

# Healthcare-seeking preferences of patients with sexually transmitted infection attending a tertiary care center in South Kerala

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## Abstract

**Background:** Sexually transmitted infections (STIs) are a major public health problem in developing countries. These diseases are associated with increased risk of transmission of human immunodeficiency virus as well as adverse outcomes on pregnancy and reproductive health. Sexual behavior and healthcare-seeking behavior are identified as the true risk factors of STIs. **Methods:** Hospital-based cross-sectional study design was adopted. Eighty-five STI patients were studied regarding the inappropriate treatment-seeking behavior, the nature of the first point of contact with the health care, the appropriateness of treatment and the concerns of the patient regarding the services rendered by government health-care facilities. **Results:** Among the 85 patients studied, 55.3% were males and 44.7% were females. Inappropriate treatment-seeking behavior was seen in 29.8% of males and 36.8% of females. About 59.6% of males and 81.6% of females sought appropriate treatment from modern medicine practitioners before attending our institution. Only 7.1% of males and 3.2% of females received appropriate treatment. The government sector was the choice of treatment for 46.4% males and 93.5% females and this difference was statistically significant ( $P = 0.00081$ ). Lack of free medicines, issues of confidentiality, and privacy were the major service-related issues in the public sector. **Conclusion:** Appropriate treatment at the first point of contact with the health system is an important measure to prevent further transmission and development of complications. Health providers from both private and public sector should be given frequent periodic training regarding syndromic management of STIs and the training should stress on the need for risk reduction and condom promotion messages along with medical management. Program planners should take necessary steps to ensure adequate and continuous supply of free drugs and tackle issues of confidentiality and privacy.

**Key words:** Healthcare-seeking behavior, sexually transmitted infection, syndromic management

## INTRODUCTION

The control of sexually transmitted infections (STIs) is a global priority. These diseases cause considerable morbidity and increase the risk of transmission of human immunodeficiency virus infection.<sup>[1]</sup> The main aims of STI control program

are to interrupt the transmission of infection and to prevent the development of complications and sequelae. While the interruption of transmission is addressed largely through campaigns promoting risk-reduction behavior and condom usage, the prevention of complications and sequelae is

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tackled through provision of health-care services to detect and treat STIs as early as possible. Timely treatment of STI is secondary prevention for that particular patient and primary prevention for other members of the community. Health-care behavior includes healthcare-seeking behavior of the patient and behavior of the health-care provider.<sup>[2]</sup> Healthcare-seeking behavior of the patient depends on patient characteristics and disease characteristics. Healthcare-seeking delays focus on the time elapsed from infection to initial contact with the health-care provider who makes the diagnosis and recommends therapy. The quality of STI services varies between health sectors and type of providers. Seeking treatment from providers who give effective care not only cures the STI but also reduces transmission of current and future infections if people follow risk reduction and prevention messages. The health services-related issues include availability of other systems of medicine, perceived poor quality of care, accessibility, cost, stigmatization, lack of privacy, and confidentiality. The importance of improving the accessibility and quality of health services related to STIs and promoting appropriate health-seeking behavior has been recognized in industrialized countries and is equally important in developing countries. Insights into the factors that make people decide why, when, and where to seek care can improve the programs that focus on STI control. Hence, we decided to study where the patients sought treatment before attending our institution, the appropriateness of that treatment, and the health services-related issues preventing them from seeking treatment from a government health facility.

## METHODS

STI patients attending the Department of Dermatology and Venereology of a tertiary care center in South Kerala were studied for 6 months after getting written informed consent. Nonconsenting patients were excluded from the study. Hospital-based, cross-sectional descriptive type of study design was used. Semi-structured questionnaire with both close- and open-ended questions was used to collect data. The broad domains under which the details were recorded were sociodemographic characteristics, clinical characteristics, treatment-seeking behavior, details of health facilities visited before visiting our center, appropriateness of treatment, and health services-related issues. Inappropriate treatment-seeking behavior of the patient was defined as seeking treatment from sources other than modern medicine health facility. The treatment received from the first point of contact was

considered appropriate if it was in accordance with the National AIDS Control Organization/World Health Organization guidelines. Details regarding the risk-reduction messages and condom-promotion messages advocated by the first point of contact were also recorded. Data were entered into Microsoft Excel and statistical analysis was performed by appropriate software.

## RESULTS

Eighty-five symptomatic STI patients who attended a tertiary care center in South Kerala were studied for 6 months regarding their healthcare-seeking behavior, the choice of health facility, the behavior of the health-care provider, and the concerns of the patient regarding the services from public sector. Among the 85 patients, 47 (55.3%) were males and 38 (44.7%) were females. Data were analyzed separately for both males and females.

Majority of the males and females were from rural areas (94.1%), belonged to 20–29 age group (48.2%), married (70.5%), with high school level of education (65.9%), and had monthly income less than Rs. 3000/- (78.8%) [Table 1]. Herpes genitalis (34.1%), condylomata acuminata (20%), syphilis (17.6%), nongonococcal urethritis (12.9%), gonorrhoea (10.5%), chancroid (2.3%), and trichomoniasis (2.3%) were the STIs in the decreasing order of frequency.

