

UNIVERSITI TEKNOLOGI MARA

**SIDE EFFECTS EXPERIENCED BY AIDS
PATIENT DUE TO HIGHLY ACTIVE
ANTIRETROVIRAL THERAPY (HAART) AND
ITS EFFECT TO PATIENT'S QUALITY OF LIFE
(QOL) IN SUNGAI BULOH HOSPITAL.**

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TABLE OF CONTENTS

	Page
TITLE PAGE	(not paginated)
APPROVAL SHEET	(not paginated)
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	x
ABSTRACT	xii
 CHAPTER ONE (INTRODUCTION)	
1.1 Introduction	1
1.2 Antiretroviral therapy	2
1.2.1 History of antiretroviral therapy	2
1.2.2 The new generation of antiretroviral therapy	3
1.3 Highly Active Antiretroviral Therapy (HAART)	3
1.4 Side effects of HAART	4
1.5 Distinct HAART adverse drug events	5
1.6 Significances of the study	5
1.7 Objectives	6
1.8 Hypothesis	6
1.9 Research questions	6
 CHAPTER TWO (LITERATURE REVIEW)	
2.1 Prevalence of antiretroviral therapy resistance	7
2.2 Side effects of HAART	7
2.3 Lipodystrophy	8
2.4 Gynaecomastia	12
2.5 Gastrointestinal-related side effects	12
2.6 Efavirenz-related insomnia	13
2.7 Lactic Acidosis	13
2.8 Hepatotoxicity	14
2.9 Hyperlipidemia	14
2.10 Hyperglycemia	14
2.11 Osteoporosis	15
2.12 Anemia	15
2.13 Hypersensitivity	16

ABSTRACT

Background: HAART regimens often associated with high toxicity that leads to high incidence of side effects experienced by the patients taking the HAART therapy. These side effects usually affect the patient quality of life. **Objective:** This study focuses on the side effects experienced by the AIDS patients taking either one of four types of first line HAART regimens and the impacts of the side effects on patients' quality of life. **Methods:** 50 patients that were taking first line HAART regimens for at least for 1 year were interviewed based on the questionnaire developed. **Results:** 56% of the study participants experienced itchy red spot. Higher prevalence of side effects of in Malay and Chinese compared to Indian, and males compared to female. Most of the patients scored at the higher ends of each quality of life dimension. However, Indian compared to Malay and Chinese, and females compared to males have lower rank in some QOL dimensions. Besides, lower scores in some quality of life dimensions are associated with sudden difficulties in breathing, extreme fatigue, fracture and hyper pigmentation. The risk factors of experiencing side effects are Malay and Chinese race, and males. Few side effects are associated with lower QOL dimensions. **Conclusion:** Further studies should be conducted to employ larger study participant and to assess patient condition before starting the HAART regimen, to find higher association of the drugs and the side effects, impacts of side effects and quality of life scores.

Keywords: HAART regimen, side effects, quality of life, AIDS

CHAPTER 1

INTRODUCTION

1.1 Introduction

Acquired Immune Deficiency Syndrome (AIDS) is a severe form of Human Immunodeficiency Virus (HIV). The mechanism of infection is, when HIV get into the body, the virus will penetrate CD4⁺ lymphocytes, the virus will turn its ribonucleic acid (RNA) to deoxyribonucleic acid (DNA) using reverse transcriptase enzyme. CD4 T cell, sometimes also called T-cells, or T-helper cells, are white blood cells which organize the immune system's response to bacterial, fungal and in HIV patient, viral infections. The viral DNA will then incorporated into the DNA of the lymphocytes. The viral will then reproduce inside the lymphocytes cell, and will eventually destroy the cell. As the lymphocytes are used to activate other immune system, destroyed lymphocytes will weaken the body system. The body will unable to eliminate HIV infection once it has started. Therefore, a person infected with human immunodeficiency virus (HIV) will experience a decrease in CD4⁺ T cell. In normal person, the range of CD4⁺ T cell is 500-1500 cell/ mm³ of blood. Towards the end of an HIV infection the number of functional CD4⁺ T cells falls, which leads to the symptomatic stage of infection known as the AIDS. A person with HIV infection is diagnosed with AIDS if the CD4⁺ T cell count is less than 200 cell/mm³ of blood CD4 percentage less than 14%) (Mark, 2004).