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KNOWLEDGE AND AWARENESS ABOUT CERVICAL CANCER AND SCREENING AMONG WOMEN ATTENDING OPD IN SREE MOOKAMBIKA INSTITUTE OF MEDICAL SCIENCES, KULASEKHARAM- A CROSS- SECTIONAL STUDY

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ABSTRACT

Introduction: Cervical cancer is a leading cause of death among women of reproductive age worldwide, with higher mortality among those lacking follow-up after detection of precancerous lesions. A major factor contributing to mortality is inadequate awareness regarding its preventability, available screening options, and HPV vaccination. Understanding barriers to screening is essential to promote early detection.

Objectives: To assess knowledge and awareness about cervical cancer and screening among women attending OPD in Sree Mookambika Institute Of Medical Sciences, Kulasekharam

Methods: A cross sectional study was conducted among 133 women attending OPD. After obtaining informed consent, data were collected using a pretested questionnaire over three months and analyzed using SPSS.

Results: Among 133 participants, 46.6% were married. Most (94%) had heard of cervical cancer, and 61.7% knew its symptoms, mainly abnormal vaginal bleeding (49.4%) and unusual discharge (31.3%). Only 25.6% had experienced such symptoms. The main information source was the internet (44%). About 75.2% were aware of HPV vaccination, and 49.6% believed women should undergo annual screening. Cost of services was cited as the main barrier (46.6%). The most recognized risk factor was HPV infection (68%). Education significantly influenced participants' knowledge and attitudes, with higher education associated with better awareness of risk factors ($p = 0.006$), symptoms ($p = 0.007$), and a more positive attitude toward HPV vaccination ($p = 0.007$).

Conclusion: Cervical cancer is preventable through timely screening and HPV vaccination. Education enhances awareness and preventive practices, while reducing service costs may improve screening uptake.

Key Words: Cervical Cancer, HPV Vaccine, Reproductive Health, Women Health.

INTRODUCTION

Cervical cancer is one of the major concerns of public health importance in today's world. It is a leading cause of mortality in women of reproductive age group worldwide, mainly in developing countries.^[2] Most of the cervical cancer cases are diagnosed late leading to poor outcomes. Very few studies have explored role of doctor and source of information for awareness of women, about cervical cancer in India.^[1]

The major factors influencing early detection of cervical cancer, and knowledge regarding risk factors, screening, Pap smear and symptoms among women.^[2]

The reported barriers to screening include unawareness of risk factors, symptoms and prevention. Stigma and misconceptions about gynecological disease and lack of National Cervical Cancer Screening Guidelines and Policies.^[4] Cervical cancer has a major impact on woman's lives worldwide and one in every five women suffering from cervical cancer belongs to India.^[5] Cervical cancer-related deaths among women in India are often due to late diagnosis of disease.^[6]

Cervical Cancer is the fourth most common cancer in women, ranking after breast cancer (2.1 million cases), colorectal cancer (0.8 million) and lung cancer (0.7 million). It is the 2nd most leading cause of female cancer among women aged 15-44 years in India. While Cervical Cancer cases are declining in the developed world, they pose a heavy burden on



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developing countries, where the risk of developing Cervical Cancer is 35% greater compared to developed countries.^[8]

About 25% of global mortality due to Cervical Cancer occurs in India. Early detection and treatment via screening can prevent up to 80% of Cervical Cancers in developed countries, where efficient screening programs are in place. According to various reports, in developed countries 68%-84% of women are being screening by Pap smear, but in India this proportion is 2.6%-5% only. This is one of the main reason that in India patients are being diagnosed at advanced stages. The main risk factor for development of Cervical Cancer is infection with human papilloma virus (HPV) types (HPV 16 and HPV 18).^[8]

Knowledge about disease and early screening is the most effective measure for Cervical Cancer prevention.^[6,7] Lack of awareness, negative attitude, and poor practice about Cervical Cancer and screening and preventive methods are the major causes to increase the incidence of disease.^[7,8]

Due to dearth of literature or evidence regarding knowledge, attitude, and practice (KAP) toward Cervical Cancer and its screening in the current geographic region this study was conducted to assess knowledge, attitude and practices related to cervical cancer and screening among women. Which is helpful for designing population-based educational program leading to knowledge enhancement about Cervical Cancer and its screening.

