

## Mental Health Problems in Perlis' B40 Group: A Preliminary Survey

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### Abstract

Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. Those who have mental health problems will not be able to think rationally and may act out of control. In Malaysia, mental health problems that are often faced by the community include depression, anxiety and stress. The aim of this study is to identify mental health problems among the people in Perlis which is the smallest state in Malaysia. This study is a quantitative study, using survey as a data collection method. The respondents involved in this study consisted of citizens of the state of Perlis with an income of B40. The findings of this study found that the prevalence of depression, anxiety and stress among the people of Perlis with an income of B40 is highest among women who live in rural areas, do not have a tertiary level of education and are not working.

**Keywords:** Mental Health Problem, Survey, B40, Perlis, Malaysia

### Introduction

The World Health Organization (WHO,2017) found that the prevalence rate of mental disorders is high among the population of the Southeast Asian region with a rate of 27% compared to regions such as Africa (9%), Eastern Mediterranean (16%), Europe (12%), America (15%) and the Pacific West (21%). Rathod et al. (2017) also stated that 80% of individuals who face mental health problems live in low and middle-income countries and most countries in the Southeast Asian region are low and middle-income countries. Therefore, Malaysia which is one of the countries in the Southeast Asian region and categorized as a middle-income country, also faces mental health problems among its people. In Malaysia, the National Health and Morbidity Survey (NHMS) was conducted to obtain information related to the physical and mental health status of the community. Based on this survey, mental health problems among the community in Malaysia in 1996 was as much as

10.7% and this number increased to 29.2% in 2015 (Ministry of Health Malaysia, 2015). The National Health and Morbidity Survey (NHMS) in 2017 later found that every one in five Malaysians having a depression and every two out of five Malaysians having an anxiety (Ministry of Health Malaysia, 2018). This situation worsened when the results of the National Health and Morbidity Survey (NHMS) in 2019 found that the number of Malaysians facing depression was as much as 2.3% or half a million people (Ministry of Health Malaysia, 2019).

Based on this amount, 2.7% of them are B40 income groups compared to M40 (1.7%) and T20 (0.5%) (Ministry of Health Malaysia, 2020). The B40 group can be divided into B40 (B1) with an income of less than RM2,500, B40 (B2) with an income of RM2,500 to RM3,169, B40 (B3) with an income from RM3,170 to RM3,969 and B40 (B4) with an income from RM3,970 to RM4,849 (6). According to the Ministry of Health Malaysia (2020), Perlis is one of the states in Malaysia that recorded the highest prevalence of depression which is 4.3%. Therefore, this study was conducted with the aim of reviewing the level of mental health, especially in terms of depression, anxiety and stress among individuals with B40 income in Perlis.

### **Materials and Methods**

This is the list of questionnaires used in this study:

- (a) Socio demographic questionnaire
- (b) DASS-21 questionnaire

### **Study Location**

Perlis, Malaysia.

### **Study Design**

Descriptive research design.

### **Study Duration**

3 months (October - December 2022).

### **Study Population**

B40 group in Perlis.

### **Inclusion Criteria**

Respondents were selected based on four main inclusion criteria. First, the respondent must be among the B40 income earners in Perlis. Second, the age of the respondents must be 18 years old and above. Third, the respondents should be able understand Malay and English. Fourth, the respondents must be fit to answered the survey.

### **Sample Size**

Sample size was calculated using Table of Sample Size Determination by Krejcie and Morgan. Table of Sample Size Determination by Krejcie and Morgan proposed a sample size of 384 for a population larger than 75,000 (Krejcie & Morgan, 1970). There is no actual total number of B40 income earners in Perlis but according to the Department of Statistics Malaysia, there are 32,000 households in Perlis that can be categorize as B40 (6). Based on Table of Sample Size Determination by Krejcie and Morgan, the minimum sample size requirement for 30,000 population is 379. In this study, a total of 400 respondents were involved and this already

exceeds the minimum sample size that has been stated in Table of Sample Size Determination by Krejcie and Morgan.

### **Sampling Method**

Universal sampling.

### **Data Collection Technique**

The researchers distributed a survey form that consisted of 2 sections, a) a socio-demographic questionnaire and b) DASS questionnaire to the respondents. The completed forms were collected and analyzed for the study.

