Care of Mother with HIV/AIDS

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“If we do not appreciate the nature and impact of stigma, none of our interventions can begin to be successful. AIDS is probably the most stigmatised disease in history”.

Every healthy person has a strong body defense to protect the body against disease. This defense system is called the immune system. The white blood cells play an important role to defend the body against all kinds of diseases. Lymphocytes are a type of white blood cells. The CD4 cell is a special type of lymphocyte with a marker on its surface called CD4. HIV attacks mostly these CD4 cells. This is why counting the number of CD4 cells is a good way of checking the soundness of your defense system.

When a person gets infected with the HIV, the virus will start to attack their immune system. After several years, the person’s immune system becomes very weak rendering them vulnerable to diseases that they could normally fight off. These diseases are called opportunistic infections because they take advantage of a weakened immune system to cause disease. Initially, HIV infection in India was restricted to high-risk populations: sex workers, trafficked women, or men having sex with men and injection drug users. HIV today is no longer restricted to any particular group. It has reached the general population which includes married women, babies and children, youth, and men who have never had any high-risk behaviour.

AIDS stands for Acquired Immune Deficiency Syndrome or Slim disease. It is a fatal illness caused by a retrovirus known as the Human Immune Deficiency Virus.

Women at Higher Risk for Infection

The reasons are: (a) Large amount of mucosal surface area in the vagina; (b) Pooling of semen during intercourse; (c) Vulnerability to HIV through sexual contact when they are young – because of an immature genital tract or have STIs, or when they undergo menopause due to fragile vaginal tract.

Transmission of HIV infection from woman to her child can be via intra-uterine system, during delivery and through breast milk. HIV does not spread through air, coughing or sneezing; water or food; insects, mosquitoes or bed bugs; using same toilets; clothes; urine or faeces; and sweat or tears.

Women at risk for HIV infection are marked by current or past history of drug use, especially intravenous history of prostitution; frequent sexual intercourse with multiple partners; sexual intercourse under the influence of drugs; sexual intercourse with men who also have sex with men.

Risk factors for health personnel include: sharp objects and needles; splashing of conjunctiva and mucous membrane with contaminated blood and body fluids; heavy contamination of broken skin e.g. cuts; and handling of large quantities of blood and body fluids without protective clothing. For patients, the reasons are re-use of needles & syringes; contaminated blood transfusion; contaminated blood transfusion; heavy soiling of the environment; poor ward facilities and improper cleaning.

Safer Sex Behaviours

A – Abstinence or delay of sexual activity
B – Being faithful
C – Condom use and safe behaviour

HIV/AIDS can be suspected if there is weight loss (>10% in body weight), chronic diarrhoea (over one month), prolonged fever (> 1 month), tuberculosis, and difficulty in swallowing, fungal infection of oral cavity.

Clinical features in infants: These include Respira-
tory infections, Diaper rashes, Oral thrush, Diarrhea, Growth failure, Developmental delays

Case Study

A study was conducted in Government Area Hospital, Kuppam, Chittoor District (Andhra Pradesh) from April 2010 – July 2011. A total of 12 HIV positive pregnant mothers were registered in ICTC. During the antenatal, intra-natal and post-natal period ICTC Counsellor educated both the partners and family members regarding ART and follow-up check-ups and linkages.

In the antenatal clinic of the hospital, nurses were advised to immediately register any HIV positive mother in ICTC and tie her up with the outreach worker of her area; provide her emotional support; ensure confidentiality; encourage her to visit the centre at least thrice during her pregnancy; fulfil all needs a pregnant woman needs; see that she adheres to the medication schedule. In a village setup the nurse should register her in the anganwadi centre so that she gets the nutrition supplement available for pregnant women. They are explained all about prevention of parent to child transmission (PPTCT) and the services available to the positive pregnant women. The women are now linked up with the outreach worker (ANM/Anganwadi Worker/ AASHA Mitras) of her area so that she is followed up until delivery.

The kit containing Nevirapine tablet is available with the outreach worker. A record of her expected date of deliver (EDD) is kept, so that her delivery is well planned and occurs in a hospital with PPTCT facilities. The details of the expected deliveries in that particular month are shared with either the superintendent / in-charge medical officer. If the EDD is not available in the case sheet of the pregnant woman, same is calculated based on the date of last menstrual period. If a woman has not turned up on the scheduled time, the outreach worker checks out on her visit.

Under antepartum care, initial and ongoing counselling for the mothers and education about HIV / AIDS is imparted. The nurse advises her on adequate sleep; decreased stress; adequate protein-rich diet; and balanced intake of vitamins and zinc.

As part of intranatal care, the nurses should follow certain measures and precautions: regular Antenatal checkups; HIV testing (if found positive, single dose of nevirapine (NVP) is administered to mother and baby). If mother does not receive NVP it should be still administered to the baby.

