



# KNOWLEDGE AND ATTITUDE REGARDING SEXUALLY TRANSMITTED DISEASES AMONG WOMEN: A CROSS SECTIONAL STUDY

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**Abstract:** The aim of this study is to identify the level of knowledge and attitude towards sexually transmitted diseases among women attending Gynaec OPD in selected hospital at Perinthalmanna. A Cross sectional survey design was used among 61 women who attended Gynaec OPD in a selected hospital to identify the level of knowledge and attitude. In this study the frequency and percentage distribution of socio demographic variables, Karl Pearson Correlation coefficient and chi square analysis were used to identify level of knowledge and attitude, correlation between knowledge and attitude and association of selected socio demographic variables with knowledge and attitude regarding Sexually transmitted diseases. Analysis revealed that 24 (39.34%) women had poor knowledge; 37 (60.66%) women had average knowledge and none of the women (0%) had good knowledge. The mean knowledge score was  $7.02 \pm 2.46$ . Based on level of attitude, 25 (40.98%) had negative attitude, 9 (14.75%) had neutral attitude and remaining 27 (44.26%) samples had positive attitude regarding sexually transmitted diseases. The obtained r value was -0.0737 with a p value 0.576 which shows that there was a weak negative correlation between knowledge and attitude of women regarding sexually transmitted diseases which was not statistically significant. It also reveals that there was a significant association between area of residence and knowledge of women about sexually transmitted diseases. The study concludes that majority of women had average level of knowledge and 40.98% had negative attitude (favorable attitude) towards sexually transmitted diseases.

Index Terms: Sexually Transmitted Diseases

## INTRODUCTION

Sexually transmitted infections (STIs) are a major public health concern worldwide, affecting the quality of life and causing serious morbidity and mortality. They result from the multiplication of microbes in the genital tract after transmission through sexual routes and can manifest with a broad spectrum of symptoms, ranging from asymptomatic infections to diseases that may lead to infertility, cancers, and even death. According to the World Health Organization (WHO), more than one million STIs are acquired globally every day. STIs profoundly impact sexual and reproductive health worldwide. Over 30 different bacteria, viruses, and parasites can be transmitted through sexual contact, including vaginal, anal, and oral sex. Some STIs can also be transmitted from mother to child during pregnancy, childbirth, and breastfeeding. Eight pathogens are linked to the highest incidence of STIs. Among these, four are currently curable: syphilis, gonorrhea, chlamydia, and trichomoniasis. The other four are incurable viral infections: hepatitis B, herpes simplex virus (HSV), HIV, and human papillomavirus (HPV).<sup>1</sup>

## STATEMENT OF THE PROBLEM

A Study to assess the knowledge and attitude regarding sexually transmitted diseases among women attending Gynaec outpatient department in selected hospitals at Perinthalmanna

## OBJECTIVES OF THE STUDY

1. Assess the knowledge regarding sexually transmitted diseases among women.
2. Assess the attitude regarding sexually transmitted diseases among women.
3. Correlate between knowledge and attitude regarding sexually transmitted diseases among women.
4. Associate between level of knowledge among women on sexually transmitted diseases and their selected demographic variables.
5. Associate between level of attitude among women on sexually transmitted diseases and their selected demographic variables.

## NEED FOR THE STUDY

STIs have a profound impact on sexual and reproductive health worldwide. In 2020, WHO estimated 374 million new infections with 1 of 4 STIs: chlamydia (129 million), gonorrhoea (82 million), syphilis (7.1 million) and trichomoniasis (156 million). More than 490 million people were estimated to be living with genital herpes in 2016, and an estimated 300 million women have an HPV infection<sup>1</sup>.

