MENTAL HEALTH
IN THE
COMMUNITY - MALAYSIA
A 20-Year Journey of a Family Medicine Consultant

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Prof. Dr. Sherina Mohd Sidik

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ABSTRACT

Mental health is more than the absence of mental illness. It is a state of well-being in which a person realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.

Mental health includes:

- How someone feels about him / herself
- How someone feels about other people
- How someone is able to handle the demands of life

One way of describing mental health is to describe mentally healthy people. To be mentally healthy, a person needs to have a balance of protective individual and community factors. Protective individual factors are high self-esteem, good coping mechanisms, a sense of meaningful life, effective communication, strong social network and a sense of humour, whereas protective community factors are safety, healthy physical environment, adequate resources and a sense of community. Mental health is thus the foundation for individual well-being and the effective functioning of a community.

INTRODUCTION

Mental health in the community comprises of the mentally healthy and mentally ill. This includes individuals or groups of people or even the entire population of a community. The way that mental health can be defined and understood is actually challenging. Mental health problems have been defined as mental disorders, mental illness and emotional distress. All these problems are common in the community and have numerous causes.

Good mental health can be achieved when there is a state of balance within a person, and between a person and the community. This balance is a product of physical, psychological, social, cultural and spiritual factors. When there is a disturbance to this balance mental illness can occur. Risk factors for mental illness can also be divided into individual and community factors. Individual risk factors for mental illness include lack of self-esteem, poor communication skills, biological factors, ineffective communication skills, limited coping skills, weak social support systems, fear and insecurity; whereas community risk factors include high rates of crime and violence, limited resources, discrimination, poverty and homelessness.

GLOBAL BURDEN OF MENTAL ILLNESS

Mental illness is a major community health concern. Depression and anxiety are the two most common mental illnesses detected in the community. Furthermore, depression is a leading cause of disability worldwide. While depression now ranks fourth in the ten leading causes of the global burden of disease, it is projected to become the second leading cause in the near future. Anxiety, which is excessive worry and tension, is also recognized as a common mental illness in the community. Many people with anxiety also have depression and vice versa.

The global burden of mental illness is widely recognised. Mental illnesses are estimated to account for 12% of the global burden of disease and represent four of the ten leading causes of disability worldwide. However, this figure may not represent the true burden of mental illness as many people do not report mental illness for fear of stigma and discrimination. The World Health Organisation has focused on improving mental health in developed and developing countries over the years. Many under-privileged populations, for example, those suffering from poverty, war-torn nations and groups vulnerable to violence and abuse, have received attention from the World Health Organisation. Research has shown a high rate of mental illness in these populations and efforts have been made to provide support and help, as well as to reduce the burden of mental illness among these groups of people.

MENTAL HEALTH IN MALAYSIA

In the early post-independence years in Malaysia, high mortality rates were mostly due to infectious diseases. The initial Malaysia Plans were therefore focused on such medical priorities. Due to the systematic planning and dedicated implementation of the Malaysian health care system, most of these diseases have been eradicated and are now well-controlled. Non-communicable diseases are now the main diseases affecting the Malaysian community, one of which being mental illnesses.

The Ministry of Health Malaysia launched its Mental Health Promotion Campaign, as part of its Healthy Lifestyle Campaign, in the year 2000. The aim was to achieve good mental health for the entire Malaysian community. This marked the awareness of mental health problems and illnesses in the community and the importance of having good mental health status. This realisation was based on the results of the Second National Health and Morbidity Survey

(NHMS II) conducted from 1987 to 1996, where the prevalence of psychiatric morbidity for people aged 16 years and above was found to be 10.7%. The Malaysian Mental Health Survey (MMHS) conducted in 2004 found that the prevalence of common mental illnesses to be 7% throughout the nation. The Third National Health and Morbidity Survey (NHMS III) found that the prevalence of psychiatric morbidity had increased to 11.2%. In view of these findings, the Malaysian government launched several health campaigns, as well as emphasised on a new set of goals in the 9th Malaysian Plan (2006-2010). Mental illness, which ranked sixth among the eight leading causes of burden of disease in Malaysia, was listed as one of the top health research priority areas for the nation. High risk populations in the Malaysian community were also identified and were found to comprise the elderly, women, adolescents, those suffering from chronic illnesses and those with poor socio-economic status (Institute of Public Health (IPH), 2008; Ministry of Health Malaysia (MOH), 2007; Economic Planning Unit Malaysia (EPU), 2006; Saroja, 2006; IPH, 1999).

HOW I BEGAN MY JOURNEY IN RESEARCH

My first experience in research began as a Masters student in 1996 where I conducted a research on the mental health of the elderly attending a government primary care clinic in Malaysia. I proceeded to conduct more studies among the elderly after joining Universiti Putra Malaysia as a lecturer in 2001. These studies were conducted mainly with undergraduate medical students as we did not have postgraduate students at the time. As my interest was mainly on mental health in the community, more studies were conducted on other populations who were also at high risk of having mental illness, for example, adolescents, women, the poor, academicians, medical students and patients attending primary care clinics.

As a Family Medicine Consultant, I am now aware that there are many people suffering from mental illness, as seen in primary care and community settings. People with more severe forms of mental illness, such as schizophrenia, bipolar disorders and psychotic disorders, are treated by psychiatrists and clinical psychologists in hospitals. However, the burden of mental illness is actually seen within the community. Mental illness affects every part of a person's life, including their physical health, occupation, family and social relationships. Family members of patients with mental illness suffer as well. These factors fuelled my interest in mental health in our Malaysian community. I realised that the prevalence and types of mental illness differed in different settings. The risk factors for various community settings are also different, for example, different occupational or school environments present different risk factors to their populations. At the time I started my research as a postgraduate student in Masters in Medicine (Family Medicine), there were limited publications and references on mental health and mental illness in Malaysia. Therefore my initial research focused on determining the prevalence of common mental illnesses (namely depression and anxiety) in the community, primary care and hospital settings. Risk factors and predictors of these common mental illnesses were also studied, to identify the high risk populations in Malaysia.

