

KNOWLEDGE, ATTITUDE AND PRACTICE OF CERVICAL CANCER SCREENING AMONG WOMEN VISITING THE REPRODUCTIVE HEALTH CLINICS OF A TERTIARY HOSPITAL IN SOUTH-SOUTH NIGERIA

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ABSTRACT

BACKGROUND: *Cervical cancer, a major public health problem is both preventable and to large extent curable. The incidence of cervical cancer differs considerably between developing and developed countries largely due to increased awareness among women in developed climes. This study was aimed to determine the knowledge, attitude and practice of cervical cancer screening among women attending the clinics of the University of Port Harcourt Teaching Hospital.*

MATERIALS AND METHODS: *Sequel to ethical approval, this descriptive cross sectional study evaluated the knowledge, attitude and practice of 118 respondents (selected by balloting) attending the reproductive health clinics of this tertiary hospital. A structured self-administered questionnaire was used to collect data which were analyzed with descriptive statistical tool.*

Results: There was 65.7% awareness of the existence of cervical cancer screening among respondents who were largely tertiary level educated (72.9%). Most (48.1%) respondents had early coitarche and multiple sex partners which are risk factors for cervical cancer. Most respondents (83.4%) felt they were not at risk and 88.4% had never had a Pap smear. The reasons for not having the Pap smear included ignorance, perceived cost, fear and non-requisition from doctors.

CONCLUSION: *Awareness of cervical cancer screening was high among respondents in this study but this did not match the very low attitude and practice among this group. There is the need for early and more aggressive health education among women about cervical cancer screening.*

KEYWORDS: *cervical, cancer, screening*

BACKGROUND

Cervical cancer is a malignant neoplasm arising from the cells that originate in the uterine cervix¹. It was first described in 400BC by the Greek physician, Hippocrates, who declared it incurable and in the intervening 25 years, many women died from the disease². Cancer of the cervix is about the only human cancer that is almost entirely preventable. It is also 100 per cent curable if picked at very early stage. Treatment is cheap and simple in early stages requiring minimal manpower to achieve the high cure rate³. Cancer of the cervix has an established screening method that works. More than two thirds of women diagnosed with cervical cancer are at advanced stages with a poor prognosis for survival especially in the African region^{8, 9}. Cervical cancer commonly affects women in their late forties and fifties.

Peak age is between 50-60 years but cases have been recorded in females as young as 17 years⁴. More than 70% of women who die from cervical cancer have not had a pap smear within the last five years^{5,6}.

Globally, the burden of cervical cancer incidence and death is highest in less developed countries. Sub-Saharan Africa has the highest incidence of cervical cancer of any region. It is the second most common genital malignancy worldwide but it is the commonest in developing countries alone. In the past four decades, the number of deaths from cervical cancer has reduced significantly among American women. This is as a result of regular Papanicolaou tests occasioned by high awareness which find cervical pre-cancer before it turns to cancer^{7,8}.

In Nigeria, cervical cancer is also the second most common cancer in females (following breast cancer) especially among females aged 15 to 50 years^{7,8}. The incidence in Nigeria is about 25 per 100,000 women. According to the World Health Organization (WHO), Nigeria has more than 40 million women aged 15 years and above who are at risk. Current estimates show that 14,550 women are diagnosed and 9,700 die from the disease every year in Nigeria. Shockingly, less than 0.1% and 1% respectively of Nigerian women have ever had a cervical cancer screening or are aware of the existence of the silent killer^{9,10}.

A study carried out in the University colposcopy clinic in Illinois among women with abnormal screening cytology tried to evaluate their knowledge of the human papilloma virus (HPV) infection, risk factors for invasive cervical cancer, and Pap smear tests. Out of the total 176 women that responded, only 99 of them (56%) knew that HPV is a sexually transmitted viral infection. The cancer screening function of a Pap test was identified by 122 of them. Also, 131 (74%) were aware that Pap smears evaluate the cervix while 137 of them (78%) knew that the test should be repeated at intervals of 1-3 years. Women in higher income strata were more likely to understand the meaning of an abnormal Pap test, the nature of HPV, and risk factors for cervical cancer. The University graduates among them were better, and multiparous women were less able than the others to identify the nature of HPV^{11,12}.

A study among women at the University of Ghana, 164 (93%) of the respondents had heard of cervical cancer, but only 65 (37%) had adequate knowledge about the disease. Of those with adequate knowledge, nurses and medical students were significantly in the majority. Those who went for general checkup at least once a year had not had significantly more Pap smears^{13,14}. In Kenya, cervical cancer was perceived to afflict those who have had too many sexual partners while in Sierra Leone, women with cervical cancer were described as having 'wild life styles' or 'Living free life'¹⁵.

