



# A Descriptive Study to Assess The Knowledge Regarding Early Signs of Cervical Cancer Among Women at Selected Community Area in Puducherry

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## ABSTRACT:

**Introduction:** Cervix cancer is the second most common cancer in women worldwide, with nearly half a million new cases diagnosed each year. Screening with cervical smear and adequate follow-up therapy can significantly reduce incidence and mortality rates. **Objectives of the study:** The main objective of the study to assess the level of knowledge regarding early signs of cervical cancer among women and to associate the knowledge regarding early signs of cervical cancer among women with selected demographic variable. **Methodology:** A quantitative research approach was adopted for the present study. A descriptive design was selected for the present study. The sample size for the present study consists of 60 women at selected community area, Puducherry. A convenient sampling technique was used to select the sample for the present study. **Results:** The present study revealed that, majority 48 (80%) of them had inadequate knowledge, 12 (20%) of them had moderate knowledge regarding early signs of cervical cancer. **Conclusion:** The study findings concluded that majority of the women had inadequate knowledge regarding early signs of cervical cancer.

## INTRODUCTION:

The uterus is a crucial reproductive organ in humans and mammals, with the cervix at its lower end. It plays a significant role in reproductive health and wellbeing, and can host a spectrum of lesions, which can be neoplastic or non-neoplastic. Cervix cancer is the second most common cancer in women worldwide, with nearly half a million new cases diagnosed each year. Screening with cervical smear and adequate follow-up therapy can significantly reduce incidence and mortality rates. In India, the incidence of cervical cancer remains high. Common disorders of the uterus include abnormal uterine bleeding, fibroids, endometriosis, uterine prolapse, endometritis, polycystic ovarian syndrome, pelvic inflammatory disease, polyps, Hematometra, Nabothian cyst, and malignancy.

Cervical screening aims to detect and treat cervical neoplasia before cervical cancer develops. Methods for screening include Pap test, liquid-based cytology, HPV DNA testing, and visual inspection method (VIA-VILI Method). VIA/VILI offers significant advantages over Pap in low resource settings, such as increased screening coverage, improved follow-up care, and improved program quality.

## **NEED FOR THE STUDY**

In 2023, an estimated 13,960 women in the United States will be diagnosed with invasive cervical cancer, with an estimated 604,127 women diagnosed in 2020 worldwide. Cervical cancer ranks as the fourth most frequently diagnosed cancer and the fourth leading cause of cancer death in women. However, 85% of worldwide deaths from cervical cancer occur in underdeveloped or developing countries, with the death rate being 18 times higher in low-income and middle-income countries compared to wealthier countries. In China, cervical cancer is the second largest female malignant tumor, with 98,900 new cases and 30,500 deaths in 2015.

India has a population of 511.4 million women ages 15 and older at risk of developing cervical cancer, with 123907 women diagnosed annually and 77348 dying from the disease. Cervical cancer is the second most frequent cancer among women in India, with a prevalence rate of 18.3%. In Tamil Nadu, the Crude Incidence Rate (CTRI) of all cancers per 1,000 population was 93.9 among women compared to 74.4 in men.

## **STATEMENT OF THE PROBLEM**

A study to assess the knowledge regarding early signs of cervical cancer among women at selected community area in Puducherry”.

## **OBJECTIVES OF THE STUDY**

1. To assess the level of knowledge regarding early signs of cervical cancer among women
2. To associate the knowledge regarding early signs of cervical cancer among women with selected demographic variable.

## **RESEARCH METHODOLOGY:**

A quantitative research approach was adopted for the present study. A descriptive design was selected for the present study. The present study was conducted at in Kalitheerthalkuppam, Puducherry. The study population consist of all the women of age group between 35 to 45 years. The sample of the study consist of all women of age group between 35 to 45 years who meet the inclusion criteria. The sample size for the present study consists of 60 women at selected community area, Puducherry. A convenient sampling technique was used to select the sample for the present study. The tool consists of demographic data, and structured questionnaire. The outcome of the study was evaluated by using descriptive and inferential statistics.

