

**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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**A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Public Health in Health Systems Development**

**College of Public Health
Chulalongkorn University**

Academic Year 2004

ISBN 974-9599-82-9

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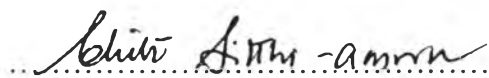
Thesis Title : Description of HIV/AIDS Patients in Nepal: Comparison of Those Treated With Those Not Treated, and Comparison of Those Whose Treatment is Observed and Not Observed

By : Mr. Sushil Yadav

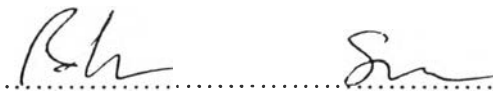
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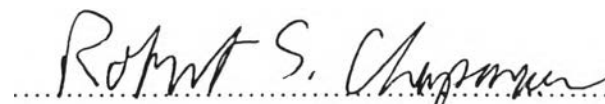
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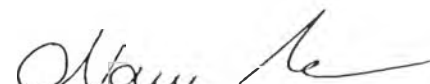
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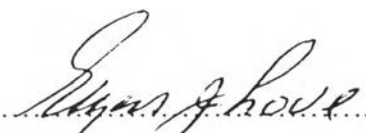
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PH: 042425 : MAJOR HEALTH SYSTEMS DEVELOPMENT PROGRAMME
 KEY WORDS : HIV/ ARV/ NON-DAART/ DAART/ WELL BEING/ NEPAL

SUSHIL YADAV: DESCRIPTION OF HIV/AIDS PATIENTS IN NEPAL:
 COMPARISON OF THOSE TREATED WITH THOSE NOT TREATED,
 AND COMPARISON OF THOSE WHOSE TREATMENT IS OBSERVED
 AND NOT OBSERVED. THESIS ADVISOR: ROBERT SEDGWICK
 CHAPMAN, M.D, M.P.H., 86 pp. ISBN 974-9599-82-9

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 ($\alpha=0.05$, $p<0.001$). In treated patients, CD4+ counts increased significantly more with DAART than non-DAART ($p<0.001$). 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%) ($p<0.05$). 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 ($p<0.001$). 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 patients 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 

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere gratitude and deep appreciation to Dr. Robert S. Chapman, my thesis advisor, for his guidance, invaluable advice, supervision and encouragement throughout all phases of this study.

I would like to thank Dr. Ratana Somrongthong for her valuable time and suggestions for my proposal development, and she provided me valuable information about instrument to collect data.

I am also very grateful to Dr. Narin Hiransuthikul, my external advisor, for his technical comments on the HIV research, and giving me valuable information about HIV/AIDS research.

I would like to express my gratitude Professor Edgar J. Love, M.D., Ph.D., University of Calgary, Canada for his valuable advise for thesis improvement.

I would like to thanks to Dr. Valaikanaya Plasai for helping me to get funding for my research.

My special thanks must go to doctors and nurses who helped me with data collection as the informants or data collectors in the study sites.

I would like to thank all my teachers of college of public health for giving me good lectures and valuable instructions. And also, I want to thank all staff of the college for their kindness and support for my study throughout the course.

I would to thank Mr. Tara Singh Bam for helping me during data collection, Mr. Sujan for helping me for translation of questionnaires, let me also thank Sushil Koirala at Mahidol University.

Lastly but not least, I would like to convey my deepest love and thanks to my parents and my wife for giving me mental support and encouraged me for the successful completion of MPH study.

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ABBREVIATIONS

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