Community perception on safe sex, HIV/STDs and substance abuse

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Background: Sexually transmitted diseases (STDs) are the problem of public health worldwide. The World Health organization reported 536 million cases of STDs all over the world, and there were 499 million people that reported the new cases of STDs. Objectives: To assess the community perception on safe sex, HIV/STDs and substance abuse. Methodology: A cross sectional observational study was carried out on 746 participants (485 male and 261 females) of reproductive age group (15-49 yr) from different localities of Indore city. Simple random selection was applied and written informed consent was obtained from the study participants. Data collected with the help of Pre-designed, Pre-tested, Semi-structured questionnaire during the period between 01 March 2016 – 30 OCT 2016 and analyzed, were presented in table formats, obtained using Excel and SPSS-22. Chi square Test was applied and p value considered significant when it is < 0.05. Results: Opinion on having multiple sex partners leading to HIV/AIDS & STDs. 85.8% males and 83.3% females accepted the statement. About cure of HIV/AIDS, 18% males and 21.8% females say yes. About safe sex, 61.9% males and 57.3% females, give correct response. 45% of total 485 males smoke or take tobacco items and 23.5% take alcohol none of the females involved in this.

Conclusions: Most of the study participants have knowledge about HIV transmission but somehow poor knowledge regarding its cure. Correct concept of safe sex is around 61%. Mostly males are involved in smoking and other addiction.

Keywords: Community Perception, HIV/STDs, Safe Sex, Substance Abuse

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**Introduction**

Sexually transmitted diseases (STDs) are the problem of public health worldwide. The World Health organization reported 536 million cases of STDs all over the word, and there were 499 million people that reported the new cases of STDs [1].

In Southeast Asia, young people do not typically have access to sex education and are poorly informed about how to protect themselves from unwanted pregnancies, STDs, and human immuno deficiency virus/acquired immuno deficiency syndrome (HIV/AIDS) [2].

Despite the ongoing investments in programs to increase sexual health awareness among young adults globally, many remain vulnerable to sexually transmitted diseases. Two-thirds of all STDs occur among youth [3-4]. Globally, most sexual health intervention for young adults tends to focus on education and prevention (Rietmeijer, 2013).

Yet, fewer interventions include a focus on creating environments that enable young adults with lived experiences to express their fears, concerns related to STD treatments, and other sexual health issues without cultural conflict or stigmatization [5-6]. STDs have become a serious public health issue in India [7]. There are some social factors which play a vital role in increasing the risk of STDs including socio-economic status, occupation marital status, sexual disharmony etc [8].

It has been observed in India that change in the epidemiological trends particularly speedy increasing rate of STDs occurrence being noted in the high risk groups, specifically different drug users and commercial sex workers. Several studies [9-13]. Adolescence group is more vulnerable to several factors like incomplete social, biological, emotional, psychological development resulting in risky behavior which serves to increase the risk of contracting STIs [14].

Some of most common behavioral contributors are use of alcohol and tobacco, diet and activity pattern, as well as use of illicit drugs and sexual behavior are initiated during adolescence [15]. High rates of teenage pregnancies and increasing number of STIs in adolescents have led to more attention being paid to adolescent sexual and reproductive health worldwide [16]. In low-income countries, STI often go undiagnosed and untreated due to lack of knowledge and/or non-availability of healthcare facilities.

Little emphasis on educational and other efforts to prevent infection occurring in the first place and the insufficient integration of HIV/AIDS and family planning into one program are common reasons why STI control programmes often fail in low-income countries and also because of social taboos surrounding reproductive and sexual health, many young married women are too embarrassed to voice their needs and instead forgo health services [17-19].

**Materials and Methods**

**Study design and study area:** cross sectional observational study was carried out in different localities of Indore city of M.P (Anoop Nagar, White Church Colony, Chhoti Gwaltoli, Nawlakha, Shastri Nagar, Geeta Nagar)

**Sampling method:** Simple random method was adopted for selection of study participants. Total sample size is 746 participants which includes 485 male and 261 females of reproductive age group (15-49 yr)

**Study duration:** 6 months from 01 March 2016–30 October 2016

**Study tool and Data collection:** After obtaining written informed consent, data was collected with the help of Pre-designed, Pre-tested, Semi-structured questionnaire.

