EVALUATION OF PSYCHOLOGICAL DISTRESS, EMOTIONAL BURNOUT SYMPTOMS AND PERCEIVED BARRIERS TO SEEK PROFESSIONAL HELP AMONG HEALTHCARE PROFESSIONALS IN KUALA LUMPUR HOSPITAL

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by

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LIST OF ABBREVIATIONS

ACTH	Adrenocorticotropic hormone
ANOVA	Analysis of Variance
Anx	Anxiety
BAI	Beck Anxiety Inventory
BDI	Beck Depression Inventory
BSI	Brief Symptom Inventory
CBI	Copenhagen Burnout Inventory
CBT	Cognitive Behavioural Therapy
CES-D	Center for Epidemiologic Studies Depression Scale
CRF	Corticotrophin-releasing factors
DASS	Depression Anxiety and Stress Score
Dep	Depression
EB	Emotional Burnout
EE	Emotional Exhaustion
EHR	Electronic Health Record
FRP	Full-Registered Pharmacist
GHQ	General Health Questionnaire
HADS	Hospital Anxiety and Depression Scale
HBM	Health Belief Model
HCP	Healthcare Professional
HKL	Hospital Kuala Lumpur
HPA	Hypothalamic pituitary-adrenal
IPS	Institute Postgraduate Studies

ISCO	International Standard Classification of Occupations
MBI	Maslach Burnout Inventory
MBI-HSS	Maslach Burnout Inventory-Human Service Survey
MBSR	Mindfulness-based stress reduction
MC	Medical certificate
MHP	Mental Health Professionals
MMA	Malaysian Medical Association
MMC	Malaysian Medical Council
MREC	Malaysian Research of Ethic Committees
MOH	Ministry of Health
NHMS	National Health and Morbidity Survey
NR	Not reported
NS	Not studied
OLBI	Oldenburg Burnout Inventory
PABS	Pharmacist's Attitudes and Belief Scale
PHQ	Patient Health Questionnaire
PRP	Provisional-Registered Pharmacist
PSI	Stress Symptom Scale
RM	Ringgit Malaysia
RR	Response rate
SAS	Zung Self-Rated Anxiety Scale
SDS	Zung Self-Rated Depression Scale
SD	Standard Deviation
SPSS	Statistical Package for the Social Science
SSRI	Selective serotonin reuptake inhibitor

STAI	State-Trait Anxiety Inventory
USM	Universiti Sains Malaysia
VAS	Value Added Services
VIF	Variance Inflation Factor
WHO	World Health Organisation

PENILAIAN DISTRES PSIKOLOGI, SIMPTOM KELESUAN EMOSI DAN HALANGAN UNTUK MENDAPATKAN BANTUAN PROFESIONAL DALAM KALANGAN PEGAWAI PERUBATAN DAN PEGAWAI FARMASI YANG BERTUGAS DI HOSPITAL KUALA LUMPUR

ABSTRAK

Tahap tekanan psikologi dan kelesuan emosi dalam kalangan anggota kesihatan adalah tinggi di seluruh dunia, kerana ia boleh menjejaskan produktiviti profesional, ketidakpuasan pesakit, kesihatan mental dan kesilapan pengubatan. Objektif kajian ini ialah bertujuan: (1) menilai kelaziman dan faktor-faktor yang mempengaruhi psikologi dan kelesuan emosi dalam kalangan anggota profesional kesihatan yang bekerja di hospital kerajaan awam, dan (2) meneroka halangan-halangan yang dihadapi oleh profesional kesihatan untuk mendapatkan bantuan psikologi. Dua fasa direka bentuk untuk mencapai matlamat kajian. Dalam kajian fasa I, data dikumpul melalui soal selidik dengan menggunakan alat kajian BDI *("Beck Depression Inventory"*), BAI (*"Beck Anxiety Inventory"*), dan MBI-HSS (*"Maslach Burnout Inventori – Human Service Survey"*), manakala dalam kajian fasa II, kajian kualitatif dijalankan melalui wawancara secara individu dan berstruktur dengan menggunakan panduan topik yang telah disahkan. Responden berjumlah 277 anggota daripada pegawai perubatan dan pegawai farmasi yang telah melengkapkan soal selidik yang diedarkan. Penemuan daripada kajian fasa I menunjukkan anggota profesional kesihatan mengalami tahap kelesuan emosi sebanyak 33.6% (95% CI: 28.0 - 39.0) dan gejala kemurungan sebanyak 14.4% (95% CI: 10.0 - 19.0). Kadar kelaziman bagi gejala kebimbangan adalah 6.1% (95% CI: 3.0 - 9.0). Individu yang berstatus bujang, mempunyai isi pendapatan rumah yang rendah, tidak bersenam,

kerap menjalankan panggilan tugasan hospital, tidak berpuas hati dengan tingkah laku pesakit dan pernah mengalami penderaan emosi dari pegawai atasan dan rakan sekerja adalah lebih cenderung untuk mengalami tekanan psikologi dan kelesuan emosi. Dalam kajian fasa II, 16 anggota professional kesihatan telah mengambil bahagian. Maklumbalas direkod, setiap perkataan disalin satu demi satu kepada bentuk verbatim, disemak dan dianalisa menggunakan pendekatan '*grounded theory*'. Sebanyak 15 tema dan sub-tema berkaitan halangan yang dihadapi oleh anggota profesional kesihatan mendapatkan bantuan professional untuk masalah-masalah psikologi telah dikenal pasti. Berikut adalah lima tema halangan utama yang dihadapi oleh anggota profesional kesihatan: (1) sukar untuk mendapatkan bantuan untuk masalah kesihatan mental, (2) masa dan tanggungjawab profesional, (3) implikasi kerjaya, (4) stigma dan (5) tiada sokongan daripada pegawai atasan. Isu kesulitan merupakan faktor utama bagi seseorang anggota kesihatan professional sanggup menerima program sokongan profesional. Kesimpulannya, anggota kesihatan profesional yang bekerja di hospital Kuala Lumpur telah mengalami tahap kelesuan emosi yang tinggi. Namun demikian, mereka menghadapi halangan tertentu untuk mendapatkan bantuan profesional untuk isu-isu psikologi disebabkan oleh identiti profesional. Halangan-halangan yang dikenal pasti dalam kajian ini boleh digunakan dan diberi tumpuan kepada pembangunan program yang berkesan untuk mengurangkan tekanan psikologi dan tahap kelesuan emosi dalam kalangan anggota professional kesihatan di kesihatan awam Malaysia.

