PREVENTING MOTHER T O CHILD TRANSMISSION OF HIV

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BACKGROUND

Data from the National Center for AIDS and STD Control in Nepal shows that there are 290 housewives, 503 commercial sex workers and 55 children infected with HIV in Nepal out of a total of 3,204 HIV positive cases recorded by the end of October 2003 (a total of 26.5%). This data shows that both high risk and low risk groups are susceptible to HIV infection. The data does not indicate how many of these women were infected during or before pregnancy, and how many of the 55 HIV positive children are due to mother to child transmission of the virus. If we consider the estimate of 58,000 HIV positive people in Nepal (UNAIDS), HIV positive women in the two groups outlined above will be 15,370 in number. Definitely then, the number of HIV positive children is likely to be higher. In addition, there are 405 HIV Positive men who use injecting drugs, and 1,945 others who are the clients of sex workers. HIV infection in their partners and children is a real possibility. The National HIV/AIDS strategy document outlines prevention of mother to child transmission as one of the strategies.

Existing practice of screening for HIV infection in Pregnancy was examined in 6 of the leading institutions for maternity services in Kathmandu. In Maternity Hospital, Thapathali, official policy for screening does not exist, but some consultant units order HIV screening as for other infections in Pregnancy. The same situation exists in two of the private university teaching hospitals, and one private non teaching hospital of the valley. Tribhuwan University teaching hospital offers screening to all women in pregnancy. In all of these institutions very little, if any, counseling is offered to the women before offering the test. If some women are detected positive, counseling is done about prevention of mother to child transmission and the effect of the infection for the woman. There were 14358 new patients attending the antenatal clinic of Maternity Hospital, Kathmandu between April 2002-April 2003 (BS 2059). The records of the pathology department show that 1242 women had their blood tested for HIV during the same period. Of them, 3 patients (0.24%) were found HIV positive.

CASE STUDY

One of the HIV positive women, Mrs. CP, of age 24 years, primigravida was detected to be HIV positive. The pathologist disclosed the result to the registrar, and asked her to take special precaution if the lady came for delivery. The patient was also told of the results, indicating that she will need treatment for herself and the baby. Although she was attending the antenatal clinic, she did not get any anti retroviral therapy during her pregnancy. She was admitted at term in second stage of labor and delivered soon after arrival in the hospital. Her HIV status was not recorded in the notes to avoid discrimination and stigma, and therefore the doctor who managed the delivery did not know of her HIV positive status, and gave no antiretroviral therapy at the time of delivery. The baby was a male weighing 2.6 kilograms. When the registrar saw her two days later she learned that the patient was HIV positive. Antiretroviral medicine was not given as it was not available at that time and she was discharged home. She was breast-feeding her baby at the time of discharge. When we tried to contact her by phone later, it was learnt that she had already left the house where she was staying on rent, and she could not be traced. (Probably sent away by the house owner when her HIV status became known).

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Against this backdrop it is encouraging to note that National Center for AIDS and STD Control (NCASC) has commenced the PMTCT program on a National scale, starting from Maternity Hospital on the World AIDS day 2003, with plans for expanding gradually to cover rest of the country.

LITERATURE REVIEW

Quoting the bulletin of world health organization 1999, Allan Rosenfield and Emily Figdor[1] say that with 50% of all AIDs cases in Africa and Asia occurring among women, mother to child transmission will continue at an astounding pace. The overall perinatal transmission is approximately 25%, and among breast-feeding women, the rate is as high as 45%. They caution, however, that consideration of preventing perinatal transmission alone, without due consideration to treatment for the women may improve child survival, but it runs the risk of leaving many of the children as orphans as a result of maternal mortality due to AIDS. They urge to consider the benefits of available treatment, and not just the element of cost.

Important components in order to prevent perinatal HIV transmission include counseling, HIV testing, family planning, obstetric care, antiretroviral agents and avoidance of breast-feeding. Zidovudine or Nevirapine used as monotherapy or in combination with other antiretroviral agents are recommended as a standard of care in the prevention of perinatal HIV transmission.