This book is written based on my journey in mental health research, how I began with the elderly and then proceeded with research on adolescents, followed by women and the other high risk populations. Based on my research experience and findings, which I have published in journals and books, I am now conducting studies to determine the effectiveness of certain interventions in reducing the burden of mental illness and improving the mental well-being and quality of life in our community. I would also like

to share my opinions on where we should be heading in community mental health research, based on my experiences.

MENTAL HEALTH OF ELDERLY

In 1997, the Malaysian population aged 60 years and above was approximated to be 1 million. In the year 2000, this group increased to 1.5 million and by 2020, the elderly population is expected to make up 9.8% of the overall Malaysian population. Aging is associated with an increased risk of disease and this includes mental illness. Depression is the most common psychiatric disorder among the elderly, and also an important problem in primary care clinics. My first research found that the prevalence of depressive symptoms among the elderly in a government primary care clinic in Pulau Pinang was 18%, based on a cut-off score of 10 and above in the Geriatric Depression Scale (GDS-30). Further interviews using the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria found that 12% of these elderly had Major Depression. Factors significantly associated with depressive symptoms were elderly who were widowed or divorced, without formal education, unemployment (including those who were retired) and low family income. Chronic illness was also significantly associated with depressive illness in the elderly, specifically Hypertension, Bronchial Asthma and Chronic Obstructive Airway Disease (Department of Statistics Malaysia, 2007; Institute of Public Health (IPH), 2004; Sherina et al.., 2003a; Sherina et al.., 2002a; Sherina et al.., 2002b).

My next research, using the same questionnaires, among the elderly living in the community found that the prevalence of depressive symptoms to be 7.6%. In this community the prevalence of chronic illness was 60.1%, functional disability 15.7% and cognitive impairment 22.4%. The most common functional disability was urinary incontinence (9.9%), followed by inability

or needing help in climbing stairs (9.0%). Cognitive impairment, which is associated with memory loss, was significantly associated with being female and single / widowed / divorced. Among those with chronic illness, the prevalence of depressive symptoms was 9%, whereas among those without chronic illness, the prevalence of depressive symptoms was 5.6%. Ischaemic heart disease (IHD) and not working were significantly associated with depressive symptoms. These findings reveal the magnitude of the problems faced by our elderly, and these problems become even worse as their age progresses. (Sherina et al.., 2004a; Sherina et al.., 2004b; Sherina et al.., 2004c; Sherina et al.., 2003a; Sherina et al.., 2003b; Sherina et al.., 2003c; Sherina et al.., 2002c).

Another community study conducted in a semi-urban community of Hulu Langat, Selangor, found that the prevalence of depression was 6.3%. Nutritional risk among these elderly was high (36.3%), and significantly associated with age of above 70 years, not being married, having chronic illness, functional disability and depressive symptoms. While the findings of my research revealed that the prevalence of mental health illnesses among the elderly to be high in this community, the prevalence was even higher in clinical settings, and thus I conducted the next research on elderly patients in a government hospital in Malaysia. Not surprisingly, the prevalence found among the elderly admitted to the hospital was extremely high, where 54% of the elderly patients had depression and this was significantly associated with age, sex, ethnicity and functional disability (Sherina et al.., 2006; Sherina et al.., 2005a; Sherina et al., 2004d; Sherina et al.., 2004e).

Over the past 10 years, it has been confirmed that the elderly in Malaysia, whether in community, primary care or hospital settings, do indeed suffer from depression. Being unmarried, unemployed or retired, having low income, chronic illness, cognitive impairment

and living alone were the main risk factors for depression in the elderly. Additional factors, such as poor emotional support and poor sleep quality / insomnia, were also identified. The recognition of depression among the elderly in the Malaysian community has helped to incorporate the management of this illness into health services for the elderly in Malaysia. Currently there are various supports for the elderly, including Klinik Warga Emas, which is implemented by the Ministry of Health in our government primary care clinics (Rashid & Tahir, 2015; Rashid et al.., 2010; Shahar et al.., 2011; Imran et al.., 2009).

MENTAL HEALTH OF ADOLESCENTS

Adolescence is a stage where there are many changes, physical and emotional. It is a period of gradual transition from childhood to adulthood. The process of growing up is complicated and challenging and adolescents are faced with many expectations, responsibilities, influences and uncertainties during this phase. Approximately 20% of adolescents will have a mental illness, usually depression or anxiety, in any particular year. Those who experienced violence, embarrassment, depreciation and poverty are at higher risk of getting a mental illness. In Malaysia, our national health and morbidity surveys (NHMS) have shown an increasing prevalence of psychiatric morbidity among children and adolescents. NHMS III which was conducted from 1997 to 2006 found that the prevalence of psychiatric morbidity among children and adolescents, aged five to below sixteen years old, was 20.3%. It was a disturbing finding as only 13% of psychiatric morbidity was reported in this age group in the NHMS II, conducted from 1987 to 1996 (IPH, 2008; 1999).

A study among 1,769 adolescents found that almost one third of

them (32.7%) were at risk of having depressive symptoms, whereas 26.4% of them were found to be at risk of having anxiety and 38.6% were found to have stress. Another study on self-esteem among secondary school students also showed that lower self-esteem was significantly associated with mental illness, gender, age, race, religion, number of siblings, smoking and family function. Data from the Malaysia Global School-based Health Survey 2012 (GSHS) showed that 17.7% of 28,738 Malaysian adolescents, aged 12 to 17 years old, from 234 schools, had depressive symptoms as well. Feeling lonely, using drugs, alcohol, tobacco, being bullied and lack of parental supervision were significant risk factors. This study advocated that addressing depressive symptoms among adolescents may have implications on managing their risks of being bullied and substance abuse (Jasvindar et al., 2014; Wan Salwina et al., 2014; Sherina et al.., 2008a).

As this problem is now of growing concern in Malaysia, apart from the activities launched by the Ministry of Health, individual researchers, including psychiatrists and psychologists, have developed and implemented specific questionnaires to accurately diagnose mental illnesses among adolescents as well as specific interventions to manage these problems in this young population. As adolescents have different ways of processing emotions and expressing themselves, specific diagnostic tools are required to elicit depressive, anxiety and stress symptoms in them. Specific interventions tailored to the need of the adolescents are also necessary to improve their mental health status and well-being (Zubaidah et al.., 2014; Hashim et al.., 2011).

