

A knowledge regarding cervical cancer among women residing in selected urban and rural areas: Comparative study

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ABSTRACT

Cervical cancer is a type of cancer that occurs in the cells of the cervix — the lower part of the uterus that connects to the vagina. Various strains of the human papillomavirus (HPV), a sexually transmitted infection, play a role in causing most cervical cancer. **Aim of study:** The main aim of the study was to access the knowledge regarding cervical cancer among women residing in selected urban and rural areas. **Methodology:** this comparative study was performed using a comprehensive self-designed questionnaire on cervical cancer women of urban 50 and rural 50 background aged 20—60 years, evaluating their knowledge for cervical cancer. Quantitative method was the approach used for the study. Non-experimental descriptive research is the label given to a study. Non-probability convenient sampling technique was used. **Result:** . Result showed that. Showed 4% of women from urban area were having poor level of knowledge score, 28% had average 34% had good, 32% had very good and only 2% of women had excellent level of knowledge score. 8% of women from rural area were having poor level of knowledge score, 44% of them had average, 34% had good and 14% of women had very good level of knowledge score. And none of them having excellent knowledge score. In urban area reveals that there is an association of knowledge score with religion and knowledge regarding cervical cancer & In rural areas reveals that there is an association with age and occupation. **Conclusion:** Thus it was concluded that the assessment of knowledge regarding cervical cancer among the women residing in selected urban and rural areas, lack of awareness knowledge regarding cervical cancer was found poor in rural area as compare to urban area

KEY WORDS: KNOWLEDGE, CERVICAL CANCER, WOMEN, RESIDING, URBAN, RURAL

Introduction

Women's health is affected by many disease problems and cervical cancer is one of them. It is the 2nd commonest disease that affected the women's health and remains a leading cause of cancer related death for women in the developing countries.¹ Cervical cancer is a type of cancer that occurs in the cells of the cervix — the lower part of the uterus that connects to the vagina. Various strains of the human papillomavirus (HPV), a sexually transmitted infection, play a role in causing most cervical cancer. When exposed to HPV, the body's immune system typically prevents the virus from doing harm. In a small percentage of people, however, the virus survives for years, contributing to the process that causes some cervical cells to become cancer cells.²

Cervical cancer grows slowly, so there's usually time to find and treat it before it causes serious problems. It kills fewer and fewer women each year, thanks to improved screening through Pap tests. Women 35 to 44 years old are most likely to get it. More than 15% of new cases are in women over age 65, however, especially those who haven't been getting regular screenings.³

The current Indian population is 1.27 billion. The incidence of cancer in India is 70-90 per 100,000 population and cancer prevalence is established to be around 2,500,000 with over 800,000 new cases and 5,50,000 deaths occurring each year.⁴

Incidence of cervical cancer is still very high in India as compared to western countries. It is the commonest genital malignancy and leading cause of women's mortality. It is very unfortunately to see so many cervical cancer patients in India when there are preventive and screening methods available. The screening method is cheap but still not used as a national screening method in our country.⁵

Cervical cancer forms 16.5% of the total cancer cases in Indian women and is the second most common type of cancer amongst women in the country (breast cancer being the first). It is estimated that about 160 million women between the ages of 30 and 59 years are at risk of developing cervical cancer in India, with 96,922 new cases registered in 2018 alone.

Unfortunately, cervical cancer does not cause any noticeable symptoms in its initial stages. Symptoms start becoming apparent only after the cancer has advanced. To further complicate matters, cervical cancer symptoms can often be confused for symptoms of other ailments.

For instance, cervical cancer can cause vaginal bleeding between menstrual periods or after sex. Such bleeding can often be misconstrued as irregular periods by women. The illness can also cause frequent, painful urination and vaginal discharge - again symptoms that are typical of urinary tract infections.⁶

Need of the study

The global cervical cancer burden is disproportionately high in low and middle-income countries, where 83% of all new cases and 85% of cervical cancer deaths occur. India accounts for nearly one-fourth of the world's cervical cancer deaths, with 60,078 deaths and 96,922 new cases in 2018. This largely preventable disease is the second most common cause of cancer mortality among Indian women.⁷ Through Human Papilloma Virus (HPV) vaccination and screening campaigns, higher income countries have successfully reduced their burden of cervical cancer by as much as 65% over four decades. Vaccination of adolescents against HPV 16 and HPV 18, which cause approximately 70% of cervical cancers, can prevent the majority of cervical cancer cases. Additionally, frequent screening allows for early detection and removal of precancerous lesions.⁸

