SEXUAL RISK BEHAVIOUR AND SEXUALLY TRANSMITTED INFECTIONS IN ADOLESCENTS ATTENDING STI CLINIC

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ABSTRACT

BACKGROUND

Adolescents and young people constitute 31% of Indian population. Socioeconomic and political reforms depend on the healthier development of young people. In this transition period from childhood to adulthood, young people face significant risks pertaining to sexual and reproductive health. In addition to behavioural risk factors, anatomically and biologically also they are at increased risk of Sexually Transmitted Infections and Human Immunodeficiency virus disease.

The aim of this study is to know the sexual risk factors and prevalence of STI/HIV among young people aged 10-24 years, attending STI clinic of Dermatology and Venereology Outpatient Department of Medical College Hospital.

MATERIALS AND METHODS

This is a retrospective study of adolescent and young people aged 10-24 years, attending STI clinic, Dermatology and Venereology Department of Medical College Hospital during 2014-2016. The demographic profile, sexual behaviour pattern, prevalence of STI and HIV were analysed from the medical records of the patient.

RESULTS

Out of 5807 new clients who have attended STI clinic during 2014-2016, the adolescents and young people were 247. Among these, male clients were 193, females were 93 with 1 transgender. Among the study group, 37.7% were of adolescent age group between 10-19 years, 62.3% were young adults in the age group of 20-24 years. Most of them were of urban domicile; predominantly with high school level education. 45% of them had no sexual exposure and attended DVL OPD for screening or with dermatological complaints. Premarital sex behaviour was found among 32% of study group. Premarital sex behaviour was found only among males of this study group, mostly it was homosexual behaviour. For young females, the sexual exposure was mainly with marital contacts. Premarital sexual exposure among young females of this study group was not found, except one who was a female sex worker. Genital skin lesion was the predominant complaint of males with sexual exposure, and genital discharge was the predominant complaint among female clients. The prevalence of STI is about 28% and HIV prevalence is about 7.2%. Common STI found among males was genital scabies and that of females was genital candidiasis. Most of cases of HIV [67%] among this study group were due to vertical transmission.

CONCLUSION

Adolescence is the transition period where the physical, biological, mental and emotional development of the individual will have influence over later life. Young people are at increased risk of STI/HIV. Sexual risk-taking behaviour and especially same sex behaviour is found commonly among the young males of this study, reiterating the need of age appropriate sex education.

KEYWORDS

Sexually Transmitted Infections, Adolescents, Premarital Sexual Risk Behaviour, Young Adults.

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BACKGROUND

Adolescence is the transition period from childhood to adulthood. World Health Organisation defines Adolescent period as age group from 10 years -19 years and youth as age group from 15 years to 24 years and young people cover the age range 10 -24 years.⁽¹⁾ Young Adults are persons from 20-24 years of age. These periods are important in a person's life because the issues they face during these periods have lifelong influence.

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Healthy adulthood in terms of physical and mental health depends upon the same in the childhood and adolescent period. Adolescents and young people have many issues like social issues, emotional issues, and health issues. Young people face significant risk pertaining to sexual and reproductive health in this transition period to adulthood. Sexually Transmitted Infections and HIV are important when adolescents and young age are considered because of increased risk. In addition to the behavioural risk factors, anatomically and biologically, adolescents and young people are at enhanced risk of STI and HIV.

Aim

To know the sexual behavioural pattern and prevalence of STI and HIV among Adolescents and young age group attending the Dermatovenereology Department of a tertiary care hospital of South India.

MATERIALS AND METHODS

This is a retrospective analysis of patients in the age group 10-24 years who attended STI clinic of a Government Medical College of South India during the period January 2014 to December 2016. Demographic profile, sexual behaviour pattern and clinical features, Rapid plasma reagin test and HIV antibody test results, Treatment given and followup were analysed from the individual STI/RTI patient wise records used in STI clinic.

RESULTS

A total of 247 clients in the age group 10-24 years attended STI clinic during 2014-2016. Among these males were 153 clients [61.9%], female 93 clients [37.7%] and transgender 1 client [0.4%]. Male female ratio comes around 2: 1.

Age & Domicile

93 [37.7%] clients were of adolescent age group between 10-19 years, 154 [62.3%] persons were young adults in the age group of 20-24 years. Most of them [72.1%] were of urban domicile. Rest of them were from the surrounding rural areas. Sexual exposure: Among 247 adolescent and young people, 110 [45%] persons had no sexual exposure [males -69, females -41]. Among males having sexual exposure, 53 [63%] had homosexual behaviour, 21[25%] had heterosexual behaviour with girlfriends and fiancés and 5 [6%] had sexual exposure with commercial sex workers and 5 [6%] had sexual exposure only with marital contacts. Among Female study group who had sexual exposure, almost all [51] were with marital partners, one female was a commercial sex worker. Overall premarital sex behaviour was found among 32% of study group among the total 247 participants. There was inconsistent condom use among male study participants with sexual exposure.

Education

9 persons were illiterate, 26 had primary school level education, 157 had higher school level education from 6th-12th. 46 persons of study group were undergraduate and diploma holders. 9 were postgraduates and professionals.

Presenting Complaints

The presenting complaints of this study group are depicted in Table 1. Majority (46.2%) of them came for screening. Next predominant complaint was genital skin lesion. Genital scabies and Tinea cruris were the major causes for genital skin lesion. Genital discharge was the predominant complaint in females.

