### **Original Research Article**

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# Awareness of sexually transmitted infections and cervical cancer among husbands in urban slums of Mumbai, India

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### **ABSTRACT**

**Background:** Cervical cancer is the most common cancer among women, 80 percent of cervical cancer cases present with an advanced stage of the disease when cure is impossible. This may be due to lack of awareness and knowledge, lack of access to proper treatment including screening facility. Cervical cancer does not always cause symptoms during initial stage. Pap smear test helps in early diagnosis of cervical cancer and hence is successful in treatment. In recent years, there has been a growing interest in involving men into reproductive health to improve health outcomes as often husband is the leading decision maker in almost all the areas. The present paper examines the knowledge, attitude, practice and health seeking behaviour about sexually transmitted infections (STIs) and cervical cancer among husbands in a slum community of Mumbai.

**Methods:** Baseline data from an intervention study entitled "Enhancing knowledge and promoting health seeking behaviour of couples on sexually transmitted infections and cervical cancer in urban slums of Mumbai" is used for this article. This data was collected from a random sample of 1958 husbands whose wives age was between 18-49 years, through a semi-structured interview schedule from two urban slums of Mumbai. Information was collected on socio-economic and demographic characters, awareness and symptoms of STIs and Cervical cancer, and health seeking behaviour.

**Results:** About 76 percent husbands heard about the infections transmitted through sexual intercourse, 95.4 percent were aware of cancer whereas only 8.5 percent husbands were aware of cervical cancer and 0.3 percent were aware of Pap smear to detect the cervical cancer. About 3 percent husbands experienced at least one symptom of STIs six months prior to survey, 7.3 percent husbands reported of having sexual partner other than spouse. Most husbands were not aware of STIs symptoms specific to wives.

**Conclusions:** There is a need for disseminating knowledge regarding STI symptoms, cervical cancer and Pap smear test for early detection of cervical cancer as well as promoting better health seeking behaviour with respect to cervical cancer and STIs. Considering sensitivity of the topic it is necessary to design separate programmes for men.

Keywords: Awareness, Cervical cancer, Pap smear test, STIs, Husbands

### INTRODUCTION

Cervical cancer is the most common cancer among women in 45 countries, with globally estimated more than 500,000 new cases and 270,000 deaths every year. Current estimates indicates 1,22,844 new cases and

67,477 deaths annually due to cervical cancer in India.<sup>2</sup> This may be due to lack of awareness and knowledge, lack of access to proper treatment including screening facility. Successful treatment depends on early diagnosis of cervical cancer.<sup>3</sup> Pap smear screening for the early detection of pre-cancerous lesions is cost-effective and

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well-established technique currently available and used globally. It also has additional benefit in detection of some the common sexually transmitted infections in single smear.<sup>4</sup>

There is lack of information in the scientific literature regarding men's knowledge, attitudes, and beliefs about cervical cancer and the roles that they may play in cervical cancer prevention.<sup>5</sup> Psychological barriers, including the lack of spousal support, can impede a woman's access to cervical cancer screenings.<sup>6-8</sup> There has been a growing interest in integrating men into reproductive health in recent years. Number of studies on reproductive health in developing countries has suggested that involving men in reproductive health improves health outcomes.<sup>9-12</sup>

It is important to determine husbands' knowledge and beliefs about cervical cancer and Pap smear screening test so that targeted interventions can be developed to increase their knowledge about cervical cancer and increase spousal support for cervical cancer screening. In this regard, the current paper tries to investigate the knowledge attitude, practice and health seeking behaviour about sexually transmitted infections (STIs) and cervical cancer among husbands in a slum community in Mumbai.

#### **METHODS**

Baseline data of husbands was drawn from an intervention study entitled "Enhancing knowledge and promoting health seeking behaviour of couples on sexually transmitted infections and cervical cancer in urban slums of Mumbai" for this article. Two maternity homes, Savitribai Phule Maternity Home, Bhandup and Dr. Babasaheb Ambedkar Maternity home, Vikhroli, of Municipal Corporation of Greater Mumbai (MCGM) were selected for the above study. Simple random sampling method was used to select married men with wives age between 18 to 49 years and currently cohabiting with wife. A total of 1958 married men were interviewed face-to-face, using semi-structured interview schedule by male social workers during October 2010 to February 2011. Data was collected on socio-economic and demographic information, awareness of cervical cancer and STIs, experience of symptoms of STIs, and sexual and reproductive health seeking behaviour. Descriptive statistics and cross tabulation was used to analyses data. Chi-square test was used to see the differences in proportion. SPSS version 19 was used for data analysis.