Utilization of screening in India is just 2.6 to 5%, mostly being opportunistic.¹⁴ Several factors have been implicated with poor utilization of cervical cancer screening. The Ministry of Health, Government of India, had launched a framework for noncommunicable disease screening in 2016 for oral, breast, and cervical cancers. These guidelines have designated subcenter as the first point of screening for cervical cancer.⁹

a study conducted by LokeshKadia (2021) on Knowledge and Awareness of Cervical Cancer Among Females of Rural and Urban Areas of Haryana. Knowledge about symptoms and risk factors was very low in both rural and urban areas. Whatever little knowledge the women had about cervical cancer was from college education, friends, neighbours, relatives, and medical practitioner or doctors. The survey pointed to the critical need to educate women about cervical cancer and its early diagnosis, related risk factors, symptoms, and preventive measures which can be achieved by launching extensive awareness programs for educating females about cervical cancer in India.¹⁰

There is need for this study as the researcher is interested in this topic. Investigator observed that many women are not aware of cervical cancer. They do not know what causes cervical cancer, what are its symptoms, what causes it, how is it treated and how can it be prevented. Investigator took this study so that information can increase the knowledge of women and they are more aware about the cervical cancer.

Aims of the study: The main aim of the study was to assess the knowledge regarding cervical cancer among women residing in selected urban and rural areas.

Materials and methods: This comparative study was performed using a comprehensive self-designed questionnaire on cervical cancer women of urban 50 and rural 50 background aged 20–60 years, evaluating their knowledge for cervical cancer. Quantitative method was the approach used for the study. Non-experimental descriptive research is the label given to a study. Non-probability convenient sampling technique was used. The content validity and reliability of the tool was done, which suggested that the tool was reliable. The pilot study was done on 15/12/2020 to 23/12/2020 for a period of 7 days sample of 10 women were selected from selected areas and found that the study was feasible for the final study. The objectives and of the study were explained in details to the subjects in the language understand best and written informed consent is taken from the participants. Even after prior appointments, if subjects were found busy in their emergency work, care was taken not to interrupt them in their work and again suitable time was taken. Study tool was filled personally by interviewing the subjects.

Result:

Demographic variables

Demographic data of the subjects shows majority of women that is 32% from urban area and 36% from rural area were in the age group of 31-40 years, 46% from urban area were graduates and 38% from rural area were educated upto secondary standard. 60% from urban area and 70% from rural area were homemaker. 40% of the women from urban area and 30% from rural area had monthly family income of more than 20000 Rs. 70% of women from urban area and 74% from rural area were hindus. All 100% of women were from urban area and rural area respectively. marital status, 78% of women were from urban area and 90% from rural area were married. 61.54% of women from urban area and 44.44% from rural area had duration of marriage 16-20 years and more. type of family, 70% of women were from urban area nuclear families and 56% from rural area were from joint families. 48.80% of women from urban area and 57.80% from rural area were para 2. 64% of women from urban

area and 56% from rural area did not have knowledge about cervical cancer. 55.60% of women from urban area and 59.09% from rural area had information about cervical cancer from media. 55.60% of women from urban area and 59.09% from rural area had information about cervical cancer from media.

Table 1 Assessment with level of knowledge score among women from urban area.

Level ofknowled ge score	Scorerange		Levelofknowledge score		Levelofknowledge score	
	Urban				Rural	
	Frequency	percentage	Frequency	Percentage	Frequency	Percentage
Poor	0-5	0-20%	2	4%	4	8%
Average	6-10	21-40%	14	28%	22	44%
Good	11-15	41-60%	17	34%	17	34%
Verygood	16-20	61-80%	16	32%	7	14%
Excellent	21-25	81-100%	1	2%	0	0%
Minimumscore			4		3	
Maximumscore			21		17	
Meanknowledgescore			12.62,4.11		10.96,3.92	
Mean%knowledgescore			50.48,16.46		43.84,15.71	