A descriptive analysis of data on sexually transmitted infections (STIs) diagnoses and screening for chlamydia in England from January to December 2022 reveals that Sexual Health Services (SHSs) conducted 2,195,909 sexual health screens, encompassing diagnostic tests for chlamydia, gonorrhoea, syphilis, or HIV. This reflects a 13.4% increase compared to the 1,936,455 screens conducted in 2021. In 2022, there were 392,453 new STI diagnoses among residents of England, marking a 23.8% increase from the 317,022 cases reported in 2021.<sup>2</sup>

Sexually transmitted diseases (STDs) remain a significant public health concern globally, affecting individuals of all ages, genders, and socio-economic backgrounds. The prevalence of STDs poses a considerable burden on healthcare systems and highlights the importance of understanding the knowledge and attitudes of individuals toward these infections. A comprehensive assessment of knowledge and attitudes is crucial for designing effective prevention and intervention strategies, as well as promoting overall sexual health.<sup>1</sup>

## THEORETICAL FRAMEWORK

The conceptual framework for this study is based on “General system theory” by Ludwig von Bertalanffy.

## MATERIALS AND METHODS

Research approach: Quantitative research approach

Research design: Non-experimental descriptive survey design

Setting: District hospital, Perinthalmanna, Kerala

## POPULATION

Women of reproductive age group

Sample and sample size: 61 women of reproductive age group attended Gynaec outpatient department in district hospital, Perinthalmanna

Sampling Technique: convenient sampling technique

## DATA COLLECTION INSTRUMENTS

Tools: a. Socio demographic performa

b. Structured knowledge questionnaire on sexually transmitted diseases

c. Attitude scale on sexually transmitted diseases

Technique: self-reporting

Ethical consideration: Informed written consent taken from all samples.

## DATA COLLECTION PROCESS

After getting permission from medical superintendent General hospital the data of study was collected from 61 women attended OPD selected based on inclusion criteria using convenient sampling technique during the period 15 november 2023

to 08 dec 2023. Investigators introduced themselves and developed a rapport with participants. Also explained the purpose of the study. After collecting the data, it was analysed and interpreted using descriptive and inferential statistics.

## RESULTS

### Section 1

Distribution of women based on demographic variable.

**Table 1: Distribution of women according to Age, Education and Occupation, religion, residence, family , income and previous knowledge.**

(n=61)

| S.No | Demographic variable | Category            | Frequency (n) | Percentage (%) |
|------|----------------------|---------------------|---------------|----------------|
| 1    | Age                  | 18-30 yrs           | 38            | 62.30          |
|      |                      | 31-45 yrs           | 23            | 37.70          |
| 2    | Education            | Illetrate           | 6             | 9.84           |
|      |                      | Primary education   | 21            | 34.43          |
|      |                      | Secondary education | 27            | 44.26          |
|      |                      | Graduate            | 7             | 11.48          |
| 3    | Occupation           | Unemployed          | 41            | 67.21          |
|      |                      | Coolie worker       | 11            | 18.03          |
|      |                      | Government job      | 5             | 8.20           |
|      |                      | Private sector      | 3             | 4.92           |
|      |                      | Health professional | 1             | 1.64           |
| 4    | Religion             | Hindu               | 20            | 32.79          |
|      |                      | Muslim              | 37            | 60.66          |
|      |                      | Chirstian           | 4             | 6.56           |
|      |                      | Others              | 0             | 0.00           |
| 5    | Area of Residence    | Urban               | 32            | 52.50          |
|      |                      | Rural               | 29            | 47.54          |
| 6    | Type of Family       | Joint               | 30            | 49.18          |
|      |                      | Nuclear             | 31            | 50.82          |
|      |                      | Expanded            | 0             | 0.00           |

|   |                    |                  |    |       |
|---|--------------------|------------------|----|-------|
| 7 | Monthly Income     | ≤5000            | 31 | 50.82 |
|   |                    | 5001-10000       | 21 | 34.43 |
|   |                    | 10000-15000      | 7  | 11.48 |
|   |                    | >15000           | 2  | 3.28  |
| 8 | Marital status     | Married          | 57 | 93.40 |
|   |                    | Single           | 4  | 6.60  |
| 8 | Previous knowledge | Public           | 30 | 49.18 |
|   |                    | Books/ magazines | 13 | 21.31 |
|   |                    | Television       | 18 | 29.51 |

Table 1 shows that majority 38(62.30%) of the women belongs to the age group of 18-30 yrs, 27(44.26%) have secondary education, 41(67.21%) were home maker, 37(60.66%) were muslim, more than half 32(52.50%) were residing in urban area, half of women have monthly income of ≤5000 and near to half women 30(49.18%) have previous knowledge about STD from public .