### RESULTS

### Socio-demographic characteristics of the respondents

Table 1 presents demographic characteristics of study participants. Majority (52.7%) of respondents were aged less than 40 years old. The mean (±SD) age of respondents was 38.62 (±8.39) years. Little more than

half of respondents (52.3%) married at the age less than 25 years. The mean ( $\pm$ SD) age at marriage of respondents was 24.48 ( $\pm 4.05$ ) years. About 75 percent of respondents were Hindu, 12.5 percent were Muslim and 12.9 percent belonged to Christian, Buddist and other communities. Majority (46.6%) had education at secondary level followed by 32.8 percent had education at graduation level, 17.6 percent had education at primary level whereas only 3 percent of respondents were illiterate. The mean ( $\pm$ SD) education of respondents was 9.79 ( $\pm$ 3.40) years. Regarding occupation; little more than one-thirds of respondents (34.5%) were working on unskilled job followed by 30.1 percent were working technical/skilled job, 18 percent had white collar job, 14.7 percent were involved in Business whereas only 2.7 percent of respondents were working in semi-skilled jobs. Majority (47%) respondents had family income between Rs. 3001-6999 followed by 45.7 percent had family income Rs. 7000/- and above and only 7.3 percent had family income up to Rs. 3000/-. The mean (±SD) family income was Rs. 8047.84 ( $\pm 6133.66$ ), median of family income was Rs. 6000/- and mode of family income was Rs. 5000/-.

Table 1: Socio-demographic characteristics of the respondents.

Socio-demographic characteristics	Number	Percent
Current Age		
Less than 40 years	1032	52.7
40 years and more	926	47.3
Age at Marriage		
Less than 25 years	1024	52.3
25-29 years	708	36.2
30-39 years	226	11.5
Religion		
Hindu	1461	74.6
Muslim	245	12.5
Christian	50	2.6
Buddist	168	8.6
Other	34	1.7
Education		
Illiterate	60	3.0
Primary	344	17.6
Secondary	912	46.6
Higher secondary and above	642	32.8
Occupation		
White collar	352	18.0
Technical/Skilled	591	30.1
Semi-skilled	53	2.7
Unskilled	675	34.5
Business	287	14.7
Family income (Rs.)		
Up to 3000	142	7.3
3001-6999	921	47.0
7000 and above	895	45.7

### Awareness of STIs, cancer, cervical cancer and pap smear test

Of the total 1958 respondents; 75.6 percent respondents were aware of STIs, 95.4 percent were aware of Cancer whereas, 8.5 percent were aware of cervical cancer and only 0.3 percent respondents were aware of Pap smear test.

### Awareness of symptoms of STIs

Study participants were asked about different symptoms of STIs. Majority (67.8%) of respondents were aware of itching/ redness in/ around genital area followed by 62.9 percent were aware of burning sensation during urination, 60.9 percent were aware of pain during intercourse, 50.4 percent were aware of genital lesion (sores/ulcer/warts), 6 percent were aware of genital discharge in men, 3.4 percent were aware of abnormal discharge from vagina, 4.4 percent were aware of lower abdominal pain only 2.1 percent were aware of abnormal vaginal bleeding (Figure 1).

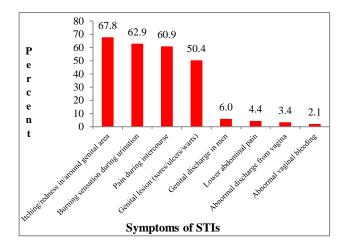


Figure 1: Awareness of symptoms of STIs.

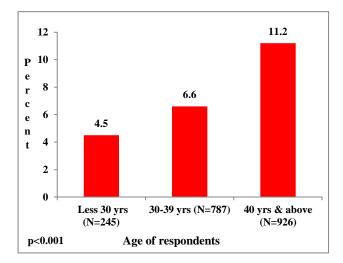


Figure 2: Awareness of cervical cancer by age of respondents.

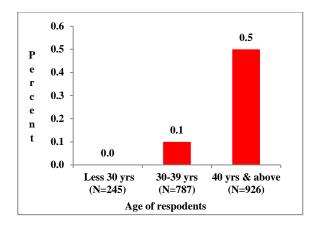


Figure 3: Awareness of pap smear test by age of respondents.

### Awareness of cervical cancer and pap smears by age of the respondents

About 5 percent of respondents aged up to 29 years followed by 6.6 percent of respondents aged 30-39 and 11.2 percent of respondents aged 40 years and above were aware of cervical cancer (Figure 2). Only 0.1 percent of respondents aged 30-39 years and 0.5 percent of respondents aged 40 years and above was aware of pap smear test. There was no one from the age group up to 29 years who was aware of pap smear test (Figure 3). Significant difference with increasing trend was observed in awareness about cervical cancer (p<0.001), whereas there was no significant difference in awareness of pap smear test with respect to the age of observed respondents.

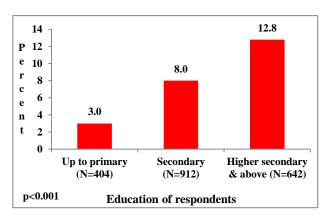


Figure 4: Awareness of cervical cancer by education of respondents.

## Awareness of cervical cancer and pap smears by education of the respondents

Three percent of respondents with education up to primary level (0-7), 8 percent of respondents with education secondary level (8-10) and 12.8 percent respondents with higher secondary and above (11 and above) were aware of cervical cancer. Significant difference (p<0.001) with increasing trend was observed

in awareness of cervical cancer with respect to education of respondents (Figure 4).

