

6. PREVENTING OPPORTUNISTIC INFECTIONS

The majority of HIV related opportunistic infections (OIs) in Zimbabwe are bacterial due to *Streptococcus pneumoniae* and *Mycobacterium tuberculosis*. Non-typhoid salmonella infection is also thought to be important. The rest of the OIs are fungal infections which include skin infections, oral candida, Pneumocystis pneumonia and Cryptococcal meningitis. Protozoal infections are next most common, mainly causing chronic diarrhoea. Microsporidial infections cause 40% of chronic diarrhoea in Zimbabwe. Cryptosporidial and isospora diarrhoea are less common. Central nervous system protozoal infection with toxoplasma does not appear to be common in Zimbabwe but this could be due to diagnostic bias as CT scans of the head are not done often enough. Viral infections such as herpes simplex infection causing genital herpes and varicella zoster causing herpes zoster (shingles) are common. Cytomegalovirus infection causing CMV retinitis is not common in Zimbabwe perhaps because people die before reaching this level of severe immunosuppression (usually occurs at CD4 counts of <50). This is also possibly true for *Mycobacterium avium intracellulare* (MAI) infections. Antiviral medication is expensive and out of the range of affordability for most people in Zimbabwe.

Immunosuppressed persons are prone to develop opportunistic infections such as *Pneumocystis pneumonia*, toxoplasmosis and bacterial lower respiratory tract infections, septicaemia and bacterial skin infections. Studies have shown clearly that taking prophylaxis in the form of cotrimoxazole on a long-term basis may prevent many of these infections. Cotrimoxazole prophylaxis can potentially prevent the following opportunistic infections:

- *Streptococcus pneumoniae pneumonia*
- Non-typhoid salmonellosis
- *Pneumocystis pneumonia*
- Cerebral toxoplasmosis
- Nocardiosis
- Isosporiasis

It is therefore recommended that **all** persons with HIV infection who have clinical evidence of immunosuppression (WHO stages 3 and 4 described in Table 5.4), or laboratory evidence of CD4+ lymphocyte depletion (CD4+

lymphocyte counts less than $200/\text{mm}^3$), and therefore all patients who are to commence ART should also receive:

- **Cotrimoxazole (sulphamethoxazole 800 mg and Trimethoprim 160 mg) once daily orally. This treatment is continued indefinitely or until such a time that the CD4+ lymphocyte counts are greater than $200 / \text{mm}^3$.**