MENTAL HEALTH OF WOMEN

Women are known to have a higher prevalence of mental illnesses compared to men. This is especially true for common mental illnesses such as depression and anxiety in the community. Women need to multitask their responsibilities, which involves having to juggle multiple roles in their daily lives, from being mothers, wives, daughters to also having professional careers. The role of a woman is usually as the main carer in the family, in terms of being the person who takes responsibility for the household chores, child-bearing and caring for the children and also elderly parents and in-laws. In the current times of economic and financial demand, women are also expected to have careers which can ease the financial burden of their families. In addition to all these demands, there are also certain phases which pose additional stressors to mental health problems among women, such as pregnancy, post-partum and menopause.

The rates of poor mental health among Malaysian women have increased from 11.2% to 12.1%, based on the Malaysian national health and morbidity surveys. A 2006 study among 972 adult women living in community households in Selangor found that prevalence of depressive symptoms was 8.3%. The risk factors identified were women with a history of miscarriage within the last 6 months (OR 2.576, 95% CI 1.165-5.696) and absence of formal education (OR 5.766, 95% CI 1.949-17.053). In a subsequent study in a different setting, depression among women was found to be higher, at a prevalence of 12.1%, and the causes of depression were financial constraints, unhappiness in relationships (children, family, work) and serious illness. Comorbid hypertension and diabetes mellitus were also found to be significantly associated with depression among women who were above 50 years old. Socioeconomic status is also a risk factor for depression where women from low

socioeconomic backgrounds have revealed much higher figures for depression; 34.5% for current depression and 27.5% for lifetime depression (Ng, 2014; Sherina et al.., 2012a; Tahir et al.., 2011; Sherina et al.., 2008b; IPH, 2008; IPH, 1999).

Anxiety is another common mental illness among women in the community and primary care. It is now being increasingly recognised and addressed by mental health professionals. The prevalence of anxiety among women in primary care clinics in Malaysia was found to be 7.8% and the main predicting factors were the woman being afraid of her husband, a history of being humiliated by her husband, recent job loss, family problems, being unhappy with work, housing problems and losing someone close and dear. This study highlighted the presence of domestic violence and stressful life events as the main causes of mental illnesses among women in Malaysia. A study involving 3,215 women, on domestic violence and women's well-being in Malaysia, found that the prevalence of violence against women was 8%. However, the figure is thought to be higher as under-reporting was considered due to the sensitivity of the issue. It is known that people who suffer from domestic violence do not all report their abuse to anyone due to shame, guilt and fear. Currently there are interventions drawn from the World Health Organisation multi-country tool, which focuses on building knowledge about domestic violence against women and its prevention, to support and inform national efforts to create a safer society for girls and women in Malaysia. It is hoped that by increasing knowledge and support for issues such as mental illness and domestic violence, more women will come forward to seek help and the burden of these problems can be reduced and alleviated (Shuib et al.., 2013; Sherina et al.., 2011b).

MENTAL HEALTH OF THE POOR

Low socio-economic status has been identified as a major risk factor for mental illnesses. People from low socio-economic classes do not only suffer from poverty, but are also exposed to higher rates of crime, violence, physical and mental illnesses and poor social support. The poverty rates in Malaysia have improved drastically over the years; however, due to the high progress of development in our country, cost of living has also increased tremendously. In most populations, socio-economic status is determined by income levels. Furthermore, as in most communities, including Malaysia, low income levels have been associated with poor mental health and increased risk for mental illnesses. Depression is also more prevalent among the lower income population (Siti Fatimah, 2014; Sherina et al.., 2011a; Sherina et al.., 2005a; Sherina et al.., 2004f; Sherina et al.., 2003a, Sherina et al.., 2002a).

In 2005, among 2,535 households selected by the Department of Statistics Malaysia, 8.1% were found to be under the category of "urban poor" (total monthly income of RM 706 and below). Factors which were found to be significantly prevalent among the urban poor were mental illnesses, chronic illnesses and physical disabilities. Among all the chronic illnesses among the low income groups diabetes mellitus was found to be one of the most prevalent and was also significantly associated with depression. The elderly appeared to be the group most affected by depression especially if their socio-economic status and income were low. Even rural populations in Malaysia are predisposed to depression and this is more common among those with low income and who are unemployed.

While the economic policies in Malaysia do prioritise helping the poor, it is important for medical and health professionals to recognise the vulnerability of this group especially in terms of their physical and mental health. By being aware of the higher prevalence of mental and physical illnesses among the poor, steps can be taken to educate them to improve their well-being (Ganasegaran et al.., 2014; Sherina et al.., 2011a; Rashid et al.., 2010).

MENTAL HEALTH IN THE WORKPLACE

Certain occupations are known to be associated with a higher risk of mental illnesses, including suicides. People who find their working environment to be highly challenging are more at risk of developing mental illnesses compared to those who feel that their work environment is less challenging and less demanding. Depression and anxiety due to stress in the workplace is well recognised in developed countries. Stress also occurs in various occupations in Malaysia and one of the main occupations which has been subjected to a lot of stress recently is the academician (Zakaria et al.., 2015; Mukosolu et al.., 2015; Norwahida & Sherina; 2014; Mohd Makhbul & Sheikh Khairuddin, 2013; Aziz et al.., 2014, Jefferelli et al.., 2004; Kessler et al., 1999).

A study among 202 academic staff at the Faculty of Medicine and Health Sciences, UPM, found a prevalence of 34.2% of poor mental health status, in the year 2003. Females, those who were unmarried, had higher education, lower family income and low level of support were found to be significantly associated with poor mental health status. Ten years later, it was found that the prevalence of job stress was 21.7% among both the academic and non-academic staff of UPM, and the main predictors were job demands, lack of support, depression, anxiety and use of avoidance focused coping. This situation is not unique to UPM, but is prevalent

in universities all around the world. Malaysian academics are faced with increased stress due to the rapid development in the Malaysian tertiary education sector and this problem has been reported by other universities as well (Mukosolu et al., 2015; Zakaria et al., 2015; Nilufar et al., 2009; Jefferelli et al., 2003).

