## **UNIVERSITI TEKNOLOGI MARA**

# FACTORS CONTRIBUTING TO COMMON PSYCHOLOGICAL DISORDERS AMONG PATIENTS WITH HIV RECEIVING HAART IN INFECTIOUS DISEASE CLINIC HOSPITAL SUNGAI BULOH

#### **DR NOR HIDAYAH JARIS**

Dissertation submitted in partial fulfilment of the requirements for the degree of **Master of Medicine** (Psychiatry)

**Faculty of Medicine** 

February 2020

#### **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This dissertation has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Postgraduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student	:	Dr. Nor Hidayah Jaris
Student I.D. No.	:	2015976397
Programme	:	Master of Medicine (Psychiatry)
Faculty	:	Faculty of Medicine
Dissertation Title	:	Factors Contributing to Common Psychological
		Disorders Among Patients with HIV in Infectious
		Disease Clinic Hospital Sungai Buloh
Signature of Student	:	
Date	:	3 <sup>rd</sup> February 2020

#### ABSTRACT

**Background**: Human Immunodeficiency Virus (HIV) infection is a life-threatening illness if left untreated. Patients with HIV are exposed to multiple social challenges such as stigma and abandonment that predispose them in development of psychological disorders that may lessen the treatment adherence and quality of life.

**Objective**: This study aimed to determine the prevalence and the contributing factors of common psychological disorders among patients with HIV in Infectious Disease Clinic, Hospital Sungai Buloh.

**Methodology**: This is a cross-sectional study involving 210 patients with HIV who are receiving Highly Active Antiretroviral Therapy (HAART) in Infectious Disease Clinic, Hospital Sungai Buloh. We recruited patients who fulfilled the inclusion criteria and gave informed consent. Socio-demographic characteristics and clinical factors such as side effects and substance use obtained from an interview with the patient. Other clinical factors were traced from the hospital electronic record system. Visual analogue scale (VAS), Hospital Anxiety Depression Scale (HADS) and Multidimensional Scale of Perceived Social Support (MSPSS) were given to the participant. The participant who scored 8 and above for HADS was interviewed using Mini International Neuropsychiatric Interview (M.I.N.I) to determine the diagnosis of generalized anxiety disorder (Gokarn et al.) or major depressive disorder (MDD).

**Results**: Prevalence of GAD among patients with HIV was 13%, MDD was 12.9% and both GAD and MDD was 7%. In multivariate analysis, illicit substance use in the past (AOR=4.17; p=0.003; 95% CI=1.56-9.44) and a low and moderate level of social support from significant others (AOR=3.73; p=0.002; 95% CI=1.66-10.04) showed consistent significant associations with GAD. CD4 counts more than 350 cells/ul (AOR=0.31; p=0.03; 95% CI=0.11-0.86), amphetamine-type stimulants use for the past three months (AOR= 40.23; p=0.01; 95% CI=3.61-447.86), low and moderate level social support from significant others (AOR=4.36; p=0.02; 95% CI=1.22-15.64) and family (AOR= 5.65; p=0.01; 95% CI=1.43-22.38) were persistently significant associated with MDD. CD4 counts more than 350 cells/ul (AOR=0.17; p=0.01; 95% CI= 0.05-0.60), illicit substance use for the past three months (AOR= 24.08; p=0.01; 95% CI=2.41-240.98), low and moderate level social support from family (AOR=19.70; p=0.01; 95% CI=2.42-160.19) were significantly associated with both GAD and MDD.

**Conclusion**: Low and moderate level of social support from significant others and illicit substance use in the past are the contributing factors of GAD among patients with HIV receiving HAART. Amphetamine-type stimulants use for the past three months, low and moderate level of social support from family and significant others as well as CD4 counts less than 350 cells/ul are the contributing factors of MDD among patients with HIV receiving HAART. CD4 counts less than 350 cells/ul, low and moderate level

#### ACKNOWLEDGEMENT

Alhamdulillah, all praises to All Mighty Allah S.W.T who have bestowed His Mercy upon me to complete this research.

I would like to express my deepest appreciation to my principal supervisor, Associate Prof. Dr Salmi Razali for the diligent supervision, support and advice throughout this research, and my co-supervisor, Prof. Dr Mohd Razali Salleh, for the support and pieces of advice, in completing this study. And for Dr Mohamad Ikhsan Selamat, my statistician, for guiding me for my proposal and data analysis.

I would like to express my sincere appreciation to the Head of Infectious Disease Department, Hospital Sungai Buloh, Dr Suresh Kumar Chidambaram and Head of Clinical Research Center of Hospital Sungai Buloh as well as the staffs, who granted me to use the facilities during data collection and helped me during the study period. To my academic supervisor, Prof. Dr Mohd. Razali Salleh, thank you for the encouragements and advice. To all lecturers, thank you for the continuous support and help.

To my dear husband, Dr Mohd Afiq Mohd Nor, my children, Aafiyah Fathimah, Amin Morsi, Anas Malik, my parents Hj Jaris and Hjh Ramlah, my siblings Zulydee, Julieyana, Redzuan and my in-laws, thank you for the continuous prayers, countless support and sacrifices for me. May Allah bless you with endless rahmah in the hereafter.

I would like to thank all the psychiatrists, my friends in UiTM support group and my colleagues in Hospital Selayang for helping me and eased my journey in the department. To my groupmates BLP; Sarah, Syeema, Laila, Fitri, Izwan, Azam, Fahmin who never stop supporting, encouraging and continue their prayers for me, thank you for being there.

Lastly, I would like to extend my appreciation to everyone who has given their support direct or indirectly in this challenging journey. Thank you very much.

### **TABLE OF CONTENTS**

CONFIRMATION BY PANEL OF EXAMINERS	Π
AUTHOR'S DECLARATION	III
CERTIFICATION	IV
ABSTRACT	V
ABSTRAK	VI
ACKNOWLEDGEMENT	VIII
TABLE OF CONTENTS	IX
LIST OF TABLES	XIVI
LIST OF FIGURES	XIV
LIST OF ABBREVIATIONS	XVI

CHA	PTER ONE: INTRODUCTION	1		
1.1	Epidemiology	1		
1.2	The Highly Active Anti-Retroviral Therapy (HAART) as a Treatment of			
	Human Immunodeficiency Virus Infection (HIV)	1		
1.3	Challenges and Common Psychological Disorders of Patients With HIV	2		
1.4	Importance of the Study	3		
CHAPTER TWO: LITERATURE REVIEW 5				
2.1	Common Psychological Disorder	5		
2.2	Epidemiology and Common Psychological Disorders Among HIV-Patients	5		
2.3	Biopsychosocial and Spiritual Model of Common Psychological Disorders			
	Among Patients With HIV	6		
2.4	Socio-Demographic Factors as a Social Factor of Common Psychological			
	Disorders Among Patients with HIV	8		
2.5	Associations Between Clinical Factors with Common Psychological Disorder	S		
	Among Patients with HIV Receiving HAART.	9		
	2.5.1 CD4 and Common Psychological Disorders	9		