

review of programmes

hiv care and treatment highlights

- Results of the workplace programme match or exceed results obtained elsewhere in the developed and developing world.
- PEPFAR award for continued funding was increased to R5.3 million dollars a year in 2005.
- Successful accomplishment of PEPFAR targets for 2005.
- Establishment of a clinic at MES in Hillbrow and at Jade Square Centre in Klerksdorp for provision of voluntary counselling and testing, and HIV care and treatment.
- Publication in a high impact journal, namely JAMA, on work previously conducted by programme investigators.
- Participation at the 2nd IAS Conference in Rio de Janeiro, Brazil, with four poster presentations with preliminary results of the workplace programme including data showing a reduction of deaths in patients on ART by 66% after 5 months of treatment and also the unique finding that INH treatment can reduce mortality patients on ART.
- Provision of scholarships for six doctors to attend the IAS Conference in Rio de Janeiro, Brazil, and to visit an HIV centre at UCLA, Los Angeles, in the United States.



OVERVIEW – AIMS AND OBJECTIVES

The HIV Care and Treatment programme, 'Light for Life', is one of Aurum Institute's largest and most established programmes. It has been in operation since October 2002, with the first antiretroviral treatments (ART) having been prescribed on 13 November 2002.

The HIV Care and Treatment programme comprises two large implementation projects, one in an industrial setting and another in a community setting. The workplace programme provides the systems, training, monitoring and evaluation for nine different companies based in over 70 health care sites in South Africa, Swaziland and Namibia. The sites range from large hospital clinics to smaller occupational health clinics. In addition, Aurum provides an HIV management service to medical schemes which is largely a general practitioner (GP) based programme.

For the community project, the Aurum Institute has received a grant from the United States' President's Emergency Plan for Aids Relief (PEPFAR) of approximately \$5.3 million per year for five years. The aim of the project is to provide voluntary counselling and testing (VCT), and HIV care and treatment to individuals in communities. The services are mainly provided by a general practitioner network that is contracted to Aurum. Aurum also uses the PEPFAR funding to support a number of State facilities and non-governmental organisations in order to provide the above services.

The programme also houses a large research component, which includes the continual evaluation of antiretroviral therapy implementation in the industrial and community projects. A number of masters and doctoral students are presently conducting studies ancillary to the antiretroviral therapy programme to further understand the adverse effects, adherence to and drug interactions involved in administering antiretroviral therapy.

The objectives of the HIV care programme are to:

- Enable greater access to HIV infected individuals requiring ART, firstly to employees of companies and then to surrounding communities around these companies. Access to care is now available to over 4000 employees and to individuals in communities, with the target set at 5500 by June 2006.
- Ensure a high quality, integrated ART programme using a standardised model of delivery: The programme is based on a set of guidelines for VCT, Adult ART; Paediatric ART; Wellness, which includes counselling and monitoring of CD4 counts; and

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Prevention of Mother to Child transmission based on national and international standards. An HIV clinical consultancy provides expert advice on difficult cases, and sites are monitored with regards to adherence, in accordance with the model.

- ‡ Build local capacity: The HIV Care and Treatment team conducts training in clinical care by our professional nurses and doctors, and in counselling by our psychologists.
- ‡ Provide a framework for research to inform health care providers about antiretroviral therapy implementation in South Africa and in the developing world. Information regarding patients on the programme is collected in a standardised way and is captured on a central database, which facilitates investigation of patient records.
- ‡ Evaluate and report on the programme in terms of feasibility, business, public health, clinical and economic outcomes.

REVIEW OF PROGRESS – 2005

By end December 2005, the workplace programme had registered 8 863 patients on the HIV care programme and had started 4 015 patients on antiretroviral therapy. CD4 counts have increased generally from 161 cells/ μ l at the time of starting ART, to 242 after six months of treatment. By 18 months of treatment, CD4 cells had increased by an average of 130 cells/ μ l from their baseline value. Virological suppression at six weeks stands at 77%, and 71%, 69% and 66% at 6, 12 and 18 months respectively. The average increase in weight by 12 months and 18 months was 4.0kg and 4.6kg respectively. Retention on the programme after three years on the programme is 67%. These and other results of the programme match or exceed results obtained by comparable and pilot programmes elsewhere both in the developed and developing world.

The PEPFAR programme includes initiatives at various centres around the country:

- ‡ General Practitioner Programme which currently manages 29 GP sites where 2 480 patients are registered on the HIV care programme and 1 325 patients have begun ART.
- ‡ A new HIV/AIDS care project at the Madwaleni Hospital, a rural hospital in the Eastern Cape, where Aurum provides for a nurse and a doctor and a stipend for five lay counsellors over the course of two years. Additionally, staff training, a vehicle for patient and staff transport to and from the hospital, and satellite clinics and infrastructure support are provided.
- ‡ At the Chris Hani Baragwanath Hospital, a public hospital in Soweto, Johannesburg, Aurum is providing training for the nurses working at the adult and paediatric ART clinics and at the TB clinic; data management services; senior clinical expertise in the adult ART clinic; and an ART pharmacy infrastructure.
- ‡ Based at the Aurum HIV Vaccine Research and Treatment Centre in Klerksdorp, the team provides HIV/AIDS care and support services to the Tshepong Hospital, and two other sites in Orkney and Klerksdorp.
- ‡ Metro Evangelical Services' Impilo Project, a non-government organisation which runs a facility for the homeless in Hillbrow, Johannesburg. Aurum has been involved in the enrolment of 76 patients in the programme, 11 of whom have begun ART.
- ‡ The Medical Research Council for which Aurum has received specially allocated additional funding from PEPFAR to provide VCT for 6 650 people and HIV care to 3 527 patients. The target is to have 1 180 patients receiving ART by September 2006. Aurum has provided training to nurses and counsellors.
- ‡ Faranani Health Solutions which comprises a network of general practitioners (GPs) who form Care Cells which consist of a doctor, a nurse and a counsellor. Aurum is to provide its ART model to the project, so as to guide the implementation of Care Cells, as well as pharmacy and laboratory support. We have planned to have 40 Care Cells operational by the end of May 2006.
- ‡ Reaction Consulting, an NGO situated in Breyten, Mpumalanga to which Aurum provides staff, laboratory and pharmacy support. The project has already enrolled 40 patients, of whom 29 are on ART.

