Knowledge and Beliefs about HIV/AIDS among Adolescents

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Knowledge and Beliefs about HIV/AIDS among Adolescents

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Abstract

Objective: To assess the level of awareness regarding HIV/AIDS among school going adolescents in Udupi district of Karnataka.

Method: Total 800 students from 5 different English medium schools were given a structured HIV questionnaire and asked to fill it and return within minutes and which was analysed.

Results: Though majority of students had heard about HIV/AIDS, the knowledge regarding its transmission, diagnosis and treatment and ways to prevent its spread was found to be inadequate.

Conclusion: There is still a lot of scope to make the adolescents more aware of HIV/AIDS which would help them adopt a positive behavior and limit the spread of infection.

Introduction

Statistics for the end of the year 2007 indicate that around 33 million people are living with HIV, the virus that causes AIDS. Each year around 2.7 million more people become infected with HIV and 2 million patients die of AIDS. Prevalence is also high in the 15-49 years age group (88.7 percent of all infections), indicating that AIDS still threatens the cream of society, those in the prime of their working life.(1)

The spread of HIV in India has been diverse, with many parts of India having a low rate of infection and the epidemic being extreme in the southern half of the country and in the far north-east. The highest HIV prevalence rates are found in Maharashtra, Andhra Pradesh and Karnataka in the south; and Manipur, Mizoram and Nagaland in the north-east.(2)

HIV/AIDS is one of the most urgent public health challenges being faced by both developing and developed nations. Even though it affects all social sectors of the population, the epidemic among adolescents is the most rapidly growing one, partly because of vulnerability of youth and because of low use of preventive measures. In spite of this, adolescents are also seen as a ‘window of hope’ because they have great potential for positive change of attitudes and behaviors. Focusing on youth is likely to be the most effective approach to confronting the epidemic, particularly in high prevalence countries.

The magnitude of infection, alarming rate of its spread, lack of curative therapy and vaccine to prevent it, mandates the acquisition of complete knowledge about HIV/AIDS not only by medical and paramedical personnel but also to some extent by majority of the population particularly those at risk.

Presently prevention of AIDS largely depends on health education and behavioral changes based on AIDS awareness, particularly among young adults who are prone to risky behavior.

Methodology

Aim: To assess the current status of knowledge and awareness about HIV/AIDS among school going adolescent students.

Objectives:
* To know about their beliefs about the disease.
* To know about the source of information in majority of the cases.
* To discuss strategies to increase the awareness in mass population.

Materials and Methods:
Type of Study: - Cross sectional study
Period of study: 2 weeks
Inclusion Criteria: - Students studying in VIII and IX standards were included.
Exclusion Criteria: - students who had not answered at least 50 % questions in the questionnaire were excluded

Methodology: A structured questionnaire was prepared comprising of 36 questions on the knowledge and awareness about various aspects of HIV/AIDS – etiology, modes of transmission, diagnosis, treatment and sources of information. It also dealt with certain myths regarding HIV and those already infected with HIV.

This questionnaire was validated by three associate professors of the reputed medical college for feasibility and was modified accordingly. After ethical committee clearance, the students from 5 different English medium schools in Udupi district of Karnataka were given this structured HIV knowledge questionnaire and requested to fill it up and return within minutes. Students were given the choice to be anonymous and any kind of discussion with the teachers or fellow
students while giving their responses was discouraged. The data collected was analyzed using SPSS version 11 for windows.

Results

**Total no of students enrolled to the study:** 800  
**Total no of schools:** Five  
**Type of schools:** All English Medium higher secondary schools  
**Mean age:** 14.89 years  
**Boys:Girls** – 462:338 (1.36:1)

**Observations:**

1. Out of 800 students 55.25% (n=442) knew that HIV and AIDS are two different entities. (p=0.001)
2. 83.75% of students (n=670) knew that HIV is a virus. (p=0.029)
3. 56.25% of students (n=450) knew that AIDS is caused by HIV. (p=0.007)
4. 63.25% of students (n=506) were aware that anyone can be affected by HIV.
5. 70.25% of students (n=562) were aware that coughing and sneezing do not spread HIV.
6. 58.75% of students (n=470) knew that sharing a glass of water with an HIV infected person does not spread HIV.
7. 50.88% of students (n=407) believed that HIV infection spreads by deep kissing a person already infected with HIV. (p=0.001)
8. 76.38% of students (n=611) were aware that if a woman has sex during her periods she is still at risk of getting HIV infection. (p=0.001)
9. 68.50% of students (n=548) were aware that having sex with more than one partner increases the chance of getting HIV infection. (p=0.001)
10. 84.51% of students (n=676) knew that HIV does not spread by sitting with an infected person in a swimming pool. (p=0.004)
11. 78.01% of students (n=624) believed that a person cannot get HIV infection from a toilet seat. (p=0.029)
12. 69% of students (n=552) were aware that HIV will not spread by mosquitoes. (p=0.001)
13. Only 29.38% of students (n=235) were aware that it was possible to get HIV infection when a person got a tattoo.
14. 72.38% of students (n=579) knew about HIV transmission from a pregnant woman to her child.
15. 42.50% of students (n=340) thought that it is possible to get HIV infection after donating blood.
16. 74.50% of students (n=596) were aware of getting HIV if transfused with HIV infected blood. (p=0.001)
17. 73.50% of students (n=588) knew that HIV would not spread by mosquito bite. (p=0.001)
18. 50.26% of students (n=402) thought that one could get HIV infection by giving injections. (p=0.005)
19. 80.13% of students (n=641) knew that one could get HIV infection by sharing infected syringes.
20. 57.00% of students (n=456) were aware that HIV can be acquired by sharing razor in a saloon.
21. 73.01% of students (n=584) did not know that all body secretions may contain HIV. (p=0.018)
22. 63.26% of students (n=506) knew that HIV could not survive in room environment for many months. (p=0.001)
23. 83.88% of students (n=671) were aware that one can not tell if someone has HIV by looking at them. (p=0.001)
24. 46.38% of students (n=371) believed that a person with HIV can look and feel healthy. (p=0.028)
25. 36.75% of students (n=294) knew that a person can be infected with HIV for five or more years without getting AIDS. (p=0.001)
26. 29.88% of students (n=239) thought that people who had been infected with HIV show serious signs infection immediately. (p=0.046)
27. 76.63% of students (n=613) knew that antibiotics do not prevent HIV infection. (p=0.001)
28. 43.13% of students (n=345) had the misconception that taking a test for HIV one week after having sex will tell a person if he or she has HIV. (p=0.001)
29. 68.63% of students (n=549) were aware that there was no vaccine that can stop adults from getting HIV infection. (p=0.014)
30. 38% of students (n=304) knew that some drugs are being prescribed for the treatment of AIDS.
31. 46.75% of students (n=374) knew that TB and HIV can be together in AIDS patients.
32. 75.75% of students (n=606) were aware that HIV can infect children also.
33. 67.88% of students (n=543) knew that condom use can decrease the chances of getting HIV infection. (34) Only 37.50% of students were aware that there is a female condom that can help decrease a woman's chance of getting HIV. (p=0.001)