About 32.9% (28) of patients had inappropriate treatment-seeking behavior. 14 (29.8%) males and 14 (36.8%) females had inappropriate treatment-seeking behavior. This difference was not

**Table 1: Sociodemographic characteristics**

Variables	Males (47), n (%)	Females (38), n (%)
Residence		
Rural	43 (91.5)	37 (97.4)
Urban	4 (8.5)	1 (2.6)
Age		
<20	2 (4.3)	1 (2.6)
20-29	22 (46.8)	19 (50)
30-39	19 (40.4)	13 (34.2)
≥40	4 (8.5)	5 (13.2)
Marital status		
Unmarried	22 (46.8)	3 (7.9)
Married	25 (53.2)	35 (92.1)
Education		
<8	16 (34.1)	13 (34.2)
≥8	31 (65.9)	25 (65.8)
Income		
<3000	35 (74.5)	32 (84.2)
≥3000	12 (25.5)	6 (15.8)

statistically significant. Majority of the males (50%) tried left over medicines to cure themselves, whereas majority of the females (35.7%) sought the help of ayurvedic doctors [Table 2]. Nineteen (40.4%) males and 7 (18.4%) females came directly to our tertiary care center for treatment. Excluding the patients who directly visited us, appropriate treatment-seeking behavior was seen in 59.6% (28) males and 81.6% (31) females. Government sector was the choice of treatment for 46.4% (13) males and 93.5% (29) females. The difference between males and females in the choice of health sector was statistically significant ( $P=0.00018$ ). Among the 28 male patients, 18 (64.2%) took treatment from general practitioners, 5 (17.9%) from specialists, and 5 (17.9%) from both. Surgeons, physicians, and urologists were the specialists from whom the male patients sought treatment. Among 31 female patients, 15 (48.4%) took treatment from general practitioners, 9 (29%) from specialist, and 7 (22.6%) from both. Gynecologist was the specialist to whom the female patients resorted to treatment.

Multiple factors influenced the choice of health facility. The reasons for taking treatment from the chosen health facility are given in Table 3. The number of health facilities attended prior to attending our center ranged from 1 to 6 for males and 1–3 for females. Nearly 28.6% (8) males and 32.3% (10) females had attended more than one health facility before visiting us [Table 4].

Among the patients who sought appropriate treatment, only 2 (7.1%) males received appropriate treatment, 2 (7.1%) were referred to higher centers where STI services were available, and the remaining 24 (85.7%) received inappropriate treatment. Only one (3.2%) female received appropriate treatment. Fifteen (48.4%) were referred to higher centers, where STI services were available and the remaining 15 (48.4%) received inappropriate treatment. All the three patients (two males and one female) who received appropriate treatment had herpes genitalis. None of the patients received risk reduction messages and condom promotion messages from either the government sector or private sector.

Many patients had multiple concerns about the government health facility. For majority of the male patients (66.7%), geographical access was a problem in seeking treatment from a government health-care facility followed by economic constraints (47.1%), lack of privacy (47.1%), lack of free medicine (47.1%), and lack of confidentiality (25.5%). The concerns and problems for females were geographical access (85.7%), economic constraints (78.6%), lack of

**Table 2: Inappropriate treatment-seeking behavior**

In appropriate treatment	Males (14)	Females (14)
Left over medicines	7 (50)	3 (21.42)
Reuse of old script	1 (7.1)	1 (7.14)
Self-prescribed	2 (14.3)	1 (7.14)
Pharmacist prescribed	4 (28.6)	1 (7.14)
Family member prescribed		1 (7.14)
Traditional healer	1 (7.1)	
Ayurvedic doctor	1 (7.1)	5 (35.71)
Homeopathic doctor		2 (14.3)
Total	16 (114.2)*	14 (100)

\*The total is more than 14 because more than one inappropriate treatment seeking was seen in males

**Table 3: Reasons for seeking treatment**

Health facility	Reason	Males (28)	Females (31)
MBBS (government)	Easy access	6	8
	Privacy		2
	Personal doctor		1
MBBS (private)	Easy access	8	2
	Privacy	5	2
	Harassment from government staff	1	
	Persistence of symptoms after treated by government doctor	1	1
Specialist (government)	Referred by MBBS doctors	3	5
	Easy access	3	4
	Persistence of symptoms after treated by private doc	1	3
Specialist private	Personal gynecologist		10
	Privacy	5	3
	Easy access	3	1
	Harassment from government staff	1	
	Referred by MBBS doctors		1
	Personal gynecologist		1
Total		37*	44*

\*The number of reasons is more than the number of males and females as more than one reason were given by many patients

**Table 4: Number of health facilities visited**

Number	Males	Females
1	20	21
2	7	9
3	2	3
6	1	0

free medicine 71.4% lack of privacy (66.7%), and lack of confidentiality (11.9%).

