

# The experience of the Bela Bela HIV prevention group with the roll out of Antiretroviral therapy at the Primary Health Care level

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## Introduction

The use of antiretroviral therapy (ART) has been shown to have significantly improved morbidity; mortality and prognosis of AIDS related conditions.<sup>1</sup> HIV/AIDS has become a chronic manageable condition in the developed world yet in most parts of the developing world HIV patients do not have access to antiretroviral therapy.<sup>2</sup>

There is evidence, mainly from the Western Cape and Gauteng, that ART can work at the PHC level, however there is no literature about it from less resourced provinces like Limpopo. Bela Bela is a sunshine town 100 km north of Pretoria, with a population of 63000 inhabitants. The Bela Bela HIV Prevention Group which was formed in 1996 by community members who are concerned about HIV has performed 17740 tests in the area from 1997 to February 2005 of which 7780 were found to be positive. The antenatal survey coordinated by the National Department of Health in the year 2004 found that the HIV seroprevalence for the Waterberg district in which Bela Bela is situated is 26.6 % while Limpopo province's average is 19.3 %.<sup>3</sup>

This paper covers issues related to achievements and challenges encountered during the first six months of an antiretroviral (ART) roll-out by the **HIV/AIDS Prevention Group** at the Primary Health Care level in Bela Bela, Limpopo Province.

## Interim Results

The HIV Prevention Group was selected by the South African Catholic Bishop's Conference (SACBC) to be one of the sites in the country where ART will be rolled-out with the United States President's Emergency Plan For AIDS Relief (PEPFAR) funding. The first phase of the ART roll-out was from September

2004 to the end of February 2005.

The wellness clinic was established a year after an exposure visit to MSF Kayelitsha and Masipumelela projects in the Western Cape. ART was implemented at the Bela Bela community clinic under the HIV Prevention Group. A family physician, part-time professional nurses, lay-counsellors who are mainly people living with HIV and a project administrator worked on the project. Drugs and the laboratory tests were funded with support from PEPFAR. Drugs for treatment and prevention of opportunistic infections were supplied by the local State clinic.

The local clinic, hospital and private practices referred patients on a booking system two 2 days per week. Criteria for inclusion included a CD4 count <200 (in adults) or < 15 % (in children) and/or a stage IV WHO HIV disease. Standardized ART regimens recommended by the national ART roll-out for South Africa were adhered to. Patients received stavudine, lamivudine and efavirenz. Some female clients received nevirapine as well as children who did not receive nevirapine at birth. Stavudine was replaced with zidovudine in some patients. Medicines were supplied by Motswedi pharmaceuticals with patient's name labeled. Blood tests were done by TOGA laboratory in Kempton Park. Nutritional support was also provided.

Patients received a full physical examination at the first consultation; blood was drawn for FBC, VL and CD4 count as baseline. These tests were repeated at six weeks post-ARV, twelve weeks and 24 weeks after the doctor's consultation. Those qualifying for ART are referred to a lay counsellor for ARVs adherence counselling. Upon successful completion of ARV

adherence counseling, a home visit is conducted before the application is presented to the selection committee. Patients who could not undergo the ARV adherence counseling had a family member do it for them. They will undergo adherence counseling later when their condition improves. All patients were encouraged to bring a treatment partner whom they live with and to whom they will disclose their HIV status.

As a result of the delivery of ART, service utilization increased tremendously. 335 patients registered in order to be treated: of whom 221 were female and 114 were male. Sixty five patients (21 males and 44 females) started ART after successfully going through ARV adherence counseling. Of all the males 16 adults and 3 children are doing well on ART; unfortunately 1 adult and 1 child died while on treatment. Of all the females 39 adults and 3 children are doing well on ART; however 2 female adults died while on ART.

The mean CD4 on starting ART was 79 for the first 13 patients: their mean weight was 51.7 kg while the mean viral load was 102449. After six weeks the mean weight was 53.96 kg, the mean viral load was 100, and the mean CD4 count was 198. Records for seven of the first patients show that their mean viral load went below 50 after 12 weeks of treatment, the mean weight was 58.78 kg and the mean CD4 was 222. For the only patient that has undergone the monitoring test at 24 weeks, the CD4 count started at 136, however at 24 weeks CD4 count was 690, viral load <50 and a weight of 67 kg (Table 1).

