

Awareness level of school students in age group of 14-18 years about HIV & AIDS in a rural area of Jammu (J&K)

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Abstract

HIV infection is known to have established in India since year 1986 and three decades are over since then. A lot of activities have been since then going on by the government of India sponsored NACP under the aegis of NACO. The endemicity of this infection in populations is known to be inversely proportional to the level of awareness about HIV/AIDS.

As per the data available, there are variations in level of awareness about the HIV/AIDS and it's prevention among the general populations as well as the at risk populations. So it is always prudent to assess the level of awareness among the general population. For this reason survey of awareness level among the high school students can give a reliable indication as they represent the level of awareness of their families. Hence a study was conducted among the adolescent students in age group of 14-19 years ie. Class 9-12 years.

Study Design: Cross sectional study.

Study Subjects: adolescent students in age group of 14-19 years ie. Class 9-12 years.

Study Period: Dec 2015

Materials and Methods: The study was conducted in village Maralian of Block RS Pura (rural field practice area of Department of Community medicine, GMC Jammu). The schools chosen were High and Higher secondary standards where the students of age group >14 years could be contacted.

Study Instrument: A pre tested schedule containing (47) questions related to Knowledge, attitudes and practices of adolescents about modes of transmission and prevention of HIV infection, attitudes and beliefs about it and their related practices was used to interview.

It was seen that the students in age group of 14-18 years were much aware about the HIV/AIDS, it's causes, routes of transmission, risk factors, preventive measures and facilities for diagnosis and drugs. Students of this age group can be taken as proxy to the families they belong to and hence the general population of the area under study. But still, a large proportion is having wrong concepts or no ideas about all the aspects associated with HIV/AIDS.

Conclusion: Hence, conducting and sustaining IEC activities in the area is recommended.

Keywords: HIV, AIDS, Awareness, Students, Prevention.

HIV infection is known to have established in India since year 1986 and three decades are over since then. A lot of activities have been since then going on by the government of India sponsored NACP under the aegis of NACO. Raising the level of awareness about the epidemiology and prevention of HIV infection among the people has been the main thrust area of all the prevention activities. As per the data available, there are variations in level of awareness about the HIV/AIDS and it's prevention among the general populations as well as the at risk populations. The endemicity of this infection in populations is known to be inversely proportional to the level of awareness about HIV/AIDS.

So it is always prudent to assess the level of awareness among the general population. For this reason survey of awareness level among the high school students can give a reliable indication as they represent the level of awareness of their families. Hence a study was conducted among the adolescent students in age group of 14-19 years ie. Class 9-12.

Materials and Methods

The study was conducted in village Maralian of Block RS Pura (rural field practice area of Department of Community medicine, GMC Jammu.) which is approximately 20 KM's from GMC. The schools chosen were High and Higher secondary standards where the students of age group >14 years could be contacted. A total of five higher/higher secondary schools are present there including government as well as private. The prior permission from heads of institutions was sought before contacting the students. The research team comprised of one Faculty member, one Demonstrator, post graduate scholar and medical students (37) on clinical posting to department of community medicine.

Study Instrument

A pre tested schedule containing (47) questions related to Knowledge, attitudes and practices of adolescents about modes of transmission and prevention of HIV infection, attitudes and beliefs about it and their related practices was used to interview the respondents.

Results

Table 1: Sex distribution of respondents

| S No. | Male N % | Female N % | Total N |
|-------|-------------|---------------|------------|
| 01. | 164 30.88 | 367 69.11 | 531 |

Table 2: Age distribution of respondents

| S No. | Age group (years) | Number | Percentage |
|-------|----------------------|--------|------------|
| 01. | < 14 | 16 | 3.01 |
| 02. | 14-16 | 357 | 67.23 |
| 03. | 16-18 | 150 | 28.24 |
| 04. | >18 | 8 | 1.5 |
| | Total | 531 | 100 |

Out of 531 students interviewed, 13.74% (n=73) of students knew correctly about the term HIV while

Table 3: Knowledge regarding modes of transmission of HIV

| S.No. | Modes of transmission | Yes N % | No N % | Don't Know N % |
|-------|---|------------|-----------|-------------------|
| 01. | Sharing contaminated needles | 460 86.62 | 38 07.15 | 33 6.21 |
| 02. | Blood Transfusion | 403 75.89 | 75 14.12 | 53 9.98 |
| 03. | Injecting illegal/IV drugs | 351 66.1 | 71 13.37 | 109 20.52 |
| 04. | Kissing | 170 32.01 | 216 40.67 | 145 27.30 |
| 05. | Mosquito bites | 268 69.3 | 178 33.52 | 85 16.00 |
| 06. | Sharing blades/razors | 276 51.97 | 148 27.87 | 109 20.52 |
| 07. | Sweat/saliva of infected person | 191 35.96 | 194 36.53 | 146 27.49 |
| 08. | Unprotected sex | 295 55.55 | 45 8.47 | 191 35.96 |
| 09. | Multi partner sex | 335 63.08 | 34 6.40 | 162 30.50 |
| 10. | Sex with sex workers | 152 28.62 | 66 12.42 | 213 40.11 |
| 11 | Living with HIV positive person | 224 42.18 | 254 47.83 | 53 9.98 |
| 12 | Having food with HIV positive person | 237 44.63 | 234 44.06 | 60 11.29 |
| 13 | From HIV positive mother to baby through breast feeding | 372 70.05 | 73 13.74 | 86 16.19 |

