

## Knowledge, Attitude and Practice of Cervical Smear as a Screening Procedure for Cervical Cancer in Ilorin, Nigeria.

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### Abstract

**Context:** Carcinoma of the cervix is a preventable disease but it remains the most common genital cancer in African women.

**Objective:** To determine the knowledge, attitude and practice of cervical smear as screening procedure for cervical cancer by female health workers in Ilorin, Nigeria.

**Study Design, Setting and Subjects:** A questionnaire was designed for cross sectional survey of 483 female health workers in Government hospitals in Ilorin metropolis. This was carried out between 3<sup>rd</sup> September and 30<sup>th</sup> November 2001.

**Main Outcome Measures:** Knowledge, utilization and compliance rates among various groups of female professional health workers.

**Results:** Three hundred and thirty seven (69.8%) knew about pap smear as a screening procedure for cervical cancer while 146 (30.2%) had no such knowledge. Of those with knowledge of pap smear, only 10 (0.3%) had pap smear test at least once previously. There is significant difference in the utilization of pap smear as a screening test between Doctors, Medical Laboratory Scientists and Nurses ( $P < 0.0001$ ). 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 the fact that respondents cannot have cervical cancer (52.5%), fear of detection of cancer (19.2%) and screening against religious beliefs (14.6%).

**Conclusion:** Although the knowledge of Pap smear as a screening procedure for cervical cancer is high, utilization is very poor. To improve utilization, public health education on the need for health workers to take up screening procedure to set "good example" for the populace is crucial. Setting up a National screening programme is very important. Meanwhile an increase in opportunistic screening might also be of help in reducing the burden of cervical cancer.

**Key Words:** Knowledge, Attitude, Practice, Pap smear, Cervical Cancer [Trop J Obstet Gynaecol, 2004;21:114-117]

### Introduction

Carcinoma of the cervix is a global public health problem responsible for an estimated 258,000 death in the year 2001 world wide<sup>1</sup>. It is however common in the developing countries than the developed one with about 80% of new cases occurring in the former<sup>2</sup>. It is indeed the commonest cancer in African women<sup>3,4</sup>.

Apart from the fact that the incidence of cervical cancer is low in developed countries compared to what obtains in developing countries, the clinical presentation also presents contrasting features. In developed countries about 75% of patients present early while in developing countries 75% of patients present in advanced stage when cure is not to be expected<sup>5</sup>.

The recorded decrease in incidence and mortality rates of 70-80% of cervical cancer in Western countries over the years is largely due to widespread screening<sup>6,7</sup>. The Papanicolaou (pap) smear introduced in 1943 for the detection of precancerous and cancerous changes in the cervix is widely recognized as the most cost effective cancer screening test yet devised and serves as a model for screening for other malignancies<sup>6</sup>.

In Nigeria, as in many other developing countries no organized screening services are available. Cervical

cancer screening needs major national commitment whereby obstetricians and gynaecologists play a central role in the education of the populace on the benefit in subjecting themselves to regular screening for cervical cancer.

Factors identified by writers as responsible for non-utilization of screening services included cultural based embarrassment, fear and hopelessness concerning diagnosis of cancer; cost and access barrier, lack of physician referral, perception of test as being unnecessary and discomforting. Other factors identified are fear of vaginal exposure, expectation of pair and gender of practitioner<sup>7,8</sup>.

Health workers are sometime looked upon as "role model" in health related issues. Their attitude and practice to such an issue might positively or negatively influence people they come into contact with. We therefore decided to determine the knowledge, attitude and practice of cervical screening among female health workers in Ilorin, Kwara State, Nigeria.

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**Materials And Methods**

A cross-sectional survey of 483 female health workers in Government hospitals within Ilorin metropolis was carried out between 3rd September and 30<sup>th</sup> November 2001. Female health workers refers to all Professional female Health Staff of the hospital; Doctors, Nurses, Laboratory scientist, Pharmacists, Physiotherapist and Medical social worker. Non-professional staffs such as administrative staff, cleaners, clerks and aide were excluded from the study.

