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COMPLEMENTARY, ALTERNATIVE AND TRADITIONAL MEDICINES AND HIV AND AIDS

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Traditional medicine is defined as the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses. Estimates suggest that approximately 27 million South Africans use indigenous medicines for their basic health care needs. There is an extensive network of traditional healers throughout South Africa that play an important role in primary health care delivery, particularly in rural areas where there is poor access to conventional medical care. These healers serve not only as primary health care practitioners but also as educators, counsellors, support workers and custodians of indigenous knowledge, but also as teachers of traditional culture and spirituality. They look after both the individual’s well-being as well as the health of the community.

For the management of HIV and AIDS, the continued suppression of the viral load with highly active antiretroviral therapy (HAART) is critically dependent on maintaining therapeutic serum concentrations of the individual medicines. The risk of the HIV virus developing resistance increases as serum concentrations of antiretrovirals fall to sub-therapeutic concentrations. Equally, the risk of toxicity from antiretrovirals rises as serum concentrations increase. Adverse effects associated with HAART regimens are common, often intolerable and sometimes fatal, and even minor adverse effects may result in serious consequences by leading to non-adherence and consequently to resistance to treatment regimens.

Effect of CAT medicines

A wide variety of factors, including adherence and drug-drug interactions, can affect the concentrations of medicines used in HAART. Drug-drug or drug-herb (or other complementary, alternative and traditional [CAT] medicine) interactions are an important potential cause of toxicity or failure of therapy. While many conventional medicines are known to affect HAART, very little is known about the effect of the various CAT medicines on the pharmacokinetics of antiretroviral drugs. It is clear that, contrary to the popular notion that ‘natural’ means ‘safe’, CAT medicines unquestionably have the potential to influence the pharmacokinetics of many drugs, including antiretrovirals. This is demonstrated by the effect that St John’s wort, a herb used for the management of mild to moderate depression, anxiety, restlessness and insomnia, has on the pharmacokinetics of certain antiretrovirals. The concurrent use of this herbal medicine with protease inhibitors, or the non-nucleoside reverse transcriptase inhibitors, may result in suboptimal antiretroviral drug concentrations, leading to an inadequate virological response, and consequently the potential for resistance or class cross-resistance. This interaction is mediated by the enzyme-inducing effect that St John’s wort exerts on the cytochrome P450 drug-metabolising enzyme system.

Although adverse events may be caused by an inherent toxicity of a CAT medicine or an interaction between a CAT medicine and a conventional drug, adverse events also occur as a result of poor quality or inappropriate use. Quality-related problems include the adulteration of medicinal products with other medicines or more potent pharmaceutical substances, such as corticosteroids and non-steroidal anti-inflammatory agents. Adverse events may also occur as a consequence of using the wrong medicinal plant, the incorrect dose or products contaminated with potentially hazardous substances, such as toxic metals or pathogenic micro-organisms.

A significant proportion of patients in HAART treatment programmes use CAT medicines. They tend not to disclose their use of CAT medicines to their health care providers, unless specifically asked. The reasons for this non-disclosure include the fear of being judged or reprimanded, or simply not regarding the CAT medicines as medicine. Few data are available on the prevalence and patterns of CAT medicine use in patients with HIV and AIDS. Research by this author indicates that a significant proportion of patients on the antiretroviral treatment programme (i.e. over 60% of patients surveyed) use CAT medicines (R Onia – unpublished data). A proportion of these patients are potentially putting their treatment regimens at risk by using CAT medicines that are known to potentially interact with antiretrovirals, or which may have an adverse impact on HIV disease progression. These CAT medicines include garlic, which may interact with protease inhibitors, St John’s wort, and the Hypoxis plant (African potato), for which evidence of a negative effect on HIV disease progression exists.
Pharmacovigilance

