

Assessment of the Awareness of Cervical Cancer and it's Screening Methods in Rural Population of Mulugu Mandal in Telangana State

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Abstract

Background: Despite being the Fourth most common cancer, there is very little knowledge and awareness among both men and women about cervical cancer and its screening procedure. Most of the studies that have been done included only women or healthcare professionals and very few included men. This motivated the present study to include men, where their degree of knowledge was scrutinized. Aim of the study was to assess the awareness and knowledge among rural men and women about cervical cancer and its screening, educating them about its significance as well as encouraging the women to undergo PAP screening, by alleviating their stigma and fears regarding this vital procedure.

Material and Methods: Survey was conducted over the span of two months in 2019, among 500 men and women of Mulugu. The data obtained through a modified, pretested questionnaire was analyzed using SPSS software (version 22) and the results were summarized.

Results: Of the 500 participants 145 were men. Over all 81.4% and among men 82.1% were unaware of cervical cancer. Only 0.6% knew about screening. After the survey, the number of screening tests had increased significantly.

Conclusion: Awareness programs help promote early screening, diagnosis and hence treatment of carcinoma cervix, thereby reducing the mortality rate.

Keywords: Cervical cancer, screening, PAP smear, knowledge, awareness, practice

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Introduction

Carcinoma cervix is the fourth most common cancer in women around the globe, with 5,69,847 new cases and a mortality rate of 3,11,365 in 2018 [1]. It accounts for maximum number of deaths in women in the developing countries [2]. 20% of cervical cancer cases in the world are reported from India [3]. More than three-fourths of these patients are diagnosed in advanced stages leading to poor prospects of long-term survival and cure [3]. In India, there is a cervical cancer screening program, but only a few are aware of it. Recent studies have shown evidence that there is a decline in the incidence of cervical cancer in urban areas, but with sustained prevalence in rural population.

Infection by Human Papilloma Virus (HPV) is the chief cause of cervical cancer [4]. Out of 40 types of HPV which are transmitted sexually, HPV type 16 and 18 are the ones with high risk, and are responsible for majority of cases registered in India [5,6]. The other factors adding to this risk of developing cervical cancer are multiple sexual partners, sex at an early age, family history of cervical cancer, poor sexual hygiene, multiparity, smoking and excess alcohol consumption [7-9].

Pap smear screening contributes to early detection of cervical cancer and improves the prognosis [10]. Visual Inspection through Acetic acid(VIA) and Visual Inspection through Lugol's Iodine(VILI) are also considered as alternate screening methods for detection of cervical cancer [11-15].

Low literacy levels, lack of knowledge and poor attitude towards the disease risk factors affect the screening practice for cervical cancer in rural population as well as hamper the development of preventive behavior. Lack of awareness about cervical cancer and screening, fear of procedural pain and instrumentation, lack of husband's support for screening procedure are the most

common reasons stated in other studies for not undergoing screening test for cervical cancer [7,12-19].

Less number of PAP screenings and the low incidence of squamous intra-epithelial lesions in the PAP smears obtained from the OBG outpatient department in the tertiary hospital has called for this survey of awareness of cervical cancer in this rural population of Mulugu mandal [20,21].

Aims and Objectives

- 1) To assess the awareness, knowledge, attitude and practices to prevent cervical cancer in the age group (15-60) in the villages of Mulugu mandal.
- 2) To educate the women about the cervical cancer and its screening methods
- 3) To encourage the women to undergo PAP screening by helping them with their stigmas and fears.

Material and Methods

Residents from rural areas of Mulugu mandal of Siddipet district from Telangana were included in this descriptive cross-sectional study with informed consent. The survey was conducted in the months of May 2019 and June 2019. A modified, pretested, structured questionnaire was used, which covered their demographic and socioeconomic data, general awareness and knowledge about risk factors, attitude towards pap smear testing, reasons for not undergoing pap screening and source of knowledge.

The sample size was about 500 participants. They were recruited using systemic random sampling technique. Informed consent was taken from the participants prior to the questionnaire. Anonymity of the participants was maintained.

Inclusion criteria: Both married and unmarried women of age group 15-60 and men of age group 20-55 were included in the study.

Statistical analysis

Data analysis was done using SPSS version 22 and the data was summarized.

Results

A total of 500 participants were administered the questionnaire. Wherein, highest number of participants were between the ages of 36 to 45 years and the least, 12% were from 56 to 60 years. The youngest participant was 15 and the oldest was 60.