Using a sample of first 20 patients, the most common side-effects were tiredness (40 % of patients), nausea and vomiting (40 % of patients),

**Table I:** Results of 65 patients on ART during the first 6 months

	65 patients baseline	13 patients baseline	13 patients 6 weeks	7 patients 12 weeks	1 patient 24 weeks
<b>Mean CD<sub>4</sub></b>	94	79	198	222	136 to 690
<b>Mean viral load</b>	161378 copies/ml	102449 copies/ml	100 copies/ml	<50 copies/ml	<50 copies/ml
<b>Mean weight</b>	51.2 kg	51.7 kg	53.96 kg	58.78 kg	67 kg

headache (35 %), rash (25 % of patients), diarrhea (25 % of patients), dizziness (15 % of patients) and change in appetite (15 % of patients). It is worth noting that 20 % of patients did not report any side-effects.

After 6 months of running the program, there are 69 persons eligible for ART. 40 of them are actively going through ART adherence counseling, 10 are ready to start ART but have not yet decided, 11 stopped half-way (through the ART adherence counseling) and 8 have not done anything yet about entering the ART programme. Interestingly, the number of male patients seeking help is increasing unlike in the past. Compliance with Doctor's appointment has improved enormously as the programme has rolled-out: currently it is 90 %. Every patient has managed to disclose their HIV status to a person living with them who has then supported them. It is very interesting to find that there are a few children who are effectively supporting their parents. The filing system has been excellent, no missing files are reported. Continuity of care has been effective and efficient.

The community of Bela Bela has responded very well to the ART roll-out: there is a high intake for VCT, there is increased enthusiasm since some patients have been seen to be doing well, family members feel they can do something for those infected and affected by HIV, and project staff members are warmly welcomed during home visits. Some of the challenges encountered include: TB diagnosis, limited physical space, delays in obtaining histology results, the loss of State clinic cards hence patients come to us without their medical history, increasing and high patient's loads.

### Discussion

The project attracted several patients hence 335 persons registered. There were 2/3 females and 1/3 males. This is consistent with health care utilization patterns.

The deaths that occurred during

ART were related to HIV itself, not side-effects of medicines. Nobody was excluded from starting ART on grounds of very low CD4 count hence the mean CD4 was 79 for the first 13 patients while the mean viral load was 102449 but dropped to 100 after six weeks of treatment. This can be considered as a huge success. Linda-Gail Bekker *et al* reported that their first 16 patients who received ART had a viral load <400 copies/ml after sixteen weeks of treatment.<sup>4</sup> Patients also received food supplements from the State clinic hence the mean weight increased.

Side effects were monitored using a tool designed by Peter Adams.<sup>5</sup> This tool has most side-effects with numbers. A patient has to record a record relevant to the side-effect they experience on daily basis at the time that they are recording intake of the medicines. The tool is available in English, Afrikaans and African languages. The doctor went through the sheet with the patient during post-ART follow up consultation.

The national guidelines on use of antiretrovirals states that ART may not be given as an emergency treatment.<sup>6</sup> Patients need to be ready before they are put on ART. So there were 69 persons eligible for ART who did not yet start ART. The increase of male patients may be viewed as a sign that the programme's effectiveness has spread through the word of mouth. The high level of compliance with medical doctor's appointment is a sign of high patient's satisfaction.<sup>7,8</sup> The filing system was critical in achieving the main objectives of the ART roll-out. Fehrsen recommends that chronic care need to be shared and well organized in terms of records.<sup>9</sup> Various problems orientated medical record tools were used to capture patients' visits in an organized, user-friendly manner which allows easy review or extraction of important data.

### Conclusion

ART roll-out may be done smoothly at primary health care level even in a resource limited setting. It is more convenient for patients and for staff. The

continuity of care supported by effective patient records and filing system is much desired. Networking with well-functioning projects is essential. Community involvement and support by the local clinic and local hospital were also remarkable. The public/private partnership has been fruitful. Lay-counsellors (who are mainly PWA's) and their facilitator (trainer) have played a critical role in performing ART adherence counselling as well as home visits. However, the physical space (wellness clinic), number of staff, budget and working hours need to be reviewed. Establishment of support care groups for patients on ART is high on the priority list for the next phase of the project.

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