

A cross sectional study to determine the knowledge and practices of Pap smear test among women

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Cervical cancer is the second most common malignancy among Indian women. Every year, 122 844 women are diagnosed with cervical cancer, with 67 477 dying as a result of it. It primarily affects women between the ages of 15 and 44 who are in the reproductive age group¹. This is primarily due to a delay in early cervical pathology diagnosis and treatment. From September 2017 to February 2018, a descriptive cross-sectional study was undertaken in the Obstetrics and Gynecology OPD at Govt. Erode Medical College, Perundurai, Erode District, Tamilnadu women ≥ 20 years age visiting Obstetrics and Gynecology OPD. The majority of women, 84.4 percent, married after they turned 18 years old (211). And 15.6 percent of the population was under the age of 18. Hinduism was followed by 97.2 percent, Christians by 1.6 percent, and Muslims by 1.2 percent. Doctors were the source of information for 36.3 % of those in our survey, while health workers educated 26 %. 25.9 % got their knowledge from the media, while 14 % got it from relatives and friends. According to our research, the most common reasons for refusing a Pap smear are dread of having to undergo a test (46.7 %) and a delay in receiving the results. When people are asymptomatic and have already been screened, 23 % believe it is unnecessary to go through the process again. They were not ready to acknowledge the requirement for pre-programmed serial screening.

The importance of immunization and the role of the vaccine for the human papillomavirus must also be educated. Given the main reason given by the participants for not having the test, it is critical that all health providers use every opportunity they have with women to educate and encourage them to do so.

Key words: cervical cancer, human papillomavirus, Pap smear test

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Перекрестное исследование по оценке осведомленности о тесте Папаниколау среди женщин

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Рак шейки матки (РШМ) является 2-м по распространенности злокачественным новообразованием среди женщин в Индии. Ежегодно РШМ диагностируется у 122 844 женщин, а 67 477 пациенток умирают от него. Чаще всего РШМ поражает женщин репродуктивного возраста от 15 до 44 лет. Такое распространение заболевания связано в первую очередь с поздней диагностикой патологии шейки матки, а следовательно, несвоевременным лечением. Нами было

проведено описательное перекрестное исследование, куда включались женщины старше 20 лет, которые в период с сентября 2017 по февраль 2018 г. посещали отделение акушерства и гинекологии Государственного медицинского колледжа и больницы Ироду, Перундурай, Ироду, Тамилнад. Большинство из них вступили в брак после того, как им исполнилось 18 лет ($n = 211$; 84,4 %); лишь 15,6 % вступили в брак до 18 лет. Подавляющее большинство (97,2 %) исповедовали индуизм, 1,6 % были христианками, а 1,2 % – мусульманками. При опросе пациенток было установлено, что врачи были основным источником информации для 36,3 % участниц исследования, в то время как 26 % пациенток получали сведения от других медицинских работников. Четверть опрошенных (25,9 %) использовали средства массовой информации, а 14 % женщин узнавали необходимые сведения от знакомых и родственников. Согласно нашим результатам, наиболее распространенными причинами отказа от мазка Папаниколау являются страх перед необходимостью пройти тест (46,7 %) и задержка с получением результатов. Почти каждая 4-я опрошенная женщина (23 %) считала, что, если тест уже пройден и отсутствуют симптомы, повторное прохождение не требуется. Они не были готовы признать необходимость планового многократного скрининга. Необходимо также информировать пациенток о важности иммунизации против РШМ и роли вакцины, направленной на предотвращение папилломавирусной инфекции. Учитывая основную причину, по которой участницы отказывались от прохождения теста, крайне важно приложить все возможные усилия для обучения женщин и поощрения прохождения ими регулярного обследования.

