

Original Research Article

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE (KAP) RELATED TO PAP SMEARS AMONG PATIENTS ATTENDING A TEACHING HOSPITAL LOCATED IN KOPPAL DISTRICT, KARNATAKA

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Received : 26/04/2024
Received in revised form : 08/05/2024
Accepted : 30/05/2024

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DOI: 10.5530/ijmedph.2024.2.130

Source of Support: Nil,
Conflict of Interest: None declared

Int J Med Pub Health
2024; 14 (2); 677-682

ABSTRACT

Background: Cancer of the cervix is a major burden on women's health worldwide. Cervical cancer is the second most common cancer in women worldwide, following cancer of the breast in developing countries, however it is the most common cancer among women.

Aim and Objectives: To analyse the knowledge, attitude, and practice related to cervical Pap smears among women attending a teaching hospital.

Materials and Methods: A Community based cross sectional study conducted at KIMS teaching hospital, Koppal (from August 2023 to January 2024). A structured questionnaire was used to conduct face to face interviews that assessed the demographic details of the participants along with the knowledge and attitude of the participants. The collected data was then analysed and results

Results: The present study included 100 participants of which majority belonged to the age group between 30-39 years (32%) and resided in rural regions (71%). With regard to knowledge, the results obtained show that less than half of the participants had previous heard of PAP smears (42%) while 56% had previous knowledge of cervical cancer (54%). When asked about who they would like to conduct the PAP smear, most of the participants reported to want it to have it done at a women's clinic (37%) followed by a gynaecologist (36%). A great proportion (62%) agreed to the need for conducting cervical cancer awareness programs. Most of the participants (68%) believed that PAP smears were not a reliable tool for the early detection of cervical cancer. Most of the participants have not undergone screening for cervical cancer (89%).

Conclusion: The results of the present study show that the knowledge and practice toward cervical cancer and Pap smears but showed favourable attitude which can be helpful in improving the uptake of Pap smears among women.

Keywords: Knowledge, Attitude, Practice, Pap smear, Cervical cancer.

INTRODUCTION

In India, cervical cancer is a major public health issue, accounting for around 123,000 new cases and 77,000 fatalities every year. The condition is especially common in underdeveloped nations like India, where there is frequently inadequate access to screening programs and healthcare facilities.^[1] A

straightforward, affordable, non-invasive, and uncomplicated procedure for the early identification of precancerous lesions is the Pap smear. Cervical cancer incidence and death rates can be lowered by up to 80% with routine screening.^[2]

Cervical cancer screening is crucial, however in India, participation in and adherence to these programs are severely hindered. The percentage of

women in India who have Pap smears ranges from 2.6% to 6.9%, while in wealthy nations it is between 68% and 84%.^[3] Numerous causes, such as a lack of awareness of the significance of screening, restricted access to healthcare facilities, and cultural or socioeconomic considerations, might be blamed for this gap. Understanding the women who visit the hospital's with regard to their knowledge, attitudes, and practices about cervical Pap screenings is crucial in the setting of an Indian teaching hospital.^[4] This information can help design focused interventions that increase participation in and adherence to cervical cancer screening programs, which will ultimately lower the disease's incidence and fatality rates.^[5]

A previously conducted study reported that 2% of the 7,127 cervical pap smears included had showing epithelial cell abnormalities thus providing evidence on the sensitive of the procedure in detecting cancerous, pre-cancerous and non-cancerous lesions of the cervix.⁵ A camp approach in Lucknow city reported a much higher incidence with 18.2% among 2,369 women. The present study is important because it will shed light on women visiting an Indian teaching hospital's knowledge, attitudes, and practices about cervical Pap screenings. The results of this study can help design focused interventions to increase participation in and adherence to cervical cancer screening programs, which would ultimately lower the disease's incidence and death rates in India. Furthermore, by adding to the amount of research already available on Pap smears and cervical cancer screening, this study can influence healthcare practices and policy in developing nations like India.^[6]

In India, cervical cancer is a major public health problem. Early identification and prevention of cervical cancer depend heavily on cervical cancer screening. Cervical cancer screening is crucial, however in India, participation in and adherence to these programs are severely hindered. Women visiting a teaching hospital in India can determine their attitudes, habits, and knowledge gaps about Pap smears with the use of a KAP analysis. The dearth of literature related to the knowledge, attitude, and practice of Indian women toward cervical cancer and its screening was the reason for the conduction of the present study. The outcome of this study will provide crucial information regarding current awareness, attitude and practice about cervical cancer and screening, which will be helpful in devising population based educational programme which can lead to knowledge enhancement about cervical cancer and its screening. In order to better inform the development of focused interventions to increase the uptake and adherence to cervical cancer screening programs in India, this study intends to examine the knowledge, attitude, and practice surrounding cervical Pap smears among women visiting an Indian teaching hospital.