**Source of information:**

1. Television – 63.38% (n=507) (p=0.001)  
2. Newspapers and magazines – 52.88% (n=423)  
3. Teachers – 22.50% (n=180)  
4. Friends – 24.50% (n=196)  
5. Parents – 14.38% (n=115) (p=0.044)

**Discussion**

Physical, psychological, and social attributes of
adolescence make young people particularly vulnerable to HIV and other sexually transmitted infections. A good knowledge about how HIV spreads and how it can be prevented, is of enormous importance for preventing the further spread of the disease. Informing teenagers about HIV is very important since they are or soon will be in a sexually active age. The knowledge about the disease, as well as the misconceptions about it, strongly influences their attitudes and behaviors towards HIV infected people. Keeping this in view the following study was undertaken to assess the awareness levels among adolescents regarding HIV/AIDS in Udupi district of Karnataka.

It was found that majority of students have heard about AIDS but they did not know the difference between AIDS and HIV. According to 41% students, HIV and AIDS meant the same. This belief that HIV infection and AIDS are synonymous is responsible for the social stigma suffered by many of the HIV infected but asymptomatic individuals. Clearing this misconception shall help decrease the social outcast faced by HIV infected persons.

The knowledge about HIV transmission is inadequate and there are still many misconceptions. 70% students were aware of the heterosexual route of transmission. Also, increased risk with multiple sex partners was known to 68% students. Majority of the students (74%) knew about getting the infection through HIV infected blood. However many were not aware of the fact that getting a tattoo or sharing needles also poses substantial risk of acquiring HIV infection. Transmission from mother to child was known to 72% students. This is encouraging as HIV control strategies have to start right at the time of childbirth.

Nearly 63% students believed that anyone could be infected with HIV and 75% students were aware that HIV can infect children also. Because many adolescents and young adults tend to think that they are invincible, this belief may cause them to engage in risky behavior, delay HIV testing, and if they test positive, delay or refuse treatment. Only 43% students were aware of the availability of a test to detect HIV infection and AIDS are synonymous is responsible for the social stigma suffered by many of the HIV infected but asymptomatic individuals. Clearing this misconception shall help decrease the social outcast faced by HIV infected persons.

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Nearly 63% students believed that anyone could be infected with HIV and 75% students were aware that HIV can infect children also. Because many adolescents and young adults tend to think that they are invincible, this belief may cause them to engage in risky behavior, delay HIV testing, and if they test positive, delay or refuse treatment. Only 43% students were aware of the availability of a test to detect HIV but most had a misconception that taking the test within a week of unprotected sex would tell them if they have HIV or not. It takes about 6-8 weeks to get the result positive after contracting the infection (3).

Only 38% students were aware of drugs that could treat AIDS but whether they knew that these drugs can only prolong the life of already infected individuals and not totally cure AIDS could not be elicited by this study. However this may have a negative influence as the belief that the disease can be cured might make them indulge in risky behavior and actually get the infection. Majority appeared to be unaware of the available treatments and this ignorance can force the affected patients to become vulnerable to unscrupulous treatment claims. About 31% students had the misconception that there is a vaccine against AIDS. It is quite likely that this is because of some media reports on HIV vaccines being developed and tested. When asked about safe sex, 68% students were aware that using a condom will reduce their chance of getting the infection. About 68% students were aware of the fact that having multiple sexual partners also increases the risk of HIV infection. This observation shows that the media campaigns conducted by government and various NGOs are achieving its goal of spreading awareness among general population. The majority of the students heard about HIV/AIDS for the first time through media. Media is an effective way of spreading information. More than 60 % students had got the information regarding the disease through television, newspapers and magazines. Only 37% students said that they were given some kind of sex education in school. It is recommended that more emphasis should be laid on sexual education in schools as well as on motivating parents to discuss these issues with their adolescent children. Nearly 38% students said that they discuss about HIV/AIDS with their friends but this does not seem to be a very reliable source of information and may lead to many misconceptions. Only 29% students had talked to their parents about AIDS. In an orthodox Indian society a lot of unwarranted stigma is attached to sex and sexually transmitted diseases which prevents parents discussing the same with their kids. But such discussions should be encouraged as it is a more reliable way of getting correct information and educating the children to adopt healthy behavior. Internet remains an unexploited source of information as only 10% students said that they obtained information through this source.

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