### **Statistical Analysis**

The data collected were analyzed using the Statistical Package for the Social Sciences version 22. Descriptive statistics was applied in this study.

### **Questionnaires**

#### **a) Socio-demographic questionnaire**

A socio-demographic questionnaire was used to assess respondent's age, gender, race, religion, residential area, education level, sector of occupation and type of B40 group (B1, B2, B3 or B4).

#### **b) DASS-21**

Questions 3, 5, 10, 13, 16, 17, and 21 were used to create the depression subscale. The overall depression subscale score was classified as normal (0–9), mild depression (10–12), moderate depression (13–20), severe depression (21–27), and extremely severe depression (28–42). Questions 2, 4, 7, 9, 15, 19, and 20 comprised the anxiety subscale. The total anxiety subscale score was classified as normal (0–6), mild anxiety (7–9), moderate anxiety (10–14), severe anxiety (15–19), and extremely severe anxiety (20–42). The stress subscale consisted of questions 1, 6, 8, 11, 12, 14, and 18. Scores of normal (0–10), mild stress (11–18), moderate stress (19–26), severe stress (27–34), and extremely severe stress (35–42) were used to categorize the total stress subscale score. Sum scores were calculated by multiplying the scores on the items per (sub) scale by a factor of two. As a result, the aggregate scores for each subscale varied from 0 to 42. The reliability of the DASS-21 was demonstrated by excellent Cronbach's alpha values of 0.81, 0.89, and 0.78 for the depression, anxiety, and stress subscales, respectively. DASS-21 was discovered to have high internal consistency, and discriminative, concurrent, and convergent validity. The DASS-21 depression and anxiety subscales correlated well with the self-rating depression scale and the state trait anxiety assessment. The psychometric qualities of the DASS-21 were found to be satisfactory. Thus, DASS-21 was dependable, valid, and simple to use.

### **Results**

A total of 400 respondents with B40 income were involved in this study. The majority of respondents are women, 263 people and 137 people are men. A total of 115 respondents aged 30 to 34 years, 105 respondents aged 25 to 29 years, 67 respondents aged 35 to 39 years, 42 respondents aged 18 to 24 years, 33 respondents aged 40 to 44 years, 22 respondents aged 45 to 49 years old, 7 respondents aged 50 to 54 years old, 5 respondents aged 55 to 59 years old and 4 respondents aged 60 years and above.

The majority of respondents are Malay and Muslim. In terms of place of residence, a total of 235 respondents live in rural areas while the remaining 165 respondents live in urban areas. Based on the level of education, a total of 19 respondents have a Lower Secondary Assessment (PMR), 86 respondents have a Malaysian Education Certificate (SPM), 144 respondents have a Malaysian Higher Education Certificate (STPM), 125 people have a bachelor's degree, 22 people have a master's degree and 4 people have a doctor of philosophy (PhD) degree.

A total of 124 respondents were employed in the private sector, 88 were employed in the government sector, 76 were self-employed and 112 were unemployed. The majority of respondents are from the B401 group, which is 264 respondents, 51 respondents are from B402 group, 41 respondents are from B403 group and 44 respondents are from B404 group. 51% of all respondents had a normal level of depression, 14% had a mild depression, 11% had a moderate depression, 13% had a severe depression and 11% had an extremely severe depression. 49% of all respondents had a normal level of anxiety, 11% had a mild anxiety, 12% had a moderate anxiety, 7% had a severe anxiety and 21% had an extremely severe anxiety. 60% of all respondents had a normal level of stress, 10% had a mild stress, 16% had a moderate stress, 10% had a severe stress and 4% had an extremely severe stress.