Studies in Nigeria on different sections of the populace have recorded various levels of awareness. A cross-sectional study carried out among 407 female secondary school teachers in Osun State showed most of the respondents, 181(44.5%) were certain that cervical cancer is common, 62(15.2%) were not, while

164(40.3%) were unsure. Only 22 (5.4%) had taken a Pap smear test at the time of the study. Among the major reasons why they had not been screened, 238 (58.5%) were not aware of the test while 50 (12.5%) did not know where the Pap tests were carried out¹⁶. Also, a cross-sectional study of 483 female professional health workers in Ilorin showed that 337 (69.8%) knew about Pap smear as a screening procedure for cervical cancer while 146 (30.2%) had no such knowledge. The common sources of information about Pap smear were school lectures (35.3%), textbook (25.2%) and medical journal (10.7%). The common reasons for not wanting to be screened included that the respondents thought that they themselves could not have cervical cancer (52.5%), fear of detection of the cancer (19.2%) and screening against religious beliefs (14.6%)¹⁷. This was similar to findings from studies in Ibadan^{10,18} and south eastern Nigeria^{19,20}.

This study was aimed at determining the knowledge, attitude and practice of cervical cancer screening test among women (18 years and over) attending the reproductive health clinics of the University of Port Harcourt Teaching Hospital.

MATERIALS AND METHODS

Study design and population: This was a descriptive cross sectional study in August 2012 at the University of Port Harcourt Teaching Hospital. It is one of the third generation tertiary hospitals established by law in 1985. Respondents comprised pregnant women visiting the ante-natal clinic, women visiting the gynaecology clinic and women visiting the family planning clinic – where reproductive health services are offered. The clinics have a combined average daily turnover of 200 clients.

Study tool: This included structured self administered questionnaire which assessed socio-demographic characteristics, gynaecological and obstetric history, knowledge, attitude and practice of cervical cancer, screening methods and Pap smear among women visiting the reproductive health clinics of the University of Port Harcourt Teaching Hospital. The questionnaire was pre-tested among ward maids of the University of Port Harcourt Teaching Hospital with similar demographic characteristics and necessary amendments made subsequently.

Inclusion criteria were that respondents must be registered adult females visiting any of the reproductive health clinics for consultation.

Sample collection: Using the formula for proportion, 186 respondents were randomly recruited daily by balloting for one week among women visiting the reproductive health clinic of the hospital.

Data collection and analysis: The 186 respondents were issued structured self administered questionnaires (by members of the research team) which they responded to as they waited in turns to consult the medical personnel. Data collected were manually sorted and entered into a spread sheet. They were then analyzed using descriptive statistics in tables and graphs.

Ethical consideration: The study was approved by the Department of Preventive and Social Medicine of the University of Port Harcourt. Permission was also obtained from the Head of Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital to administer the questionnaire on the patients. Verbal and written consents were obtained from the participants prior to commencement of the study. Educational materials on cervical cancer, its risk factors and importance of screening were distributed to participants at the end of the study.

Limitations of the study: Inaccurate recall of their health history, such as incorrectly stating the time since the last Pap smear, might lead to incorrect estimates of the relationship between usage and knowledge. This was controlled for by asking participants to answer only questions they can vividly recall.

RESULTS

Out of 186 questionnaires distributed, 181 were returned giving a 97.3% response rate.

Table 1: Demographic data of respondents

Variable		Frequency	Percentage
Age			
	20-24	14	7.7
	25-29	39	21.6
	30-34	32	17.7
	35-39	42	23.3
	40-44	23	12.7
	45-49	15	8.2
	≥50	16	8.8
Marital status			
	Single	44	24.3
	Married	132	72.9
	Divorced	2	1.1
	Widowed	3	1.7
Educational Status			
	Primary	16	8.8
	Secondary	78	43.1
	Tertiary	87	48.1

Table 2: Medical (obstetrics and gynaecology) and social history of the respondents

Variable		Frequency (n=181)	Percentage(100%)
Smokers	Yes	6	3.3
	No	175	96.7
Sexual Intercourse	Yes	161	88.9
	No	20	11.1
Coitarche	15-19	87	48.1
	20-24	65	35.9
	25-29	9	5.0
	30-34	0	0
Sexual Partners	0	20	11.1
	1-2	48	26.5
	3-4	78	43.1
	≥5	35	19.3
Number of children	0	41	22.6
	1	19	10.5
	2	34	18.8
	3	48	26.5
	4	26	14.4
	5	13	7.2
Contraceptives used	IUCD	5	2.8
	Tablets (pills)	27	14.9
	Injections	15	8.3
	Natural	16	8.8
	Condoms	78	43.1
	Implants	10	5.5
	None	18	9.9
	No response	20	11.1

