

Knowledge and Misconceptions about Sexually Transmitted Infections in Married Women - Perspective from Islamabad

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Abstract

Objective: To study the knowledge of married women regarding existence of sexually transmitted infection (STI) their complications, treatment seeking, ways of preventing STI acquisition and opinion about sex education in schools/colleges and media.

Setting: The Mother and Child Health Center, a tertiary care hospital in Islamabad.

Methods: A cross-sectional survey based on sample of convenience was conducted, using a structured questionnaire with both close and open-ended questions. Trained women physician interviewers conducted the interviews after obtaining verbal consent.

Results: Out of 218 women approached for interviewing, only two refused to participate in the study. The mean age of the respondents was 28.5 years (range 18 - 53 years). One hundred and sixty-eight (77.8%) respondents had heard/knew about sexually transmitted infections STIs. Two hundred and ten (97.2%) respondents had heard/knew about AIDS and out of these 162 (77.1%) knew that it is also transmitted through sexual contact. One hundred and eighty two (84.2%) felt a need for sex education in the media, both print and electronic and 204 (94.4%) respondents said that they would like to learn more about sexually transmitted infections. One hundred ninety four (98.8 %) respondents had heard the Latin term Luekorrhoea. Of these 158 (81.5%) thought it was a gynecological disease. Majority thought it caused weakness.

Conclusion: Widespread misperceptions were found to exist, which does not augur well for the effective prevention of STIs in the country. Population based studies are required to study the knowledge and epidemiology of STIs, as well as a need for a health education campaign in the country (JPMA 51 :389,2001).

Introduction

Sexually transmitted infections (STIs) as the name implies are predominantly transmitted through sexual intercourse but use/contact with contaminated blood and vertical transmission from mother to baby through pregnancy and childbirth also occurs. STIs are usually diagnosed on the presenting symptomology of patients seeking care, as few laboratory based diagnostic tests exist that are inexpensive, affordable, rapid and easily accessible/available in most primary and secondary health care facilities. This hampers their early diagnosis and treatment. This is further compounded by the fact that many STIs in women are asymptomatic or minimally symptomatic with non-specific symptoms. Such women may unknowingly spread these infections if they themselves or their husbands or their regular sexual partners have multiple sexual partners.

STIs are recognized as the major public health problem in the world¹ and there is evidence that better management and treatment of STIs tend to decrease the transmission of HI V/AIDS^{2,3}. In Southeast Asia there were reportedly 150 million new STIs in the year 1995 alone⁴.

The epidemiology of STIs has not been studied in a nationally representative survey in Pakistan and neither has the knowledge about STIs in the country except AIDS⁵.

However the few studies that have been undertaken suggest that STIs are not uncommon. A 4%

prevalence of Chlamydia infection was found in a sample of three hundred sexually active women visiting hospitals in Karachi⁶. While two other studies of 85 and 126 pregnant women found Chlamydia trachomatis prevalence rate of 8.2% and 13.5% respectively, in Karachi^{7,8}. Another study of 255 patients visiting a Social Hygiene Center in Karachi found evidence of the Neisseria Gonorrhoea growth in 134 (52.5%) in cervical and urethral swabs of patients⁹.

Regarding knowledge of STIs, a previous study using a sample size of thirty sexually active, predominantly illiterate women in an urban community in Karachi found that 50% of women had no knowledge about STIs. They concluded that there is a need for establishing STI clinics at Primary Health Care Centers to address the screening, treatment and health education need for STIs¹⁰. It has been reported that in Pakistan many HIV positive women have acquired the infection as a result of their husband's high-risk behavior, rather than their own¹¹. Furthermore, low literacy level, socio-cultural constraints precluding explicit health education messages and limited access to electronic media have been identified as impediments for successful preventive health education campaigns in the country¹². Even educated women in Pakistan, have been reported to have more knowledge gaps about AIDS and its mode of transmission than men, and health education pertaining to AIDS and other STIs has been advocated to be made a part of school/college curriculum¹³.

This study was undertaken to determine the knowledge of married women regarding existence of sexually transmitted infections, their complications, treatment seeking and ways of preventing STIs acquisition. Knowledge about AIDS, Leukorrhoea and opinion on sex education in schools/colleges and media was also inquired about.