## DISCUSSION

The STI patients who attended the tertiary care center for 6 months were studied regarding their choice of health-care facility before attending our center, the appropriateness of treatment received and their concerns regarding services from the government health-care facility.

The majority of the males and females were from rural areas, belonged to 20–29 age group, were married, with high school level of education, and belonged to the lower income group. These findings were similar to the report from Zambia.<sup>[3]</sup> Inappropriate treatment seeking was seen in 32.9%. This was similar to the report from Zambia and Kenya where the proportion of patients who sought inappropriate treatment ranged from 23.7% to 30%.<sup>[3,4]</sup>

Females predominated in inappropriate treatment practices before visiting a modern medicine health facility (36.8% vs. 29.8%). Although the proportion of males and females resorting to treatment from the informal sector was less in Nairobi (13% of males and 16% of females), there was a predominance of females like in ours.<sup>[5]</sup> This observation of ours was contradictory to the Kenyan study where men resorted to treatment from informal sector more than females, 32.7% and 16.1, respectively.<sup>[4]</sup> The informal sector included pharmacists, traditional practitioners, drug peddlers, family members, ayurvedic practitioners, and homeopathic practitioners. A traditional healer was consulted only by one male patient (7.1%) in this study and was similar to Kenyan study where 6.1% visited traditional healers.<sup>[4]</sup> Traditional healer was the choice of 14.9% of patients in Zambia and 56% of STI patients in Uttarakhand.<sup>[3,6]</sup> This inappropriate treatment may be due to many factors such as stigma, shame, guilt, lack of easy accessibility to treatment care facilities, lack of knowledge regarding STIs, lack of self-efficacy, perceived seriousness, and lack of support from family. Whatever be the reason, the waiting period increases the transmission dynamics of STIs.

Government sector was the choice of treatment for 49.4% of patients (46.4% males and 93.5% females). In Zambia, 69.3% sought care at public health facility and 15.8% from private facility and similar to our study females preferred government sector facility (59.6% males vs. 79.6% females).<sup>[3]</sup> About 37.7% of the patients sought treatment from public-sector health facilities (26.9% men and 46.8% women) and 38.6% preferred private clinics (40.4% men and 37.1% women) in Kenya.<sup>[4]</sup> Contrary to our findings and reports from Zambia and Kenya, majority sought treatment from private sector (72% men and 57% women) in Nairobi.<sup>[5]</sup>

About 28.6% of males and 32.3% of females had attended more than one health facility before visiting us which was high when compared to Nairobi where 13% of males and 18% of females had attended more

than one health facility. The reasons cited for not seeking care from public facilities were similar to that reported from literature such as lack of privacy, lack of drugs, long waiting time, and insistence on bringing the sex partner.<sup>[3,4,7-9]</sup>

Sexual contact after the onset of symptoms was seen in 55.3% of patients and consistent condom usage was seen in none. This was similar to Zambian patients where 57% reported sex after the onset of symptoms and consistent condom use was reported in only 15%.<sup>[3]</sup>

Treatment failure at the first point of contact was evident as majority of our patients were referred from other peripheral centers although some patients came directly without reference. Although appropriate treatment-seeking behavior was there in all the patients (69.4%) who visited other center's before visiting our center, the fact that they came to us indicate some form of treatment failure. The proportion of patients attending more than one health facility was also high. Among them, only 7.1% of males and 3.2% of females received appropriate treatment. This is a matter of grave concern as inadequate treatment or lack of treatment at the first point of contact with the health system inevitably increases the length of time during which individuals remain infectious providing more opportunities for transmission and chances of drug resistance. None of the patients including those who received appropriate treatment were given risk reduction messages and condom promotion messages.

Major improvements in the delivery of effective health-care services as well as increased educational efforts both in health facilities and in communities are required. Public awareness needs to be raised on the importance of early treatment seeking at public facilities, long-term consequences of STIs, and sexual risk reduction strategies for reducing STIs. Individuals should be made aware that they must seek treatment promptly and refrain from sexual activity until they have been effectively treated. Continuous training in syndromic management and the establishment of regular supportive supervision are necessary for both general practitioners and specialists. Periodic performance appraisals should be conducted for all public facilities by supervising authorities. As STI control is a government initiative, the private sector is usually not included in periodic training. Training as part of STI control programs in future has to include private sector also. Standardization of STI care in both public and private facilities should be an important



strategy. Government health sector is a place where quality services can be delivered. Government and program planners should take into consideration the concerns expressed by the patients regarding the healthservice-related issues such as availability of medicines, issues of confidentiality, stigmatization, and harassment from staff. Most of the females in this study preferred government facilities despite the inadequacies. The facilities should be made women friendly. The major limitation of this study is the tertiary care study setting. Although the generalizability of the findings is poor, this study should be considered as an eye opener to the existing problems in our health facility.

## CONCLUSION

Strengthening of STI services in the public sector, periodic training of health care providers of both public and private sector and creation of public awareness regarding the importance of early appropriate treatment should be an integral aspect of STI control program.

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## Conflicts of interest

There are no conflicts of interest.

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