Objectives: To assess knowledge and awareness about cervical cancer and screening among women attending OPD in Sree Mookambika Institute Of Medical Sciences, Kulasekharam

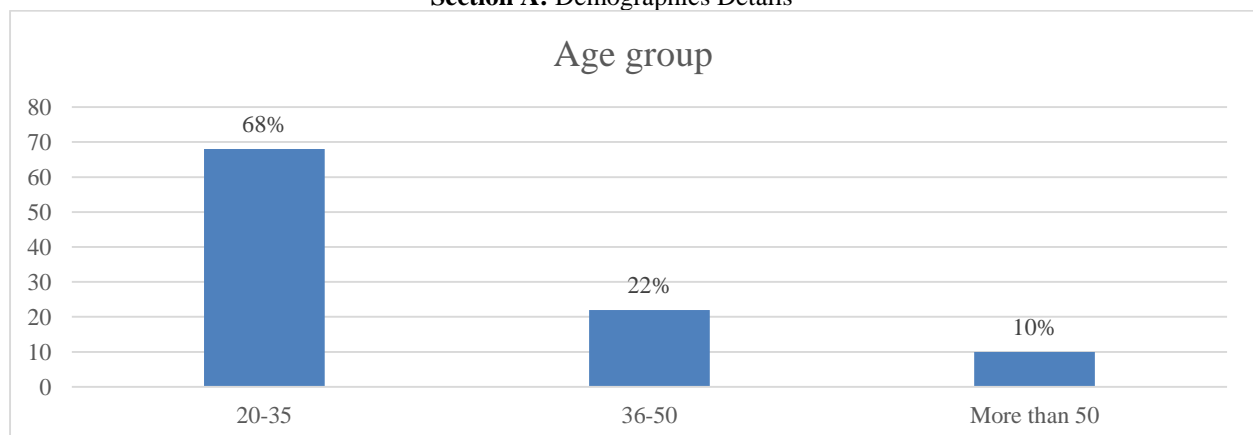
MATERIALS AND METHODS

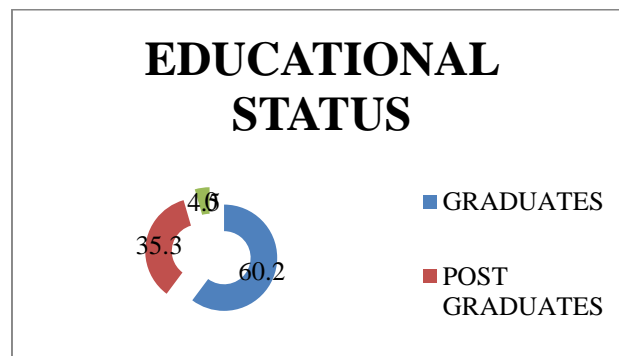
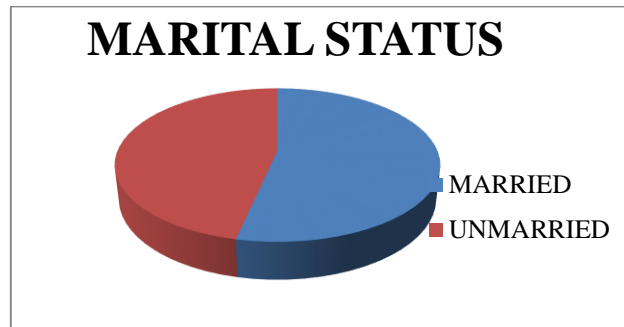
This is a cross-sectional study performed from January to March 2024 in Sree Mookambika Institute of Medical Sciences Tamil Nadu, South India. The ethical approval for conducting this study was obtained from institutional ethics committee. Women Age more than 18 years attending OPD in Sree Mookambika Institute of Medical Sciences, Kulasekharam were included in this study. Women with a current diagnosis of cervical cancer, Participants who are autistic, mentally retarded, and incomplete response were excluded from the study. The target sample size was 85, based on the prevalence value 81.9%, 95% confidence interval and relative precision of 10%. Convenience sampling technique is used in the study. The volunteers were briefed about the objective of the study and their informed consent was taken before participation.

