

## KAP study in the married women coming to the outpatient department in a tertiary care centre on pap smear

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### Abstract

**Introduction:** Invasive cervical cancer is the second most common cancer in women worldwide, but 80% of cases occur in developing countries. If detected early cervical cancer is usually curable. The papanicolaou smear is a reliable, inexpensive and effective screening test for cervical cancer. This study aimed to determine the knowledge, attitudes and practice of women in Nanded towards pap smear, barriers for their participation in the screening and also relationship between the knowledge, attitudes and practices.

**Materials and Methods:** This study was carried out on 200 outpatient married women attending outpatient department in Dr. SCGMC, Nanded, a rural tertiary health care center in Maharashtra, India.

**Results and Observations:** In our study done on rural population only 44% had heard about pap smear and 35% had got pap smear taken at least once, but 70% of the patients were ready to get pap smear done upon explaining about pap smear. Only 11% knew that cancer cervix could be detected before onset of symptoms and 100% were of the opinion that cancer cervix awareness program has to be conducted.

**Conclusion:** Clearly there is a need for reformations at the grassroot level to have an appeal to the people of rural areas to help them utilize the screening tests available for early detection and treatment of the deadly disease like cancer which shows a higher prevalence in the people of rural areas with lower educational level and low socio-economic status.

**Keywords:** Cancer cervix, Pap smear, Knowledge, Attitude, Practice.

### Introduction

Cervical cancer is the major cause of cancer deaths in women worldwide. Invasive cervical cancer is the second most common cancer in women worldwide, but 80% of cases occur in developing countries.<sup>1</sup> Of the half million new cases of cervical cancer reported yearly, nearly one-fifth are detected in India alone. This cancer can be prevented because of the long pre-invasive period<sup>2</sup> and its prevention and early detection by screening tests can contribute to the achievement of the Millennium Development Goals. Cervical cancer has several unique characteristics that make prevention through screening and the treatment of precancerous stages relatively straightforward.<sup>3</sup>

Infection by the human papillomavirus (HPV) is the most important risk factor for cervical cancer. Infection with HPV is common, and in most people the body can clear the infection by itself. Sometimes, however, the infection does not go away and becomes chronic. Chronic infection, especially when it is caused by certain high-risk HPV types, can eventually cause certain cancers, such as cervical cancer. A well-proven way to prevent cervical cancer is to have testing (screening) to find precancers before they can turn into invasive cancer. The pap test (or Pap smear) and the human papillomavirus (HPV) test are used for this. If detected early cervical cancer is usually curable. However, the global mortality: incidence ratio is 52%.<sup>4</sup> Primary prevention through vaccination against the prevalent carcinogenic HPV types, HPV-16 and HPV-18, is also possible, but is significantly more expensive.<sup>5</sup>

The Papanicolaou smear is a reliable, inexpensive and effective screening test for cervical cancer.<sup>6</sup> Pap smear screening has a specificity of approximately 99%, its better

for high grade and invasive lesions. The sensitivity of pap smear screening has been reported to range from 40 to 70 percent. Though pap smear is a routine screening test, the overall sensitivity in detection of high grade squamous intraepithelial lesion (HSIL) is 70-80%.<sup>7</sup> The generally accepted false negative rate is 15-25%. Due to the long period associated with the precursor lesion (CIN), this false negative rate does not compromise screening strategies as long as smears are performed frequently enough.<sup>8</sup>

This study aimed to determine the knowledge, attitudes and practice of women in Nanded towards pap smear, barriers for their participation in the screening and also relationship between the knowledge, attitudes and practices.

### Materials and Methods

This study was carried out on 200 outpatient married women attending outpatient department in Dr SCGMC, Nanded, a rural tertiary health care center in Maharashtra, India. It included patients attending both gynecology clinic as well as antenatal clinic. Unmarried women were excluded from the study.

The questionnaire included 9 questions about participant's demographic and fertility characteristics, 6 questions to assess the level of knowledge, 6 statements related to attitudes towards pap smear, and 4 questions focused on the behavior and practice of the participants.

The socio demographic questionnaire contained questions regarding demographic information including: age, educational level of the woman, occupation, number of parturition, family history of cancer and reason for referring to the clinic. The knowledge questionnaire contained a series of questions to assess knowledge about the pap smear test.

