

## Knowledge and awareness of Sexually Transmitted Diseases (STDs) among housewives in a city in Northern India

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### Abstract

**Introduction:** Sexually transmitted diseases (STDs) affect women of child bearing age leading to severe morbidity, mortality and can even transmit disease to offsprings during pregnancy. Improving awareness and knowledge amongst females regarding STDs is important to prevent the grave consequences. This study was done to assess the knowledge and awareness of STDs among housewives in a city in Northern India.

**Materials and Methods:** This was a descriptive cross-sectional study carried out among housewives in Rohtak city, Haryana. A pre-validated questionnaire addressing socio-demographic characteristics, knowledge of the features and complications of common STDs, routes of transmission of STDs, preventive and treatment measures was used as a tool for the study.

**Results:** Only 80% of women had heard about STDs. Regarding routes of transmission, spread via vaginal intercourse, blood transfusion and transmission from mother to child were known to 95%, 5% and 5% of women respectively. 20% of women had no knowledge regarding symptoms of STD. Regarding complications; miscarriage, pelvic inflammatory disease and cancer were known to 80%, 10% and 8% of women respectively. STDs can be prevented by abstinence and using condoms was known to 60% and 40% women respectively. 98% of the women had no knowledge regarding the drugs used for treatment of STDs.

**Summary:** Complete knowledge regarding STDs was inadequate. There is a potential to control STDs by making females aware of the signs and symptoms, complications, preventive and control measures. So, there is a need to adopt an assertive, promotional and educative approach to make more and more women aware of STDs.

**Keywords:** Awareness, STDs, Knowledge, Complications.

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## 1. Introduction

India is on the fast-track to become the HIV capital of Asia. Sexually Transmitted Infections (STIs) in general, and among young population in particular, are of paramount concern as they are the 'silent killers'. [1] Sexually transmitted infections (STIs) are infections with significant probability of transmission by means of sexual contact through vaginal, oral and anal sex. It is estimated that more than 340 million new cases of curable STIs occur every year throughout the world in men and women aged 15–49 years. [2] Since 1995, there has been increasing trend of STIs. [3] In

developing countries, this group of infections and their complications are one of the top five reasons that adults seek health care. [4] There are multiple factors that could have lead to this increasing trend. Wide spread use of oral contraceptives and other methods of contraception has lead to reduced use of barrier methods of contraception thereby exposing individuals' risk to contact STIs. Increasing number of mobile population both within and between countries, recreational drug use, alcohol and frequent partner changes could have led to risky sexual behaviour. Studies have shown

that lack of information and negative attitudes encourage sexual risk behaviour, thus increasing risk of acquiring STIs. [5] Poor knowledge and risky practices related to STIs are a universal phenomenon in the young adulthood. A closer look at the literature reveals that differences exist in the kinds of misconceptions depending on the cultural norms and beliefs. Sexual behaviour also differs in various regions. Deviations in the number of partners or in sexual mixing patterns have been noted most commonly. STI prevalence directly affects the rate of transmission of HIV. In Indian society, it is seen that STIs are widely associated with social stigma, embarrassment and denial. Sexuality and associated health risks are still a major taboo. These diseases may lead to serious complications such as infertility, ectopic pregnancy, cervical cancer, fetal wastage, and even death.

Females bear much more severe morbidity of STIs than males.[6] They get severe consequences if not treated and even transmit the STIs to offsprings during pregnancy and child birth causing various complications.[7] Added upon this is the social stigma attached to STD accounting for non-detection of cases, not disclosing the source of contact and dropping out before treatment. WHO suggests that improving awareness and knowledge of STIs should be a part of all sexual health education and services. [4] However, majority females don't have access to information and education on STIs, nor do they have access to preventive and treatment services. All these factors add up to make females more susceptible to sexually transmitted infections, their complications and finally reinfections.

Thus, in the current scenario, sexuality education and awareness are paramount. Sexuality education comprises of physiological, psychological and social issues related to sex, a lack of which may lead to inappropriate attitudes and practices. Sex education can help children transform into well-adjusted adults with established sexual identity, functioning and ability. [8]

The study was done to assess the knowledge and awareness of Sexually Transmitted Diseases (STDs) among housewives in a city in Northern India.

## 2. Material and Methods

### 2.1 Study area

The study site is one of the major cities in northern India, i.e., Rohtak. The population of Rohtak has good access to health facilities. There is one Health University, one Civil Hospital, many dispensaries, more than 100 pharmacy shops, traditional healers, private and other nongovernmental organizations (NGO) clinics.

### 2.2 Study design and population

Hundred randomly selected housewives irrespective of their age were included in the study.

