THE PREVALENCE OF DEPRESSION AND ITS RISK FACTORS AMONG MALAY ELDERLY IN RESIDENTIAL CARE

R. Normala, C. Azlini, M.J. Nurul Jannah and Z.M. Lukman and Asyikin S.S.

Faculty of Applied Social Sciences, Sultan Zainal Abidin University, Malaysia

ABSTRACT

This study is part of larger research project under Research Acculturation Grant Scheme (RAGS/2012/UNISZA/SS03/3) funded by the Sultan Zainal Abidin University. The aim of this study is to examine the prevalence of depression and to identify risk factors related to depression among Malay elderly in residential care. Changes in social structure and economic status have shifted the direction of care for elderly people, as the value of filial piety has been gradually decreased in Malay culture. The researchers hypothesized that the level of depression among institutionalized Malay elderly people is high. Altogether, 98 of Malay elderly (men 41.8%, women 58.2%) participated in this study from eight residential cares in Peninsular Malaysia. This study was using purposive sampling technique, where the respondents were recruited based on the criteria needed purposely to achieve the research aim: Malay, aged 60 years and above, able to communicate, and with no severe mental and/or physical health problem. The Geriatric Depression Scale (GDS-30) developed by Yesavage et al. (1983) was used to assess depression among the elderly. Overall, 70.4% of the respondents had been diagnosed with depression, where 39.8% had mild depression and 30.6% were suffered from major depression. Five factors from the 13 risk factors of depression hypothesized have been identified as the high risk factors of depression i.e. sadness, helplessness, isolation, loneliness and loss of interest in activities (76.8-86.9%).

Keywords: Depression, Elderly, Residential Care, Malay, Geriatric Depression Scale (GDS)

1. INTRODUCTION

Depression is not a natural part of aging, but it is a natural partner (Greenberg, 2007; Majdi et al., 2011). Its prevalence among elderly people is common, but it often has been under diagnosed and frequently has been inadequately treated (Kim et al., 2009; Hjaltadottir & Gustafsdottir, 2007; Farzianpour et al., 2012). Globally, the prevalence of depression among elderly is 10-15.0% due to such issues as lack of transportation, loss of employment, loss of friends and acquaintances, loss of loved ones, isolation, bereavement and the existence of a variety of health problems (Krishnaswamy, 1997; Onya & Stanley, 2013; Kessler et al., 2005). When these symptoms become severe and influencing social, work or family life, depression

becomes an illness (Jampawai et al., 2011; Bergland & Kikrevold, 2006Alavi et al., 2011; Nazemi et al., 2013).

Numerous studies had examined depression in the general community, but studies of depression in the elderly particularly those who living in institution is generally limited (Majdi et al., 2011; Farzianpour et al., 2012; Onya & Stanley, 2013). In the United States, 20.3% of the elderly dwelling in nursing homes or institutionalized type of care were depressed (Jones et al. (2003). Kim et al. (2009) found in their study that 66.7% of institutionalized Korean elderly and 41.7% of institutionalized Japanese elderly were experienced depression. In Australia, 34.7% of the elderly living in residential care suffered from depression and they were more likely to have anxiety disorder (Haralambous et al., 2009).

In Malaysia, a study by Sherina et al. (2006) found that 54.0% of the elderly institutionalized in a tertiary care in Kuala Lumpur were suffered from depression. Al-Jawad et al. (2007) reported that the prevalence of depression among 167 people over 60 years of age living in a state run residential home in Malaysia is 67.0% (major depression 13.2%, minor depression 53.8%), with more depression in males. In another study by Suzana & Charn (2009), 73.0% of 100 Chinese elderly living in two private nursing homes in Butterworth, Penang had depression (46.0% mild to moderate depression, 27.0% major depression). Furthermore, it was three to four times higher than the rate observed by Jongenelis et al. (2004) among community-dwelling elderly.