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ABSTRACT

The level of psychological distress and emotional burnout is high worldwide among the healthcare professionals working in a hospital setting and this occurrence may impact professional productivity, patient satisfaction, mental health and medical errors. The objectives of this study are to: (1) evaluate the prevalence and factors associated with psychological distress and emotional burnout among healthcare professionals, and (2) explore the perceived barriers to seek for professional psychological help by healthcare professionals working in a tertiary public hospital. A sequential two-phase research design was used to achieve the objectives. In Phase I of the study, BDI (Beck Depression Inventory), BAI (Beck Anxiety Inventory), and the MBI-HSS (Maslach Burnout Inventory – Human Service Survey) were used in a cross-sectional questionnaire survey. In Phase II, a qualitative study using semi-structured and individual in-depth interviews was conducted. The questionnaire was completed by 277 healthcare professionals who comprise of doctors and pharmacists. Findings from phase I show that healthcare professionals are experiencing prevalence of emotional burnout 33.6% (95% CI: 28.0 - 39.0) and depressive 14.4% (95% CI: 10.0 - 19.0) symptoms. The prevalence of anxiety symptoms was 6.1% (95% CI: 3.0 - 9.0). Individuals who are single, with low household income, not physically active, with frequent on-call duties, dissatisfied with patients' behaviour and experienced emotional abuse from superiors and colleagues are more likely to experience

psychological distress and emotional burnout. In Phase II qualitative study, 16 healthcare professionals participated in the interviews. Interviews were conducted using an interview guide and responses were audio-tape recorded, transcribed verbatim, checked, and analysed using the grounded theory approach. A total of 15 themes and subthemes were identified within each domain on the barriers faced by health professionals to seek for professional help for psychological problems. The following five themes are the dominant barriers perceived by health professionals: perceived mental health is difficult to seek help, time and professional responsibility, career implication, stigmatization and unsupportive superiors. In addition, confidentiality was identified as the major concern for health professionals' willingness to accept the professional support programme. In conclusion, the health professionals in Kuala Lumpur tertiary public hospital are experiencing a high level of emotional burnout. However, due to professional identity, they are hindered by specific perceived barriers to seeking professional help to address these psychological issues. The barriers identified can be used to focus on the development of an effective programme to reduce psychological distress and burnout levels among health professionals in public healthcare practice in Malaysia.

CHAPTER 1

INTRODUCTION

1.1 Background of the study

International literature estimated approximately 10% of the adults would have depression or anxiety which is the most common mental health problem affecting the current worldwide population (World Health Organization, 2001). By the year 2020 it is estimated that the disease burden for mental illness will increase from 12% to 15% (World Health Organization, 2001). Mental health is defined as a state of complete physical, psychological and social well-being and not merely the absence of disease or infirmity (World Health Organisation, 2011), and mental health problems could be coming of a variety of mental health difficulties, ranging from psychological distress to more severe mental health problems. Corresponding to the WHO agenda, Prince et al. (2007) introduced the concept of 'no health without mental health', which underlines the importance of mental health besides the physical health of an individual. For example, research shows that patients with cardiovascular (CVD) have more depression than the general population. Vice versa, a person with depression is more likely to develop CVD eventually and also have a higher mortality rate than the general population (Hare et al., 2013).

Psychological distress is described as an unpleasant feeling or emotional that impact the level of functioning which involves negative views from others, self and the environment and is characterised by unpleasant subjective states such as feeling tense, worried, worthless and irritable (Barlow & Durand, 2005). Not only mental health can

impact on one's individual life, but psychological distress can also have direct and indirect effects on the individual's social, occupational functioning and psychological, which affects their life, including relationships, work and health.

Globally, there is growing concern about the influence of the workplace environment on the well-being of healthcare professionals (HCPs). The setting of hospital has been regarded as one of the working environment which could be physically and emotionally draining for HCP contributing to a high potential for the occurrence of workplace related psychological distress and burnout (Al-Zahrani & Kalo, 2014; Ashley & Francis, 2000; Asrat B et al., 2015; Gong et al., 2014; Higuchi et al., 2016; Rothmann, S. , 2007; Ruitenburg et al., 2012; Sharifah et al., 2011).

The recent Malaysian National Health and Morbidity Survey (NHMS) 2015 reported that the prevalence of mental health problems among adult aged 16 and above has increased from 11.2% in 2006 (Institute of Public Health, 2011) to 29.2% in 2015 (Institute of Public Health, 2015). It was estimated that every 4 out of 10 adults in Malaysia suffered some forms of mental health issues in their lifetime. Among the Malaysian population, the state of Sabah and Federal Territory of Labuan have the highest prevalence of mental health problems (42.9%), while the Federal Territory of Kuala Lumpur has the third highest (39.8%) number of mental problems cases in the country (Institute of Public Health, 2015). Accordingly, it is likely that at some point in time, HCP might experience mental health problems.