Subjects and Methods

Between September 15th, 2000 and February 20th, 2001, a cross-sectional survey based on sample of convenience was conducted in the out-patient department of a tertiary care Mother and Child Center in Islamabad, using a structured questionnaire with both, close and open-ended questions. This questionnaire was pre-tested, prior to administration. Pre-testing helped in either eliminating or rephrasing of the more sensitive questions.

Six female physicians of the senior postgraduate resident status, trained in interviewing, administered the questionnaires after obtaining verbal consent. Women visiting the obstetrics and gynecology outpatient department of the Center in Islamabad and referred to the Consultant (S.B.M) were approached. They were told that a study was being conducted in which questions about diseases in women would be asked. Strict confidentiality was assured by explaining that the name and address of the woman, if she chooses to take part in this study, would neither be asked nor recorded. However, it was emphasized that honest and correct answers were imperative. Women who agreed to be interviewed were advised that they could terminate the interview at any time. All the interviews were conducted in the privacy of patient's examination room of the Center. Women who were married for at least one year were approached and interviewed.

Respondents were asked if they have ever heard of or knew about diseases that were transmitted through sexual contact. Those women who replied affirmatively were further asked about how a woman could protect herself from these diseases in an open-ended question. Respondents were further asked about whether a sexually transmitted infection could be transmitted from mother to her baby during pregnancy/childbirth, and whether STIs could lead to infertility. Regarding treatment for STIs, an open-ended question was asked as to where a woman could get treatment for her STIs.

They were questioned about ever hearing about AIDS and those respondents who replied affirmatively were asked whether AIDS was an STI and whether it was curable. About sex education, the respondent's opinion regarding need for sex education at school and/or college level was taken. The

respondent was asked if she had heard of the term Luekorrhoea, was it a STI, and was it associated with complications if any. In the end a question was asked as to whether the respondent would like to know more about sexually transmitted infections.

A sample size of 216 was calculated, based on 95% confidence intervals and assuming a hypothetical population proportion of correct knowledge at 10% in married women, with an absolute precision of 4%, on either side of the proportion¹⁴. However it should be emphasized that any and every sample size calculation presupposes random sampling¹⁵. In this study a sample of convenience was adopted due to practical considerations, as random sampling was not feasible in this study.

Results

Out of the 218 women approached for interviewing, only two refused to participate in the study. The mean age of the respondents was 28.5 years (range 18 - 53 years) and only 33 (15.3%) respondents were above the age of 35 years. The mean duration of marriage was 6.9 years (range 1 - 32 years) and the mean years of education was 10.8 years (range 0 - 16). Only 14 (6.5%) respondents had no formal education, while 167 (77.3 %) had ten or more years of education. Only 38 (17.6%) respondents had a job, while the rest were housewives. All of them were residents of Islamabad.

One hundred and sixty-eight (77.8%) respondents had heard/knew about sexually transmitted infections. Further questions about STIs were only asked from women who had replied affirmatively to this question. Out of these women, in response to an open-ended question as to how a woman could protect herself from the STIs, 123 (73.2%) women replied that limiting to one's husband would protect a women from contracting STIs.

Table 1. How a woman could protect herself from Sexually Transmitted Diseases?

Response	n	%
Don't know	4	2.4
Use of condoms	18	10.7
Limiting to one's husband	84	50
Use of condoms and limiting to one's husband	39	23.2
Avoid intercourse	23	13.7

Table 1 lists the various responses given by the women.

respondents thought that a STIs could be transmitted to the baby during pregnancy and/or childbirth while 76 (45.2 %) thought that STIs could lead to infertility. One hundred and thirty four (79.8%) women identified Obstet/Gynae consultant/outpatient department was the right expert/place to seek treatment. Seventeen (10.1%) identified general medical consultant/outpatient department and another 17 (10.1%) felt that a general medical practitioner would be the appropriate choice.

All 216 respondents were asked about AIDS. Two hundred and ten (97.2%) had heard/knew about AIDS, and of these 162 (77.1%) knew that it is also transmitted through sexual contact. Thirty three

(15.7 %) thought that AIDS is curable.

All 216 respondents were asked about the need for sex education. Twenty two (10.2 %) and 135 (62.5%) respondents felt that such need existed at the school and college level, respectively. One hundred and eighty two (84.2 %) felt the need for sex education in the print and electronic media as well. Moreover, 204 (94.4%) respondents said that they would like to learn more about sexually transmitted diseases.

