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Knowledge, attitude and behaviour of the University of Ibadan women towards cancer of the cervix and its prevention

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Abstract

Objectives: The two commonest cancers in Nigerian women are cancers of the breast and the cervix. Cancer of the cervix is the second commonest cancer and is a killer disease worldwide. The main objective of this study is to find out the knowledge, attitude and practices of the female university staff towards cancer of the cervix as a leadership group in the local effort towards cancer prevention.

Methodology: A sample of 302 female staff of the University of Ibadan, which comprised 151 academic and 151 non-academic staff was studied. These were all the female members of staff who were met during the study visitation of all the departments on the main campus of the university and who were willing to participate in the study. A self-constructed and validated instrument called the knowledge, attitude and practice towards cervical cancer scale was used in collecting data for the study.

Results: Two hundred and forty-two (79.1%) were aware of the disease, whereas 19.9% (60) were not aware. The academic staff were statistically significantly more knowledgeable of cervical cancer than the non-academic staff ($p=0.05$).

Two hundred and thirty-two (232 or 76.82%) have a positive attitude towards preventive measures for cancer of the cervix such as Pap smear or ascetic acid test. However, as much as 210 (73.5%) of the women had never undertaken a Pap smear or other screening test for the condition.

Conclusion: There is need for more education and promotion of cancer screening and services in this locality.

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Introduction

It is widely reported that cervical cancer is the second most common form of cancer in women and in most developing countries. Cancer, a disease that affects health negatively, manifests with demoralising symptoms and often becomes a thing of concern to many, only when it has reached advanced stage and has started having psychological impacts that impinge on the stability of affected individuals and their family members. Although largely preventable, cervical cancer remains a leading cause of cancer death in the developing world [3]. The disease poses more threat to the entire women race than some other deadly diseases because of the little cognizance people take of its existence. The threat it poses to the human population is because of its capability to affect women of all ages. Notably, the risk for it tends to increase with age.

The burden of cervical cancer on its victims and families has been noticed to be overwhelming; this is

because a lot of people seem to be poorly aware and indifferent to this disease exacerbated by the silent nature of cervical cancer at the early stage. Socially, the affected individual might become withdrawn, stressed and may portray antisocial behaviours because of the inner feeling of being stigmatised or discriminated against. This feeling most times arises from the unwanted help and pity from people around. Economically, the consequences are from the likely financial strains and poverty that the individual is plunged into as a result of hospital bills incurred from late medical attention to the ailment. Psychologically, the individual experiences pain, anxiety, grief and fear of death. Apart from the pool of trauma that it plunges into this individual, it pushes further a good quota of the infected persons into premature death.

As earlier enacted, the disease is preventable only if attended to in time. Nevertheless, this has not been too possible as the knowledge and attitude of many women towards its occurrence is low. For instance, Ogunbode and Ayinde [11] found out in a study

conducted in Nigeria that only 40.8% (197) of 499 respondents are aware of cervical cancer, and out of these, only 19.7% (95) are knowledgeable about Pap smear and only 5.2% (25) have had previous Pap smear performed. A study of Tebeu *et al.* [18] in Cameroon showed that despite the awareness of cervical cancer by 28% of 171 women studied, only a minority of them, 4 of 48 (8.3%), underwent a preventative screening test. Only 71 of 171 (41.5%) women stated that they would be having a screening test in the future. The awareness of cervical cancer by women in Cameroon is still inadequate.

Sterling [17] observed from a particular study in Hanover that most of the women were indulging in behaviour that put them at high risk of cancer of the cervix, yet many of them were not aware that they were at risk for cancer of the cervix. The study also revealed that some were afraid of the Pap smear, which would allow them early detection and treatment of cervical cancer. Kidanto *et al.* [9] investigated the level of knowledge of the basic symptoms of cancer of the cervix among Tanzanian women and determined the causes of late presentation with advanced disease among cancer patients. Both cases and controls had low knowledge of the basic symptoms of cancer of the cervix, and as a result, most of those who happen to have problems reported late with advanced disease. Zoe *et al.* [23] concluded from their study that despite the fact that cervical cancer incidence is approximately one in every 10 000 women at present; the knowledge of this disease is relatively low.