Table 1

Have you ever heard about cervical cancer?	Frequency	Percent
Yes	93	18.6
No	407	81.4
Total	500	100

Table 1 shows the percentage of people who have heard about the cervical cancer.

Table 2: Distribution of awareness of cervical cancer in men

Have you ever heard about cervical cancer?	Frequency	Percent
Yes	26	17.9
No	119	82.1
Total	145	100

Table 2 shows the meagre percentage of the men, who have heard about cervical cancer.

Table 3

Knowledge about risk factors	Yes	No	Do not Know	Total
Do you know that having multiple sexual partners increases the risk of cervical cancer?	16	3	481	500
Do you think that sex at early age is a risk factor for cervical cancer?	12	4	484	500
Do you think that family history of cervical cancer can increase the risk?	46	3	451	500
Do you think multiparity has role in increasing the risk?	7	4	489	500
Have you heard that HPV infection increases the risk?	10	0	490	500
Do you know that poor sexual hygiene of your partner is a risk factor?	25	3	472	500
Do you think consuming excess alcohol increases the risk?	42	0	458	500
Do you think smoking is a risk factor?	52	0	448	500
Do you think sexually transmitted diseases increase the risk of cervical cancer?	36	2	462	500

Table 3 gives the data about risk awareness among the participants. This clearly shows, that the basic knowledge about the risk factors, that range from sexual factors and transmission to personal habits like alcohol consumption, is sorely lacking among most of the participants.

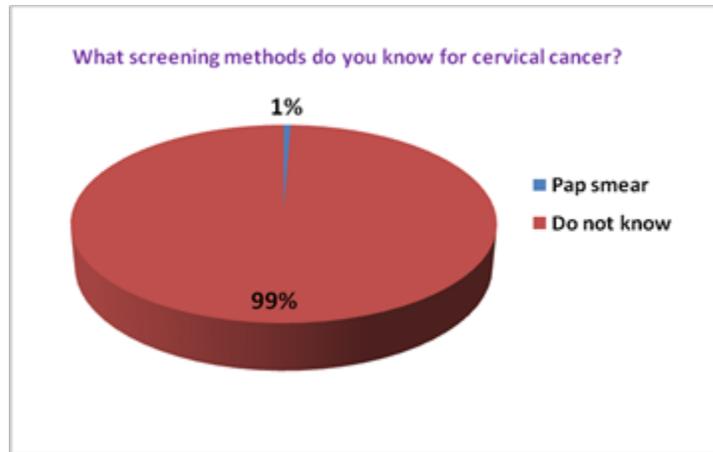


Figure 1

Figure 1 shows about 99 percent of the population do not know about screening methods.