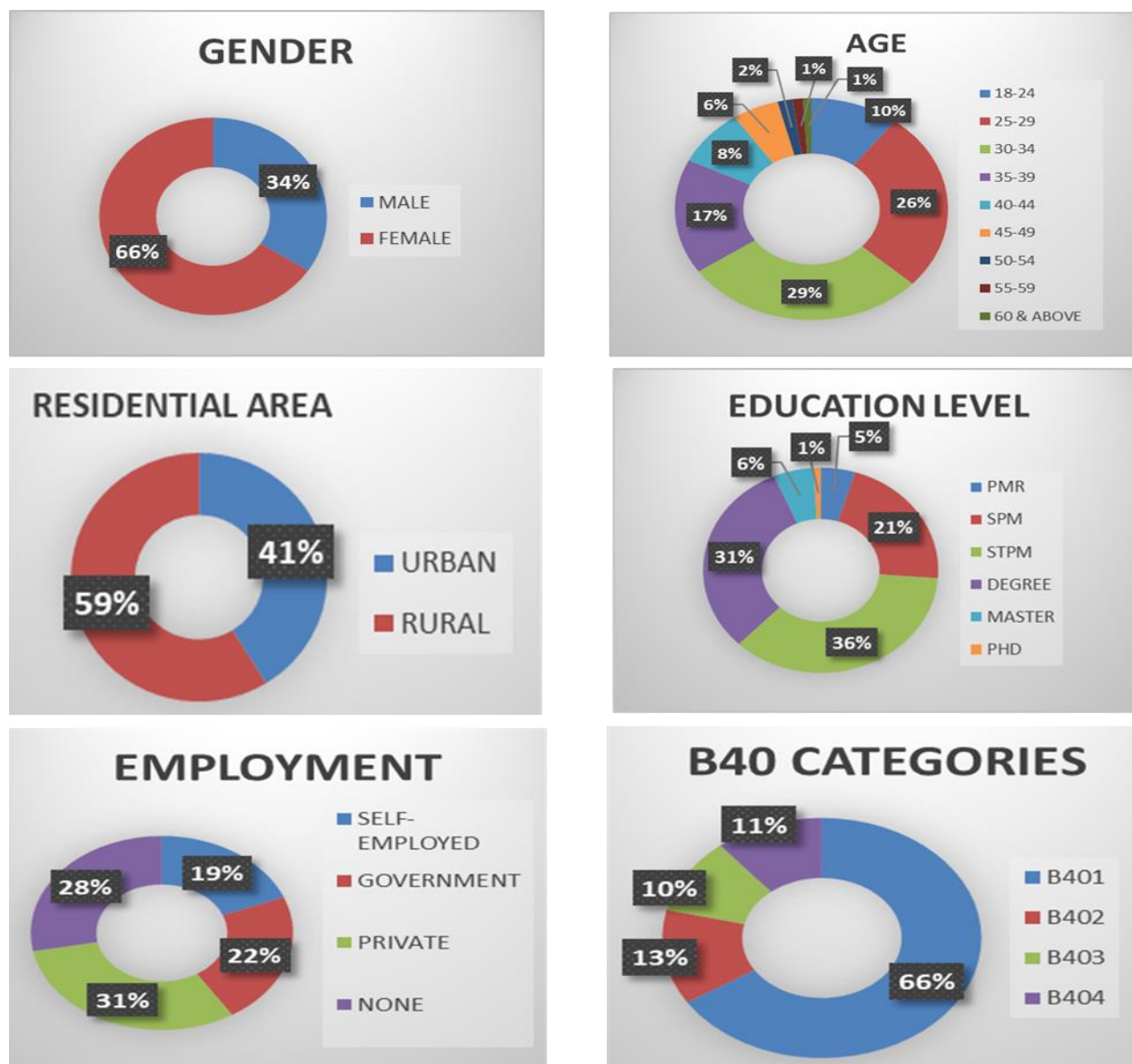


Figure 1: Sociodemographic profile of respondents

**Discussions**

The study conducted found that the prevalence of anxiety was the highest (51%) among respondents with an income of B40 in Perlis compared to depression (49%) and stress (40%). In terms of gender, more women have depression (69%), anxiety (67%) and stress (67%) than men who only have depression (31%), anxiety (33%) and stress (33%). Women are synonymous with depression, anxiety and stress based on previous studies.

Based on the National Health and Morbidity Survey 2015, anxiety and stress among women in Malaysia is high at 42% compared to men at 37.1% (Ministry of Health Malaysia, 2015). In terms of depression, the National Health and Morbidity Survey 2019 found that depression among Malaysian women was 2.6% higher than Malaysian men who recorded only 2.0% (Ministry of Health Malaysia, 2020).