Mental health in the workplace should be an integral component of any organisation. Mental illnesses can occur due to stressors in the workplace which can affect not only the well-being of the employees and their families, but also the work organisation itself. To establish a successful organisation, the well-being of the employees must be taken into account. This not only includes their physical well-being but also their mental well-being, which is an essential component of building a healthy and productive work environment. A conceptual study is currently being conducted to study stress among Malaysian academics, where three methods of interventions are being proposed to combat stress, by eliminating the stressors, focusing on the individuals instead of the environment and rehabilitating individuals with ill-health due to stress in the workplace (Mohd Makhbul & Sheikh Khairuddin, 2013; Katon, 2009; Khalib & Ngan, 2006).

MENTAL HEALTH OF MEDICAL STUDENTS

Apart from the workplace where employees are subjected to stress, schools and universities have also been recognised as stressful environments for students as well. In general, most university students are exposed to stress and suffer from mental health problems as a consequence. Medical schools in particular are known to exert a negative effect on the academic performance, physical health and psychological well-being of the students. When I first joined UPM as a lecturer, I found that our medical students were always complaining about stress and feeling depressed.

In a 2003 study among 414 medical students from Years 1 to 5 in UPM, it was found that 41.9% of the students had emotional disorders and psychological distress. The prevalence of depression was 35.9% and was significantly higher among females, those who had relationship problems with siblings, pressure prior to exams and problems with love relationships. The prevalence of anxiety was 38.4%, and significant factors of anxiety were found to be female, perceived high level of pressure, year of study (pre-clinical), ethnicity and depression. A recent study in 2014, among preclinical medical students in UPM, found that stress was 16.9%, anxiety 52% and depression 24.4%. Other factors including suicidality, which means suicidal ideation or suicidal attempt or the likelihood of suicidal behaviour in the future, have been studied in association with these mental health disorders among our students. Depression, breaking off a steady love relationship, hopelessness and something valued being lost or stolen were found to be predictors of suicidality among the medical students (Tan et al., 2015; Fuad et al., 2015a; Fuad et al., 2015b; Phang et al., 2015a; Sherina et al., 2005b; Sherina et al., 2004g; Sherina et al., 2003d; Sherina et al., 2003e).

Stress, anxiety and depression are not only recognised among medical students in public universities, but also among those in private universities as well. In fact, this problem is prevalent in all universities worldwide. The more prestigious the university the more demanding the expectations from the students which ultimately leads to a higher level of stress and burden of mental illness among the students. In view of the severity of this problem, questionnaires which can accurately detect these problems among university students, specifically among medical students, have been developed. Several management strategies, specifically targeted towards prevention of mental illness and reducing the severity of these illnesses among medical students, have also been developed;

in forms of cognitive behavioural therapy. Students who have undergone these management interventions have reported lower anxiety and depression scores and better coping strategies while undergoing their studies (Phang et al., 2015b; Normala et al., 2014; Saravanan & Wilks, 2013; Yusoff et al., 2013; Yusoff, 2011).

MENTAL HEALTH OF PATIENTS IN PRIMARY CARE CLINICS

The primary care clinics attend to patients of all sorts of ages, backgrounds, socio-demographic characteristics and illnesses. Babies, children, adolescents, adults, elderly, men and women come to the primary care clinics due to various illnesses, including acute and chronic diseases. The primary care population actually represents the community in which the primary care clinic is located. The number of patients attending primary care clinics is high, and most of these clinics have to deal with overcrowding of patients and inadequate numbers of medical and health professionals. Many patients in primary care present co-existing mental illnesses even when they come to the clinics for other complaints and most doctors recognise the need to address these mental health problems while treating them.

Primary care clinics, in both rural and urban areas, have documented high rates of mental illnesses, mainly depression. A rural government primary care clinic found that the prevalence of poor mental health among its adult patients was 15.2% (based on the General Health Questionnaire-30). General symptoms such as aches, insomnia and pain were significantly associated with poor mental health. This study identified that many patients suffering from somatoform disorders actually had underlying mental illnesses. Somatoform disorders (redefined as "somatic symptom disorder" in the DSM-V criteria) are mental illnesses that cause

bodily symptoms, including pain. These symptoms are common among patients attending primary care clinics and patients who frequently have these complaints should be screened for underlying mental illnesses. A larger study which was conducted using the Mini International Neuropsychiatric Interview (MINI), in three urban government primary care clinics, found that the prevalence of depression among adult patients was 7%, and dysthymia was 1.4%. Significant factors for depressive disorders were low educational level (primary and below) and ethnicity (Jammy Suzana, 2005; Fuziah et al., 2005; Fuziah et al., 2004).

The Ministry of Health Malaysia is aware of the magnitude of mental illnesses in our primary care clinics and has launched many campaigns to improve the mental well-being of our patients. Mental health services have been integrated into general health services, specifically at the primary care level. Other initiatives taken include increasing human resources in the fields of psychiatry, clinical psychology and mental health, public education including campaigns run in primary care and community settings and reorientation of school health services to include mental health services, which are also provided by doctors and personnel from primary care clinics (Ng, 2014; Chong et al., 2013; Ang, 2011).

FUTURE DIRECTIONS - WHERE WE SHOULD BE HEADING IN RESEARCH

The high prevalence of mental illnesses in the Malaysian community shows that there is a need for accurate diagnosis and treatment of these illnesses. As there are many high risk groups, the individual factors contributing to the higher rates of mental illnesses in these populations need to be addressed. Specific interventions should be developed for each high risk group, so that effective management can be implemented.

