ORIGINAL ARTICLE

Prevalence of Knowledge and Awareness Regarding Cervical Cancer among Females Presenting in a Tertiary Care Hospital: A Cross-Sectional Study

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ABSTRACT

Background: Cervical cancer is the leading cause of morbidity and mortality in females. A number of causes are there that contribute to the advanced stage of disease at presentation but the lack of knowledge remains the foremost factor that contributes to this. Furthermore, there is a lack of screening among general population. Lack of knowledge and awareness about the causes and risk factors of cervical cancer is leading to increase in incidence of cervical cancer day by day. The target audience of this study were the local population of females that comes in tertiary care hospital of the metropolitan city.
Methods: In this study, 350 consecutive patients were included after informed consent. A predesigned Questionnaire was utilized to evaluate the knowledge of participants regarding cervical cancer. Data was entered and analyzed using SPSS 17.0. Mean and standard deviation were calculated for age. Frequency and percentage were calculated for parity and knowledge regarding cervical cancer.
Results: The mean age of participants was 43.34 ± 15.06 years. There were 192 (54.86%) females of non-screened type and 158 (45.14%) females of screened type. There were 98 (28.0%) females who had adequate knowledge about cervical cancer and 252 (72.0%) females were unaware or had poor knowledge of the disease. There was insignificant difference observed among all females of different parity for adequate knowledge ($P>0.05$). There was significant difference observed among all females of different education level for adequate knowledge ($P<0.05$). There was significant difference observed among all females of different SES class for adequate knowledge ($P<0.05$).
Conclusions: This study concluded that only one fourth of the females are aware of this problem and remaining are, either unaware or have a poor knowledge of cervical cancer. Before embarking on cervical screening, there is immense need to increase the public awareness by campaigns.
Keywords: Cervical cancer, knowledge, females, reproductive age

INTRODUCTION

Cervical cancer is the second most common cancer among women worldwide, with an estimated 529,409 new cases yearly. About 86% of these cases occur in the developing countries, representing13%of female cancers.[1]Surprisingly, More than 25% of the burden of cervical carcinoma[2]. Is being borne by the Asians. Cervical cancer (CC) is a public health problem owing to its higher prevalence and mortality rates in reproductive age group women of low socio-economic strata[3]. Cervical cancer is the second most common cancer with ASR of 193.5/100,000[4].

Unfortunately, the situation in Pakistan is very deplorable due to non existence of any statistical parameters.. The only data which we have is through institutional and regional cancer registries. So this cannot elucidate the actual burden of the disease[5,6]. This is due to non methodical collection of this important information. Cervical cancer was responsible for 3.6 percent of cancer mortality[7] in Pakistan, this was known by the data obtained from one of the local cancer registry. . A study done to know knowledge of women regarding carcinoma of the cervix clearly demonstrated that only 5 % of the females in Pakistan had any know how regarding screening of cancers. In fact only 2.6 percent of the females have had pap smear once in their life[8].

A study conducted in Kerala, India showed that 92.8% had poor knowledge on the various aspects like symptoms, risk factors, screening test, etc[9]. Another study conducted in 2014 in Turkey reported that knowledge regarding cervical cancer and screening was appropriate in 33.3% only[10].

Rationale of this study is to assess knowledge about the cervical cancer among females presenting in a tertiary care hospital. Since in industrialized countries the incidence and mortality secondary to cervical cancer is being reduced significantly by virtue of adequate awareness about the disease and need for screening, however developing nations are still battling cervical cancer owing to lack of adequate knowledge about the cancer, benefits and availability of screening. This study would help the program planners and health educators to devise evidence based guidelines to target the management of cervical cancer according to the disease burden amongst the local population.

MATERIAL AND METHODS

The study was conducted in the outpatient department of KEMU, Lahore.Non-probability, consecutive sampling technique was used and the study duration was 6 months starting from April 2019 to October, 2019. Sample size of

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350 cases was calculated with 95% confidence level, 5% margin of error and taking expected percentage of knowledge i.e., 33% regarding cervical cancer among females. The married females between 18 to 70 years of age comprised of this study while patients who were diagnosed cases of cervical cancer and those having hysterectomies were not included in the study. Patients who did not give consents or having the ASA group IV were also not included in the study. A predesigned Questionnaire evaluated the knowledge of participants regarding cervical cancer by researcher herself. All this information was collected through predesigned Proforma. Variables were entered and analyzed using SPSS 17.0. Mean and standard deviation were calculated for age. Frequency and percentage were calculated for parity and knowledge regarding cervical cancer.