This finding is also in line with studies conducted by Kok & Low (2019) and Beckstein et. al (2021) who also found that the rate of Malaysian women experiencing depression, anxiety and stress is higher than men. This condition is related to hormonal changes in women, especially during



puberty, before menstruation, after pregnancy and during perimenopause (Albert, 2015). Therefore, women's hormonal fluctuations may triggered them to experience depression, anxiety and stress.

The findings of the study found that those aged 25 to 29 years are more likely to have depression and stress while those aged 30 to 34 years are more likely to have anxiety. Respondents who suffer from depression, anxiety and stress are mostly Malays and Muslims because they are the majority population in the state of Perlis. However, based on the National Health and Morbidity Survey 2017, ethnic Indians recorded the highest number of depression (33%) and anxiety (47%) compared to other ethnic groups in Malaysia (Ministry of Health Malaysia, 2018).

Studies by Kok and Low (2019) and Cheah et al. (2020) also found the same thing. Different findings were obtained in Perlis because based on the Key Findings Population and Housing Census of Malaysia 2020, the majority of residents in Perlis are Bumiputera (88.8%), Chinese (7.4%), others (2.0%) and there are only (1.8%) Indian in Perlis (Department of Statistics Malaysia, 2022). This situation affects the findings in this study.

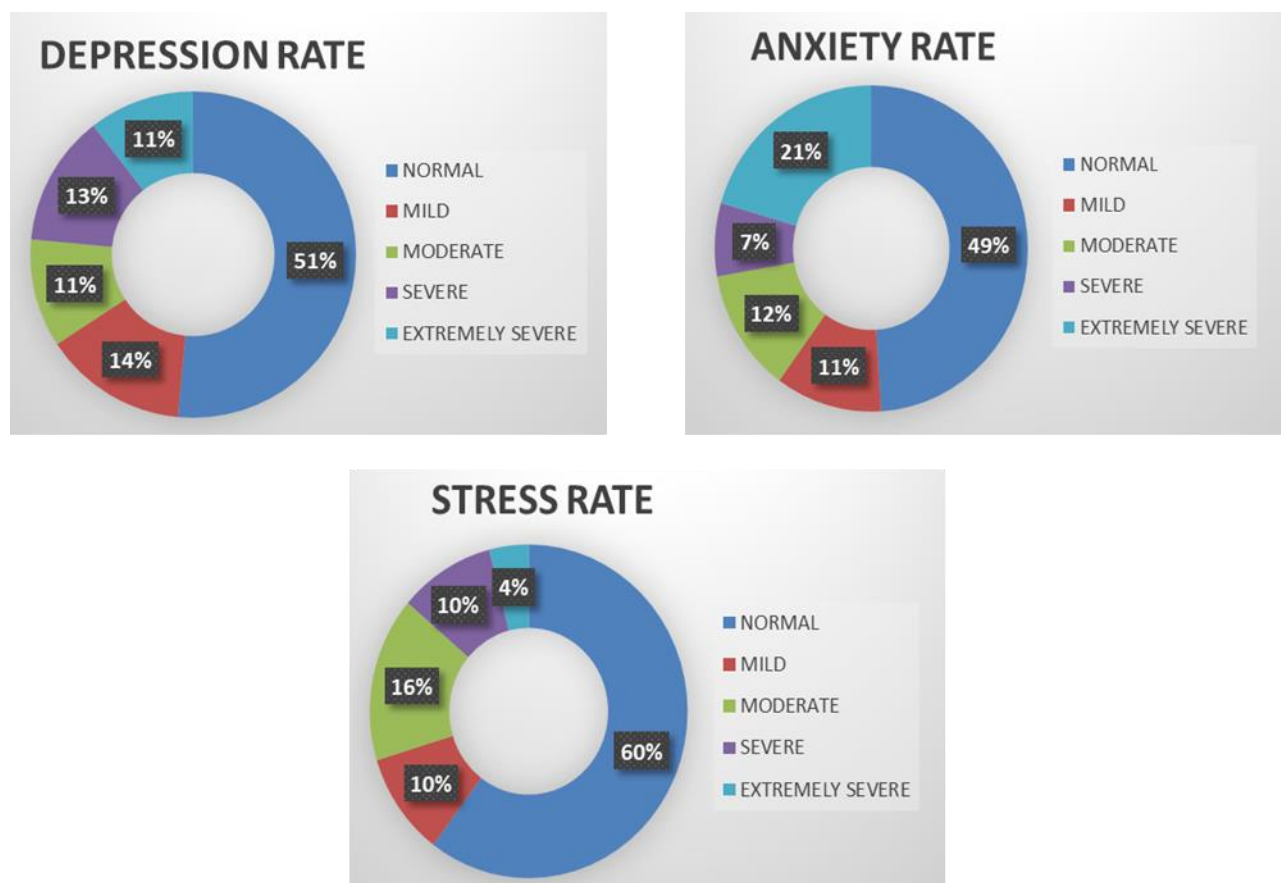


Figure 2: Prevalence of depression, anxiety and stress among the respondent

60% of respondents who suffer from depression, 61% of respondents who suffer from anxiety and 62% who suffer from stress in Perlis live in rural areas compared to urban areas. This finding supports the National Health and Morbidity Survey 2019 which found that Malaysians living in rural areas have a higher percentage of depression (3.6%) than those living in urban areas (1.9%) (Ministry of Health Malaysia, 2020). This finding is also in line with the findings

from the study of Abdul Manaf et. al (2016) who also found that the living arrangement in rural communities is an important factor that has influenced depression and anxiety. According to Raaj, Tharmaselan, and Lally (2021) rural areas have poor socioeconomic conditions, with higher poverty and unemployment. This, combined with increased stigma, reduced access to general and mental healthcare, and the practice of seeking alternative care through religious practitioners or shamans, can all contribute to an increased risk for the development and maintenance of mental health problem. However, there is a study that found the opposite because compared to rural settings, city dwellers have an almost 40% increased risk of depression, over 20% more anxiety, and risk of schizophrenia doubles (Peen et al., 2010). In terms of education level, respondents who do not have tertiary education were found to be more likely to face depression anxiety