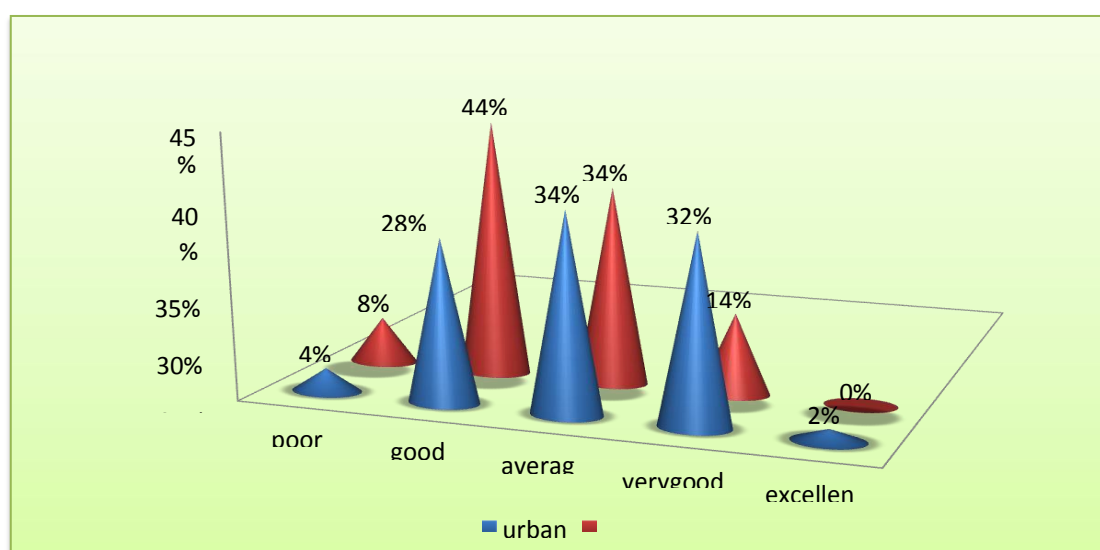


Figure 1 conical diagram representing the level of knowledge score among women residing in selected urban and rural areas

Above table & figure showed 4% of women from urban area were having poor level of knowledge score, 28% had average, 34% had good, 32% had very good and only 2% of women had excellent level of knowledge score.

Assessment with level of knowledge score among women from rural area showed 8% of women from rural area were having poor level of knowledge score, 44% of them had average, 34% had good and 14% of women had very good level of knowledge score. And none of them having excellent knowledge score.

Distribution of areas wise assessment of knowledge score regarding cervical cancer among women residing in urban and rural area.

Mean knowledge score of women for the area of introduction in urban area was 2.88 ± 1.09 and in rural area it was 2.66 ± 1.28 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.91, p=0.36$).

Mean knowledge score of women for the area of causes in urban area was 0.90 ± 0.76 and in rural area it was 0.68 ± 0.68 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=1.51, p=0.13$).

Mean knowledge score of women for the area of risk factors in urban area was 0.72 ± 0.70 and in rural area it was 0.68 ± 0.65 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.29, p=0.76$).

Mean knowledge score of women for the area of sign and symptoms in urban area was 1.40 ± 0.75 and in rural area it was 1.14 ± 0.80 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=1.66, p=0.10$).

Mean knowledge score of women for the area of investigation in urban area was 0.94 ± 0.73 and in rural area it was 0.98 ± 0.74 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.27, p=0.78$).

Mean knowledge score of women for the area of prevention in urban area was 3.60 ± 1.84 and in rural area it was 3.26 ± 1.91 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.90, p=0.36$).

Mean knowledge score of women for the area of treatment in urban area was 0.52 ± 0.50 and in rural area it was 0.42 ± 0.49 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.99, p=0.32$).

Mean knowledge score of women for the area of complications in urban area was 1.02 ± 0.68 and in rural area it was 1.02 ± 0.71 . By using student's unpaired t-test statistically no significant difference was found in mean knowledge score among women of urban and rural area ($t=0.00, p=1.00$)

Mean knowledge score of women for the area of prognosis in urban area was 0.64 ± 0.48 and in rural area it was 0.38 ± 0.49 . By using student's unpaired t-test statistically significant difference was found in mean knowledge score among women of urban and rural area ($t=2.66, p=0.009$).

Comparison of knowledge score regarding cervical cancer among women residing in selected urban and rural areas.