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The research programme includes the evaluation of the antiretroviral programme which comprises:

- feasibility i.e. acceptability to and retention of patients on the programme;
- virological and immunological outcomes as measured by viral loads and CD4 count measurements, and recognised predictors of poor outcomes
- clinical effects of antiretroviral therapy as measured by hospital admissions, TB cases and deaths and a comparison with a historical cohort that did not have access to ART.

Additional ancillary studies are currently being conducted. These are:

Early side effects of antiretroviral therapy: The side effects of ART, particularly the neurological side effects of efavirenz, are being investigated to determine the ability of patients to work while receiving the treatment.

Predictors of adherence to antiretroviral therapy in South Africa: Mison Dahab, a doctoral student from the London School of Hygiene and Tropical Medicine is conducting a study investigating the predictors for poor adherence among patients receiving antiretroviral therapy. The study is in the preparation phase at present and is planned for three sites: one industrial and two community based.

Aurum liver injury study: rates and risks for hepatotoxicity in South African patients receiving antiretroviral therapy. Dr Chris Hoffman, an Infectious Disease Fellow, is currently studying liver toxicity among patients receiving antiretroviral therapy. The association between hepatitis B and liver toxicity is a specific focus of this study.

CHALLENGES

The primary challenge of this programme is to operate as a research unit while also functioning in an operational capacity. Research is the means by which Aurum obtains funding and so while the actual treatment of HIV/AIDS patients takes precedence, research is vital to the organisation's survival. Research projects at present prioritise investigations into the delivery of ART and the factors that either facilitate or impede the delivery of drugs to patients.

A further challenge relates to HIV/AIDS medication. The drugs used in ART treatment are obtained on access pricing, however, a condition of the PEPFAR grant is that only FDA-approved drugs may be used. Thus, though generic drugs are available at a significantly reduced rate, they may not be used, posing a significant challenge to Aurum which operates within a resource-constrained environment.

FUTURE PLANS AND OPPORTUNITIES

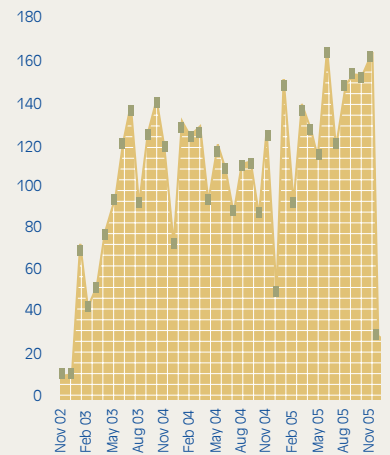
While challenges remain, there are positive aspects to be reported. Aurum is very excited about making a significant contribution at the Chris Hani Baragwanath Hospital where 3 000 patients are currently receiving ART. The programme is also looking forward to the maturation of all the other partnerships in the PEPFAR programme, and the realisation of all the targets that have been set for these partnerships.

As research projects are completed, information regarding their implementation is becoming available. Several abstracts have been submitted for the Toronto HIV/AIDS Conference in August 2006 while a number of publications are in preparation for submission to journals this year.

Opportunities to expand the programme to other industrial and community programmes are being pursued. Aurum plans to take the lead in the introduction of a new antiretroviral regimen which has reduced side effects and could lead to improved levels of adherence. This opportunity is being investigated presently and promises to be a very exciting future development.

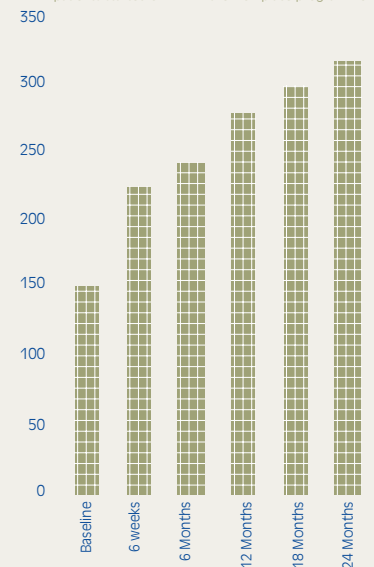
Monthly ART starts

number of patients started on antiretroviral therapy on a monthly basis in the workplace programme



CD4 Response

immunological (CD4 count) response to treatment for patients started on ART in the workplace programme



Viral Response

virological response to treatment for patients started on ART in the workplace programme (%)