There are several risk factors for mental health problems among HCP including high work-related stressors, socio-economic status and exposure to violence at the workplace (Demir et al., 2007; Erdur et al., 2006; Gong et al., 2014; Roldán et al.,

2013). Among the reasons for work-related stress include long working hours, frequent on-calls with insufficient rest, unable to take leave, worries due to exposure to blood-borne infectious diseases, communicable diseases and other occupational risks. Job stress could affect HCP who are regularly subjected to complaints by patients and threats of lawsuits because of malpractices (Ho et al., 2010). Moreover, HCPs have to deal with work-family conflict. They often have to sacrifice their family time due to their duties (Abdul Razak et al., 2010; Ahmad, 2010). The cumulative effects from work-related mental stress and burnout among HCPs would affect their professional efficiency, productivity at work, and the overall quality of life (Angerer & Weigl, 2015; Liang et al., 2015). As a result, one could expect deterioration in their work performance which may have a severe impact on patients' satisfaction, increased risk of medical errors; and ultimately compromising patients' safety (Fahrenkopf et al., 2008; Waterman et al., 2007).

Health care providers are presumed to have reasonable access to health care and adequate treatment. Comparing to the general population, most healthcare professionals have above average health status (Kay et al., 2008). Although they are less likely to suffer diseases associated with poor lifestyles, such as cardiovascular problem, diabetes and smoking-related illness but they are at higher risk of poorer mental health (Voltmer et al., 2013) and burnout because of their professional circumstances as compared to the general population.

Several specialist services and programs advocating the importance of mental health and well-being among doctors have been established in a few western countries. The Physician Health Program (United States of America) (Brooks, S.K. et al., 2011),

Practitioner Health Programme (United Kingdom) (NHS Practitioner Health Programme, 2017), Pharmacist Support Service (Australia) (Pharmacist Support Service, 1995) and Peer Support Program (Singapore) (Chan et al., 2012) are a few examples of specialist support services that cater to HCPs. However, a substantial amount of literature suggested that HCPs may feel reluctant to seek help due to several factors. These include the problem of confidentiality, licensing, impact on career, culture and stigmatization of mental illness (Guille et al., 2010; Kay et al., 2008; White et al., 2006). The lack of time owing to their professional responsibility and busy working nature is also another significant barrier to seek help (Guille et al., 2010). The aversion of doctors to ask for help may lead to self-diagnosis and self-medication (Adams et al., 2010; Stoesser & Cobb, 2014).

1.2 The Healthcare System in Malaysia

The healthcare system in Malaysia is governed by the Ministry of Health (MOH) Malaysia. In general, there are two types of healthcare system that run in parallel; known as the government healthcare system (public sector) and the private healthcare system. The government healthcare system is highly subsidized through funding from the federal government (Lee, P. O., 2015). For the private healthcare system, patients are required to pay out-of-pocket bills. The public sector provides about 82% of inpatient care and 35% of ambulatory care, while the private sector accounts for about 18% of inpatient care and 62% of ambulatory care (Hussein, 2009). Apparently, the public sector plays a dominant role in Malaysia's healthcare system due to its affordable fees. This is to ensure that the public hospital is accessible to the general population. A citizen is required to pay a minimal fee of RM1 (non-specialist) and RM5 (specialist) for treatment. This is inclusive of medication for outpatient visits.

Ward charges are as low as RM3 per day to a maximum amount of RM500 for a third class ward (Ministry of Health Malaysia, 2013). Due to the rise in cost in private healthcare, the number of patients with chronic diseases seeking care in government hospitals has increased year by year (Lau, 2016). The number of aging population is escalating in the country which further demands various health services and long term care of patients. Foreigners, refugees and asylum seekers were among regular patrons in the public hospital due to the low medical cost and affordability. As a result, HCPs have to face the phenomenon of an increase in a number of patients seeking treatment and admission into government hospitals.

The Oxford Advanced Learners' Dictionary defines the word 'doctor' as noun meaning a person who has been trained in medical science, whose job is to treat people who are ill/sick or injured while a pharmacist (also known as druggist) as a person who prepares medications, dispense, counsel and sell them to the public in a retail outlet or in a hospital. HCPs in this study refer to the medical officer, resident officers (House Officer) and pharmacist as defined under the International Standard Classification of Occupations (ISCO) (International Labour Office, 2012). In Malaysia, the burden of psychological distress and emotional burnout among medical officers (not House Officers) and pharmacists is not known. Burnout studies were commonly studied among House Officers (Al-Dubai, S. A.R. et al., 2013; Zuraida & Zainal, 2015) and nurses (Sharifah et al., 2011; Sharoni et al., 2012). This study focused on the healthcare professionals group known as "Kumpulan Pengurusan dan Profesional" (Managerial and Professional group) with position grade above 41 - UD41 for doctors, UF41 for pharmacists and UG41 for dentists (Jabatan Perkhidmatan

Awam Malaysia, 2016). Due to the small number of dentist population in HKL,the dental department was excluded from this study.

1.2.1 Hospital Doctors

Under the Medical Act 1971, the Malaysian Medical Council registers doctors and they formed a significant portion of the Malaysian healthcare workforce (Malaysian Medical Council, 2015). Currently, there are 33,454 doctors in the public sector and they constitute a ratio of 1:656 doctors to the Malaysian population (Ministry of Health Malaysia, 2016). To sustain staffing and improve quality of medical graduates in public hospitals, doctors are required to complete a two-year compulsory service as an internship (House Officer) plus two years of government service as a Medical Officer in any of the approved public hospitals (Malaysian Medical Council, 2015). The Deputy Health Director of Malaysia previously highlighted that one in five House Officer employed each year quit due to inability to work long hours and due to burnout (The Star, March 2015). At the same time, many senior healthcare professionals have chosen to work in the private sector after completing their compulsory service, leaving mainly younger and inexperienced healthcare professionals to handle the sheer number of cases. This often leads to work pressure (Lua & Imilia I, 2011). Despite the proliferation of medical schools in the country resulting in the oversupply of doctors, there is a significant shortage of highly trained medical specialists (Yusoff et al., 2011). Based on observation, young medical graduates have limited vacancies available in the government sector. As a consequence, it results in an unequal distribution of manpower and long working hours.