Presenting Complaints	No. of Patients	Percentage
Genital skin lesion	39	15.8
Genital discharge	27	10.9
Genital ulcer disease	12	4.9
Genital itching	5	2
Screening	114	46.2
Partner screening	11	4.4
Nocturnal emission	3	1.2
Generalised itching and skin lesion	35	14.2
Urethral discharge	1	0.4

Table 1. Presenting Complaints of Young People Attending STI Clinic

Prevalence of STI and HIV

18 [7.2%] HIV reactive cases were found among this group. 12 were due to vertical transmission. Among the rest of 6, females were 3 in number and male were also 3. All females got infection through marital contact and sexual risk behaviour was found among males. About 70 cases [28%] had STI. [TABLE 2]. The common STI found among males was genital scabies. Genital candidiasis was common among females.

Sexually Transmitted Infections	Number of Patients
Vulvovaginal Candidiasis	20
Genital Scabies	17
Genital Warts	10
Genital Herpes	6
Trichomonas vaginalis vaginitis	2
Bacterial vaginosis	5
Primary Syphilis	2
Secondary Syphilis	3
Early Latent Syphilis	1
Nongonococcal Urethritis	1
Balanoposthitis	3

Table 2. STI in Study Group. Total 70 [28%] Patients had STI Among 247 Adolescents

Treatment and followup: 95% of young people diagnosed to have STI underwent treatment and followup. About 90% of patients had one followup visit. Partner screening was possible only for 4.4 % of clients.

DISCUSSION

The total number of new STI clients attended OPD during 2014-2016 was 5807. Among this adolescents and young people constituted 4.2%. In a similar study done at Nigeria, about 30% of STI clinic attendees were adolescents. The majority of the study groups were men with male female ratio of 2:1. Most of them in the study group were in the age group of 18-21 years.

The prevalence of premarital sex among young people of India varies from region to region and it was found to vary from 15% to 16%. It differs according to the domicile, gender,

socioeconomic status, educational status, etc. About 15% of young men and 4% of young women reported to have premarital sex.⁽²⁾ In a study done among college students of Gujarat, India, 14% of 450 participants gave history of premarital sex.⁽³⁾ But premarital sex was found among 32% of young people of this study. Since the study was among STI clinic attendees, this may explain the higher percentage of risk behaviour found in this study. In our study, among males those who had sexual exposure, 37 % of males had heterosexual exposure and 63 % of them had homosexual exposure. The increased prevalence of homosexual behaviour among young people is shown in other studies also. In a study done among MSM attending Voluntary counselling and testing centre of a nongovernmental organisation, Bombay, the mean age found was 24.8 years.⁽⁴⁾ Among the many reasons for sexual risk taking behaviour, inadequate information on sexual health, age related curiosity to know about sex may be some of the reasons.

Among young females of this study group most of the sexual exposures were within marital relationship. According to Prohibition of Child Marriage Act, 2006, if a girl in India marries before 18 completed years of age it is considered as child marriage. But in our study group, 55% of females gave history of marriage before 18 years of age. Because of early marriage young females in India are exposed to sexual life at an earlier age. Early marriage impairs women's sexual as well as reproductive health in terms of repeated child birth, unwanted pregnancies and pregnancy terminations.⁽⁵⁾ In a large national level survey among Indian women, it was found that 15% of adolescent women had symptoms of STI and 11% of adolescent women had abnormal genital discharge.⁽⁶⁾ In our study, 29% of young women presented with abnormal vaginal discharge. This increased prevalence may be explained by the fact that our study groups were STI clinic attendees and the study mentioned above was a large community based study.

The earliest age of first sexual exposure in this study group was 8 years. The average age of first sexual exposure in this study group was 18 years. In a study from Andhra Pradesh the mean age of first sexual debut among male was about 16.8 years and among female it was 15.7 years.⁽⁷⁾ The earlier the age of first sexual debut, the chance of experiencing STI is more.⁽⁸⁾ In a study from Humsafar Trust Bombay, it is found that the mean age of first sexual intercourse among MSM is around 24.8 years.⁽⁴⁾

Adolescents with STI have an increased risk of subsequent HIV infection, when compared to adolescents without STI. In a study conducted at Philadelphia, HIV risk has doubled for those who had a STI reported during adolescence.⁽⁶⁾ In our study group, 28% of adolescents presented with STI. This reflects the sexual risk-taking behaviour of the young people.

The prevalence of STI among people in the age group 10-24 age in this study is about 28%, while the adult STI prevalence in India comes around 6%. The knowledge about STI is still lacking in our adolescent population. In a study conducted among professional college students only about 40% of students knew the symptoms of STI.⁽⁹⁾

CONCLUSION

Our study revealed the sexual risk-taking behaviour of young people which showed that a sizeable number of young people have engaged in premarital sex and predominantly same sex

behaviour among men and unprotected sex, reiterating the need of age appropriate sexual health education. Communication between parent and child on sensitive issues like sexual relation and reproduction are minimal and most of the young people acquire knowledge regarding sex from media and peer group.

Promising features in this study were the service utilisation of facilities by the young people and proper health care delivery by the providers. A good number of young people without sexual exposure utilised STI clinic for STI screening. And for many patients, who attended OPD with skin lesions STI screening was done, making this as an opportunity for sexual health education to young people and also for STI screening.

Adolescent health education is to be imparted to the adolescent and young people to help them cope up with the physical and psychological changes of this transition period. The health education should cater the school going as well as the school dropouts. Red ribbon clubs implemented by National Aids Control Organisation in colleges encourages peer to peer messaging on HIV prevention. These adolescent friendly efforts create a space for them to seek clarifications for their myths and misconceptions on STI/HIV. Effective communication within the family between parents and young people on sexual and reproductive issues will help adolescents to face the issues of this period.

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