Data collection began after obtaining approval from the institutional ethical committee and informed consent from the participants, 133 women participated in the study. A pre-validated semi-structured, questionnaire was used to collect data from the students. The questionnaire was pre validated by a panel of senior faculty members. A pilot study was done and suitable modifications carried out before finalizing the questionnaire. Questionnaire containing four sections include demographic details, knowledge awareness and attitude of participants towards cervical cancer and screening .The collected data was entered into Microsoft Excel and analyzed using SPSS version 20.

RESULTS

Section A: Demographics Details





Out of 133 participants, 68% from the age group between 20-35. Among respondents 53.4% are

married, 60.2% and 35.3% were graduates and post graduates respectively

Section B: Knowledge

| Assessment Tools | Responses | Frequency | Percentage |
|---|---|-----------|------------|
| Knows Symptoms | Yes | 82 | 61.7% |
| Knows Hpv Vaccination And Prevention Of Cervical Cancer | Yes | 100 | 75.2% |
| Is Screening Important | Yes | 129 | 97% |
| Symptoms Of Cervical Cancer | Abnormal Vaginal Bleeding | 41 | 49.4% |
| | Unusual Vaginal Discharge | 26 | 31.3% |
| | Pain During Intercourse | 11 | 13.3% |
| | Pelvic Pain | 5 | 6% |
| Frequency For Screening | Annually | 66 | 49.6% |
| | Every 3 Years | 38 | 28.6% |
| | Only When Symptomatic | 17 | 12.8% |
| | Every 5 Years | 12 | 9% |
| Barriers For Screening Services | Cost Of Services | 63 | 46.6% |
| | Limited Availability Of Screening Centers | 47 | 36.6% |
| | Distant To Facility | 23 | 16.8% |
| Age At You Heard About Screening | < 20 Years | 64 | 48.1% |
| | >30 Years | 16 | 12% |
| | 20—30 Years | 44 | 33.1% |
| | Never Heard About It | 9 | 6.8% |
| Know The Role Of Family History | Yes | 80 | 60.2% |

Out of 133 participants, majority of the women (61.7%) know about symptoms of cervical cancer. 49.4% mentioned abnormal vaginal bleeding the

common symptoms known to cause cervical cancer. Majority of the participants (75.2%) know about HPV vaccination and cervical cancer prevention.

Most of the participants (49.6%) felt that women should get screened annually, whilst 28.6% of them, felt women should get screened once in 3 years for cervical cancer. Majority of people (97%) thought cervical cancer screening was important. There are various barriers in accessing cervical cancer

screening among that most common issue they faced were cost of services (46.6%) followed by limited availability of screening centers (36.6%) and distant to facilities (16%). Most of the women who heard about cervical cancer screening were <20 years (48.1 %).

Section C: Awareness

| Assessment Tools | Responses | Frequency | Percentage |
|-------------------------------|--------------------------|-----------|------------|
| Heard About Cervical Cancer | Yes | 125 | 94.0% |
| Source | Others | 61 | 48.8% |
| | Internet | 44 | 35.2% |
| | Family And Friends | 17 | 13.6% |
| | Television Or Radio | 3 | 2.4% |
| Is It Preventable | Yes | 114 | 85.7% |
| Aware About Screening Methods | Yes | 92 | 69.2% |
| Risk Factors | Hpv Infection | 66 | 68% |
| | Weakened Immune System | 17 | 17.5% |
| | Early Sexual Activity | 7 | 7.2% |
| | Multiple Sexual Partners | 7 | 7.2% |
| Experienced Any Symptoms | Yes | 34 | 25.6% |

Out of 133 participants, 94% have heard about cervical cancer. Major source of (35.2%) were get information from internet followed by family and friends (17%). Most of them (85.7%) know that cervical cancer is preventable. Among the

respondents most common risk factor that causing cervical cancer were HPV infection (68%), followed by weak immune system (17.5%), early sexual activity and multiple sexual partners (7.2% each). 69.2% aware about screening methods