### **Inclusion criteria:**

1. Women who are in the age of 35-45 years.
2. Women who are willing to participate in this study.
3. Women who are married.

**Exclusion criteria:**

- Women who are physically and mentally ill.
- Women who are not willing to participate in this study
- Women who are not married

**SECTION A:** Demographic variables include age, gender, educational, status, occupational status, socio-economic status, marital status, religion, family history of cervical cancer, number of children, use of contraceptive method, family income per month, dietary pattern, type of family, area of residence, previous knowledge regarding cervical cancer, bad habit, age of menarche, age of woman at first birth.

**SECTION B:** This section consists of structured questionnaire of 30 items with multiple choice question format. Each correct response is graded as “1” and wrong response is graded as “0”.

**SCORING INTERPRETATION:**

| S.NO | SCORE   | INTERPRETATION    |
|------|---------|-------------------|
| 1    | < 10    | Inadequate        |
| 2    | 11 - 20 | Moderate Adequate |
| 3    | > 20    | Adequate          |

**DATA ANALYSIS AND INTERPRETATION**

The data collected was analyzed using descriptive and inferential statistics. The data was organised as

**SECTION A:** Frequency and percentage wise distribution of demographic variables of women

**SECTION B:** Frequency and percentage distribution of the level of knowledge regarding early signs of cervical cancer among women.

**SECTION C:** Association of the knowledge regarding early signs of cervical cancer among women with selected demographic variables

**Table 4.1: Frequency and percentage wise distribution of demographic variables of women N = 60**

| S.No | Demographic variables | Frequency | Percentage |
|------|-----------------------|-----------|------------|
| 1    | <b>Age in years</b>   |           |            |
|      | a) 30-35 years        | 6         | 10%        |
|      | b) 36-40 years        | 31        | 51.7%      |
|      | c) 41-45 years        | 23        | 38.3%      |

|           |                              |    |       |
|-----------|------------------------------|----|-------|
|           | d) Above 45 years            | 0  | 0%    |
| <b>2.</b> | <b>Religion</b>              |    |       |
|           | a) Hindu                     | 48 | 80%   |
|           | b) Muslim                    | 6  | 10%   |
|           | c) Christian                 | 6  | 10%   |
|           | d) Others                    | 0  | 0%    |
| <b>3.</b> | <b>Education</b>             |    |       |
|           | a) Illiterate                | 33 | 55%   |
|           | b) Primary school            | 15 | 25%   |
|           | c) High school               | 10 | 16.7% |
|           | d) Graduate                  | 2  | 3.3%  |
| <b>4.</b> | <b>Occupational status</b>   |    |       |
|           | a) Housewife                 | 52 | 86.7% |
|           | b) Government sector         | 4  | 6.7%  |
|           | c) Private sector            | 4  | 6.7%  |
|           | d) Others                    | 0  | 0%    |
| <b>5.</b> | <b>Family Income</b>         |    |       |
|           | a) <5000                     | 0  | 0     |
|           | b) 5000-10000                | 3  | 5%    |
|           | c) 10,000-15,000             | 54 | 90%   |
|           | d) > 15,000                  | 3  | 5%    |
| <b>6.</b> | <b>Dietary pattern</b>       |    |       |
|           | a) Vegetarian                | 5  | 8.3%  |
|           | b) Non vegetarian            | 0  | 0%    |
|           | c) Mixed                     | 55 | 91.7% |
| <b>7.</b> | <b>Type of family</b>        |    |       |
|           | a) Nuclear family            | 53 | 88.3% |
|           | b) Joint family              | 7  | 11.7% |
|           | c) Extended family           | 0  | 0%    |
| <b>8.</b> | <b>Area of residence</b>     |    |       |
|           | a) Urban                     | 60 | 100%  |
|           | b) Rural                     | 0  | 0%    |
| <b>9.</b> | <b>Socio economic status</b> |    |       |
|           | a) Poor socio-economic class | 0  | 0%    |