Based on my experience, I would like to recommend some directions in terms of research on community mental health in Malaysia. One recommendation is to develop tools which can accurately detect mental illnesses in the community. Different populations need different tools which are able to accurately diagnose specific mental illnesses prevalent in the population. These tools (also called instruments) are usually in the form of questionnaires which can be self-administered or used via interviews. Another recommendation is to develop proper management strategies to address and treat people with mental illnesses in specific high risk groups. Each high risk group needs to have its own specific treatment. Treatment which is tailored to the specific needs of a high risk population will be more effective in managing and reducing the burden of mental illness in that population. Finally, it is important to establish good collaboration and networks locally and internationally to improve research quality and ensure that the findings can be useful to our community. Here I would like to share my current experiences in related research which may help in establishing our future directions.

Validation of Brief Screening Questionnaires in the Malaysian Context

International researchers have developed and used questionnaires to screen and diagnose mental illnesses in their countries. Questionnaires have been developed for community, primary care and hospital settings, but most of them are in the English language. In the local context it is necessary to use similar questionnaires which accurately detect these mental illnesses but they should be in our own national language. One method to accomplish this is to translate well recommended and tested questionnaires into Malay ("Bahasa Malaysia"), Chinese and Tamil languages, based on the

major ethnic groups in our country. Another method would be to develop our own questionnaires based on our own needs and socio-cultural context.

Currently, several questionnaires have already been translated into Malay versions, such as the Hamilton Depression Anxiety Scale (HADS) and Beck Depression Inventory (BDI). These questionnaires are commonly used in hospital settings. The Modified International Neuropsychiatry Interview (MINI) has also been translated into the Malay language and the method of administration is via interviews by trained personnel. Another questionnaire, the Depression, Anxiety and Stress Scale (DASS) has also been translated into the Malaysian context and is now being used in primary care and community settings in Malaysia.

For people in the community, including those in primary care settings, it is preferable to have brief and simple questionnaires which can be self-administered. This saves time and cost. There are many brief questionnaires available in the English language. To ensure that these questionnaires accurately measure what they are supposed to measure, for example depression, the questionnaires have to go through a process of validation, to finally produce valid and accurate questionnaires in the Malay language. There are several brief and valid questionnaires to detect depression and anxiety which have been translated into the Malay language and validated. These include the Patient Health Questionnaire (PHQ-9) and the Two Questions with Help Question (TQWHQ) which are used to determine depression, and the Generalised Anxiety Questionnaire (GAD-7) which is used to determine anxiety. These questionnaires are easy to use, and can be used in both primary care and community settings. They are self-administered and have proven validity and reliability for use in the Malaysian community (Sherina et al., 2012b; Sherina et al., 2012c; Sherina et al., 2011c).

The PHQ-9 has been translated into many other languages and used in different countries as well, such as Brazil, Canada, Denmark, Finland, France, Hong Kong, Italy, Korea, Netherlands, Norway, Poland, Russia, Taiwan, USA, New Zealand and recently, Malaysia. The in depth validity of the Malay version of the PHQ-9 and the method used for its validation has been of interest to international researchers worldwide. The Malay version of the PHQ-9 has been included in a meta-analysis study on the Patient Health Questionnaire by McGill University in Canada. This research collaboration involves 50 researchers from various countries worldwide. The effectiveness of the PHQ-9 (Malay version) as a diagnostic instrument for depression was demonstrated by the ROC curve, where the AUC was 0.966. Based on ROC curves, the closer the AUC value is to 1 the better the overall diagnostic performance of the instrument (Sherina et al., 2012b; Arroll et al., 2010; Huang et al., 2006; Nease & Maloin, 2003; Kroenke et al., 2001). Refer to Figure 1 for the ROC curve of the PHQ-9; and Appendix 1 for the PHQ-9 questionnaire (validated Malay version).

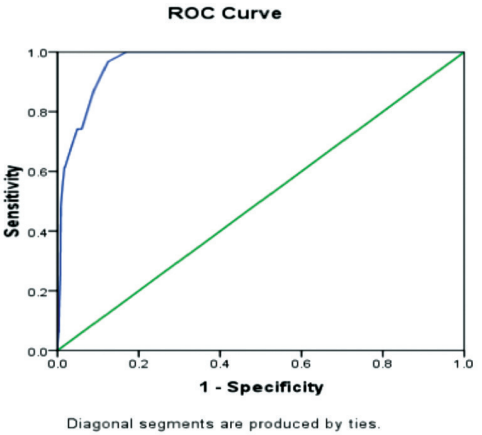

Figure 1 Receiver Operating Characteristic (ROC) Curve of the PHQ-9 compared with the Composite International Diagnostic Interview (CIDI) as the reference standard for depression

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The GAD-7 which was initially developed for use in primary care detects generalised anxiety disorder (GAD), panic disorder, social anxiety disorder and post-traumatic stress disorder (PTSD). Since its development it has also been found to be useful in detecting common anxiety symptoms in the community. As anxiety is now being recognised more frequently in community and primary care settings, simple and brief questionnaires on anxiety such as the seven-item GAD will be of importance to accurately detect anxiety in these populations (Sherina et al., 2012c; Kroenke et al., 2007; Spitzer et al., 2006). Refer to Appendix 2 for the GAD-7 questionnaire (validated Malay version).

Another questionnaire, the TQWHQ, is a very interesting ultra-brief questionnaire because of its simplicity in only having two questions, which are: (1) "During the past month, have you often been bothered by feeling down, depressed or hopeless?"; and (2) "During the past month, have you often been bothered by

little interest or pleasure in doing things?"; and one more question inquiring if help is needed. A preliminary study on the two questions was conducted in New Zealand where they were found to be good at detecting depression. The help question was added later as it increased the specificity in detecting depression. Together with the advantage of its brevity, the TQWHQ was found to be a practical and potentially useful instrument to detect depression in primary care settings in Malaysia (Sherina et al., 2011c; Arroll et al., 2005; Arroll et al., 2003).

While all these questionnaires can be used to detect depression and / or anxiety in primary care and community settings, definitive diagnosis of mental illnesses requires further psychiatric evaluation and patients detected as having depression and / or anxiety should be referred for further evaluation and management. The aim of having these questionnaires is not to overrule the diagnosis by psychiatrists and / or clinical psychologists, but to aid in improving the detection of mental illnesses in the community so that people can receive early treatment and management.