Section D: Attitude and Practise

| Assessment Tools | Responses | Frequency | Percentage |
|---|----------------------------|-----------|------------|
| Screened In The Past | Yes | 21 | 15.8% |
| Reason For Not Being Screened | Lack Of Awareness | 26 | 23.3% |
| | Cost Of Screening | 45 | 40.3% |
| | Fear Or Anxiety | 39 | 35.4% |
| Received Hpv Vaccine | Yes | 16 | 12% |
| Willingness To Get Vaccinated In Future | Yes | 90 | 67.7% |
| Family History Of Cervical Cancer | Yes | 5 | 3.8% |
| Encouraging Others To Get Screened | Yes | 119 | 89.5% |
| Ever Visited Health Care Provider To Discuss About Cervical Cancer | Yes | 32 | 24.1% |
| What In Your Opinion Is The Best Method To Make The Community Aware About The Importance Of Screening | Community Outreach Program | 47 | 35.3% |
| | Free Screening | 38 | 28.6% |
| | Education Campaign | 44 | 33.1% |
| | Others | 4 | 3.0% |

Out of 133 participants, 15.8% have screened for cervical cancer. Majority of the people have not been screening mainly due to cost of screening (40.3%), followed by fear or anxiety (35.4%) and lack of awareness (23.3%). Only 12% of the participants, received HPV vaccine, and 67.7% of them, were willing to get vaccinated for HPV in future.

This study attempts to assess knowledge, attitude and practices related to cervical cancer and screening among women.

According to our study, (61.7%) women know about symptoms of cervical cancer, whilst 81.9% women had knowledge according to the study conducted by Harshakumar et al.^[1] Abnormal vaginal bleeding (49.4%) was the most common early symptom of cervical cancer knows by them in our study, whilst foul smelling discharge (17.3%)

DISCUSSION

was the symptoms most familiar by the participants in the study conducted by Dahiya N Aggarwal K et al.^[2]

According to our study, 15.8% have screened for cervical cancer, whereas study conducted by Agam B Bansal et al around 9.5% have undergone screening and ParthaBasu et al only 6.2 % have undergone screening.^[7] Based on our study, we observed that various barriers in accessing cervical cancer screening were cost of services (46.6%), limited availability of screening centers (36.6%) and distant to facilities (16%).

According to the study conducted by Agam B Bansal et al only 76.25% of the participants expressed a favorable attitude for screening, while in our study 97% of the participants expressed a favorable attitude. According to our study the major barrier towards accessing screening was cost of services (36.6%) followed by limited availability of screening centers (36.6%).^[7]

Also according to our study, majority of them (35.2%) have heard about cervical cancer from the internet, followed by family and friends (17%), while based on the study conducted by G Narayana et al most of them (41.6%) heard about the same from media.^[6]

The most common risk factor for cervical cancer according to our study was HPV (68%), study done by NehaDahiya et al (12.7%) reported tobacco and smoking as the most common risk factor associated with cervical cancer.^[2] In our study Most of participants (67.7%) are willing to get HPV vaccination in future, while only 12% of the participants received HPV vaccine.

Limitation of the study was it included only a single geographical area. The study would have included people from other geographical areas other than Kulasekharam. The participants were allowed to fill the questionnaire independently but the influence of family and friends cannot be ruled out.

CONCLUSION

Cervical cancer is one of the major concerns of public health importance in today's world. Fortunately it has a long premalignant period that provides an opportunity for screening and treating before it turns to be invasive Cervical Cancer. In this study conducted among women attending SMIMS OPD, 61.7% women have an idea about the symptoms of cervical cancer. Thus, majority of women have a brief idea about the symptoms of cervical cancer. The commonly known symptoms are abnormal vaginal bleeding and foul- smelling discharge. Also, a fair percentage of women are willing to undergo screening for cervical cancer, though the actual population who has undergone screening is comparatively less. The major barriers for screening are cost of services, followed by anxiety and lack of awareness. Internet was the most

common modality from which people had heard about cervical cancer and its screening, followed by media.

Recommendation

Comprehensive health education programmes should be strengthened to improve women's knowledge regarding cervical cancer, its risk factors, symptoms, screening, and HPV vaccination. Cervical cancer screening services should be made more accessible and affordable through expansion of free screening facilities at primary healthcare centres and regular community outreach camps. Opportunistic screening and counselling should be integrated into routine reproductive and maternal health services. Implementation of the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD), Ayushman Bharat Health and Wellness Centres, National Health Mission initiatives, and the Government of India's HPV vaccination programme should be further strengthened to improve screening uptake and vaccination coverage. Healthcare providers should also receive regular training to address misconceptions, alleviate fear associated with screening, and encourage early detection and prevention of cervical cancer.

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