Sociodemographic profile of patients with cervical cancer in a tertiary-care cancer hospital in Mysuru, Karnataka

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Abstract

Background: Cervical cancer is a major public health problem. Its burden is high in developing countries, where screening programs are not well established or are minimally effective. Study of the sociodemographic profile is the first step in planning screening and control measures.

Objective: To determine the sociodemographic profile of patients with cervical cancer in a tertiary-care cancer hospital in Mysuru, Karnataka, India.

Materials and Methods: This combined prospective and retrospective study was conducted during January 2012 to December 2012 among all the newly diagnosed cases of cervical cancer from January 2006 to December 2007 at a tertiary-care cancer hospital. Data were collected using a pretested structured questionnaire. Details of sociodemographic profile, symptoms, and staging were obtained. Data were entered in Microsoft Excel and results were expressed in percentages and proportions.

Result: Among the 380 patients with cervical cancer, 175 (46.1%) were in the age group of 50–64 years. Majority of the patients were from rural areas (73.9%) and 26.1% were from urban areas. Majority of the patients were Hindus (93.2%), 249 (65.5%) were illiterate, 237 (62.4%) were married, and 130 (34.3%) belonged to Class III socioeconomic status. The most common symptom was white discharge per vagina (50.5%). Majority of the patients (140, 36.8%) were in stage IIIB followed by 116 (30.5%) in stage IIB.

Conclusion: Cervical cancer is potentially preventable and curable. The focus should be on creating awareness regarding the risk factors, stress the need for early detection, screening, and effective utilization of health-care resources.

KEY WORDS: Cervical cancer, sociodemographic profile, risk factors

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Introduction

Cervical cancer is a major public health problem that continues to have a huge impact on women worldwide. It is the fourth most common cancer in women, and the seventh overall, with an estimated 5,28,000 new cases in 2012. A large majority (around 85%) of the global burden occurs in the less developed regions, where it accounts for almost 12%

of all cancers in females. There were an estimated 2,66,000 deaths from cervical cancer worldwide in 2012, accounting for 7.5% of all cancer deaths among females. In India, there were 1,23,000 cancer cases and 67,000 deaths due to cervical cancer in 2012.[1]

Along with human papillomavirus, there are various risk factors associated with cervical cancer such as early age at marriage, early age at first sexual intercourse, multiple sexual partners, high parity, tobacco use, use of oral contraceptives, and immunosuppression.[2]

Prevalence of cancer is known to vary from region to region and is affected by socioeconomic changes.[3] The burden of cervical cancer is high in developing countries, where screening programs are not well established or are minimally effective. Study of the sociodemographic profile is the first step in planning screening and control measures. This study was conducted to determine the profile of patients with cervical cancer in a tertiary-care cancer hospital in Mysuru.

Materials and Methods

This combined prospective and retrospective study was conducted in a tertiary-care cancer hospital at Mysuru city for 1 year during January 2012 to December 2012. Approval from institutional ethics committee and required permission from hospital authorities were obtained before the start of the study. The study was conducted among all the 380 patients with newly diagnosed cervical cancer during the period of January 1, 2006, to December 31, 2007. Patients of cervical cancer who were registered before the study period and already on treatment were excluded from the study. Data were collected using a pretested structured questionnaire. Hospital records of the patients were studied and patients were contacted during follow-up visits to the hospital, house visits, and through telephone taking feasibility factor into account. The sociodemographic profile consisted of name, age, residential address, locality, religion, marital status, education, and socioeconomic status. The modified BG Prasad's Classification was used to assess the socioeconomic status. Clinical history including symptoms and their duration, method of diagnosis, and International Federation of Gynecology and Obstetrics staging were obtained. Data were coded and entered into Microsoft Excel worksheet. The results were expressed in percentages and proportions.

