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 to 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 symptoms 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 cancerous.¹ 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 year.² 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 HPV.³ This cervical HPV infection occurs in many women soon after commencing sexual intercourse, 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.³ Early commencement of sexual activity especially in adolescence is associated with greater risk of cervical cancer because of vulnerability to HPV infection.⁶ 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 and cervical cancer. Condom use offers partial protection against transmission of genital HPV.⁸

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. 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. Cervical screening is a health intervention used on population of women at risk of developing cervical cancer. 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, 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 bleeding 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, 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 Awka Local 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 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.

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III. Results

Table 1: Frequency and percentage responses on knowledge of cervical cancer risk factors among female civil servants in Anambra State

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

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 with micronutrient deficiency is a risk factor to cervical cancer were 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 factor was 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

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

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<table>
<thead>
<tr>
<th>Sources of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1919.958</td>
<td>2</td>
<td>959.979</td>
<td>95.715</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>3109.147</td>
<td>310</td>
<td>10.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5029.105</td>
<td>312</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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, while family 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. 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. 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. 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 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.

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%).
This study agree with in 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 if proper 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


