Awareness about cervical cancer and its screening amongst patient’s attenders in a tertiary care hospital in Chennai

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ABSTRACT

In recent years cervical cancer has been witnessed as the second most prevalent cancer amongst females throughout the world. Sadly, regardless of the proof of methods for prevention, the majority of the females endure unscreened. The hurdles to screening include ignorance towards risk factors, manifestations, stigma, and fallacy about gynecological ailments. This research was conducted with the objective to describe the extent of awareness about cervical carcinoma and its screening among patient’s attenders who are women and are in the reproductive age group in a tertiary hospital. A cross-sectional study was conducted among patient’s attenders age 15-45 years at a tertiary health care center, i.e., Saveetha Medical College and Hospital (SMCH) with a sample size of 158 and purposive sampling technique was used. Data was gathered using a semi-structured questionnaire. Data were entered in Microsoft Excel and analyzed using relevant statistical tests. Out of 158 study participants at SMCH, 85 (53.7%) of them have heard about cervical cancer, 88 (55.6%) are apprised of screening of cervical carcinoma and 40 (25.3%) of them have been screened for cervical carcinoma using Pap smear. Study shows that more than half of the women have a satisfactory extent of awareness regarding cervical carcinoma. However, uptake of screening services is low. These results indicate that we need to increase awareness about cervical cancer and its screening.

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INTRODUCTION

Cervical carcinoma is the second most prevalent cancer among females throughout the world. 88 percent of deaths which are attributed to cervical cancer occur in developing regions of the world (Raychaudhuri and Mandal, 2012). In India, cervical cancer is the most frequent cancer among women, besides breast carcinoma (Shrestha et al., 2013).

It is a malignant neoplasm occurring from cells springing in the cervix. It conceivably is asymptomatic in the initial stage. In later stages, it perhaps occurs as unexplained weight loss, pelvic pain, unusual vaginal discharge, bleeding in between periods, pain and bleeding subsequent to sexual intercourse. Human papillomavirus (HPV) types 18 and 16 lead to 75 percent of cervical carcinoma worldwide. Additional risk factors comprise of tobacco consumption, early age of sexual intercourse, multiple sexual partners, increasing parity, sexually transmitted diseases and prolonged cause of oral contraceptive pills (Shrestha et al., 2013). Lately, vaccines to human papillo-
mavirus have affirmed the possibility of protecting the females of the new generation. It has been proposed that the bulk of cervical cancer could be avoided if women were provided and adhered to cytological screening programs (Varadheswari et al., 2015).

Screening shall be carried out not less than once for all women in the target age group (30-49 years) when it is most advantageous (WHO, 2018). Screening is underutilized in countries like India ascribed to several factors such as lack of awareness regarding the accessibility and benefits of screening, poor educational background, deficiency of information from part of health care staff, ability to pay for screening services by the individual, nonavailability of facilities in most of the healthcare centers and cultural barriers. Among these factors, insufficient awareness, incorrect beliefs regarding the screening and disease are the major contributing factors (Elaemurugan et al., 2016). In this study, we are describing the level of awareness about cervical carcinoma and its screening amongst the patient’s attenders due to the fact that the majority of them are coming from surrounding villages as per the hospital records which are vulnerable and unavailability of the published literature in this particular geographical area.

MATERIALS AND METHODS

A cross-sectional study was undertaken amongst the patient’s attenders in Saveetha Medical College and Hospital for the study duration of 3 months. A sample size of 158 was calculated using the formula
\[ 4pq/r^2 \]
where \( p = 37.7 \) (Narayana et al., 2017), \( r = 20\% \) of \( p \). The study participants were selected using a purposeful sampling technique.

The inclusion criteria for selected participants were:
Females of reproductive age group (15-45 years) who came as patient’s attenders at Saveetha Medical College & Hospitals. All the females who gave informed consent to participate in the study were included. A semi-structured questionnaire was used for data collection using interview techniques.

The data were collected utilizing a semi-structured questionnaire that covered the socio-demographic factors and awareness regarding cervical cancer and its screening and was entered in the MS excel. The analysis was done using EpilInfo software and relevant statistics such as proportions and chi-square were used for data analysis. P-value of less than 0.05 was considered to be statistically significant. Institutional Ethical Committee approval was taken before the commencement of the study.

RESULTS AND DISCUSSION

Out of 158 participants, the majority of study participants belonged to 40-45 yrs age group, i.e., 57 (36%) followed by 30-35 yrs age group and most of them, i.e., 47 (29.7%) were illiterates. The majority of the study participants were homemakers, i.e., 92 (58.2%) and the majority of them have belonged to upper-middle class, i.e., 59 (37.3%) followed by lower-class, i.e., 37 (23.4%) according to Modified BG Prasad Scale, January 2019. (Table 1)

![Figure 1: Perceptions regarding symptoms of cervical cancer (n=158)](image)

![Figure 2: Perceptions regarding the risk factors of cervical carcinoma (n=158)](image)

About 85 (53.70%) of the study participants were aware regarding cervical carcinoma and its screening. And 73 (46%) of the study participants knew that Pap smear procedure is utilized for uncovering cervical cancer among them; however, only 54% of the participants expressed willingness for screening. 40 (25.4%) of the study participants have been screened by pap smear at least once in their lifetime, while 118 (74.6%) have never been taken a Pap smear test.

