

A Comparative Study to Assess the Knowledge and Attitude Regarding Cervical Cancer Among Women of Reproductive Age Group in Selected Urban & Rural Areas of Bilaspur, Chhattisgarh.

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Abstract

A descriptive comparative study to Assess the Knowledge and Attitude Regarding Cervical Cancer The objectives of the study were to assess and compare the knowledge and attitude regarding cervical cancer among women aged 18–49 years in selected urban and rural areas, and to determine the association between knowledge scores and selected socio demographic variables. The study was guided by the Health Belief Model and adopted a non-experimental descriptive design. A total of 60 women were selected using purposive sampling, and data were collected using a self-structured questionnaire and Likert scale & data were analyzed using descriptive and inferential statistics. A significant difference was found between urban and rural women in both knowledge and attitude regarding cervical cancer. In rural areas, 70% of women had poor knowledge compared to only 26.67% in urban areas. Conversely, 66.67% of urban women had average knowledge. The mean knowledge score and attitude score were significantly higher among urban women ($t=4.93$ and $t=8.17$ respectively, at $p<0.05$). Marital status was the only socio demographic variable significantly associated with knowledge in both urban and rural groups.

Conclusion: Urban women demonstrated significantly higher knowledge and a more positive attitude towards cervical cancer compared to rural women. The findings emphasize the need for targeted awareness and educational interventions in rural areas to bridge the knowledge and attitude gap.

Keywords: Comparative, Assess, Knowledge, Attitude, Cervical Cancer, Reproductive Age Group, Urban & Rural.

1. Introduction

Women play a crucial role in maintaining the health of their families and communities. Promoting women's health through preventive measures and health education is essential for improving the overall health of society¹.

Cervical cancer is one of the leading cancers among women and is a major public health concern worldwide. In India, it is one of the most common causes of cancer-related deaths among women².

Persistent infection with Human Papillomavirus (HPV), especially types 16 and 18, is the main cause of cervical cancer. Early detection through Pap smear screening and prevention through HPV vaccination can significantly reduce the incidence and mortality of the disease^{3,4}.

However, lack of awareness, poor screening practices, and limited access to healthcare services remain major barriers, particularly in developing countries. Therefore, improving women's knowledge regarding cervical cancer and its prevention is essential for early diagnosis and better health outcomes^{2,5}.

2. Statement of Problem

“A comparative study to assess the knowledge and attitude regarding cervical cancer among women of reproductive age group in selected urban & rural areas of Bilaspur, Chhattisgarh.”

3. Objective

- To assess the level of knowledge regarding cervical cancer among women of reproductive age group in selected urban and rural area of Bilaspur Chhattisgarh.
- To assess the attitude towards cervical cancer among women of reproductive age group in selected urban and rural area of Bilaspur Chhattisgarh.
- To compare the knowledge scores regarding cervical cancer among women of reproductive age group in selected urban and rural area of Bilaspur Chhattisgarh
- To compare the attitude scores regarding cervical cancer among women of reproductive age group in selected urban and rural area of Bilaspur Chhattisgarh
- To find out the association between knowledge score with selected socio demographic variables regarding cervical among women of reproductive age group in selected urban and rural area of Bilaspur Chhattisgarh.

4. Materials and Methodology

The study adopted a quantitative research approach using a comparative descriptive research design to assess and compare the knowledge and attitude regarding cervical cancer among women of reproductive age in selected urban and rural areas of Bilaspur, Chhattisgarh. The study was conducted in Sarkanda (urban area) and Lagra (rural area) of Bilaspur district. The target population comprised women aged 18–49 years residing in the selected areas. A total of 60 women (30 from the urban area and 30 from the rural area) were selected using a non-probability purposive sampling technique. Women aged 18–49 years who were willing to participate, available during the data collection period, and able to respond to the questionnaire were included in the study. Women who were unwilling to participate or had previously participated in a similar study were excluded.

5. Description of The Tool

The data were collected using a **semi-structured interview schedule** consisting of **three sections (46 items)**:

- **Section A:** Socio-demographic variables (Age, religion, marital status, education, occupation, monthly family income, and type of family).
- **Section B:** A **30-item structured questionnaire** to assess knowledge regarding cervical cancer, including general information, risk factors, signs and symptoms, screening, diagnosis, treatment, and prevention.

- **Section C: A 16-item five-point Likert scale** to assess attitudes toward cervical cancer.