Also, the World Health Organisation (WHO) [20] stated that in many developing countries, women's knowledge on cervical cancer is very limited and that the vast majority of women in these developing countries had not heard of cervical cancer and even more knew nothing about cervical cancer screening. It further explains that in developed countries, infrequent uptake of Pap smear and poor knowledge of this disease is more often recorded among women who are older, less educated and of a poor background. In addition, the discrepancy between developed and developing countries concerning the rate of incidence and mortality of cervical cancer is parallel by a similar discrepancy regarding the education and the knowledge of cervical cancer, its prevention, as well as lack of communication between health-care workers and the target victims. Therefore, the purpose of this study is to find out the knowledge, attitude and practices of the female university staff towards cancer of the cervix as a leadership group in the local effort towards cancer prevention.

Research hypothesis

There is no significant difference between the female academic and non-academic staff in their knowledge of and attitude towards cancer of the cervix in the University of Ibadan.

Research questions

- 1a. Are women knowledgeable about cervical cancer?
- 1b. Are they aware of the relationship between HPV and cervical cancer?
2. Are women aware of cervical cancer?
3. What is the attitude of women towards cervical cancer?
4. Are women aware of Pap smear test and visual inspection with acetic acid?
5. Do women go for Pap smear test?

Discussion of findings

Methodology

A sample of 302 female staff of the University of Ibadan, which comprised 151 academic and 151 non-academic staff, was studied. These were all the female members of the staff who were met during the study visitation of all the departments on the main campus of the university and who were willing to participate in the study. Of the female academic staff, 70.2% was married and 7.9% single. Of the non-academic staff, 62.9% was married, whereas 28.5% was single. Majority of the female academic staff (55.6%) were in the 41–60 years age bracket, whereas majority of the female non-academic staff (49%) were in the 31–40 years age bracket. Of the female academic staff, 90.7% had at least a PhD qualification, whereas only 4% of the female non-academic staff had a PhD qualification. The instrument used in collecting the information was self-constructed and validated and is called 'knowledge, attitude and practice towards cervical cancer scale'.

Research design

The research design used for this study is a descriptive survey.

Population

The population for this study is the female staff of the University of Ibadan.

Sample and sampling procedure

Using purposive sampling, a total number of 302 female staff was selected from the various faculties, departments and sections in the University of Ibadan for the study. Among these, 151 were academic staff and the other 151 were non-academic staff.

Research instrument

The research instrument used for the study was a self-designed questionnaire (knowledge and attitude

towards cervical cancer scale). The instrument consists of two sections, A and B. Section A elicited sociodemographic information, whereas Section B is divided into three subsections to elicit accurate responses. Subsection A consists of 18 items to elicit responses on knowledge of cervical cancer. Subsection B consists of six items and is aimed at eliciting the respondents' attitudinal disposition towards cervical cancer, whereas subsection C consists of six practical items aimed at eliciting response of practices towards this disease.

Procedure

The researchers personally administered the questionnaires to the respondents and collected them when they were through. A total of 320 questionnaires were distributed, whereas 302 were retrieved making the percentage of return to be 94.

Data analysis

The data collected was analysed using descriptive statistics and paired sample test.

Results

A sample of 302 female staff of the University of Ibadan, which comprised 151 academic and 151 non-academic staff, was studied. These were all the female members of staff who were met during the study visitation of all the departments on the main campus of the university and willing to participate in the study. Of the female academic staff, 70.2% was married and 7.9% single. Of the non-academic staff, 62.9% was married, whereas 28.5% was single. Majority of the female academic staff (55.6%) were in the 41–60 years age bracket, whereas majority of the female non-academic staff (49%) were in the 31–40 years age bracket. Of the female academic staff, 90.7% had at least a PhD qualification, whereas only 4% of the female non-academic staff had a PhD qualification.

Hypothesis 1: There is no significant difference between the female academic and non-academic staff in their knowledge of and attitude towards cancer of the cervix in the University of Ibadan.

Table 1 shows that there is a significant difference in the paired samples of academic and non-academic female staff in knowledge, attitude and practice of cervical cancer screening ($P < 0.05$). Thus, the hypothesis is rejected.

