A study on awareness about HIV among female sex workers of Davangere, Karnataka, India: a cross-sectional study

Girish H. O., Sudhir Prabhu Haladi, Balu P. S.

INTRODUCTION

HIV/AIDS is a major medical, public health as well as a grave socioeconomic challenge to the world. In India, sexual transmission is responsible for 87 percent of reported HIV cases. Female sex workers form a separate and largest group among the core high risk groups. The main objectives were to know the level of awareness about HIV among female sex workers of Davangere city, Karnataka, India.

METHODS: A Cross-sectional community based descriptive study conducted at Davanagere city involving 200 female sex workers using modified questionnaire of behaviour surveillance survey.

RESULTS: The mean age was 32.7 years. 64% were illiterates, 56.5% were married and living with their spouse. Good proportion of participants had awareness about the mode of spread & prevention of HIV, but the awareness needs to be improved in some components.

CONCLUSIONS: The proportion of awareness would be because of the exposure of female sex workers to the targeted intervention programme which helps them in understanding about the disease.

KEYWORDS: Condom, HIV, Female sex workers
METHODS

Study design

Cross sectional community based descriptive study was conducted at Davanagere city from 16-01-2011 to 15-01-2012.

Study participants

Female sex workers practicing sex-work for atleast past one year and consenting to participate were included in the study.

Data collection

Female sex workers were approached with the assistance of NGO peer educator working in this area as a part of targeted intervention programme. They were used as a window to enter into the network of female sex workers and further sex workers. All subjects were informed about the purpose of study and interviewed after obtaining informed consent and assuring confidentiality.

Sampling

Sample size was calculated on the basis of reported 47% (7) STI morbidity by Thakor HG et al among female sex workers and fixing 15% as the relative precision using formula \(4PQ/D^2\). Sample size was calculated to be 200 FSW’s. FSW’s were selected randomly. Subjects were interviewed by using the standard questionnaire of Behavioural Surveillance Surveys (BSS) after suitable adaptation to local situation. Data was presented in suitable tables and analysed applying percentage proportions.

RESULTS

Table 1 shows that out of 200 FSW’s included in our study, 36% of them were below 30 years of age. The mean age of respondents was 32.7 years. 89% of them were Hindus and 11% were Muslims. 64% were illiterate. Currently 56.5 % FSW’s were married and living with their spouse. Table 2 shows that all of them had heard about HIV and good proportion of them had correct awareness about the mode of spread of HIV. Table 3 shows that 83% were that HIV can be prevented by avoiding penetrative sex 79% were aware that spread of HIV can be prevented by consistent use of condom and 84.5% were aware that HIV can be prevented by being with one uninfected faithful partner. The awareness about the treatment facilities available for HIV is less (Table 4). Symptoms/ presentation of HIV: The most commonly quoted symptoms are Genital discharge (65%), Genital ulcers (40%), burning pain during urination (45%), abdominal pain (73), other symptoms mentioned are weakness, fever, hair loss, discoularisation of face, jaundice, red eye, weight loss, loose stools.

| Variable | Variable categories | Number N= 200 | Percentage |
|----------|---------------------|---------------|------------|
| Age (years) | Mean age= 32.7 | 18 - 29 | 72 | 36.0 |
| | | 30 - 39 | 85 | 42.5 |
| | | > 40 | 43 | 21.5 |
| Religion | Hindu | 178 | 89 |
| | Muslim | 22 | 11 |
| Education level | Illiterate | 128 | 64.0 |
| | Primary school | 37 | 18.5 |
| | High school & above | 35 | 17 |
| Marital status | Married & living with spouse | 113 | 56.5 |
| | Separated | 79 | 39.5 |
| | Never married | 8 | 4 |

Table 2: Awareness of participants about HIV & its mode of transmission.

| Question | Yes No (%) | No No (%) | Don’t know No (%) |
|----------|------------|-----------|------------------|
| Have you heard of disease transmitted by sexual route? | 199 (99.5) | 1 (0.5) | -- |
| Have you ever heard of HIV? | 200 (100) | 0 (0) | -- |
| Whether HIV spreads by sexual route? | 166 (83) | 16 (8) | 18 (9) |
| Can HIV spread from pregnant to foetus? | 165 (82.5) | 12 (6) | 23 (11.5) |
| Whether breastfeeding transmits HIV to child? | 109 (54.5) | 55 (27.5) | 36 (18) |
| Can healthy looking person have HIV? | 126 (63) | 49 (24.5) | 25 (12.5) |
| Whether HIV spreads by using same needle? | 187 (93.5) | 2 (1) | 11 (5.5) |
| Whether HIV spreads by mosquito bite? | 105 (52.5) | 60 (30) | 35 (17.5) |
| Whether HIV spreads by sharing meal with infected person? | 69 (34.5) | 115(57.5) | 16 (8) |
Table 3: Awareness of participants about methods of preventing HIV transmission.

| Correct awareness about methods of preventing HIV transmission (N = 200) | Proportion correctly identifying all three modes N = 200 |
|---|---|
| Can be prevented by avoiding penetrative sex Yes | Can be prevented by consistent use of condom Yes | Can be prevented by being with one uninfected faithful sex partner: Yes | |
| Number | % | Number | % | Number | % | Number | % |
| 166 | 83.0 | 158 | 79.0 | 169 | 84.5 | 145 | 72.5 |