|            |   |    |       |
|------------|---|----|-------|
|            | b) Upper middle class                               | 3  | 5%    |
|            | c) Lower middle class                               | 54 | 90%   |
|            | d) High class                                       | 3  | 5%    |
| <b>10.</b> | <b>Family history of Cervical cancer</b>            |    |       |
|            | a) Yes  | 0  | 0%    |
|            | b) No   | 60 | 100%  |
| <b>11.</b> | <b>Previous knowledge regarding cervical cancer</b> |    |       |
|            | a) Yes  | 0  | 0%    |
|            | b) No   | 60 | 100%  |
| <b>12.</b> | <b>Do you have a bad habit of</b>                   |    |       |
|            | a) alcohol drinking                                 | 0  | 0     |
|            | b) smoking  | 0  | 0%    |
|            | c) chewing tobacco                                  | 0  | 0%    |
|            | d) none   | 60 | 100%  |
| <b>13.</b> | <b>Age at menarche</b>                              |    |       |
|            | a) less than 10 years                               | 5  | 8.3%  |
|            | b) 10-12  | 28 | 46.7% |
|            | c) 13-15  | 27 | 45%   |
|            | d) Above 15 years                                   | 0  | 0%    |
| <b>14.</b> | <b>Marital status</b>                               |    |       |
|            | a) Married  | 60 | 100%  |
|            | b) Unmarried  | 0  | 0     |
|            | c) Widowed  | 0  | 0     |
|            | d) Divorced   | 0  | 0     |
| <b>15.</b> | <b>No of child birth</b>                            |    |       |
|            | a) 1  | 5  | 8.3%  |
|            | b) 2  | 28 | 46.7% |
|            | c) 3  | 27 | 45%   |
|            | d) More than  | 0  | 0%    |
| <b>16.</b> | <b>Use of contraceptive method</b>                  |    |       |
|            | a) condom   | 4  | 6.7%  |
|            | b) Copper T   | 0  | 0%    |
|            | c) Oral pills                                       | 0  | 0%    |

|            |  |    |       |
|------------|--|----|-------|
|            | d) Permanent sterilization               | 56 | 93.3% |
| <b>17.</b> | <b>Age of woman at first child birth</b> |    |       |
|            | a) 15-20                                 | 28 | 43.3% |
|            | b) 21-25                                 | 34 | 56.7% |
|            | c) 26-30                                 | 0  | 0%    |
|            | d) > 30 years                            | 0  | 0%    |

The above table shows frequency and percentage-wise distribution of women attending fertility centre. Regarding the age in years, the majority 31 (51.7%) were in the age group of 36-40 years, 23 (38.3%) were in the age group of 41-45 years and 6(10%) were in the age group of 41-45 years.

In the aspect of religion majority, 48 (80%) were Hindu, 6 (10%) were Muslim and 6 (10%) were Christian. In the aspect of education, majority 33 (55%) were illiterate and 15 (25%) were completed primary school.

Regarding family income, the data shows that 54 (90%) come under Rs.10000-15000 and 3 (5%) were have income above Rs. 15000. Regarding dietary pattern, 55 (91.7%) were vegetarian and non-vegetarian, 5 (8.3%) were vegetarian. In the aspect of types of family majority, 53 (88.3%) were belong to nuclear family, 7 (11.7%) were belong to joint family.

With regards to area of residence majority, 60(100%) were in urban area. With regards to socio economic status majority 54 (90%) had lower middle class and 3 (5%) had high class. In the aspect of family history of cervical cancer 60 (100%) had no family history.

Regarding previous knowledge regarding cervical cancer 60 (100%) had no previous knowledge. With regards to marital status, 60 (100%) were married. In the aspect of number of child birth, 28 (46.7%) had two child and 27 (45%) had three children. Regarding use of contraceptive method, 56 (93.3%) had permanent sterilization.

