Fact Sheet 4 Nursing care of adults with HIV-related illness

• Introduction:

Nursing care of the person with HIV-related illness is the same as the nursing care for any person who is ill. Consequently, all trained nurses/midwives are competent to care for patients with HIV-related illness as the same principles of nursing practice apply. In addition, many of the health care problems people will have as a result of HIV infection will be familiar to nurses because of their knowledge and experience of caring for people with other chronic, progressive diseases. The use of universal precautions for infection control are critical in the care and prevention of HIV (Fact Sheet 11).

Almost all (if not all) HIV-infected people will ultimately develop HIV-related disease and AIDS. This progression depends on the type and strain of the virus and certain host characteristics. HIV infects both the central and the peripheral nervous system early in the course of infection, often causing a variety of neurological and psychiatric problems. As HIV infection progresses and immunity declines, people become more prone to opportunistic infection and other conditions. Opportunistic infections are those that can invade the body when the immune system is not working adequately.

Opportunistic infections include:
Tuberculosis (see Fact Sheet 13)
Other sexually transmitted diseases (STDs)
Septicaemia

Pneumonia (usually pneumocyctis carinii)

Recurrent fungal infections of the skin, mouth and throat

Other skin diseases

Unexplained fever

Meningitis

Other conditions may include:

Cancers such as Kaposi sarcoma

Chronic diarrhoea with weight loss (often known as "slim disease")

Many adults will have been tested for HIV and their status is known when an HIV-related illness presents. However, in many cases, testing is not done. Reasons for not testing include: fear, stigma, other psychosocial factors, lack of resources to provide testing, or inadequate voluntary HIV testing and counselling services.

• Making a diagnosis of AIDS in adults when HIV testing is not available

A case definition for AIDS is made in the presence of at least 2 major signs and at least 1 minor sign.

Major signs:

- weight loss greater than 10% of body weigh over a short period of time
- chronic diarrhoea for more than 1 month prolonged fever for more than 1 month

Minor signs:

- persistent cough for more than 1 month (for people with TB, this cough would not be considered a minor sign of AIDS)
- generalized itching skin rash
- history of herpes zoster in last 2 years

- fungal infections of mouth and/or throat
- chronic progressive or generalized herpes simplex infection
- generalized enlarged lymph nodes

***Please note*: The presence of either generalized Kaposi's sarcoma or cryptococcal meningitis is sufficient for a case definition of AIDS.**

• HIV and TB: The Dual Epidemic

***Although both tuberculosis (TB) and HIV are considered potentially lethal diseases, the interaction between TB and HIV is life threatening if TB is undiagnosed or left untreated*.**

Unlike HIV, the TB germ can spread through the air to HIV negative people and is the only major AIDS-related opportunistic infection to pose this kind of risk. Because HIV effects the immune system, it is estimated that TB carriers who are infected with HIV are 30-50 times more likely to develop active TB than those without HIV. Worldwide, over the next four years, the spread of HIV will result in more than 3 million new TB cases. Antituberculosis drugs are just as effective in HIV-infected individuals as in those not infected with HIV, and are considered cost effective, even in the poorest countries. DOTS is a programme of directly observed treatment by a short course of prescribed medicines and provides cost effective treatment for TB. (see Fact Sheet 13) This programme, available in most countries throughout the world, claims to cure 95% of TB cases. In addition to treating TB, health workers should consider offering preventive therapy with isoniazid (INH) to HIV-infected patients at high risk of developing TB such as those living in communities with a high incidence of TB. Protocols for TB prevention therapy are now available in many countries. Check the Ministry of Health or those of the District Health Management Team for guidelines in your country.

•Opportunistic infections and common treatments

In most circumstances, a doctor will make the diagnosis of an opportunistic illness and prescribe treatment. However, it is useful for nurses and midwives to be familiar with the most common medical treatments for HIV-related infections. Drugs prescribed for HIV-related illnesses must be considered in relation to those used for other health problems, especially problems likely to occur because of HIV, such as TB, other respiratory ailments and chronic diarrhoea. For example, an HIV-positive patient who is receiving TB treatment should not be prescribed Thaicetazone (a TB drug common in some countries), because this can cause severe reaction in people with HIV. Antiretroviral therapy (if available) may have reactions with other drugs. It is important to check that any drugs prescribed for the patient will not react with other drugs the person is taking.

The list of common medical treatments presented here is very

superficial and reference to other resources on pharmaceutical treatments including the handbook "**Standard treatments and essential drugs for HIV-related conditions**" (WHO DAP/97.9) would be helpful (see reference list). Other useful resources might include the National AIDS Control Programme and Ministry of Health for national guidelines for treatment of opportunistic infections developed in your country.