Majority of respondents had correct information about the various modes of transmission but still a large proportion had incorrect or no knowledge about the same. More than 75% knew correctly about infected needles, Blood transfusion, as causes of spread. 66.1% were aware of IDU as a cause. MTCT as a cause was known to 70.05% and blades as cause was known to only 51.97%. More than 305 were aware of sweat, saliva and kissing as routes of transmission. 69.3% had misconception that mosquito bites were a route of

18.07% had wrong information and rest 68.17% (n=362) did not know about it. About term AIDS, 16.76% (n= 89) answered correctly, 9.41% (n=50) answered wrong and 73.82% (n=392) did not know it.

Age of respondents was significantly associated with knowledge about the HIV infection and disease and occupation of father was found to be strongly associated with knowledge about what AIDS meant (p.001)

Main source of information about HIV/AIDS was Television (n=372;70.05%) followed by newspaper (n=242;45.57%), friends (n=152;28.62%), awareness campaigns in schools (n=151;28.43%), family (n=82;15.44%) public lectures (n=71 ;13.37%). Hoardings and relatives over 10% and street plays and NGO's played their role to the tune of over 3% in raising the awareness.

transmission. However it was not statistically significant.

Age of the respondents was a major determinant of the knowledge about the modes of transmission and it was statistically significant (<0.05).

Regarding the preventability of HIV infection a large majority (86.81%) had correct information. At the same time a major percentage (57.81%) had wrong notion about the curability of AIDS whereas 25.04% had correct notion and 17.13% had no idea about it.

Table 4: Knowledge regarding prevention & treatment of disease

| S. No. | Preventive measure | Yes N % | No N % | Don't Know N % |
|--------|---|------------|-----------|-------------------|
| 03. | HIV prevented by faithfulness to partner | 262 49.34 | 87 16.38 | 182 34.27 |
| 04. | HIV is Preventable by screening of blood before transfusion | 420 79.09 | 34 6.4% | 77 14.50 |
| 05. | Use of condom during sex | 299 56.3 | 54 10.16 | 170 32.01 |
| 06. | Using disposable needles/syringes | 424 79.84 | 80 15.06 | 47 8.85 |

Majority of respondents had good knowledge about use of disposable needles and screening of blood before transfusion for prevention (>79%) whereas knowledge about role of safe sex (56.3%) and importance of

monogamous relationship (49.34%) was very less comparatively. It could be attributed to their being in a younger age group (not in marriageable age).

Table 5: Knowledge regarding management

| S No. | Availability of services | Yes N % | No N % | Don't Know N % |
|-------|--|------------|-----------|-------------------|
| 01. | HIV testing at district hospital | 257 48.39 | 39 7.34 | 235 44.25 |
| 02. | Drugs available | 314 59.13 | 71 13.37 | 146 27.49 |
| 03. | Vaccine available | 240 45.19 | 85 16.00 | 206 38.79 |
| 04. | Screening available for pregnant women | 399 75.14 | 26 4.89 | 106 19.96 |
| 05. | Knowing HIV status can help prevention | 394 74.19 | 40 7.53 | 97 18.26 |

Table 5: Attitudes of respondents

| S. No. | Belief | Yes n % | No n % |
|--------|---|------------|-----------|
| 01. | Like to play with an HIV positive person | 211 39.73 | 320 60.26 |
| 02. | Shake hands with an HIV positive person | 232 43.69 | 299 56.30 |
| 03. | Eat with an HIV positive person | 151 28.43 | 380 71.56 |
| 04. | Shop from an HIV positive 's shop | 315 59.32 | 216 40.67 |
| 05. | Feel uncomfortable if a classmate is HIV positive | 224 42.18 | 297 55.93 |
| 06. | Hesitate sitting next to an HIV positive | 227 42.74 | 304 57.25 |
| 07. | Will help an HIV positive accident victim | 461 86.81 | 70 13.18 |
| 08. | Should names of HIV positive persons be made public | 204 38.41 | 327 61.58 |
| 09. | PLWHA's have right to study | 485 91.33 | 46 8.66 |
| 10. | PLWHA's should be helped and supported | 512 96.42 | 19 3.57 |
| 11. | PLWHA's are threat to society | 247 46.51 | 284 53.48 |
| 12. | PLWHA's deserve to suffer | 92 17.32 | 439 82.67 |
| 13. | Do you feel sympathy for PLWHA | 462 87.00 | 69 12.99 |
| 14. | Will you love, care & support a PLWHA | 473 89.07 | 58 10.92 |
| 15. | Willing to get tested for HIV | 473 89.07 | 58 10.92 |

Most of the respondents revealed healthy practices in respect to HIV prevention. 94.53% reported no use of iv drugs for intoxication, 75.70% insist on use of fresh blade while getting hair cut, 74.19% avoid touching blood/secretions without gloves and 57.81% insist on use of disposable syringes.

