

UNIVERSITI TEKNOLOGI MARA

**MENTAL HEALTH PROBLEMS
(DEPRESSION, ANXIETY AND
STRESS) AND THE ASSOCIATION
WITH NUTRITIONAL STATUS
AMONG THE ELDERLY ATTENDING
COMMUNITY HEALTH SCREENINGS**

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Thesis submitted in fulfilment
of the requirements for the degree of
**Master of Medicine
(Family Medicine)**

Faculty of Medicine

May 2025

ACKNOWLEDGEMENT

In the name of Allah, the Most Beneficent, the Most Merciful.

First and foremost, I wish to thank Allah the Almighty for allowing me to enrol in this Master's programme (Family Medicine) and for granting me the strength to complete this long and challenging journey.

It is a great pleasure to express my gratitude and deepest thanks to my supervisor, Dr. Nur Amirah Shibraumalisi, as well as my co-supervisors, Assoc. Prof. Dr. Siti Sara Yaacob and Dr. Noor Azleen Ahmad Tarmizi, for their invaluable guidance, continuous support, and constant supervision throughout the course of this study.

Finally, I would like to extend my sincere appreciation to all contributors and participants who were involved in this study.

Thank you

ABSTRACT

Background: Malaysia's elderly population is projected to be 15% by 2030. Nutritional status significantly impacts elderly health, with malnutrition linked to depression, anxiety and stress. This study assessed mental health problems and their association with nutritional status among elderly individuals attending community health screenings.

Method: A cross-sectional study was conducted among elderly participants selected through convenience sampling from four community health screenings in Kuala Selangor District (June–October 2024). Sociodemographic details, nutritional status (Mini Nutritional Assessment-Short Form, MNA®-SF), and mental health problems (Depression, Anxiety, and Stress Scale-21, DASS-21) were obtained. Multiple logistic regression was used to examine the associations between nutritional status and mental health problems

Results: Among 361 elderly participants, the prevalence of depression, anxiety, and stress was 12.7%, 9.4%, and 4.2%, respectively. At risk of malnutrition significantly increased the odds of depression (AOR = 10.94, 95% CI = 4.35–27.52), anxiety (AOR = 11.16, 95% CI = 4.10–30.41), and stress (AOR = 5.03, 95% CI = 1.55–16.34), while malnutrition increased the odds of depression (AOR = 45.61, 95% CI = 13.20–157.61) and anxiety (AOR = 17.80, 95% CI = 4.93–64.32). Female gender and less social engagement were associated with depression. Being a smoker, ex-smoker and less physical activity was associated with anxiety. Finally, retirees and having sleeping issues were associated with both depression and anxiety.

Conclusion: Nutritional status is a key determinant of depression, anxiety, and stress in the elderly. Early identification, further assessment, and targeted interventions are crucial for improving mental well-being in this population

Keywords: Aging, Mental health, Nutritional status, Depression, Anxiety

TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	II
AUTHOR’S DECLARATION	III
ABSTRACT	IV
ACKNOWLEDGEMENT	V
TABLE OF CONTENTS	VI
LIST OF TABLES	VIII
LIST OF FIGURES	IX
LIST OF ABBREVIATIONS	X
LIST OF SYMBOLS	XI
CHAPTER ONE: INTRODUCTION	1
CHAPTER TWO: RESEARCH METHODOLOGY	4
2.1: Study design and population	4
2.2: Sample Size Calculation	4
2.3: Study Variables	4
2.4: Sampling Method and Data Collection	6
2.5: Study Instruments	7

CHAPTER ONE: INTRODUCTION

The global population is ageing rapidly, with the proportion of people aged 60 and above expected to increase from 12% in 2020 to 22% by 2050, while Malaysia's elderly population is projected to reach 15% by 2030 [1, 2]. As aging increases the risk of chronic diseases, disabilities, and cognitive decline, healthcare providers must remain vigilant and well-informed to address the evolving needs of this population. Beyond physical health challenges, mental health problems, particularly depression and anxiety, are also highly prevalent among the elderly, posing a major public health concern [3]. Depression is one of the most common psychiatric disorders in older adults, characterized by persistent low mood, loss of interest, and functional impairment. According to the World Health Organization (WHO), approximately 7% of the global elderly population experiences depression, making it a leading cause of disability in this age group [4]. In Malaysia, the National Health and Morbidity Survey (NHMS) 2018 reported a depression prevalence of 11% among the elderly, though anxiety and stress were not specifically assessed [5]. However, other studies have documented depression prevalence ranging from 4% to 28%, indicating a wide variation depending on study populations and assessment methods. Another study found that depression prevalence ranged from 4% to 28%, while limited research reported an anxiety prevalence of 22.6% and a stress prevalence of 8.7% among the elderly. [6-8]. Anxiety disorders, characterized by excessive worry and heightened stress responses, are also common in the elderly. WHO estimates that 3.8% of older adults experience anxiety, while Malaysian studies have reported a prevalence as high as 22.6% [4, 7]. Although stress is less commonly reported due to its transient nature, it remains a significant concern among the elderly, with 8.7% experiencing stress during screening in a rural Malaysian study.

Elderly individuals are at higher risk of mental health problems due to social isolation, physical illness, and cognitive decline [6, 9]. Apart from that, elderly with