International Journal of Community Medicine and Public Health
Banik S et al. Int J Community Med Public Health. 2022 Feb;9(2):763-766
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040
DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20220236

Original Research Article

Knowledge and practice regarding cervical cancer prevention among women in a rural area of Tripura, India

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Received: 16 November 2021
Accepted: 07 January 2022

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ABSTRACT

Background: Cervical cancer is commonest in developing countries and the third most common form of cancer among women worldwide which presents a later stage causing high morbidity and mortality. PAP smear discovered in 1941 was a revolutionary screening test but acceptance is poor. Objective was to detect the level of awareness regarding prevention of cervical cancer among rural women and to study the determinants of awareness regarding prevention of cervical cancer.
Methods: A community based cross-sectional study was conducted in rural field practice area of Agartala Government Medical College for two months among 131 women chosen by multistage sampling, aged 15 years and above. Quantitative data were collected by administering a structured interview schedule. Chi square test was applied for testing the significance of study findings and $p<0.05$ was considered statistically significant.
Results: About 78% of the study women were primary educated and 33.3% of the study women have heard about cervical cancer and health care providers were the source of information for 34.04% of the respondents. 99.2% of the women didn't hear about PAP smear, nor they have any idea of vaccination. They didn't undergo any screening test and cited "absence of symptoms" as the main reason.
Conclusions: Majority of the studied women didn't have any clear idea of cervical cancer, screening and vaccination and level of awareness was very low. Intensified health educational programs should be launched. Health workers and physicians must play critical role in counselling. Information about safety, efficacy, insurance coverage etc. to be facilitated for active HPV vaccination.

Keywords: Awareness, Cervical carcinoma, HPV, PAP smear, Vaccination

INTRODUCTION

Cervical cancer is the third most common form of cancer among women worldwide which is one of the most preventable malignancies.[1,2] In developing countries, it is the commonest female malignancy and very little change has occurred in its incidence.[3,4] Morbidity and mortality are high because most women present at an advanced stage of the disease.[5] The concept of cervical smears was first described by Papanicolaou and Traut in 1941 and since then screening for cervical cancer has been one of the few tests which have been shown to be able to directly reduce mortality and morbidity.[6] It is claimed that the majority of cervical cancers could be prevented if all women were offered and complied with high quality cytological screening programs.[7] But to achieve this, there must be a high rate of acceptance by women. In many developed countries where sophisticated screening programmes are established, cervical cancer has decreased considerably.[8] In many developing countries, women's knowledge of cervical cancer is very limited. It has been demonstrated that the vast majority of women in some countries have not heard about cervical cancer and even knew nothing about cervical screening.[9,10]

Demographic factors such as age, education and ethnicity, and psychosocial factors such as social class, personality, embarrassment, fear and lack of health insurance, and also structural factors such as beliefs, attitude and knowledge about the disease and the smear test have been documented as determinants of an individual's participation in cancer screening.[11,12]

In developing countries, women's knowledge of cervical cancer is very limited. There is no previous study in this area that has assessed the knowledge and awareness regarding cervical cancer among females attending a health centre. Therefore, this study was designed to assess knowledge and awareness regarding prevention of cervical cancer among women in a rural area of Tripura and also to define the determinants of awareness regarding prevention of cervical cancer.

METHODS

A community based cross-sectional study was conducted between February to March 2013. The study was conducted in Mohanpur block which was the rural field practice area of Agartala Government Medical College.

Inclusion criteria

Women aged 15 years and above residing in the study area were included in the study.

Exclusion criteria

The women who were not willing to participate and those who were physically or mentally unfit to make valid statement were excluded.

Multistage random sampling was adopted to select the individual participants. Assuming poor cervical cancer awareness among 36.6% of the participants, precision of 8%, α error of 5%, and non-response rate of 5%, the sample size was calculated to be 131.[13]

A semi-structured questionnaire was used to gather information regarding sociodemographic characteristics, KAP (knowledge, attitude, practice) toward cervical, and its screening. The questionnaire was pre-tested in a sample of 30 in a similar population other than the study area. Only the respondents who knew what is a cancer and that cervix is a part of female reproductive organ were interviewed to prevent information bias. Being accompanied by the ANM and MSW, selected women were paid home visits and informed written consent was sought from them. Then the consenting women were interviewed confidentially. Information thus collected was entered in the interview schedule.

Institute Ethics Committee of Agartala Government Medical College has approved the study.

Data entry was conducted using Microsoft excel and analysis was done in computer using Statistical Package for Social Sciences version 20. The categorical variables were presented as proportions or percentages. Continuous variables were presented as mean and standard deviation. P value of less than 0.05 was considered as statistically significant.

RESULTS

Table 1 shows that most of the study women were housewives (76.30%, n=100) and studied up to primary level (77.90%, n=102) as shown in Table 2.

Table 1: Sociodemographic profile of the study women (n=131).

Characteristics	Subgroups	N (%)
Educational qualification	Illiterate	13 (9.9)
	Primary school	102 (77.8)
	Secondary school	12 (9.2)
	Graduate and above	4 (3.1)
Religion	Hindu	127 (96.9)
	Christian	4 (3.1)
Occupation	Housewife	100 (76.3)
	Service	2 (1.5)
	Self-employed	17 (13.0)
	Labourer	12 (9.2)
Family type	Nuclear	37 (28.2)
	Joint	94 (71.8)
Marital status	Married	115 (87.8)
	Unmarried	16 (12.2)

Most of them belonged to joint families (71.80%, n=94) and were Hindu (96.90%, n=127) by religion (Table 1). Mean age, mean age at marriage and median monthly income of the respondents were 25±32 years, 18±47 years and Rs. 4000 respectively. It was found that 47 (35.88%) of the study women have heard about cervical cancer. Friends, health care providers, and media were the sources of information for 18 (38.30%), 16 (34.04%) and 13 (27.66%) of the respondents, respectively. Only 9 (6.87%) women knew cervical cancer as a preventable disease. Awareness of cervical cancer was associated with family type. All other demographic variables had no significant association with cervical cancer awareness and preventability (Table 2).