The residential care providers need to recognize the risk factors associated with depression in institutionalized elderly so they can be treated or prevented (Kim et al., 2009; Farzianpour et al., 2012). If depression has not been prevented, it may cause the elderly fails to successfully thrive in adjusting and adapting their life in the institution, resulting in a low level of life satisfaction and quality of life (Hjaltadottir & Gustafsdottir, 2007; Bergland & Kikrevold, 2006). If it has not been treated, depression may impair cognitive, physical, and psychological to be worsen, delayed recovery from medical illness, decreased social functioning, increased health care requirement, and suicide (Jongenelis et al., 2004; Greenberg, 2007; Dahlan et al., 2010).

2. MATERIAL AND METHODS

The aim of this study is to examine the prevalence of depression and to identify risk factors related to depression among Malay elderly in institutional care. Like many Asian cultures which have strong value of filial piety, the Malay family traditionally highly respect for the elderly people and has the major role in looking after them (Dahlan et al., 2010; Al-Jawad et al., 2007). However, changes in social structure and economic status have shifted the direction of care for elderly people in Malay culture (Dahlan et al., 2010). When the elderly people had been institutionalized, the researchers hypothesized that the level of depression among them is high. Fifteen public and private residential cares for elderly in Peninsular Malaysia had been approached to participate in this study. There were only eight residential cares agreed and given their permission to establish contact with overall 122 residents. However, only 98 of them (41 men and 57 women) were able to participate.

This study was using purposive sampling technique, where the respondents were recruited based on the criteria needed purposely to achieve the research aim: Malay, aged 60 years and above, able to communicate, and with no severe mental and/or physical health problem. Informed consent from the respondents was obtained and they were free to withdraw from the study at any stage.

The study has been divided into two parts. The first part is depression assessment of the elderly. Depression among the elderly was assessed by using the Geriatric Depression Scale (GDS-30) developed by Yesavage et al. (1983). It is a useful screening tool and has been tested and used extensively to assess depression among elderly people including in Malaysia (Greenberg, 2007; Sherina et al. 2006). The GDS-30 has been recommended by the Royal College of Physicians, British Geriatric Society and the Royal College of General Practitioners as a suitable scale to screen for depression (Onya & Stanley, 2013). The validity and reliability of the scale have been supported through both clinical practice and research (Wancata et al., 2006; Greenberg, 2007). The GDS-30 is a self-rating scale. Respondents are required to answer "yes" or "no" in reference of how they felt over the past week. Face-to-face interviews were conducted with each respondent in Malay language. It took about 10 to 20 minutes to complete. Scores of 0-9 are considered normal; 10-19 indicate mild depression; and 20-30 indicate severe depression (Yesavage et al., 1983). Those respondents had been found experiencing depression,

their name were submitted to the residential care provider as requested. The information released neither to undermine nor to harmful the elderly. The institution needs it to refer the depressed elderly to mental health professional for further evaluation and treatment. In this case, the elderly were asked for permission and explained the purpose of submission in the beginning of interview. Here, research ethical, moral and value was never being side-stepped while conducting this study.

The second part of the study is identifying depression risk factors among the elderly who were diagnosed with mild and major depression. After the assessment session, those respondents with mild and major depression were asked their permission to participate in the second interview. They were respectfully and kindly encouraged to describe in more details about factors related to their depression over the past week. The interview was used a list of elderly 13 depression risk factors as a guideline (i.e. anxiety, fatigue, sadness, insomnia, loss of concentration, unsatisfied life, loneliness, hopelessness, helplessness, worthlessness, isolation, loss of memory, and loss of interest in activities). The list has been developed based on the information from previous studies (i.e. Kessler et al., 2005; Suzana & Charn, 2009; Kim et al., 2009; Bergland & Kikrevold, 2006; Ostbye et al., 2005; Krishnaswamy, 1997; Hjaltadottir & Gustafsdottir, 2007; Dahlan et al., 2010; Onya & Stanley, 2013; Greenberg, 2007; Sherina et al. 2006; Suzana et al., 2013). Each respondent had been interviewed in average 20 to 30 minutes. Based on observation on the residential cares, elderly living environment, routines and activities, rules and regulations of the institutions, and the Malay culture and value in terms of respecting and taking care of elderly, the 13 depression risk factors can be categorized into three groups as shown in Table 1. There are three hypotheses have been developed from the circumstances and the study makes an attempt to find out.