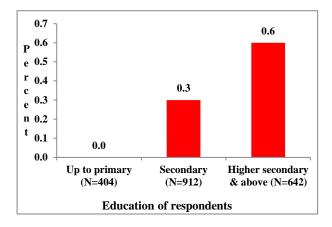


Figure 5: Awareness of pap smear test by education of respondents.

Regarding awareness of pap smear test; 0.3 percent of respondents with secondary level education and 0.6 percent respondents with education higher secondary and above were aware of pap smear test, whereas no respondents with education up to primary level were aware of pap smear test. No significant difference was observed in awareness of pap smear test with respect to education of respondents (Figure 5).

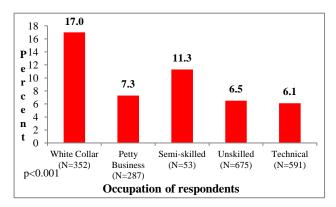


Figure 6: Awareness of cervical cancer by occupation of respondents.

### Awareness of cervical cancer and pap smears by occupation of the respondents

Seventeen percent of respondents with white collar job, 7.3 percent with involvement in petty business, 11.3 percent with semi-skilled job, 6.5 percent with unskilled job and 6.1 percent with technical job were aware of cervical cancer. Significant difference was observed in awareness of cervical cancer with respect to occupation of respondents (Figure 6). Regarding awareness of pap smear test; 0.9 percent of respondents with white collar job, 0.3 percent with un-skilled job and 0.2 percent with technical job were aware of pap smear test, whereas no

one with petty business or working on semi-skilled job were aware of pap smear test.

### Sexual behaviour and experience of STIs symptoms

About 7 percent of respondents had history of sex with other than spouse (wife) prior to six month of survey, 6.5 percent of respondents had sex with only one partner other than spouse, 0.7 percent of respondents reported consistent use of condom while 0.2 percent of respondents reported irregular use of condom with sexual partner other than wife.

Of the total 1958 respondents; 3 percent experienced burning sensation during urination followed by 1.2 percent experienced genital lesions and one percent experienced genital discharge six months prior to the survey. Among the respondents who experienced STI problem; 38.5 percent of them reported that they discussed about it with wives and 81.5 percent reported about seeking treatment for the STI problem.

Regarding their wife's experience of symptoms of STIs prior to six month of survey; 2.7 percent of respondents reported their wives experienced abnormal discharge from vagina, followed by 21.2 percent of respondents reported their wives experienced lower abdominal pain, 1.9 percent reported their wives experienced burning sensation during urination, 2.2 percent reported their wives experienced itching/redness in/ around genital area whereas 2.9 percent of respondents reported their wives experienced pain during intercourse and 1.9 percent of respondents reported their wives experienced abnormal vaginal bleeding (0.8%). Only 0.1 percent of respondents reported that their wives experienced genital lesions.

### Measures taken to prevent re-infection

Respondents who had reported about their own or wives STI prior to six months of survey were asked about the measures taken to prevent re-infection. Responding to this question; 45.8 percent of respondents said that both of them took treatment, 4.2 percent of respondents said that they used condom and 3 percent of respondents said they abstained from sex whereas 47 percent of respondents reported that they did not do anything to prevent infection.

### DISCUSSION

Awareness of STIs and cancer was observed high among respondents in the current study. Studies on knowledge of men about cervical cancer and pap smear screening test for cervical cancer indicated low awareness among men.<sup>5,13,14</sup> Similar findings were observed in the current study. Only 8.5 percent of respondents in this study were aware of cervical cancer, whereas 0.3 percent of respondents were aware of pap smear screening test.

Age-wise distribution shows increasing trend in awareness of cervical cancer as well as pap smear test. Similarly, significantly greater proportions of adequate knowledge among the respondents in higher age group were observed by Das et al, in their study conducted in Delhi. Education-wise distribution also shows increasing trend in awareness of cervical cancer. Similarly a link between formal education and awareness of cervical cancer was observed in a study conducted in Ghana. Jolle et al also observed significantly greater knowledge about cervical cancer among men with higher levels of education in their study among men in Kenya. Comparatively low awareness was observed among husbands with technical and unskilled job.

Awareness of STI symptoms such as: abnormal vaginal bleeding, abnormal discharge from vagina, lower abdominal pain and genital discharge among men were observed poor in this study. Risky behaviour; multiple sexual partners was observed in 0.3 percent of respondents with non-use of condom. Nancy et al in their study in Ghana also observed 2.3 percent of women with multiple sexual partners. Non-use of condom can increase risk of STIs and cervical cancer. Therefore, there is need to plan interventions not only to increase the awareness level but also towards safe sex for the husbands to prevent transmission of STI.

#### **CONCLUSION**

Study concludes that the need to disseminate knowledge regarding STI symptoms, cervical cancer and pap smear test for early detection of cervical cancer specifically to younger, low educated and men working in technical and unskilled jobs, as well as promoting better health seeking behaviour with respect to cervical cancer and STIs. Considering the sensitivity of the topic it is necessary to design separate programmes for husbands (men). Health workers need to target male partners with information on cervical cancer and its prevention in order to increase screening for cervical cancer among women.

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