RESULTS

This study comprised of 350 females with the mean age of 43.34±15.06 years. The age range of the patients in this study was between 18 to 70 years. There were 192 (54.86%) females of non-screened type and 158 (45.14%) females of screened type. There were 98 (28.0%) females who had adequate knowledge about cervical cancer and 252(78%) females had poor knowledge.

There were 57(16.3%) females of age 18-25 years, 88(25.1%) females of age 26-40 years,113(32.3%) females of age 41-55 years and 92(26.3%) females of age 56-70 years.

Among females of age group in 18-25 years, 11 females had adequate knowledge while 46 had poor knowledge about cervical cancer. Similarly, among females of age group in 26-40 years, 32 females had adequate knowledge while 56 had poor knowledge about cervical cancer, among females of age group in 41-55 years, 33 females had adequate knowledge while 80 had poor knowledge about carcinoma cervix and among females of age group in 56-70 years, 22 females had adequate knowledge while 70 had poor knowledge about cervical cancer. The age wise segregation of all females in this study showed that there is no significant difference in distribution of adequate knowledge of cervical cancer among females of all 4 different age groups.(P>0.05) (Table 1).

There were 53(15.1%) females who had parity zero, 47 (13.4%) had parity 1, 104(29.7%) had parity 2, 90(25.7%) had parity 3, 40(11.4%) had parity 4 and 16(4.6%) had parity 5. Among females who had parity zero, 15 females had adequate knowledge while 38 had poor awareness about carcinoma cervix. Similarly, among females who had parity 1, 15 females had adequate knowledge while 32 had little awareness about carcinoma of the cervix, among females who had parity 2, 30 females had adequate knowledge while 74 had little understanding about carcinoma cervix, the females who had parity 3, 17 females had adequate knowledge while 73 had poor knowledge, among females who had parity 4, 13 females had adequate knowledge while 27 had poor knowledge and among females who had parity 5, 8 females had adequate knowledge while 8 had poor knowledge about cervical cancer. There was insignificant difference observed among all females of different parity for adequate knowledge of cervical cancer (P>0.05) (Table 2).

There were 72 (20.6%) females who were illiterate, 88 (25.1%) were under metric, 150 (42.9%) were graduate, and 40 (11.4%) were postgraduate. Among illiterate females, 5 females had adequate knowledge while 67 had very little know how about carcinoma cervix. Similarly, under metric females, 4 females had adequate knowledge while 84 had little understanding about cervical cancer, among graduate females, 66 females had adequate knowledge while 84 had poor knowledge about carcinoma cervix and among postgraduate females, 23 females had adequate knowledge while 17 had no understanding about carcinoma of the cervix. There was significant difference observed among all females of different education level for adequate knowledge of cervical cancer (P<0.05) (Table 3).

There were 118(33.7%) females belonged to poor SES, 150(42.9%) belonged to middle class while 82(23.4%) belonged to high SES class. Among females of poor SES, 19 females had adequate knowledge while 99 had poor knowledge about cervical cancer, while in females of middle class, 26 females had adequate knowledge while 124 had poor knowledge about cervical cancer and among females of high SES, 53 females had adequate knowledge while 29 had little know how about this disease. There was significant difference observed among all females belonging from different SES class for adequate knowledge of cervical cancer (P<0.05) (Table 4).

Table 1: Distribution of knowledge of cervical cancer among females of different age groups.

Age Groups (Females)	Knowledge		Total
	Adequate	Poor	
18-25	11	46	57
26-40	32	56	88
41-55	33	80	113
56-70	22	70	92
Total	98	252	350

Chi-square = 6.038 P-value = 0.110

Table 2: Distribution of knowledge of cervical cancer among females of different parity.

Parity	Knowledge		Total
	Adequate	Poor	
0	15	38	53
1	15	32	47
2	30	74	104
3	17	73	90
4	13	27	40
5	8	8	16
Total	98	252	350

Table 3: Distribution of knowledge of cervical cancer among females according to literacy (Illiterate, under-metric, graduate & post-graduate).