One tertiary and 3 secondary health care facilities were purposively selected. The study population in the selected health care facilities was 1,153. Based on the sample size of 500 and study population, proportionate sampling was used to determine the sample size from each health care facility. In each of the health care facilities, the sample size was picked by simple random sampling (ballot method) using the nominal roll. A structured self-administered questionnaire was designed. The information sought included the socio-demographic characteristic of the respondents, their knowledge, attitude and utilization of pap smear as a screening device for carcinoma of the cervix. Pretesting of the questionnaire was done on 50 respondents in one of the secondary health care facilities; after which necessary adjustment was made and the questionnaire administered. Five hundred questionnaires were distributed out of which 483 (96.6%) were returned completed. Their responses form the basis of result and discussion that followed. Where necessary, Chi-Square was used as a test of significance. A p-value of <0.05 was regarded as significant.

**Results**

There were 483 respondents in all. Out of these, 405 (83.9%) were nurses, 31 (6.4%) were doctors, 23 (4.8%) were medical laboratory scientists and 12 (2.5%) were pharmacists. Table 1 shows the age and parity distribution of the respondents.

**Table 1**  
**Age and Parity Distribution of Respondents**

Age in year	Parity		
	0-2	3-4	> 5
20 24	5	2	0
25 29	41	11	4
30 34	44	46	14
35 39	25	44	29
> 40	85	92	41
<b>TOTAL</b>	<b>200</b>	<b>195</b>	<b>88</b>

Two hundred (41.4%) were of low parity (0-2) and 88 (18.2%) were grandmultiparous (parity 5 and above).

Four hundred and thirty six (90.3%) were married while 47 (9.7%) were single. Majority of the respondents 416 (86.1%) were Yoruba while 27 (5.6%) and 9 (1.9%) were of Igbo and Hausa extraction respectively.

Three hundred and thirty seven (69.8%) knew about pap smear as a screening procedure for cervical cancer while 146 (30.2%) had no such knowledge. The remaining aspect of result deals exclusively with those with knowledge of pap smear (337) as a screening procedure for cervical cancer. Of these, only 10 (3%) had pap smear at least once previously. Seven (1.7%) nurses, Two (6.5%) doctors and One (4.3%) medical laboratory scientist. The difference between the groups was significant (P <0.001). They were all married. None of the single respondent had a previous pap smear. There was significant difference (P <. 001) between married and single respondents in the utilization of pap smear. The first source of information about pap smear included school lectures in 119 (35.3%), textbook in 85 (25.2%) and medical journal in 36 (10.7%). Media was the least in 25(5.1%) respondents. Only sixty-six (19.6%) of those with knowledge of pap smear who had not undergone at least one screening procedure would like to be screened; while 261 (77.4%) would not like to be screened. The reasons for not wanting to be screened included the belief that respondents cannot have cervical cancer 137 (52.5%), fear of detection of cancer 50 (19.2%), screening is against religious belief 38 (14.6%) and screening is expensive 35 (13.4%) These are shown in table II.

**Table II**  
**Reasons For Not Wanting To Be Screened**

Reason	No of Respondent	%
Cannot have cervical cancer	137	52.5
Fear of detector of cervical cancer	50	19.2
Screening against religious belief	38	14.6
Screening expensive	35	13.4
My husband is against it	27	10.3
No particular reason	34	13.0

Many respondents had more than one reason

About half of those with knowledge of screening (49.9%) think that screening should commence at age 35 year and above while only 35 (10.4%) think that it should commence at age less than 20 years. One hundred and forty two (42.1%) did not have an idea about screening interval, Sixty (17.8%) thought that it should be a yearly event while 56 (16.6%) and 42 (12.5%) were of the opinion that it should be done every 2 and 3 years respectively. Sixteen (4.7%) believed it should be done every 5 years while 21 (6.2%) thought it should be done every 10 years (Table IV).

**Table II**  
**Respondents Idea About Screening Interval**

Interval for Screening In year	No of Respondent	%
No idea	142	42.1
1	60	17.8
2	56	16.6
3	42	12.5
4	16	4.7
10	21	4.7
<b>TOTAL</b>	<b>337</b>	<b>100</b>

## Discussion

This study has shown that the knowledge of papanicolaou smear as a screening procedure amongst the respondents is high (69.8%) and is comparable to the 72.9% obtained in a similar study at Abuja<sup>(9)</sup>. The compliance rate of 3% among the aware group was extremely low and lower than the 9.6% and 7.6% compliance rate obtained at Ibadan and Abuja<sup>(9,10)</sup> respectively.