Table 2 comparison of knowledge regarding cervical cancer among urban and rural women

Overall	Mean	SD	Mean Difference	t-value	p-value
Urban Area	12.62	4.11	1.66 ± 0.19	2.06	0.043
Rural Area	10.96	3.92			$S, p < 0.05$

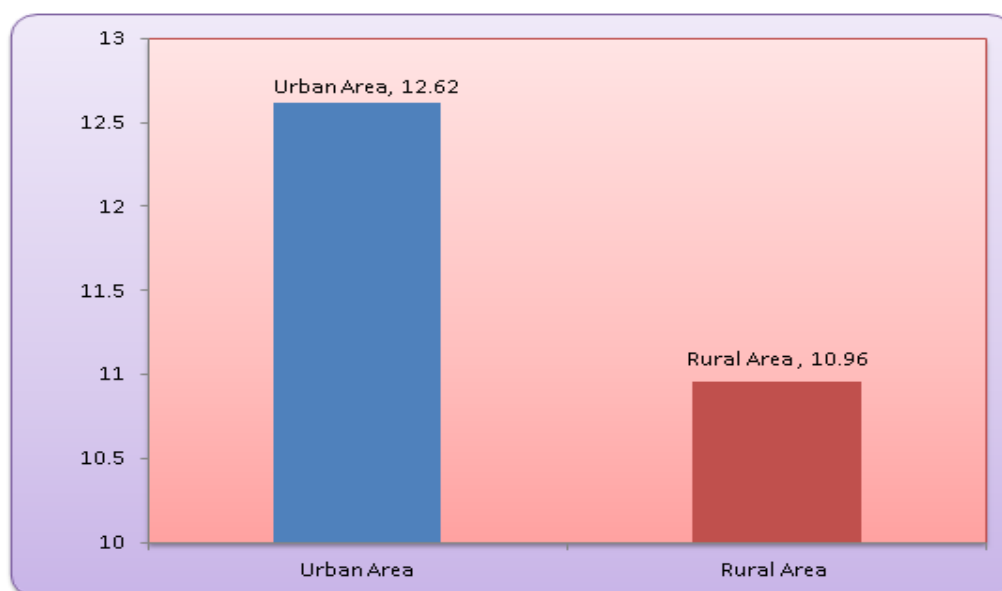


Figure 2 Bar diagram representing Comparison of knowledge regarding cervical cancer among urban and rural women

The comparison of knowledge regarding cervical cancer among urban and rural women shows Mean and standard deviation are compared and student's unpaired 't' test is applied at 5% level of significance. The tabulated value for $n=50+50-1$ i.e. 98 degrees of freedom was 1.98.

The calculated 't' value i.e. 2.06 are higher than the tabulated value at 5% level of significance for overall knowledge of urban and rural women which is statistically acceptable level of significance. Hence it is statistically interpreted that the knowledge regarding cervical cancer among women from rural and urban area was effective. Thus the H1 is accepted.

Association of knowledge regarding cervical cancer among women residing in selected urban and rural areas with their demographic variables.

- In urban area reveals that there is an association of knowledge score with religion and knowledge regarding cervical cancer.
- In rural areas reveals that there is an association with age and occupation.

DISCUSSION: The study aimed at determining the Knowledge regarding Cervical Cancer among women residing in selected urban and rural areas : A Comparative Study. The main aim of the study was compare the knowledge regarding cervical cancer among women residing in selected urban and rural areas. Quantitative method was the approach used for the study. Non-experimental descriptive research is the label given to a study. The setting for the present study is selected urban and rural areas. Non-probability purposive sampling technique was used. The content validity and reliability of the tool was done, which suggested that the tool was reliable. The study was conducted among 50 rural & 50 urban women. Non-probability purposive sampling technique was used. Even after prior appointments, if subjects were found busy in their emergency work, care was taken not to interrupt them in their work and again suitable time was taken. Study tool was filled personally by interviewing the subjects. Result showed that. Showed 4% of women from urban area were having poor level of knowledge score, 28% had average, 34% had good, 32% had very good and only 2% of women had excellent level of knowledge score. 8% of women from rural area were having poor level of knowledge score, 44% of them had average, 34% had good and 14% of women had very good level of knowledge score. And none of them having excellent knowledge score. In urban area reveals that there is an association of knowledge score with religion and knowledge regarding cervical cancer & In rural areas reveals that there is an association with age and occupation.

CONCLUSION: This non experimental study done on Knowledge regarding Cervical Cancer among women residing in selected urban and rural areas: A Comparative Study. Women's organ is complex and often affected by many factors and related issues need early and careful diagnosis. Women's health is affected by many disease problems and cervical cancer is one of them. Cervical cancer affects the women's health and remains a leading cause of cancer related death for women in the developing countries. Thus it was concluded that the assessment of knowledge regarding cervical cancer among the women residing in selected urban and rural areas, lack of awareness knowledge regarding cervical cancer was found poor in rural area as compare to urban area. In urban area reveals that there is an association of knowledge score with religion and knowledge regarding cervical cancer & In rural areas reveals that there is an association with age and occupation.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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