Discussion of findings

The single hypothesis tested in this study indicated that there is a significant difference in the knowledge, attitude and practice of cervical cancer screening among the academic and non-academic female staff of the University of Ibadan. The higher mean scores in knowledge and attitude indicate a higher knowledge of cervical cancer and a better attitude towards screening for cervical cancer. The mean score in practice also indicated that more of the female academic staff than the non-academic staff has gone for Pap smear test; while 41% of the academic staff has gone for Pap smear, only 11% of the female non-academic staff has gone for the test. These differences between the two groups may be due to the gap in the academic qualifications between these two groups. This predicated on the assumption that the higher educational attainment level of the academic staff may likely have exposed them to or enabled them to have some avenues and materials to information on health issues than their counterparts could get. Understandably, education known as the source of power of knowledge would make any one in a good possession of it to be averagely aware about pertinent issues of life. This finding is in congruence with a few other studies such as Breslow *et al.* [5] and Smith and Mc Closkey [16], who in agreement to this, stated that surveys in both the US and Australia respectively, have demonstrated that the accuracy of knowledge of cancer risk is positively associated with educational attainment.

Amarin *et al.* [2], in a research work, enlisted level of educational achievement alongside other factors

Table 1. Paired sample t-test of the difference in knowledge, attitude and practice of cervical cancer screening between female academic and non-academic staff

Group	N	X	SD	DF	T-CAL	T-TAB	P	REM
Knowledge								
Academic staff	151	12.98	3.977	150	7.730	1.960	<0.05	Significant
Non-academic staff	151	8.68	5.714					
Attitude								
Academic staff	151	9.51	3.042	150	5.358	1.960	<0.05	Significant
Non-academic staff	151	7.21	4.361					
Practice								
Academic staff	151	1.51	0.576	150	5.839	1.960	<0.05	Significant
Non-academic staff	151	1.85	0.412					

SD, standard deviation; DF, degree of freedom; T-CAL, T-calculated; T-TAB, T-table; REM, remark.

like socio-economic status as factors that affect the knowledge on cervical cancer. In addition, WHO [20] contends that people with less educational achievement are those noticed in developed countries to have poor knowledge of cervical cancer and infrequent uptake of Pap smear test. WHO went further to opine that the discrepancy between developed and developing countries concerning the rate of incidence and mortality of cervical cancer is congruent with a similar discrepancy in the level of education and knowledge of cervical cancer and its prevention. In another of its research, it stated that the overall poor knowledge about cervical cancer and Pap smear is related to the lack of basic education because in the research, nearly 16% of the respondents who had no knowledge of this disease had no formal education, and that in a Kenya survey, the illiteracy rate of cervical cancer patients was about six times higher than those of the general population of women aged 15 to 45 years. The difference in the attitude between academic and non-academic female staff could also be traced to the level of educational attainment between the academic and non-academic staff. Because from hypothesis 1 education affected knowledge, this influence of education could directly or indirectly affect the attitude that would be exhibited towards this disease. Notably, there is every tendency for an individual to be indifferent to what he or she is ignorant about or would pay nonchalance to a construct one is not knowledgeable about. Jepson *et al.* [8], in a research on knowledge and attitude towards cervical cancer screening, supported this view noting that there is an evidence base for the relation between knowledge and behaviour (attitude) for cervical cancer screening.

Age differences between the academic and non-academic staff most have played a mediating role in the findings of this study. Majority of the female academic staff (55.6%) were in the 41–60 years age bracket, whereas majority of the female non-academic staff (49%) were in the 31–40 years age bracket. In this study, more women in the older age bracket were members of the academic staff and have better knowledge, attitude and practice of Pap smear screening. This differs from the findings of Amarin *et al.* [2] that found a lower uptake of Pap smear test receipt and the knowledge of cervical cancer among women of older age group. In a study, Wang and Lin [19] also linked older age group women with under screening. The Australian Institute of Health and Welfare [1] made obvious its congruence with this significance. As it stated that the underutilization of Pap smear test among older women and their lower likelihood of having knowledge of the test are alarming as mortality rates of cervical cancer are highest among these women.

From the outcome of this study on research question 1, more than half of the respondents are knowledgeable about cervical cancer. This outcome is in agreement with a few other studies while also in discord with some other research findings. Agreeing