Results

Among the 380 patients with cervical cancer, 175 (46.1%) were in the age group of 50–64 years. Only 3.9% of the patients were aged <35 years and 15% were aged >65 years. Most patients (281, 73.9%) were from rural areas and 99 (26.1%) were from urban areas. Majority of the patients (354, 93.2%) were Hindus, 249 (65.5%) were illiterate, and 130 (34.3%) belonged to Class III socioeconomic status [Table 1]. In this study, 237 (62.4%) were married, 137 (36%) were widowed,

Table 1: Sociodemographic profile of patients with cervical cancer

Sociodemographic factors	Frequency	Percentage
Age (years)		
<35	15	3.9
35–49	133	35
50–64	175	46.1
>65	57	15
Religion		
Hindu	354	93.2
Muslim	20	5.3
Christian	2	0.5
Buddhist	4	1
Education		
Illiterate	249	65.5
Primary school	42	11
Middle school	41	10.8
High school	43	11.3
Preuniversity	3	0.8
Graduate	2	0.6
Socioeconomic status		
I	13	3.4
II	53	13.9
III	130	34.3
IV	113	29.7
V	71	18.7

4 (1.1%) were separated, and 2 (0.5%) were unmarried. Majority (50.5%) of the patients presented with complaints of white discharge per vagina. This was followed by complaints of postmenopausal bleeding in 152 (40%) and irregular menstrual cycles in 83 (21.8%) of the patients. The other presenting complaints were lower abdominal pain in 51 (13.4%), dysuria in 13 (3.4%), postcoital bleeding in 11 (2.9%), and infertility in 1 (0.3%) of the patients [Figure 1]. Many patients had more than one symptom at the time of presentation to the hospital. Majority of the patients (140, 36.8%) were in stage IIIB followed by 116 (30.5%) in stage IIB. Very few patients were in stage IA and IB. Thirty-one patients (8.2%) were in stage IVA and six (1.6%) in stage IVB [Figure 2].

Discussion

Cervical cancer is a major cause of morbidity and mortality among women worldwide. The prevalence of cervical cancer varies in different regions and a large majority of the global burden exists in developing countries. This study was conducted to determine the sociodemographic profile of patients with cervical cancer in a tertiary-care hospital in Mysuru.

In this study, majority (46.1%) of the patients with cervical cancer were in the age group of 50–64 years. As per the data from hospital-based cancer registries, cervical cancer is found more commonly in women aged between
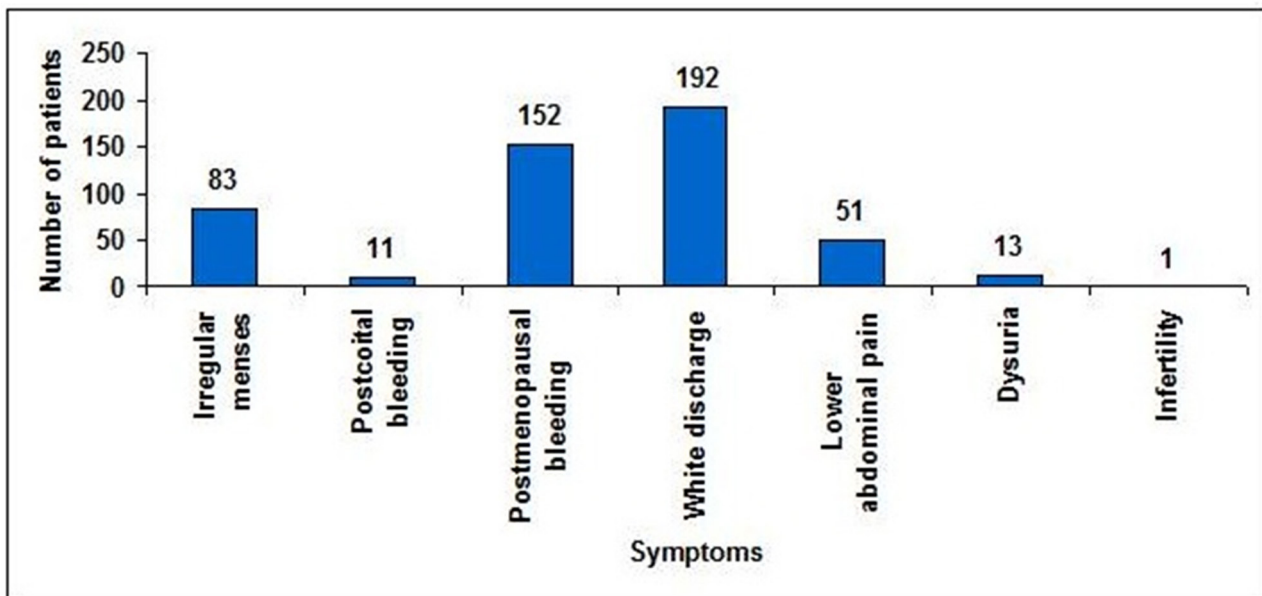
Figure 1: Distribution of patients with cervical cancer according to symptoms.
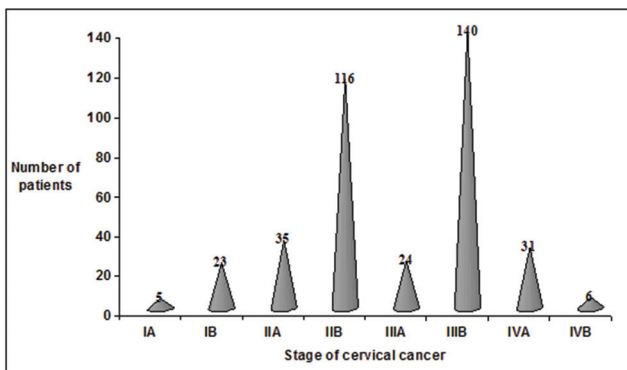