Other Critical Issues

These include: (a) Disclosure and shared confidentiality; (b) Access of treating health care team to his HIV status; (c) Counsel the concerned person on the need for disclose; (d) Primary Health Care Professional (PHP) to disclose HIV status to the sexual partners/spouse, if such persons do not disclose the information to others; (e) Keeping the results strictly confidential; (f) Emotional support; (g) Mode of delivery; (g) Vaginal delivery in the hospital; (h) Caesarean section indicated electively only after 38 weeks of gestation, when viral load is high or as an emergency for obstetrical causes/foetal distress.

During vaginal delivery: (a) Obstetricians and nurses are to use double gloves and gown, eye glass for protection against blood and amniotic fluid spill-age; (b) HIV positive cases need not to be isolated in the ward; (c) Needle prick is risk for infection; (d) Wash needle prick area with soap & water and applying tincture iodine; (e) Breast feeding to be avoided in positive women.

In obstetric care: (a) HIV positive woman must be advised against pregnancy and MTP in early phase; (b) If pregnancy is continued proper counselling needs to be done; (c) Adequate antenatal care with prevention of anaemia and day time rest is advised; (d) Safe sex with condom is permitted; (e) Abdominal examination can be done by bare hands; (f) Vaginal examination is done by double gloves on both hands; (g) Caesarean section delivery to prevent AIDS transmission to newborn during delivery.

Care should be taken in post-partum phase by co-ordinating the service providers; observing for signs of clinical depression; re-emphasising on safe sex practices; counselling on importance of antiretroviral agents; prophylaxis against opportunistic infections.

Under neonate care, the infant should be bathed as soon as possible after delivery; percutaneous needle sticks should be done after the initial bath; parents may refer to a paediatric HIV specialist for follow-up care. HIV test is usually performed with in 48 hours after birth, at 14 days, at age 1 to 2 months and at age 4 to 6 months.

Community-based Nursing Care

- Nurses need to help women understand that HIV/AIDS is a fatal disease
- HIV infection can be avoided if women practice safe sex
- Avoid sharing IV drug needles

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- Women at high risk for HIV/AIDS should be offered pre-marital and pre-pregnancy screening for HIV antibodies
- The nurse will be responsible for counselling the woman about the test and its implications for her, her partner and her child if she becomes pregnant
- The nurse needs to be alert for non-specific symptoms such as fever, weight loss, fatigue, persistent candidiasis, diarrhoea, cough, skin lesions and behaviour changes
- Education about optimal nutrition and maintenance of wellness is important and the information should be reviewed frequently with the woman
- The woman should also receive information about her Zidovudine prophylaxis and the importance of following the established regimen for herself during pregnancy and for her newborn after birth.

Universal precautions include: hand washing; wearing gloves; gowns and masks; eye covers; shoe covers.

Nurses Role in Prevention of HIV

Prevention is the only way to stop HIV transmission. Nurses are in an ideal position to educate patients, families and communities about HIV and how to prevent it.

_Partial Prevention_ involves offering pre- and post-test counselling to the people at risk; antenatal women, patients attending STI Clinics or having received treatment for TB. Harm reduction strategies for IUDs, educating and counselling on safe sex practices including condom use, and facilitating positive living are other measures.

Role of ARVs in PPTCT

Anti-retroviral therapy is given to a pregnant mother infected with HIV from 28 weeks of pregnancy to reduce the risk of HIV transmission to the child.

ARVs reduce risk of PPTCT by improving the overall health of the mother through a reduction of viral replication and viral load; treating maternal infection; protecting the HIV-exposed infant.

Beneﬁts of ART : (a) Prolongs life and improves quality of life; (b) Households can stay intact; (c) Decreased number of orphans; (d) Reduces mother-to-child transmission of HIV; (e) Increased number of people who accept HIV testing and counselling; (f) Increased awareness in the community, since more people take the test; (g) Decreased stigma surrounding HIV infection since treatment is now available; (h) Increased motivation of health workers, since they feel they can do more for HIV patients; (i) Less money spent to treat opportunistic infections and provide palliative care; (j) Decrease in HIV transmission.

Follow up and linkage: These include: (a) Routine postnatal care; (b) Evaluation to decide eligibility for ART and continuing ART; (c) Need to report any signs of infection; (d) Chest, urinary, puerperal, episiotomy or breast infections; (e) Reinforcement of safer sex; (f) Discussion of family planning before discharge; (g) Review birth control and infection control measures.

Follow-up care of baby born to HIV positive women:
- DNA PCR HIV testing for infants: 6 weeks; 6 months; 12 months; 18 months; 24 months.
- Routine well baby visits
- Follow standard immunisation schedule
- Need for immediate medical attention if signs and symptoms of any opportunistic infection present
- Cotrimoxazole prophylaxis
- HIV antibody testing 18 month visits.

Nurses have an important role in referral, linkages and networking. To improve mother care and to delegate care, nurses should refer mother to: (a) Other health care centers such as PHCs, ART centers, STI clinics, PPTCT, ICTC, higher level hospitals etc. (b) Other sources of support for patients: NGOs and CBOs; Positive networks; Financial resources; DOTS programmes; Religious groups.

References

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3. Ladewig and Davidson. Textbook of Contemporary Maternal Newborn Nursing Care (6th edn); pp 309-15