Questions about Luekorrhoea were also asked from all the respondents. One hundred and ninety four (98.8%) respondents had heard about Leukorrhoea, out of these 36 (18.5%) thought that it's acquired through sexual contact while the rest thought that it's a gynecological disease. In response to an open-ended question regarding its symptoms, most women thought that it leads to weakness.

Table 2. Symptoms of Luekorrhoea reported by women.

Symptom	n	%
Weakness	87	44.8
Bone pain	13	6.7
Back pain	24	12.4
Weakness and back pain	31	16.0
Infertility	17	8.8
Infertility and weakness	22	11.3

Table 2 lists the various responses given by women.

Discussion

The survey population of this study comprised of younger, more educated women and with a formal job, than the general population of the country. To ensure cultural acceptability of the survey and higher response rate, the study was limited to the women who were married for atleast one year.

Over three-quarters of the women knew about diseases that are transmitted through sexual contact. There was no relationship between years of education and the knowledge about such diseases, as women with no formal education as well as those with 16 years of education reported their ignorance about these diseases. About one third of these respondents thought that condoms confer protection from STIs. However a disturbing aspect was that an overwhelming number of women tended to believe that sexually limiting the husband/or one partner was the most effective way of avoiding STIs. This presupposes that husband/partner would not or could not be the source of contracting STIs from extramarital/other sexual contact and vice versa. This misconception of relatively educated urban married woman reinforces the finding that most women in Pakistan become HIV positive as a result of their husband's high-risk sexual behavior¹¹. Some of these married women even felt that avoiding sexual intercourse altogether, is one way to avoid contracting STIs. These responses demonstrate a profound lack of understanding of the dynamics of contracting STIs.

Regarding complications of STIs, most women thought that STIs can be transmitted to the baby during pregnancy and/or childbirth and could lead to infertility. In order to have STIs treated, most women believed that Obstet./Gynae. department of the hospitals was the right place to seek treatment, while

some also reported general medical department or the general medical practitioners. None suggested seeking such treatment in any medical care systems other than allopathic system. This could be attributed to several factors including the fact of higher educational attainment of the study population, that all the respondents were city dwellers as well as the fact that survey was done in the women who were already seeking health care in a hospital setting.

Most women (97.2%) knew about AIDS, however not everyone knew that it could also be transmitted through sexual contact, or the fact that it is not curable. This points to the need for greater explicitness in the health education messages in the media campaigns currently going on in the country regarding AIDS.

Sex education through media or in the academia is a sensitive and politically charged issue in any country. Nonetheless preventive health education is a demonstrably effective public health tool. We assessed the perceived need for sex education and were surprised to learn that 135 (62.5%) women felt that colleges are the place to impart such education, while a substantial number 182 (84.2%) of women also felt that media should also participate in sex education. An overwhelming number, of women 204 (94.4%) expressed interest in learning more about sexually transmitted diseases. The higher educational levels of the study respondents again could perhaps explain this phenomenon.

Leukorrhoea is a physiological discharge from the vagina and uterine cavity that does not signify presence of disease or a pathological state¹⁶. Yet it was perceived by most of the respondents in terms of a disease model rather than a normal physiological process. This complete lack of ignorance and misperception about this condition is alarming, considering the fact that most women were educated in this study, but nonetheless defined this physiological state in terms of weakness, pain and infertility. Results of this study need to be interpreted with caveats and in light of its methodological constraints, the important ones being that it is a hospital based study of educated and married women selected by convenience sampling. Hence results could not be generalized to the population of married women in general.

Education is the only way to dispel myths and misperceptions about sex and sexually transmitted infections. And results of this study suggest that an unmet need for sex education exists as does the need for preventive health education for sexually transmitted diseases including AIDS in Pakistan. There is a need to conduct population-based studies in men and women, for elucidating the level and correctness of knowledge about STIs.

Acknowledgements

We wish to thank our interviewers, Drs. Zubia Mushtaq, Rashida, Shagufta, Shazia Fakhar and Kinza Alam for conducting these sensitive interviews with great interest and enthusiasm. We would like to thank the interviewed patients who cooperated with us.

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