Effective pharmacovigilance of CAT medicines presents a difficult challenge to all stakeholders in their development, manufacture, prescription and utilisation. The current drive by the Department of Health to develop regulations for the control of the CAT medicine industry will go a long way to improving their safety, quality and efficacy. Although this legislation is desperately needed and would add considerable confidence to this area of medical practice, ongoing pharmacovigilance will remain an integral component in supporting the safe and effective use of CAT medicines, particularly within the context of HIV and AIDS management. Health care professionals need to engage more actively with traditional healers and allied health professionals who serve their communities. Most importantly, they also need to ask their patients, in a non-judgemental way, whether they use any CAT medicines. In addition, any adverse event or suspected drug interaction involving CAT medicines must be reported to the National Adverse Events Monitoring Centre (NADEMC) using the standard yellow report form. Contact NADEMC at tel. (021) 447-1618 or fax: (021) 448-6181.

References available on request.

THE ARV PROGRAMME IN THE WESTERN CAPE: BEST PRACTICE

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After 3 years of pilot projects with highly active antiretroviral therapy (HAART), the Western Cape was able to roll out antiretroviral treatment throughout the province during 2004. The HAART programme started in May 2001, in Khayelitsha, in a joint effort between the Department and Médecins sans Frontières. The roll-out began in earnest at the beginning of 2004, following the National Cabinet decision to fund a national HAART intervention in all provinces. The experience of working with antiretrovirals, both in the MTCT programme and the pilot antiretroviral sites, gave the provincial team a working knowledge of the numerous issues that arise in the provision of this intervention.

More than 7 500 patients are already receiving treatment in the province and at least another 5 000 are expected to be on treatment during 2005, accounting for the vast majority of people who need treatment.

Programming HAART for the public sector

According to the Provincial ARV plan, HIV care is to be provided at all health facilities up to and including testing the CD4 count of the patient. These include clinics (run by nurse) or hospitals.

If the patient is considered to be a possible candidate for HAART, he/she is referred to one of 36 sites where HAART is provided. Patients referred to HAART sites are worked up and prepared for treatment, usually over a 4-6 week period, and started on treatment with 3TC, D4T and efavirenz/nevirapine.

There are trade-offs to be made with the selection of sites. From a patient’s point of view it would be ideal to have HAART at every clinic, community health centre and hospital in the province. The expertise, however, does not exist at all facilities to provide HAART, which should only be started by a trained doctor. Follow-up visits may be shared with nurses. In a province such as the Western Cape, where there are almost 2 000 doctors in the public sector, it would seem appropriate to engage this level of expertise.

Limiting the number of sites allows pooling of expertise and the opportunity to focus management and training. Treatment at regional or tertiary hospitals, in particular, where patients travel great distances, is likely to show lower adherence rates as the linkages to psychosocial support programmes in the communities are fewer than in district hospitals or community health centres.

Limiting the number of sites aids the effort to prevent drug resistance. This is premised on the notion that having too many clinicians prescribing antiretroviral treatment encourages liberal prescribing practice, especially where there is patient and family pressure to initiate treatment when patients are not ready and at risk of non-adherence. Once again, the correct balance needs to be found between reaching as many patients as possible in the shortest time, and getting treatment right first time around. Patients who develop drug resistance are at risk of spreading resistant virus, thereby disabling treatment potential among new entrants onto the programme. Public health benefits of treatment are placed at risk with the widespread development of resistance.

With this in mind, the protocol to be followed in the selection of patients for treatment initiation is crucial. This must, however, be balanced with the rights of patients to treatment. Psycho-social criteria such as geographic access to the site, disclosure, past history of adherence to treatment, and literacy levels become important in the decision to initiate a patient onto treatment. Other factors such as alcohol or drug dependency and mental state are also important in the selection of patients for treatment. None of these criteria are exclusive. A global assessment of the patient by the clinical team must be done before a decision is made.

Lessons and challenges of expanded access

The logistics of setting up a HAART programme are complex, related in large measure to the unpredictability of the demand for treatment. We were able to predict the total number of patients needing treatment from a demographic and epidemiological model developed by the Actuarial Society of South Africa. The model is able to predict the proportions of people infected with HIV by stage of...