

AIDS and the adolescent girl

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Summary: In our country, HIV infection amongst adolescents is a recent problem. Surveillance data across our country suggest HIV to be a major problem with adverse health and economic implications. With an inadequate health infrastructure and an indifferent professional attitude, our response to HIV has been inappropriate. As professionals our response to HIV has often been to indiscriminately test for HIV and subsequently discriminate against the patient by refusal to treat. This has set a stage for confrontation between PWA (People With AIDS) and Health Care Professionals. Rather than viewing HIV as a medical disease alone, professionals ought to understand the ethical and social aspects of the disease. This is even more important in HIV positive adolescents.

Introduction:

Adolescence is a developmental phase when many young people initiate their sexual lives and experiment with alcohol and drug use. In India, early marriage has been a way to curb sexuality. 39.3% of adolescents aged 15-19 years are married and only 7% of Indian adolescents have any knowledge of contraception [Blan & Way 1988]. Most adolescent men after an early marriage leave and go to the cities for employment. Separation at this early stage and for long periods sets a pattern for sexual adventurism often leading to an HIV infection. On his return to his native village he passes the infection to his "innocent" wife. Most of these teens do not have any knowledge of contraception and do not use condoms consistently. At the Wadia hospital, of 65,990 confinements 2841 (4.31%) were amongst adolescents. Amongst 683 (1.03%) HIV positive pregnancies, 42 (6.14%) were adolescents.

Adolescents have different personal needs, which makes them vulnerable. Marginalised groups having social problems like poverty, homelessness or sex work put these adolescents in a high-risk situation. Also factors like coercion and force, sex abuse with older people, finding respect and love through sex or difficulty in communicating personal needs lead to adolescent experimenting and indulging in risk behaviour.

Routes of Transmission of HIV amongst adolescents.

Sexual Transmission: The average age of first sex

amongst India adolescents is 18 in females and 16 in males. Condoms are the only form of protection against both pregnancy and STDs including HIV. Only 5.1% of Indian adolescent males use contraception. Available data suggest that between 20-30% of all males and 10% of all females are sexually active during adolescence [Watsa, 1994] STDs too are seen amongst adolescents. An acquired STD is often a marker for HIV testing.

Blood Transfusions: Coagulation disorders in adolescents which require multiple transfusions put them at risk for receiving HIV contaminated blood or its products. Although, today blood and its products are tested for HIV antibodies, the risk, although negligible, of receiving an HIV infected blood product due to a false negative test from the window period still exists.

Drug use: Drug use puts adolescents at high risk for HIV infection. Sharing needles for injecting drugs can directly expose an individual to HIV. Using alcohol and other drugs such as cocaine impairs judgement and increases high-risk behaviour.

Perinatally infected adolescents are rare in our country, but in the west where effective but costly treatments for HIV are available, children who were perinatally infected have grown to be adolescents.

Natural History

Most adolescents are infected when their immune system

has already been developed; hence the natural history parallels that of an adult. The average latent period between infection and the development of AIDS is approximately 8 years. Given this long latent period, many adults diagnosed as having AIDS were infected when they were adolescents.

HIV testing and counselling

An indication should exist to perform an HIV test. The disadvantage of inappropriate and indiscriminate testing and the discrimination that follows outweighs any advantages of performing an HIV test in asymptomatic women.

Counselling in adolescents is often a long drawn out process requiring multiple per-test and post-test sessions. Since adolescents often require emotional support it is preferable for a member of her family to be present during the testing process.

Medical Evaluation and Management

Its aim should be to:

- Stage the HIV disease process.
- Search and treat opportunistic infections and related medical problems.
- Identify and rectify adolescent psychosocial problems.
- Focus on prevention, risk reduction, general health maintenance, education and care.

Evaluation

A complete medical history should be taken, paying special attention to when seroconversion took place, earlier hospitalisations, allergies and infections. Medical history taking should include asking for fever, fatigue, weight loss, chronic cough and dermatological complaints. A history eliciting a past risk factor like transfusions, substance abuse or sexuality must be asked. A gynaecological history concerning menstruation, abdominal pain or discharge will point towards a pelvic

infection probably from a STD.

A complete physical examination should include reviewing her growth and her state of well-being along with evidence of wasting or weight loss and lymphadenopathy.

Systemic evaluation should include the respiratory system (PCP, tuberculosis), neurological system (dementia), oral hygiene (herpes simplex, candidiasis, aphthous ulcers), dermatological problems (molluscum contagiosum, seborrheic dermatitis, and psoriasis). A gynaecological examination must include a Tanner's staging along with the pelvic examination.

In adolescents with a sexual history, a gynaecological examination should include a speculum examination, a Pap smear, and a bimanual or a rectal examination. Attention should be paid to identify chancroids, syphilis, herpes, candidiasis, condylomas, adnexal masses and other genital or perianal lesions arising from PID.

Prompt referrals are required, in doubtful cases, to a dermatologist or internist when other systemic conditions are detected. It is often teamwork that helps the patient.

Laboratory investigations

This should be directed towards

- Confirmation of Infection (2 ELISA tests utilising different antigens or a Western Blot)
- Staging the advancement of disease (Immunologic monitoring including CD4 counts)
- Searching and confirming the evidence of associated opportunistic infections (chest x-ray, CBC, hepatitis B serology, Toxoplasma titre, STD screen)
- Treatment of the disease (CD4, CD8 counts, along with quantification of viral load by PCR)

Treatment and Monitoring

- Follow-up monitoring is of prime importance to track

the natural history of the disease in asymptomatic individuals.

- The adolescent by 14 years should have had immunisation for diphtheria, tetanus, measles, mumps and rubella. Adolescents who are hepatitis B seronegative should receive immunization for hepatitis B.
- Clinical treatments should be directed towards treatment for specific opportunistic infections as the case may be. Dose and dosage schedule should be adjusted as per the age of the adolescent.
- Treatment protocols with antivirals (Highly active antiretroviral therapy) is costly and in our country there is less likelihood of continuing the regimen for long periods.
- Health support for parents and families related to

social, ethical and legal issues is important. The clinician should be able to counsel families about HIV and its confidentiality.

Preventive education

This should be an integral part of care for all adolescents. In the context of HIV, it should include discussions on sexual and behavioural changes including condom use, substance abuse and abstinence.

References

1. Blan AK, Way AA. Studies in Family Planning 29:106:1998.
2. Watsa MC. A study of knowledge attitudes, beliefs and practices among urban educated Indian Youth. Youth Sexuality. F.P.A.I.(S. E. C. R. T.), 1994.