with the findings of research question 1, Nseem and Ibrahim [10] stated that of the 350 married female school teachers investigated, 84% is fully knowledgeable about cervical cancer, whereas only 15.6% lacks total knowledge about the ailment. Meanwhile, Ogunbode and Ayinde [11] are in total disagreement with the above opinion. They reported that in a survey carried out on a sample of 499 respondents of women in Aleshinloye market, only 197 (40.8%) are knowledgeable about the disease. For the discrepancy in these studies, it seems worthy of conjecture that the researchers might have made their assessment based on the fact of the nature of population and the type of respondents used for their research. Apparently, from the aforementioned studies, it can be deduced that the population that seems to have respondents with higher educational level tends to be more knowledgeable about the disease. In research question 1b only 47% of the respondents (35.1% academic and 11.9% non-academic) knew that cancer of the cervix is linked with HPV and 36.4% (24.5 academic and 11.9 non-academics) knew that cancer of the cervix can be sexually transmitted. This is very important as the women do not even realise that they can be at risk of cervical cancer through sexual intercourse with multiple partners or having a lover or spouse that has other sexual partners, and as such, they do not find any reason to protect themselves using condom. According to the research carried out by Okolo *et al.* [12], they found out that in the general population, 26.3% of women was HPV positive. There is the need to increase the awareness on the link between HPV and cancer of the cervix.

For research question 2, this finding shows that 79% of the respondents have had about the ailment, whereas 20% have not. This indicates that majority are aware of cervical cancer. This is in agreement with the work of Amarin *et al.* [2]. They opine that a lot of women have had about cervical cancer, based on a survey carried out. They found that 33.3% has at least heard about cervical cancer.

The findings for research question 3 show that the attitude of the respondents is fairly positive. The work of some researchers also found women attitude to be positive towards cervical cancer, an example is the work of Zoe *et al.* [23]. It stated that of the respondents used, virtually all of them (96.8%) believed that women between the ages of 20 and 64 years should have a Pap smear test performed at least once every 5 years. This depicts that the women attitude towards cervical cancer is fair enough to be termed good.

From the outcome of research question 4, although a lot of the respondents indicated that they are aware of the test to diagnose cervical cancer, more are aware of Pap smear test than they are of visual inspection with acetic acid test. Generally, it can be argued that the respondents' awareness of screening measures is averagely good. Similarly and in agreement to other

studies, Sasiemi *et al.* [14] found that almost half of the women interviewed (48.6%) believed that 1000 to 4000 cases of cervical cancer are prevented each year by screening programmes. This shows women familiarity with screening programmes. Also, Ramirez *et al.* [13], Hasenyager [7], and Yacobi *et al.* [21] concluded that young women are relatively familiar with screening procedures such as local protocol and the meaning of the test result.

The result for research question 6 shows that women do not go for Pap smear test. In congruence to this finding, Ramirez *et al.* [13] addressed an HPV and Pap screening valuation, and they specifically noted that most subjects were not favourably disposed to screening for the fear that such would invade their privacy and reveal information about their sexual behaviour. Also, WHO [20], in a survey, noticed that Pap smear testing was very low given that about 14.3% of the respondents and only 7.5% have had a test within the previous 3 years despite the fact that the population was at a risk of cervical cancer.

The work of some researchers that are in sharp contrast to these opinions given the report that the prevalence of Pap smear testing was about 80% among a random sample of British women (Department of Health and Human Service, 2001), 88% among Hispanic women in America [22], 73% among women in Singapore [6]. But Saslow *et al.* [15], in opposition to the findings stated that screening rate is high, stated that 'in contrast, some are still falling short of the objectives of other countries that, by the year 2010 over 90% of all women would have had one cervical smear test within the preceding three years'.

Conclusion and recommendation

Based on the outcome of this research, it is fair to conclude that the knowledge of and attitude towards cervical cancer in the subjects are fair but not fair enough to be termed very well. A lot of women do not practice what they are aware of, despite the fact that it is an issue of health, which could lead to negative consequences on the lives of such individuals. This not too good knowledge and attitude would give room to this deadly disease to cause a lot of problems that would leave excruciating and painful memory on the victims and their family members.

More so, it is easily perceived that the success of any family, organisation and even a community directly or indirectly lies within the productive effort that the active working female population has to contribute to it. Meanwhile, this preventable disease (cervical cancer) will deplete this population if it is ignored. The implication of this study is that the world stands a great risk of losing its women to this rampaging disease. Therefore, a more radical and active way of making women and the general masses aware of this preventable killer disease should be employed to improve people's particularly women's

knowledge and attitude towards the occurrence of cervical cancer and the link between HPV and cervical cancer. As many young women are increasingly becoming sexually active, knowledge of cervical cancer should be included in the packages of sex education provided, to enable uniform information for many. In no time, the knowledge of the disease among the public would help eradicate the monstrous impacts it has on its victims, then a world free of cervical cancer would be hoped for in the nearest future. There is need for more education and promotion of cancer screening and services in this locality, beginning with such educated women as in the universities as important change agents for this area of the health services.

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