A nurse treats the open wounds of a woman at Elim Hospital in Zimbabwe. (Credit: UNAIDS/Szulc-Kryzanowski)

Tuberculosis: Isoniazid (for prevention), and rifampicin, pyrazinamide, streptomycin, ethambutol (for treatment, see DOTS programme, Fact Sheet 13)

Other sexually transmitted diseases (STDs): antibiotics, antifungal agents, gentian violet, antiviral treatments (topical, oral). Treatment will depend on the STD diagnosis

Septicaemia: antibiotics

Pneumonia (usually pneumocystis carinii): This requires complex treatment. The first line of treatment is usually sulfamethoxazole and trimethoprim (which can also be used as prophylaxis). Later treatments might include petamidine, prednisolone, dapsone, eflornithine and methylprednisolone. Simple pneumonia is treated with antibiotics.

Recurrent fungal infections of the skin, mouth and throat: gentian violet application, polyvidone iodine and chlorhexidine mouth wash, and antifungal tablets and lozenges.

Other skin diseases: calamine, topical steroids, antibiotics orally or topically

Unexplained fever: aspirin, paracetamol

Chronic diarrhoea with weight loss (often known as "slim disease"): lopamide, diphenoxylate

Meningitis: antibiotics

• Antiretroviral therapy (ARV)

ARV is very expensive and unavailable to many PLHA worldwide. However, where ARV is accessible and affordable certain guidelines must be followed. A joint publication by WHO and

UNAIDS "Guidance Modules on antiretroviral treatments" (WHO/ASD/98.1 & UNAIDS/98.7) provides comprehensive guidelines.

The minimum requirements for introducing ARVs include:

1. Availability of reliable, inexpensive tests to diagnose HIV infection.
2. Access to voluntary and confidential counselling and testing.
3. Reliable, long-term and regular supply of quality drugs.
4. Sufficient resources to pay for drugs on a long-term basis (a life-long commitment).
5. Support from a social network to help PLHA stay with the treatment regimen.
6. Appropriate training for health care workers in the correct use of ARVs.
7. Laboratory facilities to monitor adverse reactions.
8. Capacity to diagnose and treat opportunistic infections with the availability of affordable drugs.
9. Access to functioning and affordable health care services.
10. Joint decision-making between health care worker and patient in all aspects of ARV treatment (including the decision to begin ARV).

• Basic nursing care for PLHA with an opportunistic infection

Infection control:

Maintain good hygiene. Always wash hands before and after caring for the PLHA. Make sure linen and other supplies are well washed with soap and water. Burn rubbish or dispose of it in leakproof containers. Avoid contact with blood and other body fluids and wash hands immediately after handling soiled articles (see Fact Sheet 11 on Universal Precautions).

Skin problems:

Wash open sores with soap and water, and keep the area dry. Use the medical treatment, and prescribed ointment or salve. Local remedies, oils and calamine lotion might also be helpful.

Sore mouth and throat:

Rinse mouth with warm water mixed with a pinch of salt at least three times a day. Eat soft foods that are not too spicy.

Fevers and pain:
Rinse body in cool water with a clean cloth or wipe skin with wet cloths. Encourage the person to drink more fluids than usual e.g. water, tea, broth or juice. Remove thick clothing or too many blankets. Use antipyretics and analgesics such as aspirin, paracetamol etc.

Cough:
Lift head and upper body on pillows to assist with breathing, or assist the person to sit up. Place the patient where he/she can get fresh air. Vaporisers, humidifiers, and oxygen might be helpful.

Diarrhoea:
Treat immediately to avoid dehydration, either using oral rehydration or intravenous therapy if necessary. Ensure that the person drinks more than usual, and continues to take easily digestible nourishment. Cleanse the anus and buttocks after each bowel movement with warm soap and water and keep the skin dry and clean. Antibiotics used to treat other infections can worsen the diarrhoea. Always wash hands and, where possible, wear gloves when handling faecal or soiled materials (Fact Sheet 11).

Nutrition:
Where available, encourage foods that are high in fat and protein as they will help reduce weight loss.

Local Remedies:
There are often local remedies that alleviate fevers, pains, coughs, cleanse sores and abscesses. These local remedies can be very helpful in alleviating many of the symptoms associated with opportunistic infections. In many countries, traditional healers and women's associations or home care programs are collecting information about remedies which alleviated symptoms and discomfort.

Questions for reflection and discussion
What are some common symptoms which might be lead you to consider the person could have HIV (where HIV testing is unavailable, or unacceptable to the person)? **What are some of the important reasons to treat active TB in an HIV-positive patient?** **What minimal requirements should be in place before commencing ARV?** **What are some of the basic nursing care treatments for common opportunistic infections?** **Which sources would you consult for basic medical and drug treatments for opportunistic infections?**

References

Gilks, C. et al. (1998). Sexual health and health care: Care and support for people with HIV/AIDS in resource-poor settings. Department of International Development (DFID), London.

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World Health Organization (1997). Standard treatments and essential drugs for HIV-related conditions. Access to HIV-related drugs (DAP/97.9)

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Further reading: Primary AIDS Care: Third Edition, C. Evian, January 2000. Available from Jacana, South Africa. Tel (+2711) 648-1157; Fax (+2711) 648-5516. Email: marketing@jacana.co.za