MATERIAL AND METHODS

A community based cross sectional study was conducted among women who visited the Obstetrics and gynaecology outpatient department attached to a tertiary healthcare centre located in Koppal district of Karnataka. The study was conducted for a period of one year between January 2023 and January 2024. The study involved the face-to-face interview of study participants to assess their knowledge, attitude and practice using a structured questionnaire.

Informed consent was also obtained from the selected participants. Participants were included into the study they were aged between 21 to 65 years and provided consent to participate in the study. Participants were excluded if they were healthcare workers or professionals and did not consent to the study.

A close-ended questionnaire (Annexure 1) was used for assessment of the participants and it consisted of 4 parts: The first part aimed to collect women's socio-economic and demographic characteristics; the second part attempted to assess the Knowledge, Attitude and Perception of the participants related to Pap smears. The questionnaire had 16 close-ended questions with 5 questions to assess the women's knowledge, 7 questions to determine the women's attitude, and 4 questions to evaluate the women's experience regarding pap smear. The questionnaire was validated and tested for reliability.

Statistical analysis: Data was analyzed using SPSS version 28. Descriptive statistics were used to analyze the demographic variables as well as the responses of the participants on the knowledge, attitude and practice related questions.

RESULTS

Demographic details of the participants

The present study included 100 participants of which the majority belonged to the age group between 30-39 years (32%), had 1 to 4 children (57%) and resided in rural regions (71%). The occupational status of the participants showed that most of them were employed manual workers (78%) with a primary school graduate level of education (48%) and belonged to a middle class on the socioeconomic scale (52%). Most participants had family with a history of cancer (83%) as well used permanent sterilization as the type of contraception (44%).

Knowledge of the participants on PAP smear and cervical cancer

With regard to knowledge, the results obtained show that less than half of the participants had previous heard of PAP smears (42%) while 56% had previous knowledge of cervical cancer (54%). Most of the participants had not undergone a PAP smear themselves (74%) and did not believe that cervical cancer was curable (72%) as well as rejected the

possibility that cervical cancer can be detected before the symptoms appear (54%).

Attitude of the participants on PAP smear and cervical cancer

Results related to the attitude of the participants showed that most of them would get a PAP smear done if they were consulted to (58%) with most of the participants not thinking that the procedure is painful (64%) and 55% of them not being fearful of the results of the PAP smear along with 57% not being shy of undergoing a PAP smear. A great proportion (62%) agreed to the need for conducting cervical cancer awareness programs. A large majority of the participants reported that they would not have a PAP smear done every 3 years (73%).

When asked about who they would like to conduct the PAP smear, most of the participants reported to want it have it done at a women's clinic (37%) followed by a gynecologist (36%) (Figure 1).

Practice of the participants related to PAP smear and cervical cancer

Most of the participants (68%) believed that PAP smears were not a reliable tool for the early detection of cervical cancer. Most of the participants have not undergone screening for cervical cancer (89%). A vast majority of the participants had not recommended any other women to be screened for cervical cancer (83%). When asked about the reasons for not undergoing screening for cervical cancer, most of the participants gave embarrassment as the reason (34%) followed by not being advised (29%), not having enough knowledge (22%), and absence of symptoms (15%) (Figure 2).

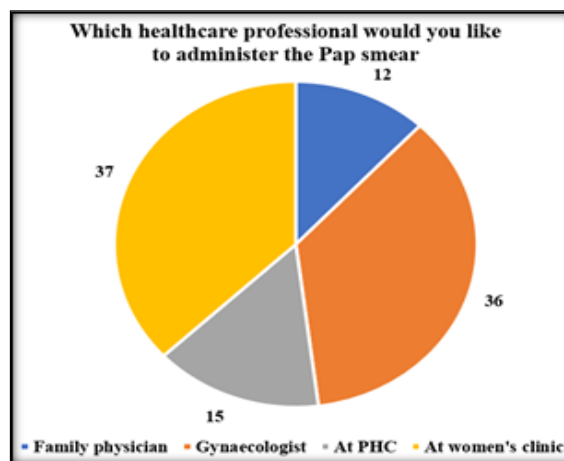


Figure 1: Different healthcare professionals that the participants would want to administer the Pap smear