## Section 2

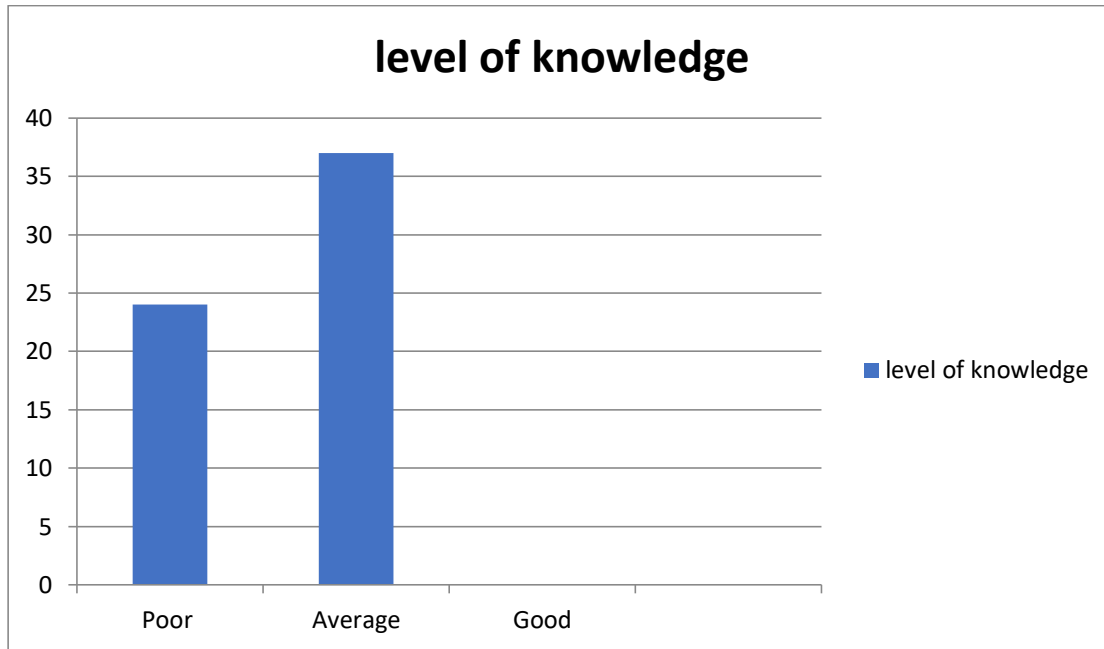
### Assessment of level of knowledge and attitude among women on sexually transmitted diseases

Table 2: Distribution of women based on knowledge score on sexually transmitted diseases

(n=61)

| Level of knowledge | Frequency (n) | Percentage (%) | Mean | SD   |
|--------------------|---------------|----------------|------|------|
| Poor               | 24            | 39.34          | 7.02 | 2.46 |
| Average            | 37            | 60.66          |      |      |
| Good               | 0             | 0              |      |      |

Table 2 reveals that 24 (39.34%) women had poor knowledge; 37 (60.66%) women had average knowledge and none of the women (0%) had good knowledge. The mean knowledge score was  $7.02 \pm 2.46$ .

**Figure 1:****Table 3: Distribution of women based on attitude score on sexually transmitted diseases**

(n=61)

| Level of knowledge      | Frequency<br>(n) | Percentage<br>(%) | Mean  | SD   |
|-------------------------|------------------|-------------------|-------|------|
| Above median (negative) | 25               | 40.98             | 40.46 | 4.27 |
| Median (neutral)        | 9                | 14.75             |       |      |
| Below median (positive) | 27               | 44.26             |       |      |

From Table 3, 25 (40.98%) had negative attitude, 9 (14.75%) had neutral attitude and remaining 27(44.26%) women had positive attitude regarding sexually transmitted diseases.