Intervention Studies in Specific Populations

A Web-Based Mental Health Assessment and Intervention Programme in Malaysia

Mental illness is associated with stigma, and that is why many people who suffer from mental illness may not come forward to seek help. They are afraid of how they may be perceived or treated by others, including their family, friends, community and work environment. In these times of advanced technology, many people turn to the internet for information on various matters. This includes self-help treatments for a wide range of illnesses. In fact, internet interventions have been shown to reduce depression, anxiety, panic disorder, post traumatic disorders, eating disorders and

insomnia. Prevention and treatment of mental disorders, especially depression and anxiety disorders, via the internet are increasing. Several internet-based interventions have been found to be helpful in reducing depression and anxiety symptoms (Wade et al., 2010; Straten et al., 2008)

To focus on addressing common mental illnesses in the community, a web-based mental health assessment and intervention programme for the Malaysian community was developed, implemented and evaluated, with the intention of assessing whether internet based management for common mental illnesses would be suitable for our community. From the 1556 adults interviewed in their community households, 10.3% were found to have depression. The predictors were serious work problems, serious financial constraints, marital problems, unhappy relationships (with children, spouse and / or family), chronic diseases and religiosity. The website, which was in both English and Malay languages, took into account the causes of depression in the community and identified specific strategies to overcome each problem. The website was developed as a user-friendly web-based psycho-education programme specifically for the Malaysian community, to enable people in the community to easily access information on mental health which was easy to understand and applicable in their daily lives. An assessment of mental health status was done on-line and this was followed by four sets of brief psycho-education programmes, administered over a period of four weeks. At the end of the four weeks, evaluation of the programme found that it was successful in increasing the mental health literacy and reducing the depression and anxiety scores of people in the community. As far as we know, this was the first web-based mental health assessment and intervention programme developed for the Malaysian community. As with all intervention programmes, collaboration with the Ministry of Health is essential

to ensure success, in the case of this programme in improving the mental well-being of the Malaysian community. Further studies also need to be carried out to establish the findings that internet-based programmes can be useful to improve mental well-being in our community (Siti Fatimah et al., 2015; Siti Fatimah et al., 2013).

Chemotherapy Patients' Counselling by Pharmacists in Government Hospitals in Malaysia

Another area of growing concern in Malaysia is the rising prevalence of cancer. Cancer is a life threatening disease and it is expected that almost anyone who is diagnosed with cancer suffers from depression and anxiety. It is especially difficult for patients undergoing chemotherapy, where the side-effects of the chemo drugs add to the suffering of the patients.

Counselling is effective in relieving patients from their depressive and anxiety symptoms. This holds true also for cancer patients who need additional emotional support from their medical and health care providers, which consist of oncologists, surgeons, physicians, psychiatrists, clinical psychologists, pathologists, radiologists, nurses, physiotherapists and pharmacists. In Malaysia, the pharmacists in the chemotherapy units are in-charge of administering chemotherapy. They are often called upon to address many questions on chemotherapy and its side-effects, by the patients. A chemotherapy counselling module was thus developed as a guide for pharmacists in managing patients undergoing chemotherapy in a government hospital in Malaysia. The module helped increase the patients' knowledge on the common side-effects of chemotherapy and how they could prevent and cope with these side-effects. The module also addressed what the patient need to be aware of and be prepared for, before, during and after chemotherapy. The mental health status and quality of life of the patients undergoing

chemotherapy were found to improve with adequate counselling using this module. Correct information given by the appropriate medical profession, such as pharmacists, has been shown to alleviate unnecessary worries and fears toward chemotherapy among the patients. As a follow-up to this study, research is currently being conducted to implement and evaluate this module in other government hospitals in Malaysia. The aim is to evaluate the effectiveness of this module in a larger nationwide trial. If found to be effective, cancer patients undergoing chemotherapy in Malaysia can be given proper and adequate counselling by pharmacists at the national level (Umma et al., 2015; Umma et al., 2014a; Umma et al., 2014b). Refer Figures 2 and 3 for the interaction plots between group and time for depression and anxiety mean scores.

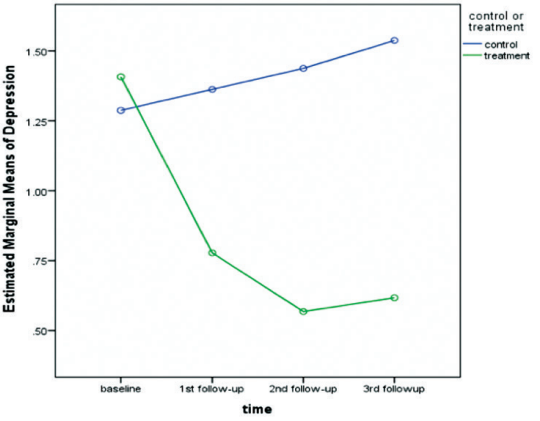

Figure 2 The interaction plot between group and time for Depression mean scores

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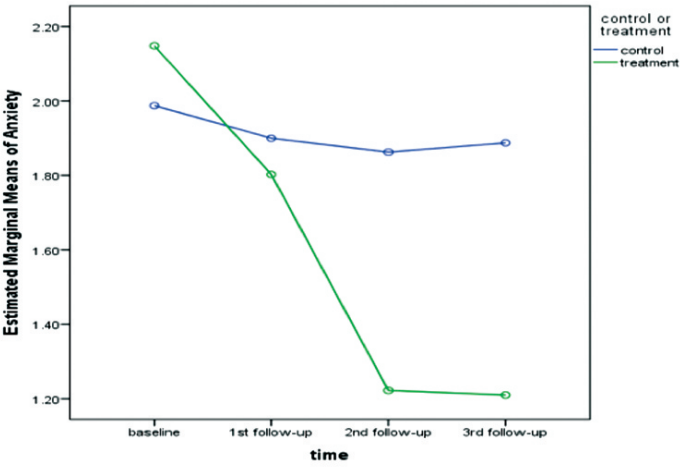

Figure 3 The interaction plot between group and time for Anxiety mean scores

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Diabetes-Related Distress

Another major disease, the prevalence of which is also escalating in Malaysia, is diabetes mellitus. This illness is associated with multi-organ damage and has severe complications which result in suffering and death if not managed properly. Patients suffering from diabetes are managed mainly in primary care clinics. Their management however, also involves various disciplines, such as ophthalmology, cardiology, nephrology, neurology, orthopaedics and other medical disciplines, due to the complications associated with the disease. The management also includes dieticians and nutritionists, as diet is a major determinant of diabetic control. Apart from taking their medication orally, some patients are also subjected to insulin injections.

