. 22(12):2675–2686.
- [17]. Balogun MR, Odukoya OO, Oyediran MA, Ujomi PU. Cervical cancer awareness and preventive practices: a challenge for female urban slum dwellers in Lagos, Nigeria. Afr J Reprod Health. 2012 Mar;16(1):75-82.
- [18]. Ayinde OA., Ogunbode OO, Adebayo OJ. Determinants of cervical cancer knowledge and its utilization of screening among a Nigerian female population. *Tropical Journal ofObstetGynaecol.* 2005;22:21-4.
- [19]. Ekenedo GO. and Rimande-Ioel R.N. (2019). Knowledge, belief and practices of cervical cancer screening and prevention among women in Taraba, North-East Nigeria. Asian Pacific Journal of Cancer Prevention, 20 (11), 3291-3298

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