### Section 3

**Table 4: Correlation between knowledge and attitude of women regarding sexually transmitted diseases.**

(n=61)

| Variable  | N  | Mean  | SD   | Correlation (r) |
|-----------|----|-------|------|-----------------|
| Knowledge | 61 | 7.02  | 2.46 | -0.0737         |
| Attitude  | 61 | 40.46 | 4.27 |                 |

Table 4 reveals the correlation between knowledge and attitude of women regarding sexually transmitted diseases by using Karl Pearson correlation co-efficient. The obtained r value was -0.0737 with a p value 0.576 which shows that there was a weak negative correlation between knowledge and attitude of women regarding sexually transmitted diseases. It is not statistically significant.

## Section 4

Table 5: Association of knowledge score of women with socio demographic variables.

(n=61)

| S.no: | Demographic variables | Chisquare | Df | P value |
|-------|-----------------------|-----------|----|---------|
| 1     | Age                   | 0.09      | 2  | 0.96    |
| 2     | Educational status    | 7.08      | 6  | 0.31    |
| 3     | Occupation            | 3.15      | 8  | 0.92    |
| 4     | Religion              | 1.69      | 6  | 0.95    |
| 5     | Area of Residence     | 5.80      | 2  | 0.05*   |
| 6     | Type of Family        | 2.74      | 4  | 0.60    |
| 7     | Monthly Income        | 3.89      | 6  | 0.69    |
| 8     | Previous knowledge    | 4.255     | 4  | 0.37    |
| 9     | Marital status        | 2.05      | 2  | 0.36    |

\* Significant at 0.05 level

This table 5 reveals the association of selected demographic variables like age, religion, educational status, occupation, and residence, type of family, monthly income, marital status and previous knowledge of women with level of knowledge on sexually transmitted diseases. The association was found by using chi square analysis. It reveals there is a significant association between area of residence and knowledge of women about sexually transmitted diseases. It is not significant with any other socio demographic variables.

Table 6: Association of attitude score of women with socio demographic variables.

(n=61)

| S.no: | Demographic variables | Chisquare | Df | P value |
|-------|-----------------------|-----------|----|---------|
| 1     | Age                   | 0.45      | 2  | 0.78    |
| 2     | Educational status    | 8.20      | 6  | 0.22    |
| 3     | Occupation            | 8.19      | 8  | 0.42    |
| 4     | Religion              | 1.99      | 6  | 0.92    |
| 5     | Area of Residence     | 0.80      | 2  | 0.67    |
| 6     | Type of Family        | 3.73      | 4  | 0.44    |
| 7     | Monthly Income        | 5.33      | 6  | 0.50    |
| 8     | Previous knowledge    | 5.58      | 4  | 0.23    |
| 9     | Marital status        | 0.75      | 4  | 0.95    |

This table 6 reveals the association of selected demographic variables like age, religion, educational status, occupation, and residence, type of family, monthly income, marital status and previous knowledge of women with level of attitude on sexually transmitted diseases. The association was found by using chi square analysis. It reveals there was no significant association between any demographic variables and level of attitude of women about sexually transmitted diseases.

#### Discussion:

The study findings were not in tune with a cross sectional study conducted among 453 randomly selected students at Mizan-Aman polytechnic college in Southwest Ethiopia were 177 (39.1%) had good knowledge about STIs. The current study findings are coinciding with the systematic review conducted on Awareness and knowledge of sexually transmitted diseases (STDs) among school-going adolescents in Europe reported low levels of awareness and knowledge of sexually transmitted diseases, with the exception of HIV/AIDS. With regard to association of knowledge and attitude among women regarding sexually transmitted diseases, the study findings are not matching with another study conducted on knowledge, attitude and practice towards sexually transmitted diseases amongst the inmates of women shelters homes at Klang valley showed that the mean age of the participants was 17.9 years old and most of the participants have completed secondary school (91.7%). Overall, the level of knowledge of participants on STDs were classified into three groups; 'high knowledge' (33.3%), 'medium knowledge' (35.0%) and 'low knowledge' (31.7%). The majority have heard of HIV/AIDS (95%) but with respect to other STDs was less well known. Whereas, the mean score for attitude was 23.1 out of total 25. Their knowledge level was not influenced by their age ( $p = 0.61$ ) and socio-economic status ( $p = 0.85$ ). However, their attitude was influenced by their age ( $p < 0.05$ ).

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