### 2.3 Data collection and management

A structured and pre-validated questionnaire was used to collect the information. It was prepared in English and then translated to local language. The houses were selected by systemic random sampling and every fifth house was taken for the data collection. The collected variables included sociodemographic data, knowledge of the features and complications of common STDs, routes of transmission of STDs, preventive and treatment measures, complications due to STDs etc. Data was collected from the lady of the house and one housewife was selected for interviewing from each house.

### 2.4 Data analysis and interpretation

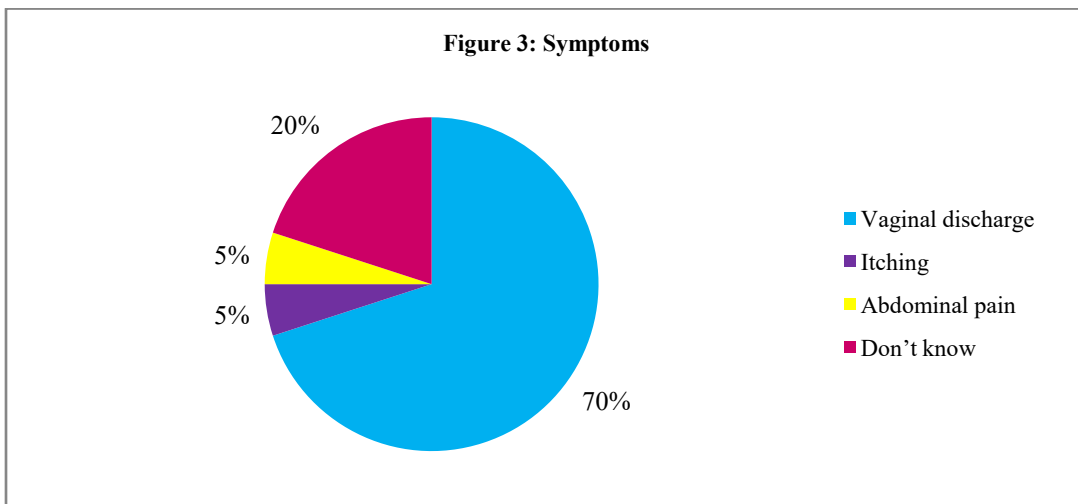
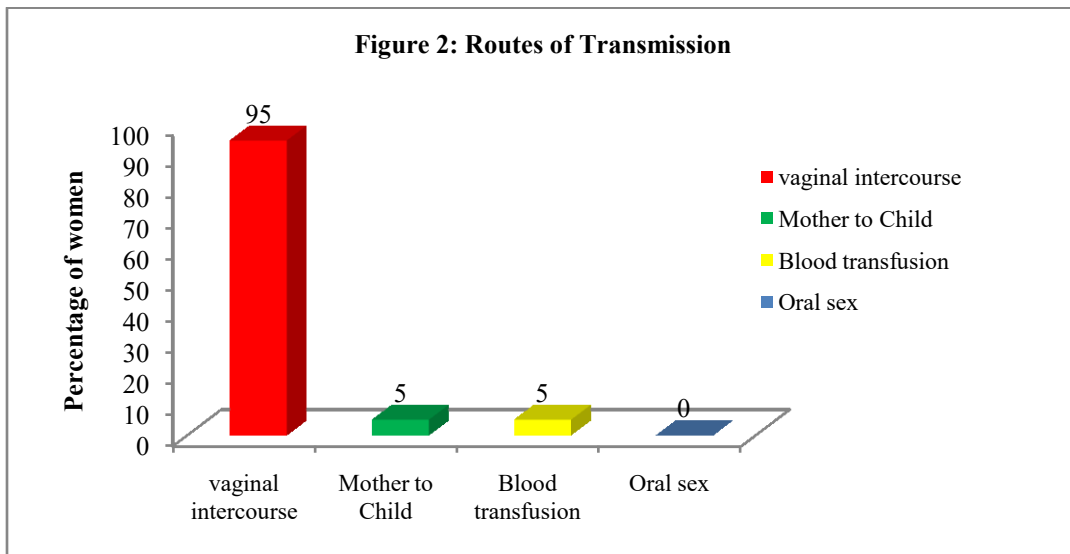
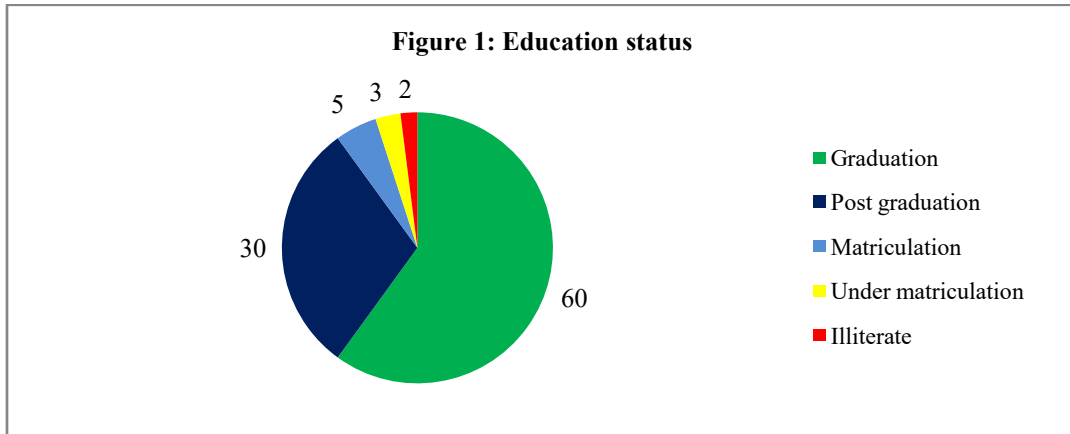
Results are represented in the form of percentages and figures.