1.2.2 Hospital Pharmacist

In Malaysia, the number of pharmacists has increased significantly and is now being recognized as an important profession in the multidisciplinary provision in the government sector. The MOH has implemented a one year internship and one year of compulsory service for pharmacists so that the public sector could retain them and have enough manpower. At present, there is a total number of 6423 registered pharmacists in the public sector. This forms a ratio of 1: 2900 pharmacists to the Malaysian population (Ministry of Health Malaysia, 2016). Expansion of roles and establishment of patient-focused services could be materialised with the increase in pharmacists in the public sector. Hospital pharmacists have gone beyond their dispensing service to more comprehensive clinical pharmacist services which include pharmacy-led medication adherence clinics, ward pharmacy services, 24-hour pharmacy on-call, parenteral nutrition, clinical pharmacokinetics services, oncology pharmacy, nuclear pharmacy and drug information services. Therefore, the role of a hospital pharmacist is prominent these days and there is an excellent interaction with doctors and nurses in providing clinical services in the ward as well. On the other hand, pharmacists also offer value-added services (VAS) to patients via the Integrated Dispensing System, 'SMS Take and Go', 'Drive Thru' service and 'Medication Through Post', as an effort targeted to improve healthcare delivery in the country. Similarly, pharmacists are responsible for providing multiple services and this can also contribute to physical and psychological distress.

1.3 Statement of the problem

The Ministry of Health (MOH) Malaysia spearheads the effort in ensuring health and staff safety. There is a guideline which focuses on promoting a healthy lifestyle,

physical activities, healthy diet, healthy mind, refrain from smoking and regular health screening for healthcare providers (Kementerian Kesihatan Malaysia, 2016). Mental health screening or commonly known as “Saringan Minda Sihat”, is part of a screening programme aimed at promoting mental health among HCPs and is conducted annually within each health facility. Depression, Anxiety and Stress Score (DASS-21) is used as a screening tool to assess all HCP mental health status. The instrument serves as a good initiative in promoting and monitoring psychological health. However, the resultant data is often not reported or under reported.

Previous studies conducted regarding the mental health of HCPs are mainly from the West and focus specifically on doctors (Ruitenburg et al., 2012; Stanton & Randal, 2011; Thommasen et al., 2001; Tyssen, Reidar & Vaglum, 2001; Unrath et al., 2012; Wallace, 2010). There are limited studies done in terms of psychological distress measurement on anxiety and depression among hospital doctors and pharmacists in Malaysia. Findings from the west might not be applicable to the Asian HCPs. More Malaysian opt for public healthcare as private insurance tends to be expensive which led to overcrowded hospitals, very long waiting lists and stressed HCPs who are not able to pay personal attention to patients. Besides that, there is a high expectation from both management and patients despite lack of manpower in the public hospitals. Both doctors and pharmacists may face peculiar psychological challenges due to the increased pressure to provide direct patient care and the increased workload. Hence, there is a crucial need to collect new information on the prevalence and prevalence of psychological distress among different occupational groups in a health-care setting such as senior doctors and pharmacists. Furthermore, international literature on the subject highlights barriers to seek help among HCPs who face psychological distress

(Bearse et al., 2013; Fridner et al., 2012; White et al., 2006). In Malaysia, only one study conducted on exploring barrier to help-seeking research among medical students using quantitative method (Aida et al., 2014). However, there are no studies done investigating obstacles that might be encountered by the HCPs.

The impact on work-related mental distress and burnout were not addressed by specific legislation in most countries (World Health Organisation, 2000), but they do have minimum standards for safety and health features at the workplace. In Malaysia, the physical aspects of the workplace are mostly focused on occupational injuries and diseases, which does not include psychological and/or mental health aspects of working conditions (Lugah et al., 2010). A proper study is essential to provide an empirical basis for understanding the issue and address the importance of HCPs' mental health that exists in the workplace.

1.4 The conceptual framework of the study

In this study, we used two (2) basic theoretical models to address healthcare professional psychological distress and burnout. In order to achieve these objectives and to select instruments for measuring variables related to psychological distress and its determinants, we adapted similar model from Linzer et al. (2014) that suggested stressors need to be identified at earlier stages by the organizations (Figure 1.1) using short measurement tools to determine the predictor and outcome. This model was also used to determine the variables to be included into multivariate statistical analyses for identifying the various parameters related to psychological distress and burnout. Therefore, a quantitative study approached is used to explore healthcare professionals' psychological distress and burnout using the measurement tool.