and stress. Based on the total number of respondents, 65% of those suffering from depression, anxiety and stress did not have a tertiary level education. This finding was also stated in previous studies such as the study by Ganasegaran et al. (2014) which stated that those who graduated from high school showed higher anxiety scores compared to those who had a degree. Cheah et al. (2019) also found in their study that those with a low level of education are more at risk of experiencing mental health problems. This situation occurs according to because those with low level of education have less psychosocial resources to respond to daily complexity and chronic stress such as lack of material resources and financial stress. This situation causes them to be burdened and at risk of experiencing symptoms of depression and other mental health problems (Niemeyer et al., 2019). Respondents who do not have a job are also found to be more at risk of depression, anxiety and stress than respondents who are employed. 32% of respondents who have depression, 33% of respondents who have anxiety and 34% of respondents who have stress are among those who do not have a job. This finding is consistent with several findings from overseas studies such as in India (Ahmad and Khan, 2019), Ethiopia (Mokona, Yohannes and Ayano, 2020) and Singapore (Subramaniam et al., 2021) which also found that individuals who do not work face higher levels of psychological stress and depression. Unemployed people have consistently found higher levels of psychological distress and depression and low levels of self-esteem (Ahmad and Khan, 2019). They have a lower confidence; feel rejected by society and in turn to developing feelings of resentment for the society. They experience years of bitterness and frustration and have symptoms of depression. Grows in them the feeling that they cannot get the life in their hands, so clipping their expectations of themselves and others (Fatourou, 2010)

### **Conclusion**

In order to deal with the depression, anxiety and stress in Perlis, focus needs to be given to women with a B40 income, live in rural areas, do not have tertiary level education and women who are not working. The government is expected to take effective steps to solve this problem. Among the effective steps include running a community-based mental health intervention program with the cooperation of NGOs. As has been carried out by the Indian state, the government in collaboration with NGOs has worked together to train volunteers by providing smartphones with an application that contains mapping tools, films, training, and educational materials to train them in using simple counseling techniques, behavioral activation, management health and financial advice to help women living in rural India with mental health problems. This kind of intervention shows a positive impact and only requiring a low cost to carry it out (Chaturvedi, 2020).

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