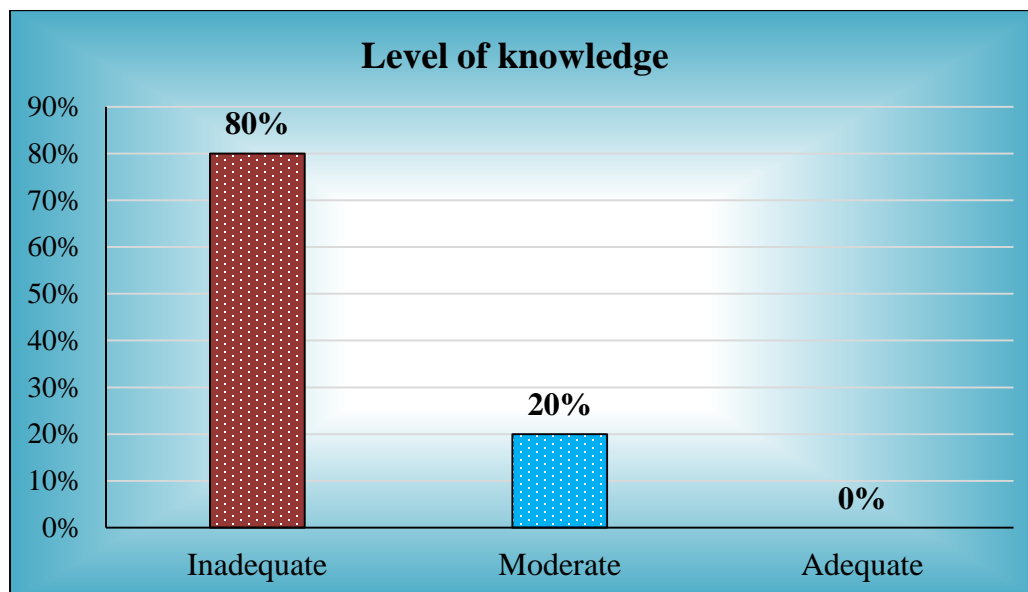
## SECTION B:

**Table 2: Frequency and percentage distribution of the level of knowledge regarding early signs of cervical cancer among women.**

N = 60

| S.NO | LEVEL OF KNOWLEDGE | FREQUENCY<br>(n) | PERCENTAGE<br>% |
|------|--------------------|------------------|-----------------|
| 1.   | Inadequate         | 48               | 80%             |
| 2.   | Moderate           | 12               | 20%             |
| 3.   | Adequate           | 0                | 0%              |

The above table reveals the frequency and percentage-wise distribution of level of knowledge regarding early signs of cervical cancer among women. The finding shows that, majority 48 (80%) of them had inadequate knowledge, 12 (20%) of them had moderate knowledge regarding early signs of cervical cancer.



**Figure 1: Percentage wise distribution of level of knowledge regarding early signs of cervical cancer among women**

### SECTION C:

**Table 3: Association of the knowledge regarding early signs of cervical cancer among women with selected demographic variables. N = 60**

| S.No | Demographic variables | LEVEL OF STRESS |    |          |    |          |   | X <sup>2</sup> value                        |
|------|-----------------------|-----------------|----|----------|----|----------|---|---|
|      |                       | Inadequate      |    | Moderate |    | Adequate |   |   |
| 1    | Age in years          | N               | %  | N        | N  | %        | N | X <sup>2</sup> = 1.673<br>p = 0.433<br>(NS) |
|      | a) 30-35 years        | 6               | 10 | 0        | 0  | 0        | 0 |   |
|      | b) 36-40 Years        | 24              | 40 | 7        | 12 | 0        | 0 |   |
|      | c) 41 - 45year        | 18              | 30 | 5        | 8  | 0        | 0 |   |
|      | d) >40 years          | 0               | 0  | 0        | 0  | 0        | 0 |   |
| 2.   | Religion              |                 |    |          |    |          |   | X <sup>2</sup> = 0.104<br>p = 0.949<br>(NS) |
|      | a) Hindu              | 38              | 63 | 10       | 17 | 0        | 0 |   |
|      | b) Muslim             | 5               | 8  | 1        | 2  | 0        | 0 |   |
|      | c) Christian          | 5               | 8  | 1        | 2  | 0        | 0 |   |
|      | d) Others             | 0               | 0  | 0        | 0  | 0        | 0 |   |
| 3    | . Education           |                 |    |          |    |          |   |   |
|      | a) Illiterate         | 27              | 45 | 6        | 10 | 0        | 0 |   |