**Inclusion criteria:** We include male and females of reproductive age group (15-49 yr) who gave written informed consent of participation in study.

**Exclusion criteria:** We exclude the person of age below 15 yrs and above 49 yrs and who do not give consent.

**Statistical methods:** The data collected were analyzed were presented in table formats, pie charts and histograms which were obtained using Excel and some using SPSS-22 (Statistical Package for Social Science). Chi square Test was applied and p value was calculated where ever required & considered significant when it is < 0.05.

**Results**

Present study was carried out on 746 participants, includes 485 male and 261 females of reproductive age group (15-49 yr) from different localities of Indore city of M.P. following are the important findings:
Table No.-01: Responses of the Participants about consequences of having multiple sex partners leading to HIV/AIDS/STDs

<table>
<thead>
<tr>
<th>Gender</th>
<th>Opinion about consequences of having multiple sex partners leading to HIV/AIDS/STDs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>416(85.8%)</td>
<td>27(5.6%)</td>
</tr>
<tr>
<td>Female</td>
<td>217(83.3%)</td>
<td>18(6.9%)</td>
</tr>
</tbody>
</table>

C2 = 1.69, p-value <1

When opinion of the participants were taken on having multiple sex partners leading to HIV/AIDS & STDs. Out of 485 males, 85.8% replied yes to the statement 5.6% said no and 8.7% had not given their opinion. In Females out of 261, 83.3% accepted the statement, 6.9% denied it and 9.8% had not given their opinion.

The knowledge about having multiple sex partners leading to HIV/AIDS was correct in maximum males 85.8% and in females 83.3%. C2 = 1.69, p-value <1 which is not significant.

Table No.-02: Responses of the Participants about concept about cure of HIV/AIDS

<table>
<thead>
<tr>
<th>Gender</th>
<th>Concept about cure of HIV/AIDS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>87(18.0%)</td>
<td>321(66.1%)</td>
</tr>
<tr>
<td>Female</td>
<td>57(21.8%)</td>
<td>175(67.2%)</td>
</tr>
</tbody>
</table>

C2 = 8.49, p-value <0.025

When participants were asked about is there any about cure of HIV/AIDS? Out of 485 males, 18% says yes, 66.1% denied and 15.9% don’t know about cure. In Females out of 261, 21.8% says there is cure of HIV/AIDS, 67.2% denied rest of the female sn 10.9% don’t know.

So there seems to be lack of awareness of HIV/AIDS education in both males and females. Concept of HIV/AIDS in males (82%) and females (78.1%) found to be similar C2 = 8.49, p-value <0.025, which is found statistically significant.

Table No.-03: Responses of the Participants about meaning of safe sex

<table>
<thead>
<tr>
<th>Gender</th>
<th>Meaning of safe sex</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prevention of HIV/AIDS /STI during sex</td>
<td>Prevention of unwanted pregnancy</td>
</tr>
<tr>
<td>Male</td>
<td>58(12.1%)</td>
<td>15(3.1%)</td>
</tr>
</tbody>
</table>

C2 = 34.54, p-value < 0.001

When asked about meaning of safe sex out of total 485 males 12.1%, replied that it is only prevention of HIV/AIDS/STD during sex, 3.1% said that is prevention of unwanted pregnancy, 61.9% said that it is both (prevention of HIV/AIDS/STD as well as prevention of unwanted pregnancy) and 23.0% don’t know what it is.

In females out of 261, 6.1% said safe sex as prevention HIV/AIDS and STDs, 1.5% as prevention of unwanted pregnancy, 57.3% have given the response as both and rest of them 35% don’t know. Hence on comparing overall knowledge about safe sex in males 61.9% and females (57.3%) was found to be statistically significant. c2 = 34.54, p-value <0.001.