Table 3: Knowledge of cervical cancer and its screening methods

Variable		Freq(n=181)	Perc.(100%)
Heard of cervical cancer?	Yes	119	65.7
	No	62	34.3
Cervical cancer common?	Yes	46	25.4
	No	26	14.4
	I don't Know	109	60.2
Aware of screening method	Yes	81	44.7
	No	89	49.2
	No Response	11	6.1
Methods known	Pap smear	74	40.9
	*VIA	10	5.5
	**HVS	9	5.0
	***HPV test	7	3.9
	Blood test	24	13.3
Risk factors of cervical CA	Early coitarche	24	13.3
	Multiple sex partners	80	44.2
	Prolonged IUCD use	3	1.7
	Promiscuous partner	36	19.9
	Smoking	24	13.3
	Others	5	2.8
	I don't know	87	48.1
Symptoms	Post-coital bleeding	38	21.0
	Vaginal discharge	57	31.5
	Irregular menstrual bleeds	50	27.6
	Frequent passage of urine	7	3.9
	Others	1	0.6
	I don't know	75	41.4
Heard of Pap Smear	Yes	79	43.6
	No	102	56.3
Source of information	Hospital staff	59	32.6
	Friends/ Relation/ Colleague	18	9.9
	Books, posters, magazines	16	8.8
	Lectures, campaign	10	5.5
	Radio, TV	11	6.1
Description of Pap smear	Good description	33	18.2
	Poor description	25	13.8
	I don't know	21	11.6
	No response	103	56.9
Time for first pap test	Below 18 years	16	

*Visual inspection using acetic acid

**High Vaginal Swab

***Human Papilloma Virus

Table 4: Attitude and Practice of the respondents to Pap smear screening

Variable		Freq(n=181)	Perc.(100%)
Are you at risk of cervical cancer?	Yes	30	16.6
	No	151	83.4
Do you have a friend, relative or Colleague with cervical cancer?	Yes	27	14.9
	No	154	85.1
Have you done a pap smear before?	Yes	21	11.6
	No	160	88.4
When do you plan to take your next pap smear test?	In \leq 1 year	0	0
	1-2 years time	3	1.7
	3-4 years time	10	5.5
	\geq 5 years time	5	2.8
	Never again	3	1.7
	No response	160	88.4
Why have you not taken a pap smear test?	I don't know about it	94	51.9
	I can't afford it	4	2.2
	My Doctor hasn't requested for it	51	28.2
	I am afraid of a possible bad result.	3	1.7
	I don't know where to do it	12	6.6
	I can never have cancer	26	14.4
	Others	22	12.2
Would you do a pap smear if given the chance?	Yes	71	39.2
	No	43	23.8
	I'm undecided	23	12.7
	No response	44	24.3
Is pap smear done in UPTH?	Yes	69	38.2
	No	39	21.5
	I don't know	73	40.3

DISCUSSION

The fact that a woman undergoes cervical cancer screening suggests that she may have some basic understanding of the procedure, its draw-backs and the results of the tests. The more knowledge a woman has about cervical screening, the more likely she is to go to a screening centre for it and if need be, adhere strictly to follow-up.

Most of the respondents in this study were young, married and well educated to tertiary level. So the high (65.7%) level of awareness of cervical cancer elicited from this study was not surprising as the aforementioned variables increase access to information. Also, only 44.7% of respondents knew there were screening tests for the disease while there was an average across the board knowledge of symptoms and risk factors for cervical cancer among respondents.

Risk factors such as early coitarche and multiple sex partners were also evident in this study (Tables 1 & 2). This to a large extent pre-supposes that even if respondents knew about the disease they did not know how to prevent or treat it – which makes the knowledge of the disease of little use. Worrysome is the fact that despite admittance by respondents to having multiple sex partners, participants still felt they were not at risk of developing cervical cancer. Also, the low percentage (11.6%) of respondents who had taken a Pap smear was in keeping with similar studies elsewhere¹⁶⁻²⁰ and buttresses the attitude of belief that they (respondents) were not at risk of the disease.

Reasons for having not taken the Pap smear included ignorance (51.9%), fear (1.7%), perceived high cost of the test (2.2%) (– as in the Oshogbo study¹⁶) and having not been told by their doctors (28.2%). These are serious indictments on our health education/awareness and health professionals in spreading awareness of cervical screening and its prevention. Even at the University of Port Harcourt Teaching Hospital where the study took place, only 38.2% of respondents knew that Pap smear could be done there while only 39.2% of respondents would do the test if given the opportunity to do so. These findings revealed obvious gaps between knowledge on the one hand and behavior on the other of cervical screening among this study group.

Conclusion: The awareness of the disease (cervical cancer) is high but this has had very little effect on the attitude and practice of its screening among the study respondents. This to a large extent due to poor awareness and education even by the medical staff! There is an urgent need to increase health education and awareness of cervical cancer and its screening at all levels.

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