Research Article

A study on awareness of cervical cancer among women of reproductive age group in urban slums of old Hubli, Karnataka, India

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ABSTRACT

Background: Cervical Cancer tops the list of cancers among women worldwide with an estimated new case of 530,000 and a mortality of 275,000 deaths annually with an overall mortality ratio of 52%. This can be largely prevented by early detection and timely screening tests. Awareness and education regarding this, is the key to curtail the rise of such cancers in the community. Objectives of the studies were to assess knowledge, attitude regarding cervical cancer among women of reproductive age group and to correlate with various socio-demographic & marital factors.

Methods: A cross-sectional study among 200 women of reproductive age group, chosen conveniently for a period of two months from April to June 2014 at urban slums of Old Hubli was undertaken by a pretested and semi-structured questionnaire. Data collected by a house to house survey, entered in Ms Excel, analysed by SPSS v.20 and presented as Percentages and Proportion. Chi-square was applied for finding out the associations and those with p-value <0.05 were taken as statistically significant.

Results: Out of the 200 female respondents belonged majorly to the 25-34 years age group at 43%. About 57% were Muslims. 30% of the women were illiterate and 19% of them had up to high school level of education. Around 65.5% of the respondents were housewives by occupation. Majority of them belonged to the lower socio-economic strata with 54% falling under Stage 4 of Modified B. G. Prasad classification. The Chi-square for awareness of cervical cancer is, $\chi^2 = 0.0858$, where $p > 0.05$, which is not significant. The Chi-square for awareness about Pap smear is, $\chi^2 = 0.2442$, where $p > 0.05$, which is not significant.

Conclusions: The study showed that awareness about cervical cancer was poor among women and also its screening tests, H.P.V vaccinations were never heard of in the community.

Keywords: Cervical cancer, Reproductive age group, Urban slums, Old-hubli

INTRODUCTION

Cervical Cancer is the most common cancer among women worldwide with an estimated 530,000 new cases and 275,000 deaths with overall incidents mortality ratio of 52 percent. It is estimated that during 2008, 134,420 new cases of Cancer Cervix accounted in India (incidents rate of 27 per lakh population) and about 72,825 women

died of the disease (mortality rate 15.2 per lakh population).¹

The key to reducing Cervical Cancer morbidity and mortality is early detection and treatment of cervical pre-cancerous lesions. In India also, both early detection and screening remains a major concern to the health workers in the absence of screening facilities coupled with low awareness level of women. Sexually transmitted infection

with Human Papilloma Virus (HPV) is fundamental to the development of Carcinoma of Cervix. HPV prevalence increases with multiple sexual partners and Poor Genital Hygiene, of the 100 HPV types, 18 have been categorised as high risk types for Cervical Carcinoma.²

Cervarix® made by Glaxo Smith Kline (GSK) is a bivalent vaccine that protects against HPV strains 16 and 18 and Gardasil® by Merck is a quadrivalent vaccine that protects the individual against HPV strains 16, 18, 6 and 11. In India also, both early detection and screening remains a major concern to the health workers in the absence of screening facilities coupled with low awareness level of women. Cervical Cancer affects relatively younger women with influence increasing rapidly from the age 25 – 45 and falling off again, this age group being very crucial with proper knowledge and hygienic practises can very well prevent the occurrence along with regular screening and timely vaccination.^{3,4,5}

Hence, the study was conducted to assess the knowledge and attitude regarding cervical cancer among women of reproductive age group residing in urban slums of old-Hubli and to correlate it with the various socio-demographic & marital factors. The outcome measurement of this short study may provide inputs towards designing suitable Information, Education and Communicable strategies to inform and educate the women on prevention of Cervical Cancer and thus augment the National Cancer Control Programme.

METHODS

A cross-sectional study was carried out among women of reproductive age group (15 -45 years) residing in urban slums under, Urban Health Training Centre, Old-Hubli for a period of two months from April to June 2014. The sample size was calculated by using the formula $Z = 4pq/d^2$. Wherein, P=knowledge regarding cervical cancer was taken as 50% among the women of urban slums and with a relative error (d) of 15%, the sample was calculated as 177, adding up 10% of the calculated sample size for non-respondents, the sample was rounded off to 200.