Table 1: Research Hypotheses Based on Suggested Risk Factors of Depression

	Depression Related Factors	**Hypotheses**
1	Sadness	**High Risk Factors** H_1: 71-100% of the depressed Malay elderly in this study is expected
2	Isolation	
3	Loneliness	

4	Insomnia	experiencing these four risk factors of depression.
5	Anxiety	**Medium Risk Factors** H_2: 31-70% of the depressed Malay elderly in this study is expected experiencing these five risk factors of depression.
6	Unsatisfied life	
7	Hopelessness	
8	Helplessness	
9	Worthlessness	
10	Loss of memory	**Low Risk Factors** H_3: 0-30% of the depressed Malay elderly in this study is expected experiencing these four risk factors of depression.
11	Loss of concentration	
12	Loss of interest in activities	
13	Fatigue	

3. RESULTS

A total of 98 Malay elderly (men 41.8%, women 58.2%) involved in the study as respondents with 45.9% of them aged 60-70 years, 31.6% aged 71-80 years and 22.4% aged 81 years and above (Table 2). In overall, 70.4% of the respondents had been diagnosed with depression, where 39.8% had mild depression and 30.6% were suffered from major depression. Only 29.6% were considered normal.

Table 2: Gender, Age and Prevalence of Depression among Malay Elderly in Residential Care

Results	**Frequency**	**Percentage (N=98)**
Gender		
Male	41	41.8
Female	57	58.2
Age		
60-70	45	45.9
71-80	31	31.6
81 and above	22	22.5

Prevalence of Depression		
Normal (GDS = 0-9)	29	29.6
Mild (GDS = 10-19)	39	39.8
Major (GDS = 20-30)	30	30.6

For the 70.4% respondents who found suffered from mild and major depression, their risk factors of depression had been examined. Table 3 shows that one depressed respondent has experienced multiple related or risk factors of depression at one time. Five factors have been identified as the high risk factors of depression i.e. sadness, helplessness, isolation, loneliness and loss of interest in activities (76.8-86.9%). Eight factors are categorized as the medium risk factors of depression i.e. worthlessness, loss of memory, loss of concentration, fatigue, insomnia, unsatisfied life, anxiety, hopelessness (53.6-68.1%). However, there is no single factor from the 13 risk factors of depression hypothesized considers as low risk. The result is not in line or contradicted with the H_3. Sadness, isolation and loneliness are the three high risk factors of depression found corresponding and consistent with the H_1. Interestingly, helplessness and loss of interest in activities are considered as the high risk factors of depression among elderly in the residential care instead of insomnia. The study also found that loss of memory, loss of concentration and fatigue cannot be considered as the low risk factors of depression, since the majority of the depressed elderly had experienced these factors while living in the residential care.

Table 3: Risk Factors of Depression among Malay Elderly in Residential Care

Hypotheses	**Research Findings (N=69)**
H_1: High Risk Factors (71-100%)	**High Risk Factors**
Sadness	Sadness (86.9%)
Isolation	Helplessness (85.5%)
Loneliness	Isolation (84.1%)
	Loneliness (82.6%)

Insomnia	Loss of interest in activities (76.8%)
H_2: Medium Risk Factors (31-70%) Anxiety Unsatisfied life Hopelessness Helplessness Worthlessness	**Medium Risk Factors** Worthlessness (68.1%) Loss of memory (68.1%) Loss of concentration (65.2%) Fatigue (65.2%) Insomnia (60.9%) Unsatisfied life (59.4%) Anxiety (53.6%) Hopelessness (53.6%)
H_3: Low Risk Factors (0-30%) Loss of memory Loss of concentration Loss of interest in activities Fatigue	-

4. DISCUSSION

Elderly people are given higher status in Malay culture. They are respected and cared because of their age as well as their lives experiences. Respect for elderly is constructed the social fabric of Malay (Alavi et al., 2011). They are regarded as guru, a knowledgeable person, a problem solver and a source of information for lives for younger generation. They were seeking by younger generation for consultation, opinion, advice or view in many aspects of lives including the decision to get married or the choice for marriage partner suitability. Their blessing is so important. In Malay culture it is wrong for young people to talk back on what the aged says or asks for. Younger generation has always been told that "If you want to be respected and taken good care during your old day, you must first respect and take care of your elders especially parents". The cycle of filial piety and altruism in caring, respecting and looking after for elderly

people has deep roots in Malay culture and continuously practice generation by generation (Lukman et al., 2011).