Table No.-04: Responses of the Participants about Abstinence (not to have sex)

<table>
<thead>
<tr>
<th>Gender</th>
<th>No to sex (abstinence) is important</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>323(66.5%)</td>
<td>147(30.3%)</td>
</tr>
<tr>
<td>Female</td>
<td>131(50.2%)</td>
<td>71(27.0%)</td>
</tr>
</tbody>
</table>

C2 = 171.47, p<0.001

When participants were asked the question is it important for you to say "No to Sex". Out of 485 males 66.5% replied that yes it matters for them, 30.3% said that it is not important for them, whereas 32% don’t know. In females out of total 261, 50.2% says "No to Sex" is important for them, 27% says it is not important for them and 22.8% don’t know.

Table No.-05: Responses of the Participants about Smoking or Intake of Any Tobacco Items

<table>
<thead>
<tr>
<th>Gender</th>
<th>Do you Smoke or Take Any Tobacco Items</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>220(45.0%)</td>
<td>265(55.0%)</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>260(99.8%)</td>
</tr>
</tbody>
</table>

Table No.-06: Responses of the Participants about do you take alcohol or have any addiction

<table>
<thead>
<tr>
<th>Gender</th>
<th>do you take alcohol or any other drug</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Male</td>
<td>90(18.5%)</td>
<td>25(5.1%)</td>
</tr>
<tr>
<td>Female</td>
<td>0</td>
<td>261</td>
</tr>
</tbody>
</table>

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When participants were asked about their intake of tobacco and smoking 45% of total 485 males smoke or take tobacco items. In females out of 261 only 1 is involved in such practices.

When participants were asked whether they take alcohol or any other addiction out of 485 males 76.4% were not taking alcohol or any addictive substance. No females were found to be addictive.

### Discussion

When opinion of the participants were taken on having multiple sex partners leading to HIV/AIDS & STDs. Out of 485 males, 85.8% replied yes to the statement 5.6% said no and 8.7% had not given the their opinion. In females out of 261, 83.3% accepted the statement, 6.9% denied it and 9.8% had not given their opinion. Similar findings were observed by NACO that nearly three-fourths of the respondents in BSS 2006 were aware that sexual contact could lead to HIV/AIDS.

This proportion has increased significantly since BSS 2001 (62%). Nine out of ten respondents in urban areas as against seven out of ten in the rural areas were aware of this aspect. Across both rural and urban areas, the awareness of HIV transmission through sexual contact was significantly higher in males (89% in urban and 78% in rural) as compared to females (82% in urban and 60% in rural) When participants were asked about is there any about cure of HIV/AIDS? Out of 485 males, 18% says yes, 66.1% denied and 15.9% don’t know about cure.

In Females out of 261, 21.8% says there is cure of HIV/AIDS, 67.2% denied rest of the females 10.9% don’t know. So there seems to be lack of awareness of HIV/AIDS education in both males and females[7].

When participants were asked about is there any about cure of HIV/AIDS? Out of 485 males, 18% says yes, 66.1% denied and 15.9% don’t know about cure. In Females out of 261, 21.8% says there is cure of HIV/AIDS, 67.2% denied rest of the females 10.9% don’t know. So there seems to be lack of awareness of HIV/AIDS education in both males and females.

Similarly, Study by Diclemente Ralph J. et al [20] found that 60% of the participants knew AIDS cannot be cured. Steiner John D. et al [21] found that 93% of the participants knew AIDS cannot be cured. Another study by Doyle Y.G. and Conrary R.M [22] in their study revealed that 84.5% of the participants were aware that AIDS cannot be cured.

When asked about meaning of safe sex out of total 485 males 12.1%, replied that it is only prevention of HIV/AIDS STD during sex, 3.1% said that it is prevention of unwanted pregnancy, 61.9% said that it is both (prevention of HIV/AIDS/STD as well as prevention of unwanted pregnancy) and 23.0% don’t know what it is. In females out of 261, 6.1% said safe sex as prevention HIV/AIDS and STDs, 1.5% as prevention of unwanted pregnancy, 57.3% have given the response as both and rest of them 35% don’t know.

When participants were asked the question is it important for you to say "No to Sex". Out of 485 males 66.5% replied that yes it matters for them, 30.3% said that it is not important for them, whereas 32% don’t know. In females out of total 261, 50.2% says "No to Sex" is important for them, 27% says it is not important for them and 22.81% don’t know.

When participants were asked whether they take alcohol or any other addiction out of 485 males 76.4% were not taking alcohol or any addictive substance. No females were found to be addictive.