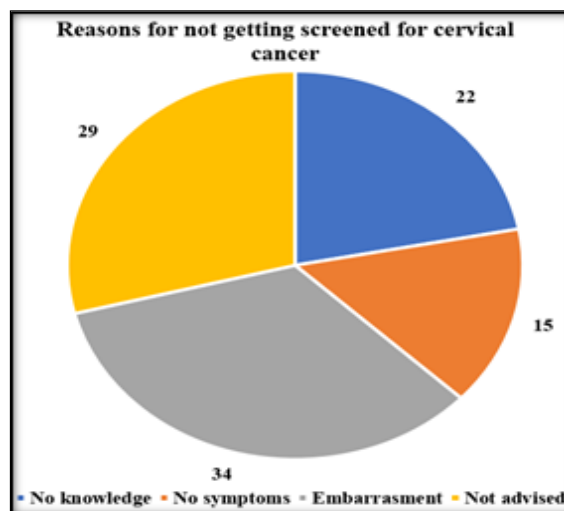


Figure 2: Different reasons given by participants for not being screened for cervical cancer

Table 1: Demographic details of the participants

Sociodemographic characteristics	Number	Percentage
Age (years)		
<35	25	25%
30-39	32	32%
40-49	41	41%
>50	12	12%
Parity		
Nulliparous	8	8%
1-4	57	57%
>5	35	35%
Residency		
Urban	29	29%
Rural	71	71%
Occupation		
Housewife and unemployed	15	15%
Manual worker and employed	78	78%
High rank occupation	7	7%
Level of education		
Illiterate	17	17%
Primary school graduate	48	48%
Secondary school graduate	28	28%
University and high level of education	7	7%
Socioeconomic status (SES)		
Low class	32	32%
Middle class	52	52%
High class	16	16%
Family history of cancer		

Yes	11	11%
No	83	83%
May be	6	6%
Type of contraception		
None	13	13%
Barrier method	21	21%
OCPs	17	17%
Permanent sterilization	44	44%
Others	5	5%

Table 2: Responses related to the knowledge of the participants

KNOWLEDGE	Yes	No
Have you ever heard of PAP smear?	42	58
Have you ever heard of Cervical cancer?	46	54
Have you ever had pap smear done?	26	74
Is cancer cervix curable?	28	72
Is it possible to detect cancer cervix before symptoms appear?	46	54

Table 3: Table depicting the responses related to the attitude of the participants

ATTITUDE	YES	NO
If you were told to get Pap smear done, would you get it done?	58	42
Is Pap smear painful?	36	64
Are you scared of Pap smear results?	45	55
Would you have Pap smear every 3 years?	27	73
Are you shy to get Pap smear done?	43	57
Do we need to conduct cancer cervix awareness programme	62	38

Table 4: Responses related to the perception of the participants

PERCEPTION	YES	NO
Do you believe Pap smear is a useful tool for early detection of cancer cervix?	32	68
Have you undergone cervical screening?	11	89
Have you ever recommended any women to get cancer cervix screening done?	17	83

DISCUSSION

The importance of Pap smears in India lies in their ability to detect cervical cancer precursor lesions at an early stage, thereby reducing the incidence and mortality rates of the disease. However, the uptake of Pap smear testing in India is a problem that can be mitigated by use of targeted interventions to improve access to healthcare services and increase awareness about the importance of cervical cancer screening.^[7] The present study was conducted with the aim to fill this particular gap in knowledge among women.

The participants involved in this study were mainly aged between 30-39 years, had 1 to 4 children, and resided in rural regions. Most of them had a primary school graduate level of education and were employed as manual workers which resulted in them belonging to a middle class on the socioeconomic scale. A previously conducted study reported an association between higher education and better knowledge scores as well as an inverse relationship with residing in rural areas as opposed to urban regions.^[8] Most of the participants in the present study had reported previous history of cancer among family members, they also reported that permanent sterilization was the most common method of contraception.

The results obtained from the participants regarding knowledge related to PAP smears and cervical cancer showed that 42% had previous heard of PAP smears but a majority of them hadn't ever

undergone it themselves (74%). With regard to cervical cancer, more than half of the population (54%) had previous knowledge of cervical cancer but almost three quarters (72%) did not believe that cervical cancer was curable. More than half of them did not believe that cervical cancer can be detected before the symptoms appear.