It is now being recognized that patients suffering from diabetes need additional emotional support to improve adherence and compliance to their management regime. Diabetes related distress has been found among these patients, and significant associations between medication non-adherence and depressive symptoms among diabetic patients have been shown. In fact incidence of depressive symptoms is one of the significant independent determinants of medication non-adherence among young adults with type 2 diabetes mellitus. As diabetes is a life-long disease, which is complex and debilitating, diabetes patients should have management and interventions which target and address their emotional needs. This will not only improve their diabetic control, but also improve their quality of life and hopefully reduce further complications due to diabetes (Chew et al., 2015a; Chew et al., 2015b; Chew et al., 2015c).

Inter and Intra-Sectoral Collaboration - Local and International

Local collaborations with national organisations in Malaysia are of utmost importance in ensuring that our research focus is on areas which are of national importance and benefit. Related national organisations include various ministries (such as the Ministry of Health Malaysia, Ministry of Education Malaysia, Ministry of Defence Malaysia), universities (government and private), non-governmental organisations, academies (such as the Academy of Medicine of Malaysia, Academy of Family Physicians of Malaysia and *College of Public Health Medicine*), and various professional bodies. There are now multiple research grants which encourage researchers from various fields and expertise to collaborate with different national organisations to produce high quality research which result in good and high impact outcomes.

International collaboration with developed countries which have overcome similar problems in mental illness can also be useful in many ways. We can learn from their experience and also improve our knowledge and expertise in managing mental illness in the community.

Most of these countries have treatments specifically developed to manage certain populations, as this method of treatment has been proven to be more effective. Specific populations, for example, people who are obese or suffering from chronic diseases or even addiction, have different needs and problems, although they may all be suffering from the same mental illness. People in the community are from all age groups, but managing mental illness in an adolescent who is undergoing puberty is different from managing it in an adult woman who is busy juggling a career and family responsibilities, or an elderly man who has just retired and feels bored and lonely. International collaboration with developing countries which are facing similar problems can also help target similar concerns and problems in the community. People in developing countries suffer from drastic changes in social and economic development due to the rapid urbanisation and development in their countries. There may be many similar causes of mental illness in our community as that in other developing countries, such as Vietnam, Thailand and Indonesia, among others.

International groups and networks have been developed to address all the above issues. One internationally renowned group is the International Primary Care Research Leadership Programme, which focuses on bringing countries together to work on current issues which are of concern in each country and globally. The group members collaborate in developing and conducting research of international calibre to improve the health of the global community.

The research areas are multi-displinary as there are many types of illnesses in primary care which includes mental illness.

Another way of establishing international collaboration is by conducting our own sabbatical and research leave in well-known and high ranked universities. The University of Oxford, United Kingdom (UK), University of Cambridge, UK and Harvard University, United States of America, are among such well-established universities in the world. Collaboration with groups such as these will enhance our knowledge in research to international standards and build our research capacity as well as increase the quality of our research. By conducting well-designed research which conforms to international standards, we will be able to increase the accuracy of our findings in research and develop and implement effective management to our community. Effective and sustainable management of any illness, including mental illness, will reduce the burden of illness and improve the well-being of the Malaysian community successfully. There are several research proposals currently being prepared among this group of researchers which will hopefully be of benefit to our Malaysian community (Sherina, 2015).

Malaysian Primary Care Research Group Network 2004.

Members (2004): Professor Dr Tong Seng Fah (Universiti Kebangsaan Malaysia), Professor Dr Ng Chirk Jenn (Universiti Malaya), Assoc. Prof. Dr Verna Lee Kar Mun (International Medical University), Assoc. Prof Dr Nik Sherina Hanafi (Universiti Malaya), Assoc Prof Dr Leelavathi Muthupalaniappen (Universiti Kebangsaan Malaysia), Datin Dr Zailinawati Abu Hassan (Academy of Family Physicians of Malaysia), Assoc. Prof. Dr Ambigga Devi Krishnapillai (Universiti Pertahanan Nasional Malaysia), Professor Dr Khoo Ee Ming (Universiti Malaya), Professor Dr Teng Cheong Lieng (International Medical Universiti) and Professor Dr Sherina Mohd Sidik (Universiti Putra Malaysia)

International Primary Care Research Leadership Programme 2014: Cohort 9 Group Members

From left, Dr Petra Erkens (Maastricht University, The Netherlands), Dr Rose Galvin (Royal College of Surgeons Ireland), Dr Tobias Dreischulte (University of Dundee, Scotland), Dr Juliana Peterson (Goethe-University Frankfurt am Main, Germany), Professor Dr Ann Van den Bruel (University of Oxford, England), Professor Dr Sherina Mohd Sidik (Universiti Putra Malaysia, Malaysia), Dr Nav Persaud (St Michael's Hospital, Toronto, Canada) and Assoc Prof Dr Nynke Scherpbier-de Haan (Radbound University Medical Centre, The Netherlands)

CONCLUSION

Mental health in the Malaysian community is unique, with its own socio-cultural characteristics, behavioural factors, lifestyles and traditions. The fact that we are a united nation of many races and religions also has an impact on our mental health status. Consequently, while there are differences in the prevalence of mental illnesses in different community populations, certain demographic, socio-cultural factors and lifestyle behaviours can be identified as being the main risk factors and predictors for mental illnesses in our community.