6. Results

Table.1 Distribution of Respondents According to Selected Socio-Demographic Variables (N=60)

S.No	Variable	Category	Urban F	Urban %	Rural F	Rural %
1	Age	18–25	13	43.33	10	33.34
		26–33	8	26.67	7	23.33
		34–41	5	16.67	7	23.33
		42–49	4	13.33	6	20
2	Education	Primary	2	6.66	3	10
		Secondary	10	33.33	8	26.66
		Higher Secondary	11	36.67	15	50
		Graduate	7	23.34	4	13.34
3	Occupation	Housewife	13	43.34	12	40
		Government Employee	0	0	5	16.67
		Private Employee	5	16.66	3	10
		Student	12	40	10	33.33
4	Monthly Income	Below 10000	10	33.34	10	33.34
		10001-15000	10	33.33	14	46.67
		15001-20000	6	20	4	13.33
		Above 20001	4	13.33	2	6.66
5	Religion	Hindu	24	80	22	73.33
		Christian	4	13.33	5	16.67
		Muslim	2	6.67	3	10
		Others	0	0	0	0
6	Type of Family	Nuclear	6	20	11	36.67
		Joint	15	50	12	40
		Extended	8	26.66	6	20
		Single Parent	1	3.34	1	3.33
7	Marital Status	Married	14	46.66	17	56.66
		Unmarried	15	50	10	33.34
		Divorce/Widow/Others	1	3.34	3	10

Table 2: Comparison of Knowledge and Attitude Scores Between Urban and Rural Women (N=60)

S.N.	Variable	Group	Total Score	Mean Score	Mean %	Standard Deviation
1	Knowledge	Urban	432/900	14.4	48.00	3.73
		Rural	306/900	10.2	34.00	3.14
2	Attitude	Urban	1689/2400	56.3	70.30	7.37

		Rural	1426/2400	47.5	59.51	6.77
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Table 3. Comparison of Knowledge Score Between Urban and Rural Women

S.N.	Knowledge Score	Urban F	Urban %	Rural F	Rural %
1	Poor	08	26.67	21	70
2	Average	20	66.67	09	30
3	Good	02	6.66	00	00

Table 4. Difference of Knowledge Level of Urban and Rural Women

Aspect	Max Score	Range Score	Mean	Mean %	SD	Unpaired t
Urban	30	8-24	14.4	48	3.73	5.25
Rural	30	8-16	10.2	34	3.14	
Difference	30	0-8	4.2	14	0.59	

Table 5. Comparison of Attitude Score Between Urban and Rural Women

S.N.	Attitude Score	Urban F	Urban %	Rural F	Rural %
1	Positive	30	100	30	100
2	Negative	00	00	30	100

Table 6. Difference of Attitude Level of Urban and Rural Women

Aspect	Max Score	Range Score	Mean	Mean %	SD	Unpaired t
Urban	80	49-64	56.3	70.3	7.37	4.8
Rural	80	40-53	47.5	59.41	6.77	
Difference	2400	9-11	8.8	10.89	0.6	

Table 7. Chi square for association between knowledge and demographic variables of urban women.

S.N.	Socio demographic variable	Poor	Average	Good	Chi square	df	Critical value at 0.05	Inference
1.	AGE 18-25 years 26-33 years 34-41 years 42-49 years	06 01 01 00	06 06 04 04	01 01 00 02	6.77	6	12.6	NS
2.	EDUCATIONAL STATUS Illiterate Primary education Higher secondary Graduate	00 02 02 04	02 07 08 03	00 01 01 00	5.66	6	12.6	NS
3.	OCCUPATIONAL							

	STATUS							NS
	House wife	02	10	01	2.87	6	12.6	
	Government employee	00	00	00				
	Private employee	01	04	00				
	Student	05	06	01				
4.	MONTHLY INCOME OF FAMILY							
	Below 10,000/-	02	07	10	5.94	6	12.6	
	10,001-15000/-	04	05	01				NS
	15,001-20,000/-	00	06	00				
	Above 20,000/-	02	02	00				
5.	RELIGION							
	Hindu	05	01	02				
	Christian	01	03	00	6.2	6	12.6	NS
	Muslim	02	00	00				
	If any other	00	00	00				
6.	TYPES OF FAMILY							
	Nuclear family	02	03	01				
	Joint family	04	10	01	2.29	6	12.6	NS
	Extended family	02	06	00				
	Single parenting	00	01	00				
7.	MARITAL STATUS							
	Married	02	11	01				
	Unmarried	06	08	01	15.45	04	9.49	HS*
	Divorcee/widow/other	00	01	00				

Table 8. Chi square for association between knowledge and demographic variables of rural women.