The attitude questionnaire contained a set of phrases to evaluate attitude towards the pap smear after explaining them about the pap smear. The questions on practice included questions of the study population regarding their practice of pap smear.

## Results and Observations

**Sociodemographic Factors:** In our study, 61% of the patients were of the age group 20-40years, 24.5% were between 41 and 60yrs and 14.5% were less than 20yrs. Out of the 200 patients interviewed, 64.5% were having farming as their occupation, 21.5% were homemakers and 14% were laborers. 74% had completed their primary education, 10.5% had completed their secondary school, 11.5% were uneducated and 4% had their graduate degree. In our study population 76% were attending the clinic for their gynecological problems, 21% were attending ANC clinic and 3% were accompanying the patients for the clinic. In our study population 7% had the history of cancer cervix in their family. (Table 1)

**Questions on Knowledge:** In our study we found that out of 200 outpatient women in the study, 158 (79%) were attending gynecology clinic and 42 (21%) women were attending antenatal clinic. Only 44% of women had heard about pap smear and out of these 41% were the women attending gynecology clinic and only 3% of the women attending ANC clinic had heard about pap smear. 35% of the women attending the OPD got pap smear taken at least once. None of the patients attending ANC clinic had got pap smear done even once. 76% of the patients attending the clinic had heard about cervical cancer. 52% of the patients attending the clinic thought that cancer cervix is curable. Only 11% of the patients knew that cancer cervix can be detected before the symptoms appear. (Table 2, Fig. 1 and Fig. 2)

**Questions on Attitude:** The patients attending the clinic were explained about pap smear and were asked questions to assess their attitude towards pap smear. 70% of the patients said yes to getting pap smear. Out of these 61% were the ones attending gynae clinic and only 9% of the patients attending ANC clinic showed positive response for getting pap smear. 42% of the women were willing to get pap smear taken in their nearby PHC and 28% were willing to get pap smear taken from the women's clinic. 59% of the patients were willing to get pap smear done every 3 yearly. 100% of the women participating in the study were of the opinion that cancer cervix awareness program has to be conducted. (Table 3, Fig. 3)

**Questions on Practice:** In our study we found that 32% of the patients had got pap smear taken once and 3% of the patients had their pap smear taken twice. All 35% of the patients who had been called up for the follow up by gynecologist. Out of these 32% had been called up for the follow up once and 3% had been called up for the follow up twice. Out of the 35% patients attending clinic for pap smear follow up, 28% had been called for follow up 6 monthly, 3% had been called up for follow up yearly and 2% had been called up for follow up 3 yearly and 2% of the patients does not remember the exact interval period of their follow up.

## Discussion

“A Knowledge, Attitudes, and Practices (KAP)” survey is a representative study of a specific population that aims to collect data on what is known, believed and done in relation to a particular topic. KAP survey data are essential to help plan, implement and evaluate programs, and can identify knowledge gaps, cultural beliefs, or behavioral patterns that may facilitate or impede the success of a program. Canada was the first country to start organized pap smear screening program in 1949. Cervical cancer mortality has fallen from 13.5 per 1,00,000 in 1952 to 2.2 per 1,00,000 in 2006 in Canada.<sup>9</sup> In countries like India with predominant rural population is having low socio-economic status, marriage at an early age and poor medical facility, it is a major challenge to formulate a screening program that is easily available, within existing resources, to a large section of society.

Incidence and mortality of cancer cervix in world is 530232 and 275008 per year while in India it is 134420 and 72825 per year respectively.<sup>10</sup> Countries that have organized screening programs have substantially reduced cervical cancer incidence and mortality.<sup>11</sup> Pap smear test can decrease mortality by diagnosing cervical cancer at an early stage.<sup>12</sup>

In a study in Kerman 81% of the women were aware about pap smears and 27% of have had a pap smear test at least once.<sup>13</sup> The findings of the study by Mulatu K et al in Ethiopia showed that 111 (53.11%) of the respondents had heard about cervical cancer. The study demonstrated that 128 (61.24%) of the respondents had positive attitude towards screening for cervical cancer.<sup>14</sup> In the study in Ghana by Peter n et al showed the agreement of 87% of the participants for acceptance of the importance of screening.<sup>15</sup>