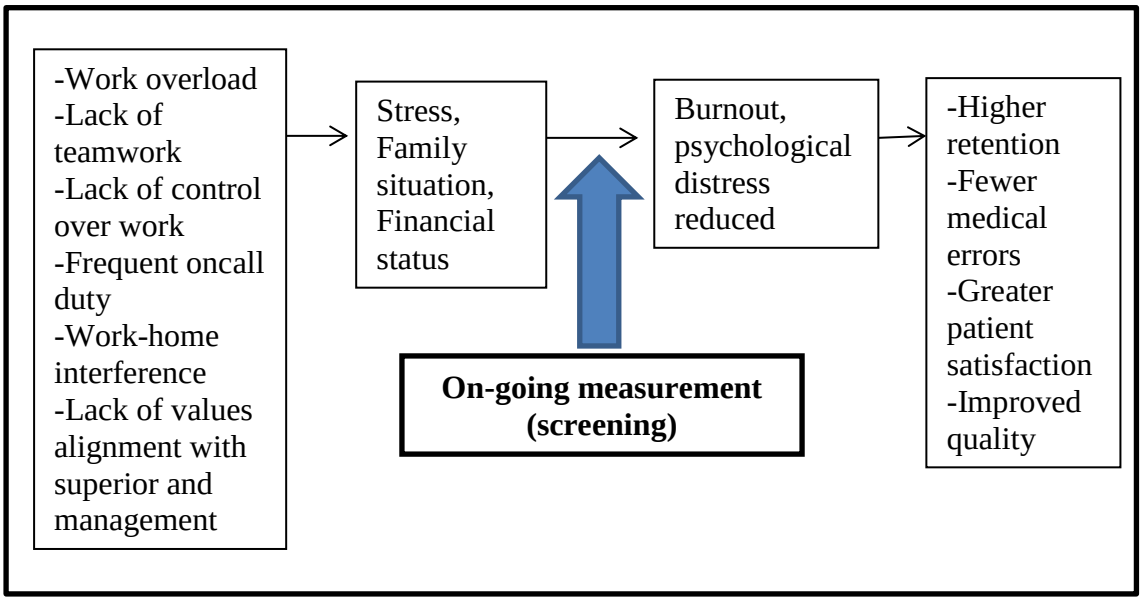

Figure 1.1: Conceptual model of variables related to healthcare professional psychological distress and burnout.

Secondly, the health belief model (HBM) is used to explain the reasons why HCPs are reluctant to use preventative health behaviours for early detection of mental health diseases (Henshaw & Freedman-Doan, 2009). The HBM theory hypothesizes on the person's perception which dictates the respond towards the threat of illness and/or its severity and the barriers to taking actions (Henshaw et al., 2009). Although identifying factors using a standard measurement instrument is helpful in prevention measures (Rickwood et al., 2012), exploring the barriers to help-seeking for psychological distress can provide more in-depth information. Besides that, perceived barriers to seek psychological help by the HCPs could be different from general perception. This information is useful for the policy maker and health professionals' organisation (example medical and pharmacy board council) in developing mental health intervention and professional support programmes which cater specially to HCPs. Thus, a qualitative study using grounded theory analysis is conducted to address this gap.

1.5 Study Objectives

1.5.1 General objectives

The general objective of this study is to determine the relationship between socio-demographic and other related factors with depressive, anxiety and emotional burnout symptoms among doctors and pharmacists in Kuala Lumpur hospital.

1.5.2 Specific objectives:

1. To evaluate the prevalence of depressive, anxiety and emotional burnout symptoms among doctors and pharmacists in Kuala Lumpur hospital.
2. To explore the perceived barriers to seek professional help among doctors and pharmacists pertaining to psychological distress related issues.

1.6 Research Questions

The following research questions will be addressed to achieve the above mentioned objectives.

1) What is the relationship between socio-demographic and other factors with depressive, anxiety and emotional burnout symptoms among doctors and pharmacists?
2) What is the prevalence of depression, anxiety and emotional burnout symptoms among doctors and pharmacists in a tertiary hospital setting?
3) What are the barriers perceived by doctors and pharmacists to seek a mental health professional help to overcome their psychological distress and emotional burnout?

1.7 The significance of the study

Healthcare professionals working in a public hospital setting are susceptible to psychological distress and emotional burnout with the increase in their responsibility for patient care and also to cop e with the additional demand during emergency situations. The problem of emotional burnout is getting more attention and awareness from the hospital employees. The finding of this study will be beneficial for the following groups:

1.7.1 Ministry of Health and Mental Health Professionals

This study will provide data for those who are concerned with the severity seriousness of psychological distress and emotional burnout among HCPs since it relates to an individual's work performance. The results of this study would be useful in developing and implementing preventive measures in the hospital settings and contribute to the future plans of the Ministry to improve the healthcare mental health. The Ministry could utilize the study results to determine the statistical trend of psychological distress and burnout among healthcare professionals in Malaysia. Understanding the complexity of issue and barriers to seeking help will encourage and motivate health professionals to access mental health treatment without prejudice and leading to greater empathy among the health care community. The findings will provide insight for mental health specialists such as psychiatrists and psychologists, and them to collaborate with the government and policy makers to assist health employees in managing psychological distress and burnout through the recommendation of appropriate intervention in the health care system.

1.7.2 The well-being of healthcare professionals

Investigating the contribution of socio-demographic and work-related factors to psychological distress and emotional burnout will likely provide us with information on their state of health. This study will create greater awareness of factors contributing to healthcare professionals' psychological distress and emotional burnout. Furthermore, it will explain the relationship between variables such as age, years of working experience, personal lifestyle and work satisfaction. It is foreseeable that HCPs will benefit significantly from the strategies and interventions implemented by heightening their awareness of the potential mental health risks.

1.7.3 Researchers

The results of the study are beneficial to those who have an interest in healthcare professionals' mental health and well-being. It can be of good use for university students who are majoring in medical, pharmacy and psychology. Besides that, researchers can expand the scope of the study by investigating psychological distress and burnout among nurses, medical assistants, laboratory technicians and other HCPs.

CHAPTER 2

LITERATURE REVIEW

2.1 Definition of mental health, psychological distress and emotional burnout

2.1.1 Mental Health

Good mental health is an essential part of our daily life which includes health and well-being. The well-being of an individual consists of the ability to cope with their daily livelihood stress and still able to contribute back to the community (World Health Organisation, 2011). The effective functioning of the community and the well-being of the individuals are the foundation of mental health. Healthcare professionals are well equipped with resources on how to handle physical, social and psychological stressors at their workplace and in turn they will be able to have high job satisfaction, better patients care and the chances of resigning are low (Chew et al., 2013; Demir et al., 2007). In contrast, risk of stress and emotional burnout increases if the healthcare professionals are unable to have an excellent mental well-being and coping skills to address all the stressors (Maslach, Schaufeli, & Leiter, 2001a) which leads to high staff turnover, deterioration in job dissatisfaction and decrease in professional efficiency (Chew et al., 2013).