S.NO.	Socio demographic variable	Poor	Average	Good	Chi square	df	Critical value at 0.05	Inference
1.	AGE							
	18-25 years	07	03	00				
	26-33 years	04	03	00	1.14	6	12.6	NS
	34-41 years	05	02	00				
	42-49 years	05	01	00				
2.	EDUCATIONAL STATUS							
	Illiterate	03	00	00				
	Primary education	07	01	00	6.99	6	12.6	NS
	Higher secondary	10	05	00				
	Graduate	01	03	00				

3.	OCCUPATIONAL STATUS							
	House wife	10	02	00	4.29	6	12.6	NS
	Government employee	03	02	00				
	Private employee	03	00	00				
	Student	05	05	00				
4.	MONTHLY INCOME OF FAMILY							
	Below 10,000/-	09	01	00	4.60	6	12.6	NS
	10,001-15000/-	08	06	00				
	15,001-20,000/-	02	02	00				
	Above 20,000/-	02	00	00				
5.	RELIGION							
	Hindu	16	06	00				
	Christian	04	01	00	6.02	6	12.6	NS
	Muslim	01	02	00				
	If any other	00	00	00				
6.	TYPES OF FAMILY							
	Nuclear family	10	01	00				
	Joint family	06	06	00	7.39	6	12.6	NS
	Extended family	05	01	00				
	Single parenting	00	01	00				
7.	MARITAL STATUS							
	Married	14	03	00				
	Unmarried	05	05	00	29.31	04	9.49	HS*
	Divorcee/widow/other	02	01	00				

7. Summary

The study compared the knowledge and attitude regarding cervical cancer among women of reproductive age in selected urban and rural areas of Bilaspur, Chhattisgarh. A quantitative non-experimental descriptive design was used. Sixty women (30 urban and 30 rural) were selected by non-probability purposive sampling. Data were collected using a self-structured questionnaire comprising socio-demographic variables, a 30-item knowledge questionnaire, and a 16-item attitude scale. Data were analyzed using descriptive and inferential statistics.

8. Major Findings

1. Findings Related to Socio-Demographic Variables

Most urban (43.33%) and rural (33.33%) women were 18–25 years old.

Majority had higher secondary education, were housewives, belonged to the Hindu religion, and lived in joint families.

Most families had a monthly income of ₹10,001–15,000.

Most urban women were unmarried (50%), while most rural women were married (56.66%).

2. Findings Related to Knowledge and Attitude

Urban women had higher knowledge scores than rural women (Mean: 14.4 vs. 10.2).

66.67% of urban women had average knowledge, whereas 70% of rural women had poor knowledge.

Both groups had a positive attitude towards cervical cancer; urban women had higher attitude scores.

The difference in knowledge ($t=5.25$) and attitude ($t=4.8$) was statistically significant.

3. Findings Related to Association

Marital status showed a significant association with knowledge in both urban and rural women.

Age, education, occupation, income, religion, and type of family showed no significant association with knowledge.

9. Discussion (Summary)

The study included 60 women (30 urban and 30 rural). Most participants were 18–25 years old, had higher secondary education, were housewives, belonged to the Hindu religion, and lived in joint families.

Urban women had higher knowledge scores (Mean=14.4) than rural women (Mean=10.2). Most urban women had average knowledge, whereas most rural women had poor knowledge.

Both urban and rural women showed a positive attitude towards cervical cancer; however, urban women had significantly higher attitude scores ($t=4.8$).

The difference in knowledge was statistically significant ($t=5.25$), indicating better knowledge among urban women.

Chi-square analysis showed that marital status was significantly associated with knowledge in both urban and rural women, while other demographic variables were not significantly associated.

Summary

The study concluded that urban women had significantly better knowledge and a more positive attitude regarding cervical cancer than rural women. Health education and awareness programmes are recommended to improve knowledge, especially among rural women.

References

Stanhope M, Lancaster J. Foundations of Nursing in the Community: Community-Oriented Practice. 2nd ed. St. Louis: Mosby Elsevier; 2006.

1. World Health Organization. Human papillomavirus (HPV) and cervical cancer. Geneva: WHO; 2020.
2. International Agency for Research on Cancer (IARC). IARC Handbooks of Cancer Prevention: Cervix Cancer Screening. Vol. 10. Lyon: IARC Press; 2005.
3. World Health Organization. Cervical Cancer. Geneva: WHO; 2018.
4. World Health Organization. Comprehensive Cervical Cancer Control: A Guide to Essential Practice. 2nd ed. Geneva: WHO; 2014.