|            |  |    |    |    |    |   |   |                                      |
|------------|--|----|----|----|----|---|---|--------------------------------------|
|            | b) Primary school                        | 13 | 22 | 2  | 3  | 0 | 0 | $X^2 = 3.485$<br>$p = 0.323$<br>(NS) |
|            | c) High school                           | 6  | 10 | 4  | 7  | 0 | 0 |                                      |
|            | d) Graduate                              | 2  | 3  | 0  | 0  | 0 | 0 |                                      |
| <b>4.</b>  | <b>Occupational Status</b>               |    |    |    |    |   |   | $X^2 = 2.548$<br>$p = 0.280$<br>(NS) |
|            | a) Housewife                             | 43 | 72 | 9  | 15 | 0 | 0 |                                      |
|            | b) Government sector                     | 3  | 5  | 1  | 2  | 0 | 0 |                                      |
|            | c) Private sector                        | 2  | 3  | 2  | 3  | 0 | 0 |                                      |
|            | d) Others                                | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
| <b>5.</b>  | <b>Total family income per month</b>     |    |    |    |    |   |   | $X^2 = 1.088$<br>$p = 0.580$<br>(NS) |
|            | a) <5000                                 | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|            | b) 50001-10000                           | 3  | 5  | 0  | 0  | 0 | 0 |                                      |
|            | c) 10,001-15,000                         | 43 | 72 | 11 | 18 | 0 | 0 |                                      |
|            | d) > 15,000                              | 2  | 3  | 1  | 2  | 0 | 0 |                                      |
| <b>6.</b>  | <b>Dietary Pattern</b>                   |    |    |    |    |   |   | $X^2 = 1.364$<br>$p = 0.243$<br>(NS) |
|            | a) Vegetarian                            | 3  | 5  | 2  | 3  | 0 | 0 |                                      |
|            | b) Non-Vegetarian                        | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|            | c) Mixed                                 | 45 | 75 | 10 | 17 | 0 | 0 |                                      |
| <b>7.</b>  | <b>Type of family</b>                    |    |    |    |    |   |   | $X^2 = .164$<br>$p = 0.572$<br>(NS)  |
|            | a) Nuclear family                        | 42 | 70 | 11 | 18 | 0 | 0 |                                      |
|            | b) Joint family                          | 6  | 10 | 1  | 2  | 0 | 0 |                                      |
|            | c) Extended Family                       | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
| <b>8</b>   | <b>Area of residence</b>                 |    |    |    |    |   |   | <b>K</b>                             |
|            | a) Rural                                 | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|            | b) Urban                                 | 48 | 80 | 12 | 20 | 0 | 0 |                                      |
| <b>9.</b>  | <b>Socio economic status</b>             |    |    |    |    |   |   | $X^2 = 1.088$<br>$p = 0.580$<br>(NS) |
|            | a) Poor socio-economic class             | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|            | b) Upper middle class                    | 3  | 5  | 0  | 0  | 0 | 0 |                                      |
|            | c) Lower middle class                    | 43 | 72 | 11 | 18 | 0 | 0 |                                      |
|            | d) High class                            | 2  | 3  | 1  | 2  | 0 | 0 |                                      |
| <b>10.</b> | <b>Family history of Cervical cancer</b> |    |    |    |    |   |   | <b>K</b>                             |
|            | a) Yes                                   | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|            | b) No                                    | 48 | 80 | 12 | 20 | 0 | 0 |                                      |