Study by Kushwaha K.P. et al [23] stated that Overall, prevalence of abuse of psycho active substances was 25% in slum areas and 18% among college participants. Abuse of tobacco was most frequent (50.3% and 72.5%) followed by that of alcohol (11.7% and 16.2) in both the groups respectively. Cannabis was also used by some children (0.6%).

When participants were asked whether they take alcohol or any other addiction out of 485 males 76.4% were not taking alcohol or any addictive substance. No females were found to be addictive.

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Abuse of tobacco was most frequent (50.3% and 72.5%) followed by that of alcohol (11.7% and 16.2) in both the groups respectively. Cannabis was also used by some children (0.6%) another study by Bansal raj Kumar [24] found that Majority of them (98.5%) had not heard of HIV and AIDS, however 4.3% had a history of STD and had been treated by majority of adolescents also had a history of...
Substance abuse, which is another important variable known to increase the vulnerability to HIV transmission both directly and indirectly.

**Conclusion**

Most of the study participants have knowledge about HIV transmission but somehow poor knowledge regarding its cure. Correct concept of safe sex is around 61%. Mostly males are involved in smoking and other addiction. Finding suggests that positive response towards efforts of HIV/STDs but still requirement of awareness generation regarding these issues.

**Outcome:** Although the efforts on HIV/STD issue shown positive results but there is still requirement of more awareness generation on this topic.

**Authors’ Contribution**

Dr. Shailesh Rai and Dr. V.P. Goswami develops the idea for present study. Dr. Shailesh developed the base after literature review and finalized the study question. Dr. Goswami verified the analytical methods. Dr. Shailesh supervised the findings of this work. Both authors discussed the results and contributed to the final manuscript.

**Reference**

01. World Health Organization(2013). sexually transmitted infections (STIs), the importance of a renewed commitment to STI prevention and control in achieving global sexual and reproductive health. Department of Reproductive Health and Research. Available at: [Article] [Crossref]

02. Pachauri S. Sexual and reproductive health services- Priorities for South and East Asia. Indian J Community Med. 2011 Apr-Jun; 36(2)83–84. doi: 10.4103/0970-0218.84116 [Crossref]


04. Nnoruka E, Ezeoke A. Evaluation of syphilis in patients with HIV infection in Nigeria. Tropical Medicine & International Health. 2005;10;pp58–64. [Article] [Crossref]

05. Rietmeijer CA. Structural interventions for sexually transmitted infection prevention and sexual health. Sexually Transmitted Diseases. 2013;40(8)655–656. [Crossref]

06. Edward C Green. Rethinking AIDS Prevention-Learning from Successes in Developing Countries. Westport, CT- Praeger. 2003;374. [Crossref]


08. Annual Report 2015-16. National AIDS Control Organisation, HIV data. New Delhi. Available at: [Article] [Crossref]


11. Bhatia C, Jagdish D, Cleland J. Self-reported symptoms of gynaecological morbidity and their treatment in South India. Stud in Fam Plann. 1995;6(4)203-16. [Crossref]

12. Chopra A, Mittal RR, Singh P, Sharma P. Pattern of sexually transmitted diseases at Patiala. Indian J Sex Transm Dis. 1990;11(2)43-5. [Crossref]


16. WHO. Adolescent sexual and reproductive health. Available at: [Article] [Crossref]

17. Lan PT, Lundborg CS, Mogren I, Phuc HD, Thi Kim Chuc N. Lack of knowledge about sexually transmitted infections among women in North rural Vietnam. BMC Infectious Diseases. 2009;9;85. [Crossref]


21. Steiner DJD, Sorokin G. Are adolescent getting smarter about AIDS? Changes in knowledge and attitude over the past 5 years. AJDC. 1990;144;302-306. [Crossref]

22. Doyle YG, Conroy RM. What Irish schoolchildren know about AIDS. Public Health. 1991 Mar;105(2)167-71. [Crossref]


24. Bansal raj Kumar. Sexual behavior and substance use patterns amongst Adolescent truck cleaners and risk of HIV/ AIDS. Indian journal of maternal and Child health. 1992; 3(4)108-110. [Crossref]