2.1.2 Psychological distress

In this thesis, psychological distress is conceptualised as a continuum from no distress to a level of distress from the broad spectrum of conscious and unconscious mental activity that refers to simply as human experience at which a person can no longer function in normal daily activities (Ryrie, 2004). The expression of psychological distress as described in some scientific literature shows that it usually happens with a

combination of symptoms ranging from depression and general anxiety symptoms to personality traits, functional disabilities and behavioural problems (Drapeau et al., 2012). Psychological distress is widely used in population surveys, epidemiology studies, intervention studies, clinical trials and also an indicator for the populations' mental health (Drapeau et al., 2012). Area of focus in assessing psychological distress has been on measures of specific types of distress such as stress, depression, and anxiety. The Beck Depression Inventory [BDI; (Beck, A. et al., 1986)], the Beck Anxiety Inventory [BAI; (Beck, A. T. et al., 1988)], the Patient Health Questionnaire [PHQ;(Spitzer et al., 1999)], and the Depression Anxiety Stress Scale [DASS;(Lovibond & Lovibond, 1995)] all measured depression and/or anxiety of the individual as an indicator of psychological distress. Therefore, the psychological distress term used in this study cover depression and anxiety among the healthcare professionals.

2.1.2 (a) Depression

The most common psychological distress among the general population is depression (World Health Organization, 2015). WHO defined depression as characterized by feelings of guilt or low self-worth, feelings of tiredness, loss of interest or pleasure, disturbed sleep or appetite, sadness and poor concentration (World Health Organisation, 2012). People with depression are normally associated with decrease in energy, feelings of tiredness and fatigue which may have trouble doing normal daily activities and work-related duties at minimum amounts of effort. Depression is relevant to HCP as it associated with impaired ability to concentrate, think and make critical decisions. Short-lived emotional responses and mood fluctuations can be caused by the mild level of depression. Moderate to severe depression could cause

suicidal and severe deterioration of their health especially it is long lasting or recurrent. Physical symptoms such as sleep disturbance and eating disorder were linked to depression (Al-Maddah et al., 2015; Gulliver et al., 2012).

2.1.2 (b) Anxiety

Anxiety is also recognized as another common psychological distress. Anxiety is primarily made up of two parts which are the emotion of fear of the current events and worry about future events (American Psychiatric Association, 2013). Basically, the symptoms of anxiety include typically physical disturbances such as palpitations or sweating and also autonomic nervous system stimuli (Sadock et al., 2005). The sources of HCP anxiety are related to fears of medical liability risk, complaints from patients and personal medical check-up (Christakis, 2003).Severe and prolonged anxiety may affect an individual's efficiency, productivity and quality of life (World Health Organization, 2005). Besides that, anxiety also affects eating habits, ability to concentrate and sleep as a result of physiological arousal (American Psychiatric Association, 2000).

2.1.3 Emotional Burnout

Burnout is defined as a state of emotional and physical depletion which is due to work place stress was first introduced by Freudenberger (1974). Freudenberger conceptualised that those most prone to develop burnout are those overcommitted and dedicated workers who feel a pressure from within to work as they tend to work with excess. The concept and research on burnout were first done on service-related occupations and it focuses on the recipients and service providers relationship in the workplace (Schaufeli, W. B., 2003).

The most prominent framework for burnout was proposed by Maslach et. al (1996), it is the most widely and commonly used by researchers which is the Maslach Burnout Inventory (MBI) and "gold standard" to access burnout (Schaufeli, Wilmar B. et al., 2009). Maslach defined burnout as a syndrome which consists of three (3) dimension namely emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity (Maslach C et al., 1996). According to Maslach, prolonged stress at work will cause a gradual depletion of an employee's psychological resources which leads to burnout (Maslach. C et al., 2001).

Emotional exhaustion (EE) is regarded to be the core dimension of burnout and first component in the development of the three dimensions of burnout (Maslach. C et al., 2001; Schaufeli, W. B., 2003). Very often the experience of exhaustion is being described as burnout by those whose experience it themselves or by explaining how others feel (Maslach. C et al., 2001). EE is the burnout dimension that is correlated the most with health provider's mental health (Papathanasiou, 2015). EE is characterised by someone feeling emotionally depleted and lack of energy without any source of replenishment (El-Ibiary et al., 2017). EE dimension has been used in previous studies as burnout outcome (Al-Dubai, S. A.R. et al., 2013; Tijdink et al., 2014; Welp et al., 2015). Therefore, in this study emotional burnout is measured in terms of emotional exhaustion dimension. Symptoms said to be the result of burnout also have other causes, for example psychological distress such as depression and anxiety. Healthcare professionals that are lacking in adaptive resources and feels that they no longer can contribute to their job are due to the depletion of one's emotional resources and finally

exhaustion occurs. Thus, feeling exhausted and the lack of mental focus results in the inability to complete their tasks.