The study proposes that many of them in the residential care experienced more than one risk factors of depression at one time. Sadness, helplessness, isolation, loneliness and loss of interest in activities have been recognized as five high risk factors of depression among the elderly. There are several reasons can be drawn why the depressed elderly experienced more than one risk factors of depression while living in the residential care:

i. Lack of routine activities in the institution.
ii. Family members do not regularly visit them.
iii. Living in overcrowding room or institution.
iv. Mixing them with other bed-ridden elderly or those who suffering from chronic illness in one room.
v. Unfriendly and unsupportive staffs.

Relatively, the study findings are consistent and in line with other studies in Malaysia and abroad. The prevalence of depression in the study (70.4%) has been found higher than studies by Sherina et al. (54.0%), Al-Jawad et al. (67.0%), Visvanathan et al. (65.0%), Kim et al. (41.7% for Japanese and 66.7% for Korean) and Haralambous et al. (34.7%). Though, it is lower than the study conducted by Suzana & Charn (2009) that is 73.0%. In term of mild depression cases, the study has lower cases (39.8%) than reported by Al-Jawad et al. (53.8%) and Suzana & Charn (46.0%). However, the prevalence of major depression in the study (30.6%) is higher than reported by Al-Jawad et al. (13.2%) and Suzana & Charn (27.0%). The residential care provider is advised to give a special attention and more efforts in caring and looking after the elderly particularly those who afflicted with major depression.

5. CONCLUSION

In conclusion, the study suggests that the prevalence of depression among the Malay elderly who lived in the residential care is high. Though, it is still in line with findings reported by other

researchers or studies locally and globally. The result also indicates that majority of depressed elderly had experienced more than one risk factors of depression. Though, five factors from the 13 risk factors of depression i.e. sadness, helplessness, isolation, loneliness and loss of interest in activities have been identified as high risk factors among the elderly in residential care. The findings are not really consistent with the hypotheses. Therefore, several series of studies will be conducted in the future to improve the instrument (the 13 risk factors of depression), to examine in detail the suitability of risk factors used in the study and to identify the reasonable cut-off point of risk level of factors that lead to the prevalence of depression. Some other factors such as suicidal ideation and loss of appetite may also need to be considered as risk factors of depression among elderly in residential care.

Residential care providers should develop a proper program on screening depression among the elderly in their institution. The risk factors of depression need to be identified, assessed and treated in order to facilitate depression among the elderly. In general, the prevalence of depression in residential care has to be alleviated in order to increase the level of mental health status of the elderly and to ensure them to have healthy and happy life while living the institution.

6. REFERENCES

Al-Jawad, M., A.K. Rashid and K.A. Narayan, 2007. *Prevalence of undetected cognitive impairment and depression in residents of an elderly care home*. Medical Journal of Malaysia.

Alavi, K., M.S. Rahim, M. S. Mohamad, M. Omar, N. Subhi, S.T. Chong, N. Sarnon, I. Fauziah and Z.M. Lukman, 2011. *Exploring the meaning of ageing and quality of life for the sub-urban older people. Pertanika Journal of Social Sciences & Humanities.*

Bergland, A. and M. Kirkevold, 2006. *Thriving in nursing homes in Norway: Contributing aspects described by resident.* International Journal of Nursing Studies.

Cacioppo, J.T., M.E. Hughes, L.J., Waite, L.C., Hawkley and R.A. Thisted, 2006. *Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. Psychology & Aging*.