Table 4: Awareness about the treatment facilities for HIV.

| Question | Yes | No | Don’t know |
|---|---|---|---|
| Whether there is treatment for HIV | 128 (64) | 10 (5) | 62 (31) |
| Whether HIV is curable | 36 (18) | 16 (8) | 148 (74) |
| Have u heard of ICTC | 28 (14) | 172 (86) | -- |
| Have u heard of ART centre | 34 (17) | 166 (83) | -- |

DISCUSSION

Female sex workers are one of the important links in the transmission of HIV to general population. Only the high level of awareness associated with high commitment towards it can change the direction of the epidemic. Our study involving 200 female sex workers from Davanagere city showed that, mean age of participants was 32.7 years which corroborates with studies done by Ramesh BM et al, Roy A, Blanchard JF et al.\(^6\). All our study population have heard of HIV which is similar to the observations made in National Behavioural Surveillance Survey in Karnataka but very less proportion (44.2%) of FSW’s have heard about HIV in a study conducted by Todd CS et al.\(^1\). The level of awareness were similar to observations made by BSS survey in Karnataka in most of the components and better than National average in part of them. The better awareness level could be attributed to the exposure of the FSW’s to targeted intervention programme. The level of transformation of the awareness into actual practise plays a major role in determining the success of the intervention programmes.

CONCLUSION

Even though the level of awareness is better in mode of transmission and prevention measures through sexual transmission, there is inappropriate knowledge in some of the components. The knowledge should be converted to practise. Then only it can make a significant change in the disease scenario.

ACKNOWLEDGEMENTS

Authors would like to acknowledge the study participants & the peer workers and the members of the NGO for their co-operation without whose involvement this study would have not been possible.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Female Sex Workers (FSWs) and their Clients, National Behavioural Surveillance Survey (BSS) 2006. National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India. [online]. [cited 2016 Sep 9]. Available from: URL:http://www.nacoonline.org/upload/NACO%20PDF/Female_Sex_Workers_(FSWs)_and_Their_Clients.pdf.
2. Targeted Interventions under NACP III, Operational Guidelines, Core High Risk Groups. National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India. [online]. 2007 [cited 2016 Sept 9]. Available from: URL:http://www.nacoonline.org/upload/Policies%20Guidelines/27,%20NACP-III.pdf.
3. National AIDS Control Programme Phase III (2006-2011) Strategy and Implementation Plan. National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India. [online]. 2006 [cited 2016 Sept 9]. Available from: URL:http://www.nacoonline.org/upload/Publication/Strategy%20and%20Implementation%20Plan%2020%20NACO%20Programme%20Phase%20III%20(2006-2011)%20NACO.pdf.
4. Park K. Park’s Textbook of Preventive and Social Medicine. 21st ed. Jabalpur: Banarsidas Bhanot Publishers; Feb 2011. P. 319.
5. HIV Sentinel Surveillance and HIV Estimation in India 2007: A Technical Brief. National AIDS Control Organization, Ministry of Health and Family Welfare, Government of India. [online]. 2008 [cited 2016 Aug 22]. Available from: URL:http://www.nacoonline.org/upload/Publication/M&E%20Surveillance,%20Research/HIV%20Sentinel%20Surveillance%20and%20HIV%20Estimation%20NACOPDF.pdf.
6. Suryakantha AH. Community Medicine with recent advances, 2nd ed. New Delhi: Jaypee Publishers; 2010 :453.
7. Thakor HG, Kosambiya JK, Umrigar DN, Desai VK. Prevalence of sexually transmitted infections in sex workers of Surat city. Indian J Community Med. 2004;29(3):104-7.

8. Ramesh BM, Moses S, Washington R, Isac S, Mohapatra B, Mahagaonkar SB, et al. Determinants of HIV prevalence among female sex workers in four south Indian states: analysis of cross-sectional surveys in twenty-three districts. AIDS. 2008;22(suppl 5):S35-44.

9. Roy A. A comparison of female sex work, condom use and exposure to programme interventions in 3 Indian districts. [online] 2009 Nov [cited 2015 Jun 24]. Available from: URL:http://www.khpt.org/CHARME%20WP%206.pdf.

10. Blanchard JF, Neil JO, Ramesh BM, Bhattacharjee P, Orchard T, Moses S. Understanding the Social and Cultural Contexts of Female Sex Workers in Karnataka, India: Implications for Prevention of HIV Infection. J Infect Dis. 2005;191(Suppl 1):S139-46.

11. Todd CS, Nasir A, Stanekzai MR, Scott PT, Close NC, Botros BA et al. HIV awareness and condom use among female sex workers in Afghanistan: implications for intervention. AIDS Care. 2011;23(3):348-56.

Cite this article as: Girish HO, Haladi SP, Balu PS. A study on awareness about HIV among female sex workers of Davangere, Karnataka, India: a cross-sectional study. Int J Community Med Public Health 2016;3:3456-9.