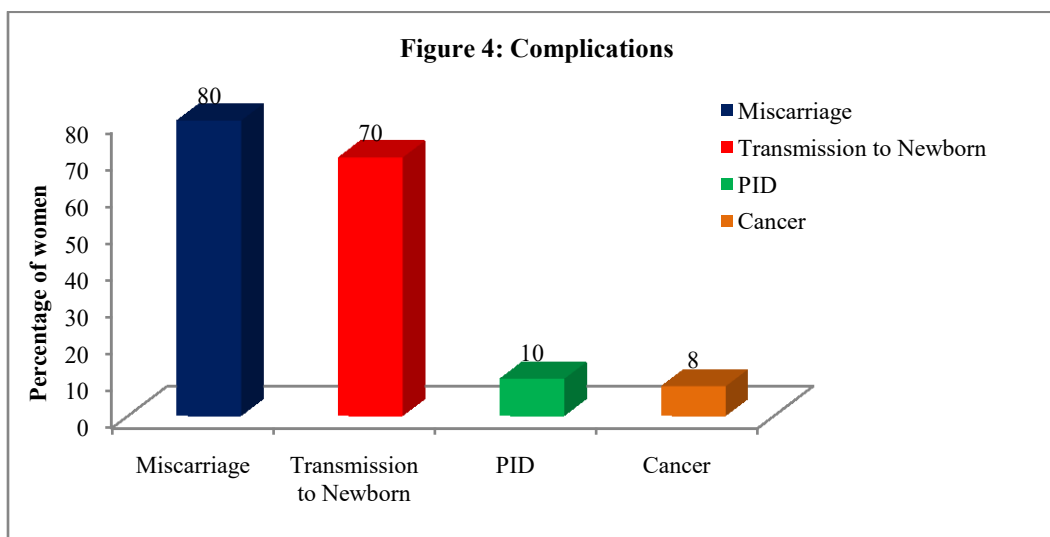
## 3. Results

A total of 130 houses were surveyed, out of which proformas were filled by 100 housewives. Education levels of the housewives were as follows: Illiterate – 2%, under matriculate – 3%, matriculate – 5%, graduate – 60% and postgraduate – 30% as shown in Figure 1. Only 80% of women had heard about STDs. Out of which 98% had heard about HIV infections, 2% knew about syphilis and 1% each knew about gonorrhoea and hepatitis B. Regarding routes of transmission, spread via vaginal intercourse, blood transfusion and transmission from mother to child were known to 95%, 5% and 5% of women respectively. (Figure 2) There was misconception in 80% of women that sex during menstruation can lead to STDs. 20% of women had no knowledge while 80% had partial knowledge regarding symptoms of STDs. Out of them, 70% of women knew that STD leads to vaginal discharge, 5% each had the knowledge that STD leads to itching and abdominal pain.(Figure 3). Regarding complications; miscarriage, pelvic inflammatory disease and cancer were known to 80%, 10% and 8% of women respectively.(Figure 4) Blood test and Genital examination can be done for the diagnosis of STDs were known to 80% and 20% of the women respectively. 60% of the women considered prostitutes whereas 40% considered multiple partners to be at high risk for getting STDs. STDs can be prevented by abstinence and using condoms was reported by 60% and 40% women respectively. 70% of the women were of the view that both the partners should be examined and treated for complete eradication of the disease. 95% of the women said that STDs could be cured by drugs. Out of them, 98% of the women had no knowledge regarding the drugs used for treatment of STDs and only 2% could name only penicillins as the drugs used for the treatment of STDs. 50% of the women believed that vaccines are available for STDs but couldn't name for which disease they are

available. 90% of the women believed that recurrence can occur even after complete treatment. All the women were of the view that persons having doubt regarding STDs should

consult the doctor and they also believed that education in schools and colleges is a must.