Ключевые слова: рак шейки матки, вирус папилломы человека, тест Папаниколау

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Background

Cervical cancer is the fourth most frequent malignancy in women worldwide. And it's the eighth most frequent cancer overall. In 2018, approximately 570 000 new cases of cervical cancer were diagnosed. Cervical cancer kills around 90 % of women in low- and middle-income nations. Cervical cancer is the second most common malignancy among Indian women. Every year, 122 844 women are diagnosed with cervical cancer, with 67 477 dying as a result of it. It primarily affects women between the ages of 15 and 44 who are in the reproductive age group [1]. This is primarily due to a delay in early cervical pathology diagnosis and treatment. Even when sensitive screening tests and preventive vaccines are available, cancer morbidity and death in developing countries do not decrease in contrast to developed countries. The main reason was a lack of understanding and apprehension about undergoing the necessary screenings and vaccinations [2]. Many studies have revealed that women's understanding of human papillomavirus (HPV), cervical cancer, and screening is quite low. the need of a national cervical cancer screening programme is highlighted by these findings. As a first step, we conducted a study to analyse Pap test (screening process) knowledge and habits among women visiting a medical college hospital in a semi-urban location. The current study focuses on the knowledge and awareness of Pap smear tests and HPV vaccination among women who visit the outpatient gynecology department for a variety of problems [3]. We have been particularly interested in determining why, despite their knowledge, they haven't been tested.

The purpose of this study was to analyze the knowledge and practice of Pap smear test and HPV vaccine among women who visited the medical college hospital's Obstetrics

and Gynecology OPD. To determine if there is a link between determining factors associated to Pap smear test knowledge and practice, as well as the HPV vaccine, among the study population [4].

Materials and methods

From September 2017 to February 2018, a descriptive cross-sectional study was undertaken in the Obstetrics and Gynecology OPD at Govt. Erode Medical College, Perundurai, Erode District, Tamilnadu. Women under the age of 20 who visited the Obstetrics and Gynecology Outpatient Clinic were pre-tested using a pre-designed questionnaire. A skilled doctor conducts a personal interview. The only exceptions were ladies who had a total hysterectomy and women who came in for an emergency. For the investigation, around 250 samples were gathered. GEMCH-Institutional Perundurai's Ethical Committee gave their approval, and the participants gave their verbal agreement while maintaining confidentiality.

Statistical analysis. After validation by experts in the departments of gynecology and community medicine, a pre-tested and pre-designed questionnaire was employed. After establishing a solid relationship, the participants were personally interviewed by qualified clinicians about socio-demographic information, understanding and practice of the Pap smear test, and HPV immunizations. At the conclusion of the workshop, all participants received advice about the screening test and HPV vaccination for cervical cancer. The data gathered was entered into the Microsoft Excel 2010 software. After cleaning the data, SPSS software 17 was used to do statistical analysis. the association between knowledge and awareness on Pap smear test and several determining factors was assessed using frequency tables and the chi-square test.

Results

The questionnaire was administered among 250 women, and their age details are given (table 1).

Table 1. Age distribution of the study population

Таблица 1. Распределение по возрасту в исследуемой популяции

Age, years Возраст, лет	Frequency, n Частота, n	Percentage, % Доля, %
20–40	134	53.6
41–60	104	41.6
>60	12	4.8
Total Всего	250	100

The socio demographic details of the study population namely age, occupation, education, total family income is given in the table 2.

The education of the women. Among the total participants, around 19.6 % have attended the primary school, majority that is 43.2 % have completed middle school, high school, and graduates were 13.2 %, and 19.6 % of the women were illiterates.

Occupation. Nearly half of them around 53.2 % ($n = 134$) were housewife, remaining 47.8 % were engaged in agriculture labour, self-employment, clerical jobs.

Family income per month. Around 40 % ($n = 100$) were earning between 5000–10000 INR. 34.8 % ($n = 87$) are between 10000–20000 INR. Then 18 % ($n = 45$) are <5000 INR and 7.2 % are >20000 INR.

Age at marriage. Most of the women got married after 18 year of age that is 84.4 % ($n = 211$). And 15.6 % were below 18 years.

