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Awareness Regarding Cervical Cancer and Preventive Practices Among Rural Married Women of Kancheepuram District, Tamil NaduGeetha Mani¹, Kalaivani Annadurai², Raja Danasekaran³

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Abstract:

Introduction: Cervical cancer is the commonest malignancy among Indian women causing high mortality and considerable socioeconomic burden. In developing countries like India primary and secondary prevention in the form of risk reduction and screening for precancerous lesions respectively offers the best hope for control of the disease. The success of preventive strategies depends on awareness and utilization of the services by the women.

Objectives: To assess the awareness regarding cervical cancer and preventive

practices related to cervical cancer among rural women in a selected area of Tamil Nadu. **Materials and methods:** This was a descriptive, cross-sectional study conducted among 100 women attending a rural health centre, in Kancheepuram district, Tamil Nadu between May and July 2012, using a semi-structured schedule.

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Results: Among the 100 participants, 74% were aware of the term cervical cancer. This awareness was positively associated with higher levels of education, socioeconomic status and occupational status ($p < 0.05$). Awareness about symptoms (29.7%), risk factors (1.35%), Pap smear (14.9%), other screening methods (13.5%) and treatment (4%) was low. None of the participants were aware of human papilloma virus (HPV) vaccine and none had undergone screening or immunisation with HPV. **Conclusion:** The awareness about cervical cancer and utilization of screening services was very

low among the participants. This emphasises the need for integrating extensive awareness building measures in cancer control programmes. A multi-pronged approach is essential to cover women belonging to various socioeconomic subgroups. **Key words:** Awareness; cervical cancer; cervical cancer screening; human papilloma virus vaccine; Pap smear.

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Introduction:

Cancer cervix has been the commonest malignancy among women in India over the past two decades.^[1] It is estimated that approximately 1.34 lakh new cases of cervical cancer are diagnosed and the disease kills an estimated 72825 Indian women in a year, accounting for nearly one-third of global cervical cancer deaths.^[2] Apart from mortality and morbidity, cancer cervix also causes loss of productive life. Women aged 25 to 64 years, tend to be sole caretakers in the family, and sometimes significant contributors to family income. Any occurrence of cancer cervix in such families poses a heavy economic burden. Additionally the high costs on treatment of cervical cancer incurred by the families further impoverish them.^[3] Considering the high physical, psychological and socioeconomic burden related to cervical cancer, a comprehensive disease control initiative – combination of improved screening and treatment of precancerous lesions (secondary prevention) with effective HPV vaccination and health education focussing on risk-reduction behaviours (primary prevention) has the best potential to significantly reduce the burden of cancer of cervix.^[4, 5,6] Vaccination with Human Papilloma virus vaccine and early screening of the disease by cytology has

markedly reduced mortality and morbidity from the disease in developed countries.^[7] But in developing countries like India, vaccine is expensive and cytology is resource intensive in terms of infrastructure, equipment and manpower. Only 2.6% of women in the age group 18 to 69 years undergo cervical cancer screening at recommended intervals in India.^[8] Government of India has incorporated cost effective, alternate screening strategies such as Visual inspection with acetic acid (VIA), visual inspection with Lugol's Iodine (VILI), in community and camp based screening programmes under the National Programme for prevention and control of cancer, cardiovascular diseases, diabetes and stroke (NPCDCS).^[9] For successful implementation of preventive strategies and significant reduction in the burden of disease, there should be active participation by the target group. The women should be made aware of the disease, the preventive measures and the availability of screening methods. The WHO report on comprehensive cervical cancer control prescribes that an awareness component regarding the cancer, risk factors and prevention should be made an integral part of any cancer control programme.^[10] But studies in various parts of India indicate

lack of awareness regarding cervical cancer and preventive measures among women.^[11] Awareness studies among the target group would help in planning appropriate interventional tools and assessing their impact. There is paucity of studies assessing cancer cervix related awareness and

screening practices among women in Tamil Nadu. Our objective was to assess the awareness regarding cervical cancer and preventive practices related to cervical cancer among rural women in a selected area of Tamil Nadu.

Materials & Methods:

This is a descriptive, cross-sectional study conducted among women attending maternal and child health clinic attached to a rural health centre of a medical college in Kancheepuram district during the period of May to July 2012. The sample size was calculated using the formula, $N = Z^2pq/d^2$. Assuming a 50% prevalence of knowledge, and 10% absolute error (d), the sample size was calculated as 96. The number of women attending the clinic per day was 10 to 15. First respondent was chosen randomly and the other respondents were selected systematically each day to get a final sample size of 100. If any participant was not willing to participate, the next respondent in the systematic selection list was chosen.

A semi-structured schedule was designed based on the objectives. The schedule was divided into 3 parts, Part- I concerned with information regarding the basic socio-

demographic characteristics, Part-II consisting of questions about knowledge on cervical cancer and Part-III related to questions on preventive practices among women.

The study was conducted after obtaining necessary approval from concerned authorities. Informed consent was obtained from the participants after they were explained about the study and ensured full confidentiality.