In a study done by Cheek J et al on Vietnamese women born in Australia 87% of the women heard about pap smear and 75% had had a pap smear.<sup>16</sup> In a Malaysian survey by Chee H et al, 25.3% had never had the pap smear, and only 18.4% had their last examination within the last three years.<sup>17</sup> Coughlin and colleagues reported that reasons for not receiving a pap smear by women in U.S included lack of physician recommendation, haven't had any problems and too painful and unpleasant to be tested.<sup>18</sup>

In a study by S Ranabhat et al in Nepal showed that 63.3% of clients were aware of cervical cancer, 73.3% of women did not know why pap smear is done. Practice of pap smear or pap smear coverage: Only 7.8% (at 95% CI was 0.02-0.13) women had had at least one pap smear test previous to the current visit.<sup>19</sup> Shrestha and Shah found pap smear coverage rate to be 10.5% in a study carried out in Kathmandu.<sup>20</sup>

In the study done on pap smear in 349 women by Hande Celik Mehmetoglu et al in Turkey showed that the percent of the participants who had never heard of pap smear screening and had never undergone testing was 90.7%. Thirty-one women had one previous pap smear screening.<sup>21</sup>

In the study done by Ekane et al, a large proportion of the study population (40.7%) had “poor” (0-2/7) knowledge. For the emotional barrier, 46.6% thought having a pap smear test was a painless procedure, 20.7% considered it painful, 32.7% “didn't know” since they never had a test. In this study

only 19.7% of the participants had been screened for cervical cancer. 55.7% of them had only one pap smear test.<sup>22</sup>

Whereas in our study done on rural population with majority of patients having only primary level of education and farming as their occupation only 44% had heard about pap smear and 35% had got pap smear taken at least once, but 70% of the patients were ready to get pap smear done upon explaining about pap smear. 12% thought pap smear was painful, 14% were scared of results of pap smear and 4% were shy to get pap smear done. Only 11% knew that cancer

cervix could be detected before onset of symptoms and 100% were of the opinion that cancer cervix awareness program has to be conducted.

Our data establishes the fact that knowledge is fairly lacking and there is a clear opportunity to train healthcare workers in simple, cost effective “screen-and treat” programs that could have a very great impact on the overall health of the population.

**Table 1: Socio demographic factors**

<b>Age:</b>	
<20yrs	29 (14.5%)
20-40yrs	122 (61%)
41-60yrs	49 (24.5%)
<b>Occupation:</b>	
Farmer	129 (64.5%)
Laborer	28 (14%)
Homemaker	43 (21.5%)
<b>Education:</b>	
Illiterate	23 (11.5%)
Primary school	148 (74%)
Secondary school	21 (10.5%)
Graduate	8 (4%)
<b>Reason for attending clinic:</b>	
Gynecological problem	152 (76%)
ANC visit	42 (21%)
Accompanying a relative	6 (3%)
<b>Contraception used:</b>	
None	19 (9.5%)
Barrier method	14 (7%)
Oral contraceptive pills	26 (13%)
Permanent sterilization	141 (70.5%)
<b>Family history of cancer</b>	14 (7%)

**Table 2: Questions on knowledge**

Questions	Yes	No
Have you heard about pap smear	88 (44%)	112 (56%)
Have you ever had pap smear done	64 (32%)	24 (12%)
Have you heard about cancer cervix	152 (76%)	48 (24%)
Is cancer cervix curable	104 (52%)	96 (48%)
Is it possible to detect cancer cervix before symptoms appear	22 (11%)	178 (89%)

**Table 3: Questions on attitude**

Questions	Yes	No
If you were told to get pap smear done, would you get it done	140 (70%)	60 (30%)
Would you have pap smear every 3 yearly	118 (59%)	82 (41%)
Pap smear is painful	24 (12%)	176 (88%)
Scared of results for pap smear	28 (14%)	172 (86%)
Shy to get pap smear done	8 (4%)	192 (96%)
Would like to get pap smear done from family physician	64 (32%)	136 (68%)
Would like to get pap smear done from gynecologist	76 (38%)	124 (62%)
Would like to get pap smear done at PHC	84 (42%)	116 (58%)
Would like to get pap smear done at women's clinic	56 (28%)	144 (72%)
Do we need to conduct cancer cervix awareness program	200 (100%)	0