Figure 2: Distribution of patients with cervical cancer according to staging.

40 and 54 years (the peak being 45–49 years).[4] In a study conducted by Chhabra et al.[5] among rural women, 43.8% of the cases were in the age group of 30–49 years and 37.6% were in the age group of 50–64 years.[5]

In studies conducted in rural western Maharashtra, Bellary (Karnataka), and Jammu, 52.23%, 72%, and 62.7% of the patients, respectively, were in the age group of 40–60 years.[3,6,7] The age at diagnosis in our study was later compared to the earlier-mentioned studies. This indicates that there is a lack of awareness about cervical cancer and screening facilities are lacking or ineffective.

In this study, majority of the patients (73.9%) were from rural areas. In studies conducted in Bellary, Jammu, and north Karnataka, 74%, 55% and 67.34% patients, respectively, were from rural areas.[6–8] Poverty, low socioeconomic status, poor genital hygiene, lack of awareness regarding cervical cancer, and lack of access to health services are the contributing factors for high prevalence in rural areas.

In this study, majority (249, 65.5%) of the patients were illiterate. In a study conducted in Karimnagar (Andhra Pradesh), majority (80.3%) of the patients were illiterate.[9] A study conducted by Patil et al.[10] in Nagpur stated that illiteracy was significantly associated with the risk of cervical cancer. A lower education level indicates lack of awareness regarding the disease and lesser utilization of health services, presentation at advanced stage of the disease.

In this study, 34.3%, 29.7%, and 18.7% patients were found to be in socioeconomic classes III, IV, and V, respectively. Most of the patients were in the lower socioeconomic group, suggesting that many were not able to afford the higher cost of cancer treatment. Inability to start treatment and lack of compliance will lead to lesser survival rates.

Majority of the patients (140, 36.8%) were in stage IIIB followed by 116 (30.5%) in stage IIB. Stage at presentation was the strongest factor in the prediction of 5-year survival; 86% of those with stage I survived compared with 58% of stage II cases, 31% of stage III cases, and 0% of stage IV cases.[11] In a study conducted in Kerala, 69%, 61.5%, 52.8%, 43%, 28%, and 0% survived in stages IB, IIA, IIB, IIIB, IVA, and IVB, respectively.[12] Very few patients in the early stages indicate that there is a lack of awareness about cervical cancer, screening for the disease, and availability and accessibility of treatment facilities.

Conclusion

Cervical cancer is potentially preventable and curable. The focus should be on addressing the underprivileged women, creating awareness regarding the risk factors, importance of early detection, encouraging more people to undergo screening, and effective utilization of health-care resources.

Acknowledgment

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