It is not surprising that there is a significant difference in the knowledge and utilization of Pap smear as a screening procedure between doctors and other health workers. This may be a reflection of the course contents, understanding and appreciation of the importance of cervical screening by doctors as different from other health workers. The utilization rate between the married and single women also showed significant difference with the married women being more likely to utilize pap smear than single women. This may reflect the poor attitude of the single women to pap smear in the mistaken belief that cervical cancer can only affect married women.

As expected, school lectures, textbooks and medical journals were the first sources of information about pap smear. This demonstrated that potential health workers have some form of introduction to the preventable nature of cervical cancer during their course. Although this knowledge did not translate to practice in the vast majority of the respondents. It is significant to note that only 19.6% of the respondents who were aware of pap smear as a screening procedure would like to be screened. The majority 77.4% would not like to be screened for a number of reasons.

It is worrisome that slightly more than half of the respondents who had knowledge of pap smear would not like to be screened simply because they believed that they cannot have cervical cancer. This is perhaps at variance to their knowledge of about cervical cancer in general. Apart from those who are single, it is assumed that the married women amongst the respondents are sexually active and therefore not immune to cervical cancer. It is important to correct their wrong perception about cervical cancer as all sexually active women are at risk.

A disturbing 8.6% of the respondents would need their husbands' consent to have the pap smear test. This was higher than the 5.1% reported from Abuja<sup>9</sup>. The over bearing nature of men over health related issues of their wives needs to be addressed. It is simply a violation of the women folk's right to receiving excellent health care services wherever and whenever it is available. Public health education needs to be directed specially at the men folk to allow their wives to attend hospital to take care of their health needs with or without their consent. Also of note is the 14% of the respondents who felt that the test is expensive. Again, it is important to enlighten the populace that it is by far cheaper to be screened for cervical cancer and if detected early with possibly of cure, rather than to wait for it to become invasive and invariably incurable.

Although age is not mentioned as a determinant of need for screening in this study. The thinking that Pap smear is not necessary at a particular age is a common reason for non-attendance for Pap smear test<sup>9,10</sup>.

About half of the respondents are of the opinion that screening should commence at age 35 years and above. This perhaps is a reflection of inadequate knowledge of the natural history of cervical cancer. It has become apparent from recent studies that preinvasive cancer of the cervix is being diagnosed at much younger age. In one study, the median age for carcinoma in situ of cervix has decreased from approximately 40 to 28 years of age<sup>12</sup>. Also in recent years, there has been an increase of 77% in the incidence of invasive carcinoma of the cervix in young women aged between 25-34 years, particularly in screened and detected cases<sup>13</sup>. It is therefore important to strongly stress the fact that women of younger age are not protected from cervical cancer. It is generally agreed that women who are or have been sexually active or who have reached the age 18 should undergo pap test<sup>(9)</sup>.

Forty two percent of those who are aware do not have any idea about screening interval. The optimal frequency and timing of pap smear screening remain controversial as the exact frequency of smear can only be determined by economic resources and individual attitude<sup>(14)</sup>. All women should be encouraged to participate in a cervical screening programme at least once (between the age of 30 and 55 years). The American cancer society in 1989<sup>15</sup> recommended that all women who are or who have been sexually active, or who have reached age 18 should undergo annual pap test and pelvic examination. With normal finding, the pap smear may be performed less frequently at the discretion of her physician. This recommendation has been accepted by many other organizations whereas the Canadian Task Force of cervical cancer screening programme recommended annual screening for sexually active women aged 18-35 years. Screening Interval may be extended to every 5 years at age 35 and discontinued at age 60 if consistently normal<sup>(6)</sup>.

In conclusion, although the level of knowledge about

pap test is high among health workers in this study, their utilization of the test is very low. Since these group of workers unconsciously and passively act as role models in health related attitude and behaviour to members of the larger society<sup>10</sup>, they need to be encouraged on the importance of taking up pap test so that they can be able to convince other women they come in contact with in the course of discharging their professional duties. Every opportunity should also be utilized to disseminate modern concepts of cancer control through schools of nursing and other paramedical organizations to achieve a more coordinated effort in these fields. The burden should not left with the physician alone. On a larger scale, continued public health education is important on the preventable nature of invasive cervical cancer through pap test. In the mean time, as there is no population-based screening programme available in the country increased opportunities screening should be intensified in an effort to reduce the burden of cervical cancer in the country.

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