The data was entered in Microsoft Office Excel Version 2007 and statistical analysis was done using Statistical Package for Social Sciences (SPSS), Version 16. Descriptive statistics were expressed as frequency and percentages. Categorical variables were analysed using Chi-square test. P value of less than 0.05 was considered significant.

Results:

A total of 100 women participated in the study. The basic demographic characteristics of the study population are shown in Table 1.

Table 1: Distribution of study population according to awareness about the term cervical cancer with respect to socio demographic variables

Variable	number of respondents (n=100)	Heard about Cervical cancer (n=74)	Chi-square value	P value
Age distribution				
≤ 30 years	3	3 (100)	3.651	0.161
31-40 years	22	19 (86.4)		
> 40 years	75	52 (69.3)		
Education status				
Illiterate	50	30 (60)	10.861	0.028[†]
Primary	12	10 (83.3)		
Middle	23	20 (87)		
Higher secondary	8	7 (87.5)		
College	7	7 (100)		
Occupational status				
House wife	53	37 (69.8)	7.372	0.025[†]
Farmer	20	12 (60)		
SHG member*	27	25 (92.6)		
Socioeconomic status[†]				
Lower middle	2	2 (100)	7.222	0.017[†]
Upper lower	44	38 (86.4)		
Lower	54	34 (63)		

The respondents were enquired about the source of information for cervical cancer. Television was the main source of information (38 out of 74, 51.3%). The other

sources were health education in schools in 20 (27%), health workers in 13 (17.6%), friends or relatives in 3 (4%).

Table 2: Knowledge about cervical cancer (n= 74)

Variables	Frequency	Percentage
Symptoms	22	29.7%
Risk factors	1	1.35%
Pap smear	11	14.9%

Other screening methods	10	13.5%
HPV Vaccine	0	0
Treatment	3	4%

Though close to 96% of those who were aware of cervical cancer had received the information from reliable sources like television, health worker or planned health education programmes in schools, the

knowledge about the risk factors, screening practices, vaccination was very poor. None of the participants had undergone any screening practices or vaccination for protection against cervical cancer.

Discussion:

In this study, where 50% of the women were literate, only 74 participants (74%) were aware of the term cervical cancer. Aswathy et al in a study in rural Kerala also reported that 72.1% of the women were aware of cervical cancer.^[12] This is much lower than the level of awareness reported by Raychaudhuri et al in rural West Bengal (87.3%)^[11]. The picture is identical in many developing countries. Shrestha S et al reported similar low level of knowledge about cervical cancer among women in Nepal.^[13]

The main source of information about cervical cancer as reported by participants was television followed by health education in schools and by health workers. This picture is slightly different from that reported by Raychaudhuri et al where friends were the major source of information followed by mass media.^[11]

29.7% of the participants were aware about the symptoms of cervical cancer, 1.3% about the risk factors of the disease. 14.9% of the population are aware of pap smear, 13.5% have heard of other screening methods like VIA and VILI. None of the participants were aware of HPV vaccine and only 4% were aware of any treatment option available. None of the participants have undergone any screening procedures for

cervical cancer. Health seeking behaviour of an individual depends on the level of awareness and their perceived risk towards the disease. So the poor preventive practices among our participants are reflective of the low level of awareness about the disease. This overall lack of awareness is similar to that observed by Raychaudhuri et al and Aswathy S et al.^[11, 12] Aswathy et al in their study in rural Kerala report that despite low level of awareness, 6.9% of the participants had undergone screening for cervical cancer compared to our study population.^[12]

Analysing the prevalence of awareness about the term cervical cancer among subgroups of the basic sociodemographic variables, the level of awareness was found to improve with increasing educational status, socioeconomic status and occupational status and these associations were found to be statistically significant ($p < 0.05$). Those who had higher level of education and better socioeconomic status had higher level of awareness. A higher proportion of women in self help groups were aware of cancer cervix compared unemployed women and those working in fields. Al-Meer et al and Vasconcelos et al also report higher level of awareness with higher educational status and occupation.^[14, 15] This emphasises the need for educating and empowering the women, to equip

themselves with information seeking and decision making skills.

The low level of awareness in our study was also accompanied by non-utilization of preventive services. Various studies have found that the adoption of preventive services was associated with the level of knowledge about the disease and the

availability of screening services. Jayant et al and Sankaranarayanan et al have reported significant improvement in preventive and protective practices with adequate awareness.^[16, 17] Kahesa et al in their study in Tanzania reported that knowledge about cancer and existing screening programmes was associated with increased acceptance rates.^[18]

Conclusion:

Our study shows that the overall awareness about cervical cancer and its prevention in this population is very low. Health education should be provided along with screening and precancer treatment services as an integrated service at primary health care level. Multi-pronged efforts are needed in awareness building among the population. Mass media should be utilized to spread essential information regarding the disease and the preventive measures among the rural

population. Health workers should be trained in imparting accurate and consistent information to improve target group participation in preventive services.

Competing interests: The authors declare that they have no competing interests.

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