Each country needs to have its own data concerning HIV/AIDS epidemiology, and the infrastructure and resources to select appropriate strategies in reducing the perinatal HIV transmission rate.[2] It can not be over emphasized that successful implementation of available perinatal HIV interventions could substantially improve child survival, but public health efforts must also emphasize primary prevention strategies to reduce incident HIV infection among adolescents and women of child bearing age.[3]

It has been estimated that each HIV positive child in South Africa costs the government more in terms of health and welfare expenses than it does to reduce the mother to child transmission of HIV through the antiretroviral regimes, where the mother continues to breast feed. It has been said that using Nevirapine saves more lives and is more cost effective than Zidovudine.[4]

In countries where HIV prevention programs are not well established, stepwise pilot programs should be considered. It is well known that VCT services in MCH clinics and health facilities require well-trained and experienced personnel.

The Ghent International working group on Mother to child transmission of HIV developed public health policy options to integrate into basic and maternal child health services.[5] What stands out clear in the above recommendations is that multiple approaches are required for prevention of mother to child transmission. Based on these and other recommendations, NCASC has developed that National HIV/AIDS strategy 2002, and has developed a detail plan for its implementation.

Training of counselors and health care providers is important for enabling them to provide counseling to pregnant women and to provide non discriminatory and high standard care. Because many women require blood transfusion around the time of delivery and obstetric procedures are often invasive, safe blood supply and universal precautions should be part of basic obstetric care. These points are supported by the studies cited below.

In a study analyzing the effect of mother to child transmission prevention program on infant caring and feeding practices in Africa where the HIV sero prevalence rate was 15%, all the respondents felt that being diagnosed HIV positive would result in serious social and domestic consequences. None of the health workers interviewed in this study could correctly estimate the risk of spreading HIV through breast feeding and many reported feeling confused about what they should counsel the mothers.[6] In a study in Argentina, it was seen that 42.7% of the HIV positive women knew of their HIV status before pregnancy, 44.8% knew during pregnancy, and 12.3% knew after the birth of their child. This data points out that generalized education and counseling for primary prevention along with VCT should be additional strategies[7] for HIV prevention programs.

The internationally accepted indicators (UNAIDS) (http://www.cpc.edu/measure/guide/mtc/mtc2.html)[8] for-measuring mother to child transmission are

- Pregnant women counseled and tested for HIV
- Antenatal clinics offering or referring women for VCT
- Quality HIV Counseling for pregnant women
- HIV positive women provided with anti-retroviral therapy in pregnancy.

When we review the indicators given above the role of obstetricians and gynecologists becomes very prominent. First of all, they should be fully versed with the modes of transmission, prevention, treatment, counseling and follow up of women who are HIV positive. Correct knowledge helps them to dispel fear from themselves and other health workers leading to reduced discriminatory practices against HIV positive people. Practice of VCT can be initiated and sustained by active participation by the obstetricians. Women

who test negative should be encouraged to adopt primary prevention measures. For women who test positive, proper counseling about contraception is essential. Antiretroviral therapy during pregnancy and delivery should be available to the women and their infants. Adequate counseling should be done about breast feeding and the risk of transmission, keeping in mind the availability of supplementary feeding and the resources to buy them. Death of the infant from diarrhoeal diseases is a serious concern where education and resources are limited. In resource poor settings, good breast care to maintain optimum breast health, and exclusive breastfeeding may be a better option to improve child survival than giving poor quality alternative feeds. HIV positive pregnant women may consider termination of pregnancy; these sensitive issues should be handled delicately.

RECOMMENDATIONS

Any specific intervention package to reduce mother to child transmission of HIV should be fully integrated in the overall maternal and neonatal care, the prime goal of which should be to reduce overall maternal and infant morbidity and mortality. Safe motherhood programs should carefully consider various issues of HIV positive pregnant women, and initiate/ strengthen the services required for their need. In Nepal, it is important that the Family health Division and the National center for AIDS and STD Control work in close collaboration. Only then, can we hope to achieve equitable and non-discriminatory services with respect to the rights of HIV positive people. Professional societies should take up leading role in education, training and advocacy to reduce stigma and discrimination and to provide quality care to HIV positive women and their newborns. Clear-cut guidelines and protocols should be made available to all the health care institutions. Joint effort and collaboration are key to the success of any program but the catalyst, or the change agent should definitely take up the leading role in prioritizing among the numerous and pressing health problems, of which HIV is one.

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