2.2 The biological aspect of psychological distress and emotional burnout

Taylor (2010) reported the links between stress, subjective experience and physiologic component. The sympathetic nervous and the hypothalamic pituitary-adrenal (HPA) axis is the main activation site for stress axes. The secretion of catecholamine, noradrenaline and adrenaline is through the stimulation of the adrenal medulla by the sympathetic arousal which leads to changes in the blood pressure, constriction of the blood vessels and heart rate. The functioning HPA axis of the hypothalamus releases corticotrophin-releasing factors (CRF) to stimulate the pituitary gland. Adrenocorticotropic hormone (ACTH) is secreted through the stimulation of the pituitary gland. Glucocorticoids such as cortisol are release from the stimulation of the adrenal cortex. In depressed individuals, cortisol secretion is dysregulated (higher than normal level) (Pruessner et al. 2003), burnout individuals experience lower than normal level of cortisol (Pruessner et al. 1999). Women who had difficulties in balancing between work and family duties with children are generally associated with higher catecholamine levels after work compared to those women who do not have children and same goes with men with or without children (Lundberg & Frankenhaeuser, 1999). The frequent and constant activation of stress hormones over an extended period of time may lead to the cellular immune functioning being suppressed. It causes an imbalance in the neurochemicals that cause psychiatric disorder or psychological distress. Generally, there are higher brain and cognitive reserve in the physician population, which could be hypothesized that work stress

would lead to emotional burnout and considerable delay in clinical depression with less severe functional consequences (Tomljenovic et al., 2014).

2.2.1 Difference between stress and emotional burnout

Stress and emotional burnout are often perceived as reciprocal, with emotional burnout it is a prolonged stress condition and not just an acute stress attack (Maslach. C et al., 2001). Stress usually is temporary and it can be an adaptation process, whereas emotional burnout is regarded as an on-going process that unfolds over time that affects one's work and is not immediately reversible after changes in the working condition or tasks as they are exposed to prolonged impairing stress (Nyssen & Hansez, 2008). In the practice of medicine by healthcare professionals, it is normal and unavoidable to be exposed to some degree of stress aspect in the medical field as stress can vary over time (Dyrbye et al., 2006). Positive stress (eustress) in medicine is necessary to mould attitudes and professionalism among healthcare professionals. Adapting to stressors can be effective for short-term but if prolonged stress will cause psychological and physical disturbances (Sadock et al., 2005). Determining the intensity of stress among healthcare professionals may not be valid as the susceptibility to stress varies from person to person (Mohd. Razali Salleh, 2008). Personal coping techniques can help deal with stressors (Robinson, 2003). Therefore, measuring stress is not the focus of this study.

2.3 Prevalence of psychological distress among healthcare professionals

Over the past decades, mental health problems among HCP have increased considerably in many countries. The prevalence of psychological distress among HCP is higher compared to the general population (Gong et al., 2014; Joules, 2014; Mata et

al., 2015). In terms of the types of distress experienced, 12-65% of HCP suffer from depression (Gong et al., 2014; Tomljenovic et al., 2014) and 24-60 % reported having moderate to severe anxiety depending on the measurement tool used. (Ruitenburg et al., 2012; Tan, S. M. et al., 2013)

A systematic review by Mata et al. (2015) had estimated the prevalence of depression was 28.8% among the resident physicians and range from 20.9% to 43.2%. The authors analysed every study that had been published on the topic of medical residents and depression in a peer-reviewed journal between 1963 and 2015. A total of 23 longitudinal studies (n=8113) and 31 cross-sectional studies (n=9447) were drawn. Three (3) studies used clinical interviews and 51 studies used self-report instruments. As the data is from different studies and study designs and involving a different group of trainees, the author is concern that it may result in different quality and criteria. In longitudinal studies, 15.8% was the median for the absolute increase in depressive symptoms. (range, 0.3%-26.3%; relative risk, 4.5) within a year of the start of residency. There was no significant difference between longitudinal and cross-sectional studies.

Thommasen et al. (2001) conducted a cross sectional using a postal survey among (n=131) family physicians in rural British Columbia on their mental health. The survey received a corrected response rate of 92.0% excluding physician on leave and duplication mailings. Using Beck Depression Inventory (BDI) with the cut-off score of ≥ 9, 29% self-reported depression rate was 29% where 31% of the physicians suffered from mild to severe depression and about 13% have been taking antidepressants for the past 5 years.

The prevalence of anxiety and depression in the Middle-East among hospital doctors were higher in the western countries. Al-Zahrani et al. (2014) conducted a study among physician (n=118) in Saudi Arabia with a response rate of 84.0%. By using the Beck Depression Inventory scale using the cut off score of ≥10 found that forty seven out of 100 physicians (47%) have depression. Four physicians experienced a severe form of depression (8.5%), 19 physicians having a moderate form (40.4%) and mild depression was noticed among 24 physicians (51%). There were other similar studies conducted using a higher BDI cut-off score of ≥17. Demir et al. (2007) reported the prevalence rate of depression by 16.0% among medical and surgical physician (n=156) in Turkey. Erdur et al. (2006) sampled 192 doctors in Turkey that are working in emergency units also found that 15.1% had depressive symptomatology. The author further analysed using bivariate comparisons found that with high anxiety scores and not having a hobby were the main contributors to depression among doctors.

In China, most authors utilized a different tool to analyse the prevalence of depressive and anxiety symptoms. Gong et al. (2014) conducted a study among 2641 physicians from 59 public hospitals with a response rate of 96.46% using Zung Self-Rating Depression Scale (SDS) and Zung Self-Rating Anxiety Scale (SAS). The author reported that 28.13% of the physician had depressive symptoms, 25.67% had anxiety and 19.01% had both depressive and anxiety symptoms. On the other hand, Wang et al. (2010) used the Center for Epidemiologic Studies Depression Scale (CES-D) to evaluate hospital physicians' depressive symptoms. The author surveyed on 1488 out of 1890 registered physicians from five (5) hospitals with a response rate of 78.7%. Approximately 65.0% of the doctors were reported with depressive symptoms. From the multivariate logistic analyses, the author found that worse doctor-patient

relationship, role boundary, having a chronic disease, role or job overload and high role insufficiency was positively associated with depressive symptoms. The status of anxiety and depression symptoms were significantly higher than the general Chinese population (Gong et al., 2014; Wang, J. et al., 2010). Physicians who had been reported on previous errors or serious errors were more likely to have higher anxiety as it negatively affects their confidence level in their abilities as physicians and chances of future errors. (Waterman et al., 2007).