Age at menarche. About 58.4 % attained menarche before 13 years of age. And 41.6 % were after 13 years of age.

Religion. Around 97.2 % belong to Hinduism, 1.6 % were Christians, and Muslims were 1.2 %.

Parity. Among the total participants 7.6 % had no children, 76.8 % of them had ≤ 2 children, and 15.6 % of them had >2 children.

Awareness of Pap smear. The distribution of women is presented in the table 3.

In our study population most of the women are in 20 to 40 years of age group. And around 60 (24 %) of them were illiterates and only 33 (13.2 %) of them are graduates. Around 18 (7.2 %) are earning more than >20000 INR. Majority of them 243 (97.2 %) were Hindu by religion.

Discussion

Knowledge about Pap smear. Dissecting our review populace the vast majority of them are youthful 20 to 40 years (53 %), finished center school (43 %) with a month to month procuring of 5000 to 10,000 INR (40 %). Among

Table 2. Distribution of socio-demographic profile of study population, $n = 250$

Таблица 2. Социально-демографические характеристики участниц исследования, $n = 250$

Parameter Показатель	Frequency, n Частота, n	Percentage, % Доля, %
Age, years: Возраст, лет:		
20–40	134	53.6
41–60	104	41.6
>60	12	4.8
Education: Образование:		
illiterate неграмотные	60	24.0
primary начальное	49	19.6
middle среднее	108	43.2
graduate высшее	33	13.2
Occupation: Занятость:		
house wife домохозяйка	133	53.2
agriculture сельское хозяйство	20	8.0
self employed самозанятые	31	12.4
clerical канцелярские работники	14	5.6
others другое	52	20.8
Total family income: Общий доход семьи:		
<5000	45	18.0
5000–10000	100	40.0
10000–20000	87	34.8
>20000	18	7.2
Religion: Вероисповедание:		
Hindus индуизм	243	97.2
Christians христианство	4	1.6
Muslims ислам	3	1.2
Age at menarche, years: Возраст начала менструаций, лет:		
>13	104	41.6
<13	146	58.4
Age at marriage, years: Возраст при вступлении в брак, лет:		
<18	39	15.6
>18	211	84.4
Parity: Количество детей:		
no children нет	19	7.6
≤ 2 children ≤ 2 детей	192	76.8
>2 children >2 детей	39	15.6

Table 3. Awareness of Pap smear

Таблица 3. Осведомленность о тесте Папаниколау

Awareness of Pap smear Осведомленность о тесте Папаниколау	Frequency, n Частота, n	Percentage, % Доля, %
Yes Да	77	30.8
No Нет	173	69.2
Underwent Pap smear Прохождение теста Папаниколау	Frequency, n Частота, n	Percentage, % Доля, %
Yes Да	21	8.4
No Нет	229	91.6

these ladies just 30 % ($n = 77$) knew about the Pap smear test and its clinical importance. The greater part of them are in the age bunch 30 to 50 years ($n = 52$) and are house spouses. While contrasting this with other writing in a comparable report from Kerala (1) a higher extent 74 % of populace knew about a screening test, and just 47 % could name it as Pap test. In a review from Uttar Pradesh, India the mindfulness was viewed as 40 %, practically like our study [3]. This might be because of higher education rate in Kerala concentrate on populace which was 64 %. Contrasting it and global investigations, a Turkish report including 332 wedded ladies, shows 90.7 % didn't know about screening test, and just 31 individuals had stepped through the examination somewhere around once [5]. The Pap smear screening inclusion in the age gathering of 18 to 69 years among Indian ladies is 2.6 %, 4.9 % in metropolitan and 2.3 % among rustic. It additionally differs between 4 to 6 % in poor and wealthy in India.