Multiple sexual partners, early sexual exposure, poor personal hygiene, contraceptive use and heredity as risk factor was known to 26.72%, 23.66%, 32.06%, 16.03%, and 16.03%, respectively (Figure 1). All the married women had only one sex partner except one, who refused to disclose her status. Among the married women, 19 were nulliparous, 46 had one and 50 had multiple children. Among the unmarried, only one had the experience of sex, 12 had no experience and three refused to answer. Irrespective of marital status, 46 (35.10%) the women were using contraception, 84 (64.10%) were not

using and 1 (0.80%) refused to answer. As many as 19.80% (n=26) women had abortion some point of time and most of these abortions were spontaneous in nature. None of the participant had ever undergone any screening for cervical cancer.

Table 2: Association of knowledge of cervical cancer by literacy, occupation, type of family and marital status of the study women.

Variables	Subgroups	Heard of cervical cancer N (%)	Not heard of cervical cancer N (%)	P value	Preventable N (%)	Not preventable N (%)	P value
Literacy	Illiterate and primary educated	38 (33.0)	77 (67.0)	0.124	8 (6.9)	107 (93.1)	0.912
	Secondary and higher educated	9 (56.3)	7 (43.7)		1 (6.25)	15 (93.75)	
Occupation	Housewife	34 (34.0)	66 (66.0)	0.554	6 (6.00)	94 (94.00)	0.479
	Working and self employed	13 (41.9)	18 (58.1)		3 (9.68)	28 (90.32)	
Family type	Joint family	28 (29.7)	66 (70.3)	0.034	8 (8.51)	86 (91.49)	0.236
	Nuclear family	19 (51.3)	18 (48.6)		1 (2.70)	36 (97.30)	
Marital status	Married	42 (36.5)	73 (63.5)	0.893	8 (6.95)	107 (93.05)	0.916
	Unmarried	5 (31.3)	11 (68.7)		1 (6.25)	15 (93.75)	

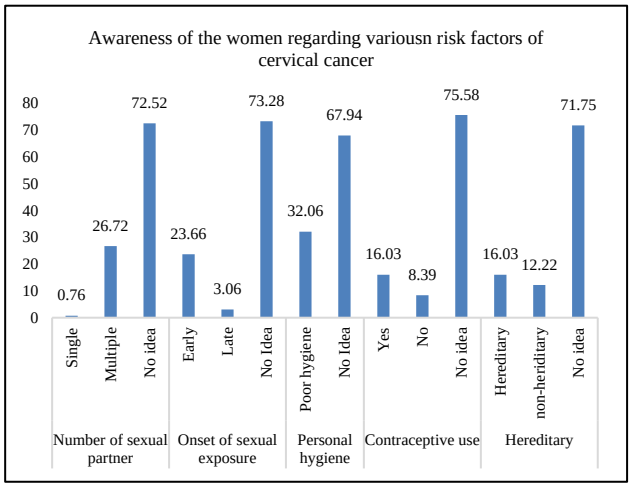

Figure 1: Awareness of the women regarding various risk factors of cervical cancer.

DISCUSSION

The study grants an overview on the rural Indian women's outlook towards cervical cancer. The limitations include reluctance of the women to completely disclose their sexual practices in the rural set up where majority of the women hesitate to even speak to strangers. Poor knowledge regarding cervical cancer was reported among Indian women.

The majority of women had primary education (77.90%) among whom only 33.04% had heard of cervical cancer. It is similar to study by Amarin et al where the level of primary education was 80% and the knowledge regarding cervical cancer was 33.33%.[14] Among the participants, none had gone for any type of screening for cervical cancer and they were not aware of PAP smear examination. This situation is comparable to certain community-based studies from Cambodia, and Nepal, that reported a small proportion of women participation in screening of cancer cervix (ranged from 7.1% to 13.6%) (15,16) and few previous Indian studies also reported a lower percentage (6.9% to 13.4%).[17-19] This smaller number of women taking part in screening practice probably could be due to lack of education along with poor health-seeking behaviour, their dependence on males for traveling to health care centres and also non-availability of organized cancer screening facilities. Health care providers were the source of information for 34.04% of the respondents in our study, which is similar to the results of study conducted by Ulman-Włodarz et al.[20] On the other hand, media was reported as the most common source of information on cervical cancer by many of the earlier studies where health care providers took second seat.[17,21,22] This shows the need of health education and awareness program related to cervical cancer.

The study was first of its kind in assessing knowledge and practice regarding cervical cancer in the north-east state, Tripura. However, there are few limitations to the study. Reluctance of the respondents could be a source of information bias.

CONCLUSION

Knowledge and practice of cervical cancer among the rural women was poor. This can hamper the uptake of cancer screening services under cancer control programme. Health care providers and female health workers need to take the initiative for creating cervical

cancer awareness. Government needs to be proactive in conducting awareness programme.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Banik S, Sahu DP, Bhattacharjya H. Knowledge and practice regarding cervical cancer prevention among women in a rural area of Tripura, India. Int J Community Med Public Health 2022;9:763-6.