Discussion

In the present Study, the sex composition of the participants was in favour of female dominance (69.1%). It is in variation with study conducted by Sudha B yadav in Jamnagar (Gujrat) where sex composition was almost equal. Regarding the awareness about HIV/AIDS, only 13.74% had heard about HIV and 16.76% had heard about AIDS. It is in wide contrast to the study by Sudha B Yadav in Jamnagar where 61.84% were aware about the terms HIV/AIDS.

Source of information: In majority it was TV, Newspaper, and friends. Similar were findings of Jamnagar study.

Regarding the knowledge about routes of transmission, 55.55% reported sexual intercourse as route, followed by BT (75.89%), MTCT (70.05%), IDU (66.1%), Blades (51.97%), multi partner sex (63.08%). This is definitely lower than the Jamnagar study results where the awareness about correct routes of transmission was to the tune of 92.42% (sexual intercourse), (91.11% BT), needles 87.84%, MTCT 83.66%.

The findings of present study are slightly better than AP study for all routes of transmission except Sexual route : The awareness of the study population about the modes of transmission, about 69% of participants reported unsafe sex as the mode of transmission, and blood transfusion (53%), sharing of needles (51%) are the other possible modes of getting infected. Only 32% of study population were aware

about breast feeding as one of the modes of transmission.

A large number (69.3%) had wrong notion of Mosquito bite as a route as compared to 18.56% in Jamnagar study and also in wide contrast to AP study where 17% respondents reported it as a route of transmission. Mosquito bites (17%), Kissing on cheeks (20%) sharing public toilets (11%).

Preventive Measures: Majority of respondents (74.19%) were of the opinion that knowing one's HIV status can help prevent HIV infection. Almost an equal proportion knew that screening facilities for pregnant women were available in hospitals whereas a much lesser proportion (48.39%) were aware that the HIV testing facilities were available in district hospitals. A large number of respondents (n=314; 59.13%) knew that drugs were available against HIV and a large number (n=240; 45.19%) had the perception that Vaccine was available against HIV. These findings are much better as compared to a similar study carried out in Jamnagar by Sudha B. Yadav et al 26.7% (n=204/765) knew about the availability of lab services and only 17.39% knew about the availability of drugs against HIV. This can be attributed to frequent IEC activities carried out in the field practice area of department of community Medicine.

Faithfulness to partner 49.34%, Screening of blood 79.09%, condoms 56.3%, Majority of respondents had good knowledge about use of disposable needles and screening of blood before transfusion for (79.09%), disposable needles and syringes (79.84%), whereas knowledge about role of safe sex (56.3%) and importance of monogamous relationship (49.34%) was very less comparatively. It could be attributed to their being in a younger age group (not in marriageable age).

These results are almost at par with the study conducted by K. Malleshappa et al in Andhra Pradesh, in which 46% reported that it was preventable through monogamy, safe blood, condoms use, avoiding commercial sex. Almost similar were results of Punjab study: 47.5 per cent females and only 25 per cent males knew about usage of disposable needles and syringes as methods of prevention. In contrast, in Jamnagar study 6.01%, 84.58%, 69.67% and 82.75% respectively knew about the correct preventive measures.

In the present study a large proportion of students had positive attitude towards the PLHA's. Shaking hands with PLHA (43.69%), eating with a PLHA (28.43%), shop from a PLHA's shop (59.32%) and 91.33% agreed that PLHA's have right to education. 57.25% did not consider them a threat to society. Much higher than the AP study in which 11.4% opined that PLHA's should be isolated and only 10.3% were sympathetic towards the PLHA. 15.9% had hesitation in sitting with an HIV positive person. Only 3.4% were willing to get tested for HIV infection. Only 8.4% wanted the HIV positive students study in schools regularly. This again could be due to the IEC activities

carried out in the area as well as to the exposure to varied forms of media.

Conclusion

It was seen that the students in age group of 14-18 years were much aware about the HIV/AIDS, its causes, routes of transmission, risk factors, preventive measures and facilities for diagnosis and drugs. Students of this age group can be taken as proxy to the families they belong to and hence the general population of the area under study. But still, a large proportion is having no idea or wrong concepts about all the aspects associated with HIV/AIDS. Hence, conducting and sustaining IEC activities in the area is recommended.

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