#### 4. Discussion

In our study 80% of women had heard about the STDs whereas in a study done by Kaur *et al* [9] in which awareness and level of knowledge about transmission dynamics of STD was seen in female patients attending gynaecology OPD, 62% of women had heard about the STDs. In our study, we found that 98% had heard about HIV infections, 2% knew about syphilis and 1% each knew about gonorrhoea and hepatitis B whereas in a study done by Amu and Adegun[10], in Nigerian population it was observed that amongst the knowledge regarding STDs, 78% of the females had heard about HIV/AIDS while 23% had heard about gonorrhoea.

Regarding routes of transmission, spread via vaginal intercourse, blood transfusion and transmission from mother to child were known to 95%, 5% and 5% of women respectively in our study whereas in a study done by Kosambiya *et al*[11] regarding STDs prevalence among women, only 32% knew that the disease is acquired from infected spouse. In another study done by Amu and Adegun[10] in Nigerian population, unprotected sex and infected blood and blood products as a mode of transmission of STDs was known to 87.6% and 73.1% of women respectively.

In our study, there was misconception in 80% of women that sex during menstruation can lead to STDs whereas in a study done by Rana *et al*[12] in adolescent girls, it was seen that 7.3%, 18.3% and 12.9% of females had misconception that STDs can be transmitted by shaking hands with an infected person, sharing toilet and contaminated food and water respectively.

In the present study, 20% of women had no knowledge while 80% had partial knowledge regarding symptoms of STDs. Out of them, 70% of women knew that STD leads to vaginal discharge, 5% each had the knowledge

that STD leads to itching and abdominal pain in contrast to a study done by Kosambiya *et al*[11] where only 14% of females were aware about the presence of discharge and 9% females reported dysuria and pelvic pain as symptom of STDs. In another study done by Rana *et al*[12], vaginal discharge, lower abdominal pain and genital ulcer was known to 63.3%, 40% and 36.7% of females respectively.

Regarding complications; miscarriage, pelvic inflammatory disease and cancer were known to 80%, 10% and 8% of women respectively in our study whereas in a study done by Kaur *et al*[9], complications like infertility, systemic complications and effects on pregnancy were known to 41%, 35% & 15% of women respectively.

Blood test and Genital examination can be done for the diagnosis of STDs was known to 80% and 20% of the women respectively in our study. However, we could not find a study in which knowledge and awareness amongst the women regarding the diagnostic criteria for STDs was seen.

In our study, 60% of the women considered prostitutes whereas 40% considered multiple partners to be at high risk for getting STDs in contrast to a study done by Sekirime *et al*[13] done on non-medical university students in Kampala, where multiple sexual partners, unprotected intercourse and sex outside marriage was considered to be a high risk factor by 92%, 94% & 72% of females respectively.

In our study, abstinence and using condoms as preventive measures, was reported by 60% and 40% women respectively in contrast to a study done by Rana *et al*[12], where avoiding having sex and using condoms as preventive measures was known to 60% and 37.1% of women respectively. In another study done by Kaur *et al*[9], abstinence and use of condoms was known to 28% and 25% of the females respectively.

In our study, 70% of the women were of the view that both the partners should be examined and treated for

complete eradication of the disease whereas in a study done by Kosambiya *et al*[11], only 26% of women said that the treatment of partners is equally important.

In our study, 95% of the women said that STDs could be cured by drugs. Out of them, 98% of the women had no knowledge regarding the drugs used for treatment of STDs and only 2% could name only penicillins as the drugs used for the treatment of STDs and 50% of the women believed that vaccines are available for STDs but couldn't name for which disease they are available in contrast to a study done by Kaur *et al*[9], where only 37% of the females knew that complete treatment of STDs is available.

Regarding recurrence, in our study 90% of the women believed that recurrence can occur even after complete treatment whereas only 33% of the women knew regarding recurrence of STDs after complete treatment in a study by Kaur *et al*[9].

In our study, all the women were of the view that persons having doubt regarding STDs should consult the doctor and they also believed that education in schools and colleges is a must. However, we couldn't find a study in which the importance of providing education regarding STDs was asked from the women. In this study along with assessing the knowledge and awareness of Sexually Transmitted Diseases (STDs) among housewives, some guidelines were also given for the prevention and treatment of STDs.

## 5. Conclusion

This study shows that although knowledge and awareness regarding STDs was there in a significant number of housewives (80%), but they had incomplete knowledge. Majority of them were educated. Majority of housewives didn't have knowledge regarding the preventive and therapeutic aspects. However, all of them believed that education regarding STDs must be provided in schools and colleges. So more and better education regarding STDs is required for the prevention, cure and to avoid complications.

## Contribution of the authors

All authors contributed in the collection and interpretation of data.

## Limitations of the study

This study has been conducted on a small group of people, but provides the useful information regarding knowledge and awareness about STDs among housewives. Further studies need to be conducted to elaborate and confirm these findings.

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