A study conducted by Ali-Risasi C et al assessed the KAP related to cervical cancer among women living in Kinshasa, the Democratic Republic of Congo and the results showed that 84% of the participants were aware of cervical cancer, however only 9% knew of pap smears and this contrasted the results of the present study.^[8] According to a study done in a low-income neighborhood in Lima, Peru, most participants had favorable views and a high level of awareness regarding Pap screenings and cervical cancer. The majority of participants were aware of the cost of a Pap smear (61.9%), when to start seeking screening (74.6%), how frequently they should obtain Pap smears (89.7%), and whether or not Pap smears are necessary for their health (70.1%). Of premenopausal women, about one-third (29.5%) said they had had a Pap smear within the previous year. However, open ended questions revealed some knowledge gaps around Pap smears, as well as some stigma associated to Human Papilloma Virus (HPV) infection.^[9] A study conducted among Sudanese women predominantly from an urban region reported that fewer than half of the individuals in our study knew enough information on HPV, cervical cancer, and cervical

cancer screening. When developing interventions aiming at enhancing cervical cancer screening for Sudanese women, health education regarding cervical cancer, HPV, and STDs, as well as the role of PST in cervical cancer prevention, is essential.^[10] The varied level of knowledge can be attributed to different levels of education, exposure of valid information, personal experience, socioeconomic factors, cultural beliefs, and attitudes as well as healthcare system factors.^[12,13]

Assessment of the attitude of study participants depicted that 58% would get a PAP smear done if they were advised to. The attitude toward PAP smear with regard to pain, fear of the result and embarrassment was mostly positive. When interviewed on which establishment would give the participants most comfort to undergo a PAP smear, most participants answered to want it to have it done at a women's clinic followed by a gynecologist. A large majority of the participants also reported that they would not have a PAP smear done every 3 years which constituted a negative attitude toward regular screening. However, most of them were receptive to the idea of conducting more cervical cancer awareness programs which could change the attitude to a more positive level. The practice related responses of the participants showed that 68% of them did not believe that PAP smears were a reliable tool for the early detection of cervical cancer. A huge proportion (89%) of them had not undergone screening for cervical cancer and the reason for this underscreening was embarrassment followed by not being consulted to undergo screening, not knowing enough about the procedure, as well as the absence of symptoms. This negative practice finally resulted in most of them not recommending more women to be screened for cervical cancer.

A previously conducted study in the Republic of Congo showed that the level of KAP was low among the participating women.⁸ Among Indian studies, Prateek S et al assessed the knowledge and attitude of women toward Pap smear who attended a medical college and the results showed that only 33% of the women were aware of Pap smears and 10% had obtained scientifically valid information. Also, 65% participants would have undergone the procedure if they were made aware of it.^[15] This result along with that of the present study helps highlight the importance of improving the knowledge of women to empower them to get Pap smears done regularly. A study by Dahiya N et al among women in Delhi showed a lack of awareness in women regarding cervical cancer along with its screening modalities.^[17] However, another Delhi based study by Singh J et al found that women in Delhi were aware of cervical cancer, and that screening programs are accepted when provided at no cost, which is a promising development. The main reason for the lack of support for the HPV vaccine was anxiety over potential side effects. However, including the HPV vaccine into a

government-sponsored immunization program would significantly boost the vaccine's acceptance.^[18] A study conducted in a district located in South India by Anitha S et al reported that most women had a very low level of knowledge and a negative attitude toward Pap smears.^[19] An online survey conducted by Agarwal M et al studied the attitude and perceived barriers among highly educated women toward cervical cancer and the results reported that the participants possessed a favorable attitude towards cervical cancer screening. Nonetheless, there is still a significant disconnect between women's perceptions and practices. This reaffirms the requirement for a well-thought-out health education campaign that emphasizes efficient information, education, and communication (IEC) tactics and fortifies the national screening program through its seamless integration into the healthcare system.^[20]

The drawback of the present study included the low sample size as well as the single centered nature of the study which has an effect on its overall generalizability. The advantages include the inclusion of women from rural regions as the availability of knowledge forming infrastructure is found to be lacking in those regions. The findings of the study underscore the importance of addressing knowledge gaps, improving attitudes towards screening, and overcoming barriers to increase the uptake of Pap smears among women in India. Efforts to enhance education, awareness, and access to screening facilities are crucial in reducing the burden of cervical cancer and improving women's health outcomes in the country. A study conducted by Nagamma T et al in 2020 assessed the effectiveness of audio-visual and print media on the knowledge of women on cervical health and the results showed a significant increase in knowledge post intervention.^[14] Another study by Hombaiah C et al reported the effectiveness of a mHealth-based intervention in significantly improving the knowledge of women about warning signs and symptoms, risk factors of cervical cancer, and HPV vaccination as well as a 5% increase in Pap smear uptake.^[16] These studies show that increased knowledge, attitude and practice can be achieved by implementation of awareness programs which also need to be devised in a way to achieve maximum exposure to the rural population.

CONCLUSION

The results of the present study show that the knowledge and practice of the participants were found to be lacking in certain areas which ultimately resulted in the underuse of screening facilities which could lead to undiagnosed early cervical cancer which could be easily managed. However, the attitude of the participants was favorable which could help in improving the knowledge and practice of women using awareness programs.

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