In Malaysia, a cross-sectional study conducted by Tan et al. (2013) using the self-rated and validated Malay Depressive Anxiety and Stress Scale (DASS) showed that 60.7% of 89 the Malaysian house officers reported had anxiety symptoms. The anxiety symptoms were associated with work-related pertaining to work-family conflicts, poor relationship with superior and colleagues and work performance may affect their performance and health care delivery.

For the pharmacist, Hashemian et al. (2016) investigated 180 community pharmacists using the Beck Depression Inventory (BDI) to measure the symptoms of depressions and characteristic attitudes with a response rate of 84.7%. According to the findings, 12.8% of the pharmacists were found to have mild depression, 11.7% moderate depression, and 2.8% severe depression. In Serbia, Jocic et al. (2014) reported the prevalence of anxiety was 60.3% among community pharmacists (n=647) with the response rate of 81.6%. The results were obtained by using the Burn Anxiety Inventory. The author found that anxiety, stress and burnout are interconnected and related to the pharmacists' attitudes and beliefs.

2.4 Prevalence of emotional burnout among doctors and pharmacists

In literature, emotional burnout affects an estimated one third of physicians, medical residents, medical professor and pharmacists (Al-Dubai, S. A.R. et al., 2013; Muir & Bortoletto, 2007; Shanafelt et al., 2012; Siu. et al., 2012; Thommasen et al., 2001; Tijdink et al., 2014). National research conducted in the United States by Shanafelt et al. (2012) reported that emotional burnout rates among physicians were found significantly higher among medical professionals compared to the general population, with at least 46.0% of doctors reported at least one (1) subscale of burnout. Doctors in general medicine department were the second highest case reported suffering from burnout as compared to other departments such as anaesthesiology, orthopaedic, surgical and other departments. This study utilizes the Maslach Burnout Inventory to assess the 27,276 doctors with a response rate of 26.7% (n=7288). A group of probability-based samples of 3442 working US adults working in different industries (non-medical) were compared with doctors, the author noted that doctors reported to have burnout symptoms (37.7% vs 27.8%) and they were unsatisfied with their work-life balance (40.2% vs 23.2%) ($P<0.001$ for both).

Imo et al. (2016) conducted a systematic literature review among doctors on the associated factors on the burnout and psychiatric morbidity and prevalence of it. The author analyse studies that were published over a span of 20 years that uses MBI for burnout and GHQ for psychiatric morbidity. A total of 30 studies were identified and analysed and among that 14 of them have burnout scores. The reported emotional exhaustion scores were within the range of 31 to 54.3% and mean score of 2.90 to 31.26 among the doctors involved in the studies. Emotional exhaustion increased when

factors such as increased job stress, workload and age in two studies reviewed by the author.

In a prospective cohort study conducted by Fahrenkopf et al. (2007) among the (n=123) paediatric residents to detect the rates of medication error associated with depression and burnout. The author found that 20% of the respondents were reported to meet the criteria for depression while 74% of the residents meet the criteria of burnout. Although the percentage of residents having burnout is high, it does not have an impact on the medication errors. The author observed that residents who met the criteria for depression had 6.2 times higher chances of committing medication errors (Fahrenkopf et al., 2007).

Al-Dubai et al. (2010) conducted a cross-sectional study evaluating doctors (N=563) from four main hospitals in Yemen on burnout using the Maslach Burnout Inventory (MBI). The results obtained from the study showed that 356 doctors have high emotional exhaustion (63.2%) with the average mean score of 31.0 (SD: 13.0). The author concluded the prevalence of high emotional exhaustions was higher than those reported internationally. Besides, the author also conducted a cross-sectional study in Malaysia by evaluating the emotional burnout and perceived job stress among 191 medical residents working in a government hospital in Klang (Al-Dubai, S. A.R. et al., 2013). In this study, the author measured emotional burnout using the 9 items of emotional exhaustion scale with the cut-off point of ≥27 to evaluate high degree emotional burnout. Approximately 37% of the medical residents were experiencing high emotional burnout. On the other hand, Zuraida et al. (2015) used the abbreviated version of the Maslach Burnout Inventory (aMBI) to explore the prevalence of burnout

among 117 junior doctors. The prevalence of burnout was found at 26.5%, where emotional exhaustion was positively correlated with depression and anxiety. The aMBI consist of nine (9) questions which comprised of three (3) from each dimension of emotional exhaustion, depersonalisation and personal accomplishment. However, this shortened instrument has not been sufficiently validated in diverse among healthcare professionals and health organizational contexts.

Ogundipe et al. (2014) reported 45.5% of doctors (n=204) undergoing residency training in a hospital Nigeria experiencing emotional burnout. The average mean age among the doctors was 33.44 (±4.5) which are older compared to the average age range for residency doctors. More than half of the respondents were male (58.3%). According to the author, respondents that reported emotional distress using GHQ score were seven (7) times higher chance of reporting emotional burnout.

Miur et al. (2007) reported 5% Australian hospital pharmacists had a high level of burnout. They were being assessed using the MBI and recorded high level of burnout in all three subscales based on personal accomplishment (49%) and emotional exhaustion (39%), while the majority of pharmacists felt low levels of burnout based on depersonalisation (60%). Based on the study 266 hospitals pharmacists responded to the survey with a response rate of 50.4% out of 528 hospital pharmacists. The author concluded that a young pharmacist working in the hospital appears to be the most exposed to the possibility of having burnout and evidence of severe burnout was identified.