|           |   |    |    |    |    |   |   |                                      |
|-----------|---|----|----|----|----|---|---|--------------------------------------|
| <b>11</b> | <b>Previous Knowledge regarding cervical cancer</b> |    |    |    |    |   |   | <b>K</b>                             |
|           | a) Yes  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | b) No   | 48 | 80 | 12 | 20 | 0 | 0 |                                      |
| <b>12</b> | <b>Do you have a bad habit of</b>                   |    | 0  |    | 0  |   |   | <b>K</b>                             |
|           | a) alcohol drinking                                 | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | b) Smoking  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | c) Chewing  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | d) none   | 48 | 80 | 12 | 20 | 0 | 0 |                                      |
| <b>13</b> | <b>Age at Menarche</b>                              |    |    |    |    |   |   | $X^2 = 2.989$<br>$p = 0.224$<br>(NS) |
|           | a) Less than 10 years                               | 5  | 8  | 0  | 0  | 0 | 0 |                                      |
|           | b) 10-12  | 20 | 33 | 8  | 13 | 0 | 0 |                                      |
|           | c) 13-15  | 23 | 38 | 4  | 7  | 0 | 0 |                                      |
|           | d) Above 15 years                                   | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
| <b>14</b> | <b>Marital status</b>                               |    |    |    |    |   |   | <b>K</b>                             |
|           | a) Married  | 48 | 80 | 12 | 20 | 0 | 0 |                                      |
|           | b) Un married                                       | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | c) Widowed  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | d) Divorced   | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
| <b>15</b> | <b>No of child birth</b>                            |    |    |    |    |   |   | $X^2 = 2.989$<br>$p = 0.224$<br>(NS) |
|           | a) 1  | 5  | 8  | 0  | 0  | 0 | 0 |                                      |
|           | b) 2  | 20 | 33 | 8  | 13 | 0 | 0 |                                      |
|           | c) 3  | 23 | 38 | 4  | 7  | 0 | 0 |                                      |
|           | d) More than 3                                      | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
| <b>16</b> | <b>Use of contraceptive method</b>                  |    |    |    |    |   |   | $X^2 = 0.67$<br>$p = 0.796$<br>(NS)  |
|           | a) Condom   | 3  | 5  | 1  | 2  | 0 | 0 |                                      |
|           | b) Copper T   | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | c) Oral pills                                       | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | d) Permanent Sterilization                          | 45 | 75 | 11 | 18 | 0 | 0 |                                      |
| <b>17</b> | <b>Age of woman at first child birth</b>            |    |    |    |    |   |   | $X^2 = 3.326$<br>$p = 0.068$<br>(NS) |
|           | a) 15-20  | 18 | 30 | 8  | 13 | 0 | 0 |                                      |
|           | b) 21-25  | 30 | 50 | 4  | 7  | 0 | 0 |                                      |
|           | c) 26-30  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |
|           | d) >30 Years  | 0  | 0  | 0  | 0  | 0 | 0 |                                      |

**\*p<0.05 - Significant; p<0.01 - Highly Significant**

The above table shows that there is no significance association between age, gender, educational, status, occupational status, socio-economic status, marital status, religion, family history of cervical cancer, number of children, use of contraceptive method, family income per month, dietary pattern, type of family, area of residence, previous knowledge regarding cervical cancer, bad habit, age of menarche, age of woman at first birth.

**MAJOR FINDING OF THE STUDY**

The study reveals that, majority 48 (80%) of them had inadequate knowledge, 12 (20%) of them had moderate knowledge regarding early signs of cervical cancer.

**CONCLUSION**

The present study assessed the knowledge regarding early signs of cervical cancer among women at selected community area in Puducherry “. The study findings concluded that majority of the women had inadequate knowledge regarding early signs of cervical cancer.

**RECOMMENDATIONS:**

1. Same study can be conducted with large samples.
2. Same study can be conducted among the women.

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