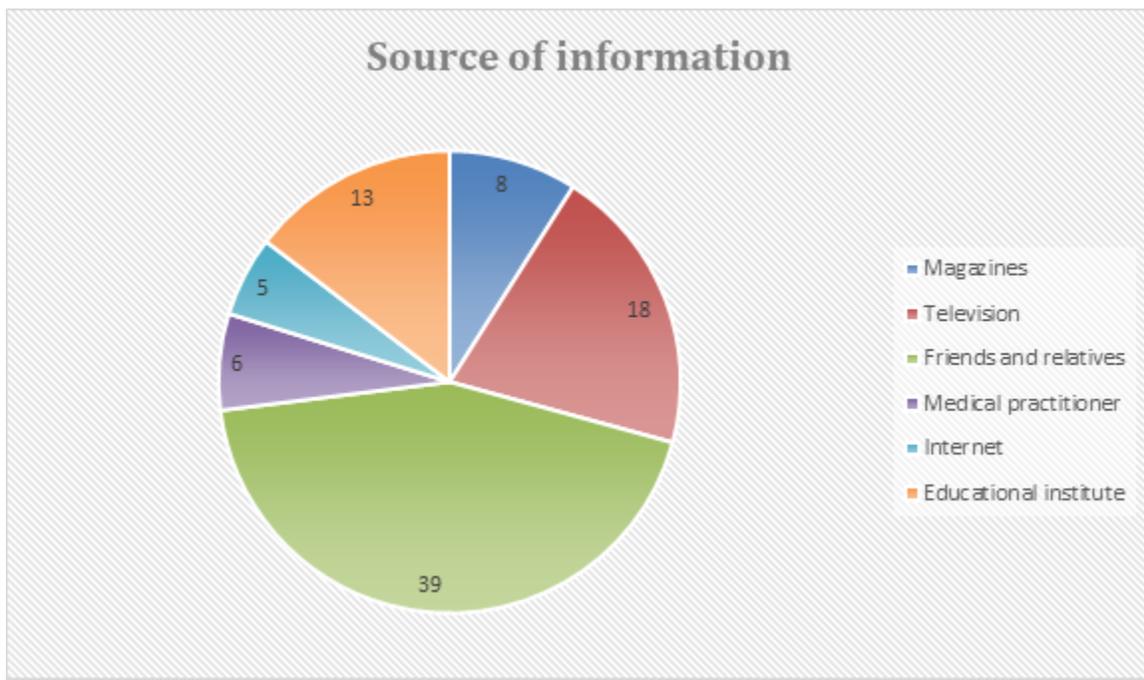


Figure 2

Figure 2 shows the source of information in those who were aware, wherein out of the 89, majority got their information from family and friends.

Table 4

HYSTERECTOMY	Frequency	Percent
Yes	63	17.7
No	292	82.3
Total	355	100

Table 4 shows the number of women who underwent hysterectomies.

Heavy menstrual bleeding because of fibroid uterus, chronic cervicitis was reported by the participants who opted for the surgery. Inadequate treatment, recurring medical expenses also adds up to this situation, where females are more likely to prefer hysterectomy. We have learned from the clinicians that the majority of women are not willing for continuous follow ups for gynecological conditions and also cannot afford the cost of screening and hence request for hysterectomy after completion of family.

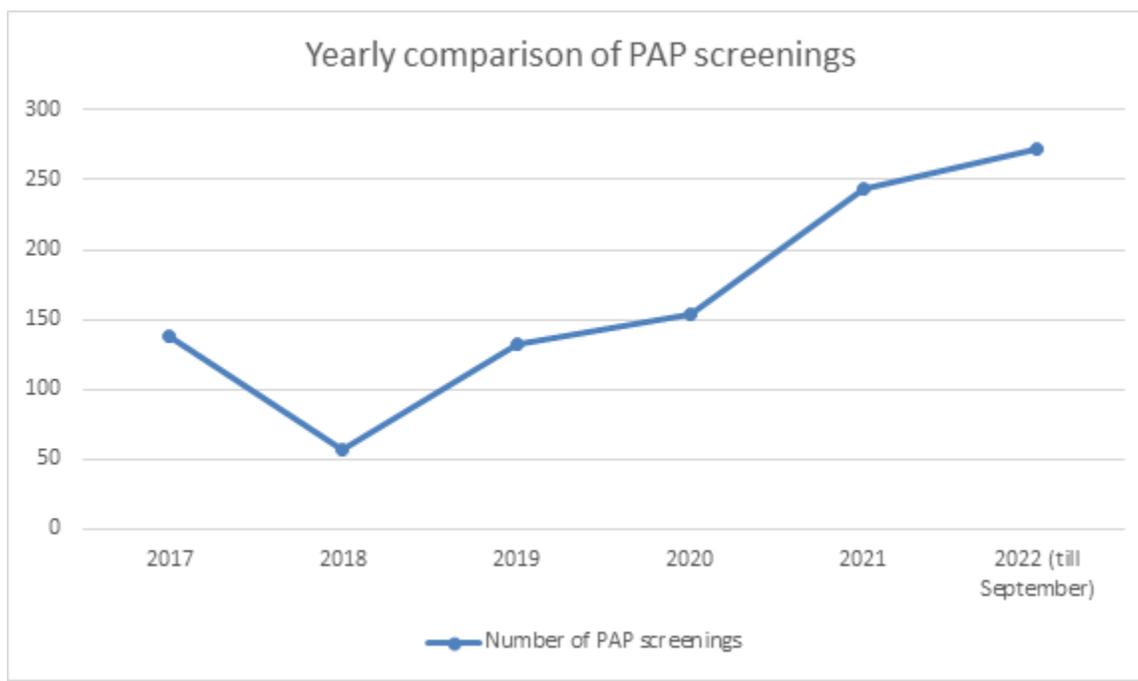


Figure 3

Figure 3 describes the number of pap screenings in the tertiary care hospital through the years. A total of 997 screenings were done from January 2017 to September 2022, wherein, the number has increased over the course of 5.5 years, with a significant rise after 2020.

Discussion

Krishnaveni *et al.*, conducted a study on Knowledge, Attitude and Practice related to cervical cancer and screening among women: Community based cross-sectional study during the year 2017 has taken only women in the study conducted over a time period of 8 months [22].