Education	Knowledge		Total
	Adequate	Poor	
Illiterate	5	67	72
Under metric	4	84	88
Graduate	66	84	150
Postgraduate	23	17	40
Total	98	252	350

Chi-square = 76.161 P-value = 0.000

Table: 4 Distribution of knowledge of cervical cancer among females belonging to different (Low, Middle, High) socioeconomic status (SES).

SES	Knowledge		Total
	Adequate	Poor	
Low	19	99	118
Middle	26	124	150
High	53	29	82
Total	98	252	350

SES= Socioeconomic status
Chi-square = 71.340 P-value = 0.000

DISCUSSION

Surprisingly, the reported incidence of cervical cancer varies globally[11]. It is ranked as fourth most prevalent cancer of females worldwide adding to significant morbidity mortality, particularly in developing countries[12]. In countries such as the US and UK, the incidence of cancer of cervix is much lower, but disparities by socio-economic status, race and ethnicity remain[13,14].

This cross sectional study was conducted by including 350 females with the mean age of 43.34±15.06 years. We found that 98(28%) females had good knowledge about cervical cancer and 252(78%) females had poor knowledge. But a study conducted in 2018 showed controversial results and revealed. Only 5% of women in Pakistan were aware of screening of cervival carcinoma and amongst those only 2.6% of women actually had the smear once[8].

A study conducted in Kerala, India in 2016 reported Scoring of knowledge levels showed that 92.8% had poor knowledge about cervical cancer and only 7.2% of Indian women are aware of cervical cancer[9]. But one study conducted in 2017 in Brazil reported that knowledge related to the cervical cancer screening was adequate in 40.4% females[3].

In this study, 192 (54.86%) females were not screened for cervical cancer while 158 (45.14%) females were screened for cervical cancer[15].

Healthcare systems must introduce programs to increase the awareness not only about the disease, but also about the effective screening modalities available, so as to improve the perceptions of the screening process for early detection to reduce cervical cancer incidence and mortality rates[16].

In our study, among females of age group in 18-25 years, 11 females had adequate knowledge while 46 had poor knowledge of this malignant disease. Similarly, among females of age group in 26-40 years, 32 females were well aware while 56 had very little know how about this malignancy., among females of age group in 41-55 years, 33 females had adequate knowledge while 80 had poor knowledge about cervical cancer and among females of age group in 56-70 years, 22 females had no know & how of this disease while 70 had little awareness about cervical cancer. There was insignificant difference observed among all age groups for adequate knowledge (P>0.05). However, in young adults, there were few females who had adequate awareness about cervical cancer while among females of advance age (>40years), there were more females who were well aware of this disease.

In our study, we did not find any role of parity with knowledge of females regarding cervical cancer. We observed that in females who had parity zero, 15 females had adequate knowledge in females who had parity 1, 15 females had adequate knowledge, in females who had parity 2, 30 females had adequate knowledge, in females who had parity 3, 17 females had adequate knowledge, in females who had parity 4, 13 females had adequate knowledge and in females who had parity 5, 8 females had adequate knowledge. There was insignificant difference observed among all females of different parity for adequate knowledge (P>0.05).

Among 72 illiterate females, 5 females had adequate knowledge while 67 had hardly any know how about carcinoma of the cervix. Similarly, 88 under matric females, 4 females had adequate knowledge while 84 had inadequate awareness about carcinoma of the cervix, among150 graduate females, 66 females had adequate knowledge while 84 had hardly any awareness about cervical cancer and among 40 postgraduate females, 23 females had adequate knowledge while 17 had little awareness about carcinoma of the cervix.. There was significant difference observed among all females of different education level for adequate knowledge (P<0.05).

Among 118 females of poor SES, 19 females had adequate knowledge while 99 had little know how about carcinoma of the cervix, while in 150 females of middle class, 26 females had adequate knowledge while 124 had little understanding about carcinoma cervix and among 82 females of high SES, 53 females had adequate knowledge while 29 had very little awareness about carcinoma of the cervix.. There was significant difference observed among all females of different SES class for adequate knowledge (P<0.05).

CONCLUSION

This is concluded through results of this study that only one fourth of the females in our local society are aware and adequate know how of this malignancy. So there is an immense need to start an awareness campaigns in order to apprise the public in general and females in particular about carcinoma of the cervix and its screening. Special focus of the campaigns is needed to direct the illiterate females and those belonging from poor socio-economic status (SES).

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