Numerous programmes have been launched to create awareness on mental health by the Ministry of Health and also various organisations. The trend however, shows an increase in mental illnesses over the years. In my opinion, we need to accurately detect the magnitude of this problem and specifically manage high risk groups to reduce the burden of mental illness in our community, especially for future generations.

Mental health in the community does not only involve people living in a community, it involves people everywhere, in primary care clinics, hospitals, working environments, schools and households. My future studies are now focussed on behavioural interventions to help specific populations address and manage mental health problems related to their diseases or situations. These include children, adolescents and also people suffering from chronic diseases and obesity. My research work has always included local collaborations with various national institutions. International collaborations are currently being established with various developed countries that have implemented programmes which successfully improved the mental well-being of their communities. In conclusion what we all want is a healthy nation, which can also be referred to as a Healthy Malaysia. This involves having healthy

minds and healthy bodies for ourselves, our children, our family, our community and our country. As was famously published in the Lancet in 2007, *There Is No Health Without Mental Health.* Therefore, we all need to play our roles and work with each other to ensure that our community is healthy; physically and mentally.

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BIOGRAPHY

Professor Dr Sherina Mohd Sidik was born in Alor Setar, Kedah. She obtained her medical degree, MBBS, from University of Malaya in 1993, and Masters in Medicine, MMED (Family Medicine), from Universiti Kebangsaan Malaysia in 2000. After serving the Ministry of Health for eight years, she joined Universiti Putra Malaysia in 2001 as a lecturer in the Faculty of Medicine and Health Sciences. She pursued her PhD in 2007, and obtained her PhD (Community Health) from the University of Auckland in 2010. She was promoted to Professor in 2011, and is currently the Deputy Director of the Cancer Resource and Education Centre (CaRE), Universiti Putra Malaysia.

Professor Sherina is a consultant in family medicine and community mental health. She conducted her sabbatical attachment with the Behavioural Medicine Team at the University of Oxford, United Kingdom in 2015. She is active in research, and has been involved in more than 20 research projects and led 14 research projects as Principal Investigator. To date, she has 120 publications in local and international journals and chapters in books. She is also the author and editor of four books. Prof Sherina served as a Senate Member in the Universiti Putra Malaysia Senate from 2011 – 2014. She is a member of several national and international associations and Editorial board member of the Malaysian Journal of Medicine and Health Sciences. She is also a reviewer for several international and national journals. Her current research interests are on behavioural interventions in specific high risk groups.

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I wish to also thank all my friends and colleagues whom I deeply appreciate and value, but who are too many to be mentioned here. My sincere gratitude to each and every person in the Cancer Resource and Education Center (CaRE) and the Department of Psychiatry, who have been very supportive and helpful, and welcomed me as part of their team.

Most of all, I am deeply grateful to my family who have supported me throughout my life. My husband (Colonel Dr Rozali Ahmad), daughter (Nadia Amira Rozali), parents (Mohd Sidik Ibrahim and Sharifah Halina Abdullah) and brothers (Professor Dr Shiran Mohd Sidik and Dr Shah Mohd Sidik), who have all been great sources of support for me, I am very fortunate to have all of you in my life.

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APPENDIX 1: PATIENT HEALTH QUESTIONNAIRE (PHQ-9) (MALAY VERSION)

Dalam tempoh **2 minggu yang lepas**, berapa kerapkali anda terganggu oleh masalah berikut? / *Over the **last 2 weeks**, how often have you been bothered by any of the following problems?*

No.	Questions	Coding
Q1	Sedikit minat atau keseronokan dalam melakukan kerja-kerja. *Little interest or pleasure in doing things.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q2	Merasa murung, sedih atau tiada harapan. *Feeling down, depressed or hopeless.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q3	Masalah hendak tidur / semasa tidur, tidur terlalu banyak. *Trouble falling / staying asleep, sleeping too much.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q4	Merasa letih atau kurang bertenaga. *Feeling tired or having little energy.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**

Q5	Kurang selera atau terlalu banyak makan. *Poor appetite or over eating.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q6	Mempunyai perasaan buruk terhadap diri sendiri – ataupun merasa gagal terhadap diri sendiri ataupun menghampakan diri atau keluarga. *Feeling bad about yourself – or that you are a failure or have let yourself or your family down.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q7	Masalah menumpukan perhatian terhadap perkara-perkara seperti membaca suratkhabar atau menonton televisyen. *Trouble concentrating on things, such as reading the newspaper or watching television.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**

Q8	Bergerak atau bercakap dengan terlalu lambat sehingga disedari oleh orang lain. Ataupun bertentangan – terlalu resah atau gelisah sehingga anda bergerak lebih dari biasa. *Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q9	Berfikiran bahawa lebih elok jika anda telah mati atau ingin mencederakan diri anda dalam sesuatu cara. *Thoughts that you would be better off dead or of hurting yourself in some way.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**

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APPENDIX 2: GENERALISED ANXIETY DISORDER (GAD)-7 (MALAY VERSION)

Dalam tempoh **2 minggu** lepas, berapa kerapkali anda terganggu oleh masalah berikut? /
*Over the last **2 weeks**, how often have you been bothered by any of the following problems?*

No.	Questions	Coding
Q1	Berasa resah, gelisah atau tegang. *Feeling nervous, anxious, or on edge.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q2	Tidak dapat menghentikan atau mengawal kebimbangan. *Not being able to stop or control worrying.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q3	Terlalu bimbang mengenai pelbagai perkara yang berlainan. *Worrying too much about different things.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q4	Mempunyai masalah untuk tenang. *Having trouble relaxing.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**

Q5	Terlalu resah sehingga susah untuk berdiam diri. *Being so restless that it is hard to sit still.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q6	Mudah menjadi rimas dan menjengkelkan. *Being easily annoyed or irritable.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**
Q7	Berasa takut bahawa sesuatu yang buruk akan terjadi. *Feeling afraid as if something awful might happen.*	Tidak pernah sama sekali / *Not at all* **0** Beberapa hari / *Several days* **1** Lebih dari seminggu / *More than half the days* **2** Hampir setiap hari / *Nearly everyday* **3**

*Source: The Journal of Primary Health Care

Sherina Mohd Sidik

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