Smita Shreshta *et al.*, conducted a study on

Knowledge, Attitude and Practice Regarding Cervical Cancer Screening Among Women Attending a Teaching Hospital in Bharatpur, Chitwan during the year 2017, whereas the participants were from their outpatient department [23], this study comprised of participants from villages.

Kim *et al.*, conducted a study on men's awareness of cervical cancer - a qualitative study [24]. The current study also included men along with women.

Radha Ramaiah *et al.*, conducted a study on knowledge, attitude and practices about cervical cancer among rural married women [25]. In this study married women of reproductive age group were considered, while in this study, both men and women

were included irrespective of their marital status.

Agam B Bansal *et al.*, conducted study on knowledge, attitude and practices related to cervical cancer among women [26]. In this study females of reproductive age group were included. It is a hospital based cross sectional study. Present study is a descriptive cross-sectional study, conducted in a rural population consisting of both males and females.

Geeta V. Bathija *et al* [27]., conducted a study on awareness of cervical cancer among women of reproductive age group in urban slums of old Hubli, Karnataka, India in 2014. In this study women of reproductive age were considered and men were included.

Ngelangel C. *et al* [27] conducted study on causes of cervical cancer in Philippines. It is a case control study. In this study women who had histologically confirmed cervical cancer were chosen. Polymerase chain reaction assay was done to detect HPV DNA. Our study is a cross sectional descriptive study, that included both men and women, and no tests were performed.

G Narayana *et al* [28]., conducted study on knowledge, attitude and practice towards cervical cancer among women coming to their obstetrics and gynecology department. It was a hospital-based study, in which study subjects were enrolled and subjected for interview. In the present study, subjects were from rural areas.

The present study showed that only 18.6 % of the population have heard about cervical cancer, in contrast to the findings of the study by Krishnaveni *et al* [22], which revealed that 98.4% of their study population were aware of cervical cancer.

Awareness of Pap smear screening test is 1% in this study population which is similar to the results of Geetha V. Bathija, Shreya Mallesh study [27] and Kim *et al* study [24].

About 10% of the study population revealed awareness about the risk factors of cervical cancer in line with the findings of Krishnaveni *et al.*, reiterating the need for population-based awareness programs and mass media campaigns [22].

The current study revealed that source of knowledge about cervical cancer and screening was through friends and relatives, similar to study by Krishnaveni *et al* [22] and differing from a study by Getahun F *et al.*, where the major source of information was television or radio accounting to about 60%, followed by health care professionals [30].

In the present study 128 out of 355 women were motivated to undergo screening procedure after the short briefing given along with questionnaire. The knowledge about HPV vaccination was found to be very insignificant – only 1 out of 500 participants knew about it. Awareness about poor sexual hygiene as a risk factor for cervical cancer was seen in 25 out of 500 study population, that is 5% in the present study.

This study revealed that 63 out of 355 women in the study population have undergone hysterectomy for various indications. The study conducted by Ranjan Kumar Prusty *et al.* estimated hysterectomy prevalence as 47% in Telangana state and 17 per 1000 married women across different states in India [29].

After the study was conducted, a significant rise was seen in the number of screening tests performed, especially in the women from these rural areas. The greater number of tests conducted, helped in diagnosing higher number of intraepithelial lesions, at an earlier stage and hence assisted in early onset of treatment.

Conclusion

Cervical cancer is a dreadful disease in women accounting for maximum number of deaths. Lower incidence of cervical intra-

epithelial lesions in the pap smears of local population has prompted the need for conducting this study. A sample size of 500 was taken using systemic random sampling technique in rural areas of Mulugu mandal of Telangana state. A pre-modified, validated, constructed questionnaire was used in assessing the knowledge, awareness, attitude and practices of the local population.

Results showed that majority of the population are ignorant of cervical cancer and screening procedures. The low incidence of squamous intra epithelial lesions in Pap smears indicating low incidence of cervical cancer in the local population is probably due to a greater number of hysterectomies in the women of age group 30-45, most of them due to lesions causing heavy menstrual bleeding and to avoid prolonged medication and follow ups.

The total number of visits to OBG outpatient and number of patients undergoing PAP screenings has increased from the commencement of this study in our tertiary hospital, Mulugu mandal, Siddipet. And the number of cervical intraepithelial lesions and cervical carcinomas are detected early helping the early treatment of the patients.

To conclude, the lack of awareness, stigma and limited support at home, has been a major hurdle in the initiation to undergo the screening procedures, among women. The poor understanding among men about the disease, has been a significant reason for this insufficient support.

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