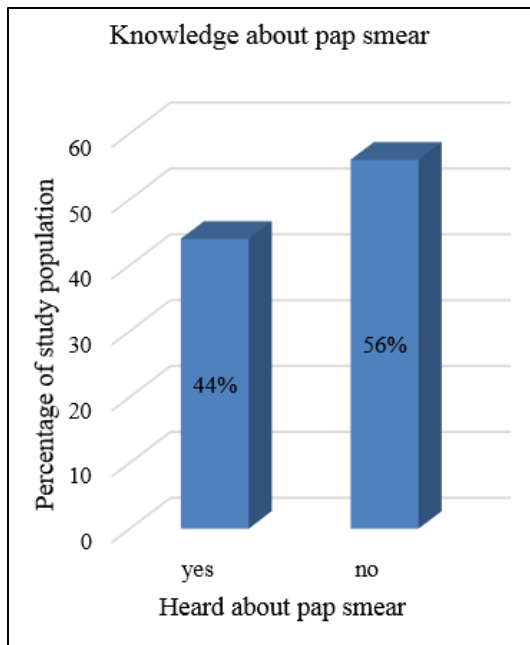


Fig. 1: Chart showing percentage of study population who had heard about pap smear

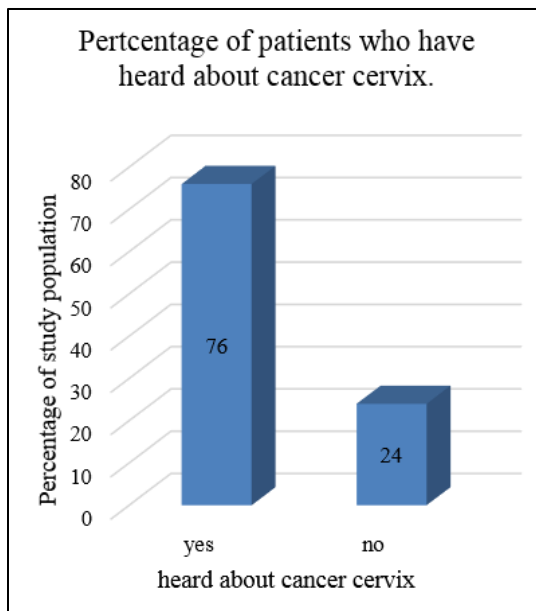


Fig. 2: Chart showing percentage of study population who had heard about cancer cervix

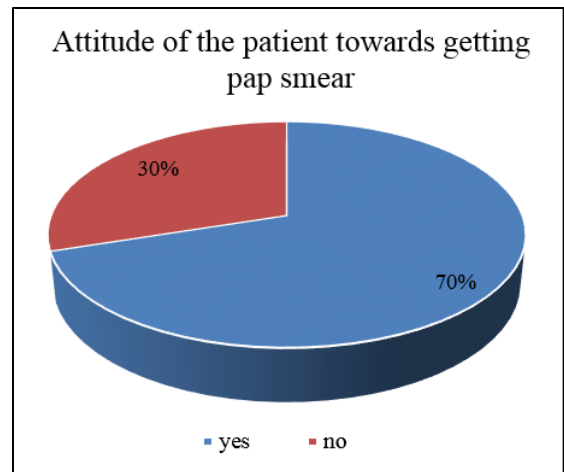


Fig. 3: Attitude of patients towards getting pap smear taken after explaining about pap smear

**Conclusion**

We can conclude from our study that knowledge is fairly lacking, the attitude is after explaining about the pap smear is fairly positive. The study establishes the need for imparting awareness about the cancer cervix and regarding screening program available for the same. Clearly there is a need for reformations at the grassroots level to have an appeal to the people of rural areas to help them utilize the screening tests available for early detection and treatment of the deadly disease like cancer which shows a higher prevalence in the people of rural areas with lower educational level and low socio-economic status.

**Conflict of Interest:** None.

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