The Old Hubli area is divided into four wards covering a population of 54,482 and 11,766 households in the area. Using stratified systematic random sampling technique, the sample households were taken from all four wards of Old Hubli area, 50 each from four wards. First household from the respective ward was chosen randomly and thereafter, every house was visited subsequently, until the required 50 sample was met.

The household was visited and any women in the inclusion criteria of age group 15 – 45 years, giving consent, was selected and interviewed. If more than one eligible woman was present in that house, then by random selection the study sample was taken. If the

household was locked or eligible persons were unavailable, the immediate next house was chosen for study.

The data was collected through an interview after an informed consent by a pre-designed questionnaire. The pilot study was done on 20 respondents to understand the practical and technical difficulties and the questionnaire was finalised. The questions were asked in vernacular language to the women using visual aids such as flip cards and the responses were diligently recorded.

The questionnaire included questions on knowledge of symptoms, risk factors, diagnosis, prevention and vaccination of Cervical Cancer and various socio-demographic parameters. Following this, health education regarding the warning signs, prevention and vaccination along with basic hygiene was also told.

The data was duly entered in Microsoft Excel, analysed using IBM SPSS software version 20.0 and relationship between knowledge and various socio – demographic parameters were drawn. The data was presented as percentages and proportion and the tests of significance like Chi-square was applied. The association with a p-value of <0.05 was taken as statistically significant.

RESULTS

Out of the 200 female respondents belonged majorly to the 25-34 years age group at 43%. About 57% were Muslims. 30% of the women were illiterate and 19% of them had up to high school level of education. Around 65.5% of the respondents were housewives by occupation. Majority of them belonged to the lower socio-economic strata with 54% falling under Stage 4 of Modified B. G. Prasad classification (Table 1).

Out of the women interviewed, 83.5% were married, while 67% were married around the age of 15-19 years. Majority of these women were multiparous with 33.5% having 3 children and 23.5% having two children (Table 2).

About 7.5% of the respondents had heard about cervical cancer, while 3.5% of them had heard about it from their relatives and the rest from other sources. A good 59% of the women answered the cancer was due to family history, while 26.55 of them said about the old age. 50% of them believed weight loss to be the chief symptom, whereas 36% thought it to be irregular bleeding. 63% opted smoking to be the major risk factor followed by 33.5% choosing personal hygiene as a potential risk factor (Table 3).

Among 200 subjects, only 1 subject (0.5%) was aware of HPV vaccine. 97.9% of the subjects were unaware of Pap smear. Majority of the subjects thought that Blood test & Scan can detect Cervical Cancer (Table 4).

Table 1: The socio-demographic determinants of the study population.

Demographic details		Number of subjects
Age	15 – 24	82
	25 - 34	87
	35 - 44	30
	45 & above	1
Religion	Hindu	86
	Muslim	114
Education	Illiterate	60
	Primary	31
	Mid school	27
	High school	38
	Intermediate	32
	Graduate	10
	Post Graduate	2
Occupation	Housewife	131
	Unskilled	29
	Student	19
	Semi Prof	7
	Semi-Skilled	6
	Professional	5
	Skilled	1
	Business	1
Socio – Economic Status	Unemployed	1
	I	2
	II	12
	III	29
	IV	108
	V	49

Table 2: Regarding marital demographics.

Demographic details		No. of Subjects
Marital status	Married	167
	Unmarried	25
	Widowed	8
Age at marriage	15 - 19	134
	20 - 24	39
	25-29	2
Parity	0	13
	1	24
	2	47
	3	67
	4	21
	5	1
	6	1

The association of literacy status with their knowledge by chi-square was evaluated. The Chi-square for awareness of cervical cancer is, $X^2 = 0.0858$, where $p > 0.05$, which is not significant. The Chi-square for awareness about Pap smear is, $X^2 = 0.2442$, where $p > 0.05$, which is not significant (Table 5).

Table 3: The various aspects of knowledge about cervical cancer.

	Number	Percentage
Heard about cervical cancer	Yes	15
	No	185
Source of information	Friend	3
	Health worker	3
	Mass Media	3
	Relative	7
Knowledge about cause of cancer	Sex	1
	Virus	11
	Old Age	53
	Family History	118
	Having More Children	24
	Others	10
Symptoms of cancer		
Irregular Vaginal Bleeding	Yes	72
	No	128
Low Back Pain	Yes	46
	No	154
Vaginal Discharge	Yes	48
	No	152
Pain during Coitus	Yes	2
	No	198
Weight Loss	Yes	100
	No	100
Others	Yes	6
	No	194
Risk factors for cervical cancer		
Multiple sexual partners	Yes	0
	No	200
Poor hygiene	Yes	67
	No	133
More no.of children	Yes	16
	No	184
OCPs	Yes	8
	No	192
Smoking	Yes	126
	No	74
Young marriage	Yes	4
	No	196

Table 4: Awareness regarding screening tests, treatment and vaccination.

