Editorial: HIV care beyond garlic, beetroot and olive oil

This edition’s SAFP updAIDS column features the third article in a series of four articles on paediatric HIV/AIDS care focusing on best strategies to maintain children and adolescents on antiretroviral therapy. In the week prior to the Toronto AIDS Conference, which has unfortunately been in the news as a result of culinary and nutritional issues rather than life saving scientific breakthroughs, the World Health Organization published detailed guidelines for the treatment of infants and children in resource-limited settings. The guidelines highlight the difficulties in determining drug doses for children, and urge pharmaceutical companies to work towards producing fixed dose combinations that can be used to treat children. They also urge national governments to invest in better methods for diagnosing HIV infection in children below 18 months, where diagnosis with HIV antibody tests is complicated by the presence of maternal antibodies in the infant’s bloodstream. WHO wants national governments to strengthen laboratory capacity so that they can use real-time PCR testing to detect genetic material from the virus itself (HIV RNA or DNA), rather than having to wait until a child is 18 months old. Where virological testing is not available clinical signs of HIV disease will continue to be the main means of diagnosis in children under the age of 18 months, but the WHO guidelines warn that clinical algorithms are rarely more than 70% sensitive and are least reliable in children below the age of 12 months, underscoring the need for diagnostic alternatives that can be used in children below the age of 18 months where laboratory facilities are limited or non-existent.

The guidelines note that large volumes of AZT liquid formula are poorly tolerated, and that although d4T is better tolerated, it carries a long-term risk of lipoatrophy in children. Tenofovir, now recommended for first-line treatment in adults, is not available in a paediatric formulation and dosing studies of the tablet formulation have not been carried out in children. Fixed dose triple combinations for children containing nevirapine are being developed by several Indian companies and are expected to be approved within the next year. Detailed dosing tables for all drugs according to weight are available within the guidelines document.

WHO points out that children and infants who have symptomatic HIV disease or who are recovering from an acute infection need to consume 20-30% more calories than HIV-negative children if they are not suffering poor growth and poor recovery from illness. Since severe wasting is a common clinical presentation in children with HIV infection, the guidelines advise that severe malnutrition needs to be stabilised before antiretroviral therapy is begun. Although this phase shouldn’t take longer than ten days in HIV-negative children, the guidelines warn that the response to malnutrition treatment may be limited and slow in HIV-positive children. If after six to eight weeks a child has not achieved a weight for height of 85% as a result of special feeding, antiretroviral therapy should probably be initiated. Once a child begins to gain weight on antiretroviral treatment, drug doses need to be reviewed regularly to ensure that the child is still receiving an adequate dose. WHO warns. The full guidelines document can be downloaded from the WHO website at http://www.who.int/hiv/pub/guidelines/art/en/index.html