Source of information of the screening test. Source of information is an important parameter to analyze so that awareness can be increased. In our study in 36.3 % the source of information were doctors, 26 % were educated by health workers. 25.9 % obtained their information from media, 14 % from their family and friends. Main source of information as per our observation are health care professionals. On comparing it with a similar study from Mangalore, we find that the major source of information is media followed by health professional [6]. This may be due to higher education status 34 % completed graduation. Our population mostly completed middle school, had their main source of information from health professionals. We can improve the awareness through media education as it would reach more frequently. As almost all women would reach health care professionals at some point of time, health professionals should make it a point to educate, encourage and offer them a screening test for Pap smear. Awareness

should be first made among the health professionals, whenever a woman reaches out to health care this should be taken as an opportunity to educate them about the importance of cancer service screening and HPV vaccination.

Demographic features of women who have undergone screening test. In our study 21 women have undergone Pap smear test at some point of time in their life. On analyzing their characteristics 14 are between 31 to 50 years, 10 people have completed middle school and 5 are graduates; all are Hindus. Our study shows women of middle age, who have at least middle school education, are able to understand the preventive importance and have undergone screening test more compared to others. Hindu women are more aware of this screening and have undergone the same compared to general population.

Similar findings were observed in Kerala study where more than 35 years have undergone Pap screening compared to the younger ones [7]. The International Agency for Research on Cancer (IARC) supports these findings in that women who don't want this screening are mainly due to lack of knowledge, individual psychosocial and cultural beliefs, lack of resources, inability to access health care delivery system and fear or limited family support and community participation [8].

Acceptability of Pap smear test. All the women who participated in our study were created awareness and were offered the Pap screening free of cost. 64 % accepted to undergo the screening and were subjected to the same. 90 women i. e., 36 % were still not willing to take the smear. As per our study the reasons for not accepting Pap smear were fear to undergo a test 47.7 % and delay in getting the report. 23 % felt it unnecessary to undergo screening when they are asymptomatic and have already done it once. They were not ready accepting the need for serial screening programmed [9]. A review article from studies conducted in UK summarizes the factors reducing the participation of women in cervical screening programme are [10]:

1. Poor awareness of the indications and benefits of cervical screening test.
2. Lack of knowledge of cervical cancer and its risk factors.
3. Fear of embarrassment and pain.
4. Lack of female screeners or convenient clinic times.
5. Anxiety caused by receiving an abnormal report.
6. Poor understanding of cervical screening procedures.
7. A need for additional information.

HPV vaccination. HPV is responsible for many cancers including cervical cancer. Fortunately, 2 vaccines are available in India, Gardasil and Cervarix against the cervical cancer. In our study population all the 250 women were asked about awareness about HPV vaccine, only 4.8 % were aware of the vaccine 95 % of the women were unaware of it. Information about the vaccine doctors and health workers were the main source of information 66.6 % [11]. On comparing with a study done among college students from Uttar Pradesh 44 % were aware of the vaccine and its significance.

Better educated young people were more aware of the vaccine. When educated about the importance of vaccination 157 mothers were accepting to vaccinate their daughters. 77 people were not ready to vaccinate their daughters, the main reason being fear followed by the cost of the vaccine.

Conclusion

Knowledge and attitude are the two most component for prevention and control of cervical cancer in women who had never received information about the cervical screening

from any source were more likely not to undergo the screening for Pap smear. In this study, as a commentary on the role of the health care professional and social media in informing, the cultural and religious roots of society should be taken into account. Role of the vaccine for HPV is also need to educated and about the importance of vaccination. Considering the main reason mentioned by the participants for not having the test, it is essential that all health providers consider every contact with the women as an opportunity to educate and encourage them to do regular Pap smear.

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Authors' contributions

M. Indira, N. Sangeetha, P. Kasi Krishna Raja, A.K. Choudhary, K. Sharma: developing the study design, data collecting and analysis, writing the article.

Вклад авторов

M. Indira, N. Sangeetha, P. Kasi Krishna Raja, A.K. Choudhary, K. Sharma: разработка дизайна исследования, сбор и анализ данных, написание статьи.

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