# DESCRIPTION OF HIV/AIDS PATIENTS IN NEPAL: COMPARISON OF THOSE TREATED WITH AND THOSE NOT TREATED, AND COMPARISON OF THOSE WHOSE TREATMENT IS OBSERVED AND NOT OBSERVED

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To date, relatively few studies have assessed outcomes of antiretroviral therapy in developing countries. In Nepal, currently the Ministry of Health is implementing Highly Active Anti-retroviral Therapy (HAART or non-DAART) in a government hospital. This treatment is self-administered by the patient, and 25 patients (11 females and 14 males) are taking it. At the same time Directly Observed Antiretroviral Therapy (DAART) is implemented in 17 HIV-positive females by a non-governmental organization, Maiti Nepal. This study compared time trends in CD4+ T cell counts, and current quality of life, between these 42 treated patients and a control group of 42 untreated HIV-positive females who also lived at Maiti Nepal. The study also compared CD4+ trends, accessibility of and adherence to treatment, and current quality of life between treated patients on DAART and non-DAART.

After one year of treatment, mean CD4+ count had increased from baseline in the DAART and non-DAART groups. Over this year, mean CD4+ cell count decreased in subjects without treatment. This difference was statistically significant (alpha=.05, $p<.001$). In treated patients, CD4+ counts increased significantly more with DAART than non-DAART ($p<.001$). The DAART patients had better access and adherence to treatment than the non-DAART patients. Respondents on DAART had a statistically significantly lower rate of side effects (47%) than respondents on Non-DAART (84.4%) ($p<.05$). Also, 88.2% of patients on DAART never missed their dosage in the last 2 weeks, in comparison to only 28% of non-DAART patients ($p<.001$). Patients on DAART had more knowledge about treatment adherence and side effects, and about drug resistance, than did non-DAART patients. The self-rated overall quality of life was significantly higher among patents without treatment than with treatment. Among treated patients, scores for specific aspects of quality of life were generally higher in the DAART group than the non-DAART group. Results were generally similar when males were included in, and excluded from, analysis. In conclusion, the results suggest that accessibility is an important predictor of treatment adherence in Nepal. More broadly, results suggest that DAART would be the most useful method to maximize effectiveness of ARV treatment in Nepal.

**Field of study** Health Systems Development **Student's signature** .....

**Academic year** 2004 ..... **Advisor's signature** Robert S. Chapman

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# ABBREVIATIONS

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|---|---|
| AIDS | : Acquired immune deficiency syndrome |
| ARH | : Adolescent reproductive health |
| ART | : Anti-retroviral Therapy |
| CBO | : Community-based organization |
| CBS | : Central Bureau of Statistics |
| CDC | : Centers for Disease Control and Prevention |
| CEDPA | : Centre for Development and Population Activities |
| CREHPA | : Center for Research on Environmental Health and Population Activities |
| DAART | : Directly Administered Antiretroviral Therapy |
| DoHS | : Department of Health Services |
| DPHO | : District Public Health Office |
| EDCD | : Epidemiology and Disease Control Division |
| EHP | : Environmental Health Project |
| FHI | : Family Health International |
| GIS | : Geographic Information System |
| HAART (or non-DAART) | : Highly Active Antiretroviral Therapy (not directly observed) |
| HIV | : Human immuno-deficiency virus |
| HMG/N | : His Majesty's Government of Nepal |
| IDUs | : Injecting Drug Users |
| IEC | : Information, education, and communication |
| MoH | : Ministry of Health |
| NCASC | : National Center for AIDS and STD Control |
| NGO | : Non-Governmental Organization |
| STD | : Sexually transmitted disease |
| STI | : Sexually transmitted infection |
| SWs | : Sex-workers |
| UNAIDS | : Joint United Nations Programme on HIV/AIDS |
| USAID | : United States Agency for International Development |
| VDC | : Village development committee |
| WHO | : World Health Organization |