Many of the participants, i.e., 66 (42.0%), were not aware of the symptoms of cervical cancer; whereas 44 (26.0%) of them believed that bleeding between the periods would be a manifestation of cervical cancer. (Figure 1)
Table 1: Socio-demographic details of the study subjects (n=158)

| Age group of the study participants (years) | Frequency | Percentage |
|--------------------------------------------|-----------|------------|
| 25-30                                      | 14        | 8.86       |
| 30-35                                      | 46        | 29.11      |
| 35-40                                      | 29        | 18.25      |
| 40-45                                      | 57        | 36.00      |
| 45-50                                      | 12        | 7.52       |

Level of education of the study participants

| Illiterate | 47 | 29.72       |
| Primary    | 3  | 1.89        |
| Middle     | 3  | 1.89        |
| Secondary  | 18 | 11.39       |
| Higher secondary | 27 | 17.08 |
| Graduation | 44 | 27.08       |
| Post-graduation | 16 | 10.12 |

Occupation of the study participants

| Professional | 29 | 18.32       |
| Semi-professional | 1 | 0.63        |
| Skilled      | 15 | 9.49        |
| Semi-skilled | 7  | 4.43        |
| Unskilled   | 14 | 8.86        |
| Homemaker   | 92 | 58.22       |

Socio-Economic Status (B G Prasad Scale, Jan 2019)

| Upper middle | 59 | 37.34       |
| Middle       | 29 | 18.35       |
| Lower middle | 33 | 20.88       |
| Lower        | 37 | 23.41       |

The majority of the population, i.e., 60 (36.7%), thought that cervical cancer occurs due to viral infection. About 33 (2.0%) thought having multiple sexual partners predisposes to cervical cancer—[Figure 2].

Table 2 shows that factors such as level of occupation, education and socio-economic status are significantly associated with awareness regarding cervical carcinoma and its screening.

About 54% of the study participants are aware of cervical carcinoma and its screening, which was less as compared to the study conducted by Kokane et al. (2015). The lower extent of awareness in the present study may be due to the fact that the majority of the study participants are from a rural background where the awareness is less and also due to different geographical locations.

Inter menstrual bleeding was the frequently declared symptom among study participants. This result is similar to the study by Sreedevi et al. (2014) in Kerala.

Out of 148, only 12.6% of females had undertaken screening. These results are parallel with the study by Shrestha et al. (2013) in Nepal. The proportion was slightly higher than the rest of India, likely due to the different study populations.

Inadequate awareness regards to a screening test and nonmanifestations of the symptoms were the most common reasons for not taking up screening. This result is similar to a study done by Sreedevi et al. (2014) in Kerala.

Factors such as level of occupation, education and socio-economic status are significantly cognate with awareness regarding cervical carcinoma and its screening, which are similar to the research conducted by (Elamurugan et al., 2016).

In a study conducted by Siddhartha in Puducherry (Siddharthar, 2014) Female education stature and occupation exerted influence on their awareness of screening. Inadequate awareness and absence of manifestations were the main reason given by women for not taking up screening.
Table 2: Factors cognate with cervical cancer awareness and its screening (n=158)

|                                | Awareness regarding cervical cancer and its screening | Chi-square value | p-Value |
|--------------------------------|------------------------------------------------------|------------------|---------|
| Level of Education             |                                                      |                  |         |
| Not literate                   | 1                                                    | 97.15            | < 0.05  |
| Primary and Middle School      | 2                                                    |                  |         |
| Secondary and Higher Secondary School | 25                                                 |                  |         |
| Graduate and Postgraduate      | 58                                                   |                  |         |
| Occupation of the study participants | 44                                             |                  |         |
| Unemployed                     | 44                                                   | 45.61            | < 0.05  |
| Unskilled and Semiskilled killed | 1                                               |                  |         |
| emiprofessional and Professional | 10                                              |                  |         |
| Socio-Economic Status (Modified B. G. Prasad Scale, Jan 2019) | | | |
| Lower class                    | 2                                                    | 73.611           | <0.05   |
| Middle class                   | 28                                                   |                  |         |
| Upper class                    | 55                                                   |                  |         |
| The age group of the study participants | | | |
| 21 - 30 years                  | 10                                                   | 3.76             | 0.15    |
| 31 – 40 years                  | 35                                                   |                  |         |
| 41 – 50 years                  | 40                                                   |                  |         |

which is similar to the present study.

The majority of the respondents said they were likely to seek screening for cervical cancer if the facility offered screening services, which is similar to the study conducted by Opoku C A in Ghana. (Opoku et al., 2016).

Inadequate recommendations by healthcare providers stopped women from taking the Pap smear test. Responses like, "No one ever suggested to me; I had no understanding about it. The doctor did not suggest me." were recorded in the present study as well which is similar to the study conducted by Li W in Malaysia (Li et al., 2009).

The participants said that although the preventive HPV vaccine is effective, it is not affordable and could constitute a heavy financial burden on the household, which is similar to the study conducted by Kim H W et al., in Korea (Kim and Kim, 2015). Therefore, some policies can be introduced, such as price control, through governmental support.

CONCLUSION

This study shows that more than half of the study participants are aware regarding cervical carcinoma and its screening. However, taking up of screening services is low in actual practice. These findings suggest a need to sensitize and educate women on screening and its importance in detecting cervical cancer at an earlier stage and promote awareness among all women with special importance to those with risk factors for cervical cancer.

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