	Number	Percentage
Regarding Screening tests used for cervical cancer		
Blood test	64	27.0
Scan	81	34.7
Pap Smear	5	2.1
X – ray	6	2.5
Don't know	77	33.0
Availability of HPV vaccine		
Yes	1	0.5
No	199	99.5

Table 5: Relationship between education and awareness.

	Literate			Illiterate		
		No.	%		No.	%
Awareness of cervical cancer	Yes	11	7.9	Yes	4	6.7
	No	129	92.1	No	56	93.3
Awareness about pap smear	Yes	4	2.8	Yes	1	1.6
	No	136	97.2	No	59	98.4

DISCUSSION

Out of the 200 female respondents belonged majorly to the 25-34 years age group at 43%. About 57% were Muslims. 30% of the women were illiterate and 19% of them had up to high school level of education. Around 65.5% of the respondents were housewives by occupation. Majority of them belonged to the lower socio-economic strata with 54% falling under Stage 4 of Modified B. G. Prasad classification (Table 1). Similarly, a study by a study in Kolkata by A Saha et al, which explores the knowledge and awareness of students of elite women's colleges with a structured questionnaire, the knowledge level was found to be 89% awareness about cervical cancer and Pap smear.⁶

Out of the women interviewed, 83.5% were married, while 67% were married around the age of 15-19 years. Majority of these women were multiparous with 33.5% having 3 children and 23.5% having two children (Table 2). Also there is evidence of a study in Mumbai by Balaiah Donta et al, awareness among couples in a slum area was explored in a previously uncharted assessment of the differences in awareness between man and wife in the lower socio-economic strata where in marital status was of prime importance.¹

About 7.5% of the respondents had heard about cervical cancer, while 3.5% of them had heard about it from their relatives and the rest from other sources. A good 59% of the women answered the cancer was due to family history, while 26.55 of them said about the old age. 50% of them believed weight loss to be the chief symptom, whereas 36% thought it to be irregular bleeding. 63% opted smoking to be the major risk factor followed by 33.5% choosing personal hygiene as a potential risk factor (Table 3). This is in contrast with a study by Saha et al where 89% of the respondents had heard of cervical cancer.⁶ The study showed that about 29% believed infection of the cervix to be a cause of cervical cancer and 15% thought of multiple sexual partners to be the incriminating risk factor. In sharp contrast to our study, only 4% believed in hygiene as a cause.

Another study by S. Aswathy, Mariya Amin Quereshi et al, about 89% of the respondents in the rural set up were aware of cervical cancer.⁵ Among 200 subjects, only 1 subject (0.5%), was aware of HPV vaccine. 97.9% of the

subjects were unaware of Pap smear (Table 4). Majority of the subjects thought that Blood test & Scan can detect Cervical Cancer. Similarly, the study by saha et al, shows that 67% of the respondents were aware of Pap smear and HPV.⁶ The Chi-square for awareness of cervical cancer is, $X^2 = 0.0858$, where $p > 0.05$, which is not significant. The Chi-square for awareness about Pap smear is, $X^2 = 0.2442$, where $p > 0.05$, which is not significant (Table 5). This is a sharp contrast to the study by Saha et al, where education was found to be significant predictor at p value < 0.05 .⁶

CONCLUSION

The study showed that awareness about cervical cancer was poor among women and also its screening tests, H.P.V vaccinations were never heard of in the community. It was found that women fail to be screened due to insufficient resources, lack of knowledge, inability to access the health care delivery system, individual and collective psychosocial, cultural resonances, fear, limited family support, strained Economy and anaemic community participation. The specific knowledge on the outcome measurement of this short study may provide inputs towards designing suitable information, education and communication strategies to inform and educate the women on prevention of cervical cancer and thus augment the National Cancer Control Programme.

Limitations

The study duration was small and sample size was limited, and women were not open to some of the personal and private questions. Social stigma is still associated with the disease, causing a communication gap with the interviewer.

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