Choi, N.G., S. Ransom and R.J. Wyllie, 2008. *Depression in older nursing home residents: The influence of nursing home environmental stressors, coping, and acceptance of group and individual therapy*. Aging & Mental Health.

Dahlan, A., M. Nicol and D. Maciver, 2010. *Elements of life satisfaction amongst elderly people living in institutions in Malaysia: A mixed methodology approach.* Hong Kong Journal of Occupational Therapy.

Farzianpour, F., S. Hosseini, M. Rostami, S.B. Pordanjani and S.M. Hosseini, 2012. *Quality of life of the elderly residents*. American Journal of Applied Sciences.

Greenberg, S.A., 2007. *How to try this - The geriatric depression scale: Short form*. American Journal of Nursing.

Jampawai, S., S. Pothinam and M. Kanato, 2011. *Model development for health promotion in the elderly participating in communities*. American Journal of Applied Sciences.

Haralambous, B., X. Lin, B. Dow, C. Jones, J. Tinney and C. Bryant, 2009. *Depression in older age: A scoping study*. Melbourne: National Ageing Research Institute. www.nari.unimelb.edu.au.

Hjaltadottir, I. and M. Gustafsdottir, 2007. *Quality of life in nursing homes: Perception of physically frail elderly residents*. Scandinavian Journal of Caring Science.

Jones, R.N., E.R. Marcantonio and T. Rabinowitz, 2003. *Prevalence and correlated of recognized depression in U.S. Nursing Homes*. Journal of the American Geriatrics Society.

Jongenelis, K., A.M. Pot, A.M.H. Eisses, A.T.F. Beekman, H. Kluiter and M.W. Ribbe, 2004. *Prevalence and risk indicators of depression in elderly nursing home patients: The AGED study.* Journal of Affective Disorders.

Kim, O., Y-S. Byeon, J-H. Kim, E. Endo, M. Akahoshi and H. Ogasawara, 2009. *Loneliness, depression and health status of the institutionalized elderly in Korea and Japan*. Asian Nursing Research.

Krishnaswamy, S., 1997. *Psychiatric problems among the elderly in Malaysia*. Medical Journal of Malaysia.

Lukman, Z.M., R. Nasir, I Fauziah, N. Sarnon, S.T. Chong, M. Mostafa Kamal, M.S. Mohamad, A.Z. Zainah, N. Subhi, O. Fatimah, S. Nen, S.M. Hoesni, R. Khairudin and H.M. Rusyada, 2011. *The relationship between dysfunctional family and the involvement of children in prostitution*. World Applied Sciences Journal.

Majdi, M.R., M. Ghayour-Mobarhan, M. Salek, M.T. Shakeri and N. Mokhber, 2011. *Prevalence of depression in an elderly population: A population-based study in Iran*. Iranian Journal of Psychiatry and Behavioral Sciences, 5(1): 17-21. http://www.mums.ac.ir/shares/crc/crc/word-pdf/akhbar/akhbar90-1.pdf.

Nazemi, L., I. Skoog, I. Karlsson, S. Hosseini, M. Hosseini, M.J. Hosseinzadeh, M.R. Mohammadi, Z. Pouransari, M. Chamari and M. Baikpour, 2013. *Depression, prevalence and some risk factors in elderly nursing homes in Tehran, Iran*. Iranian Journal of Public Health.

Onya, O.N. and P.C. Stanley, 2013. *Prevalence, presentation and co-morbidity pattern associated with depression among geriatric patients attending the GOPD of UPTH*. International Research Journal of Medical Sciences.

Ostbye, T., B. Kristjansson, G. Hill, S.C. Newman, R.N. Brouwer and I. McDowell, 2005. *Prevalence and predictors of depression in elderly Canadians: The Canadian Study of Health and Aging*. Chronic Disseases in Canada.

Sherina, M.S., L. Rampal, M.A. Hanim and P.L. Thong, 2006. *The prevalence of depression among elderly warded in a tertiary care center in Wilayah Persekutuan.* Medical Journal of Malaysia.

Suzana, S. and Y.B. Charn, 2009. *Factors influencing appetite and depression among institutionalised Chinese elderly in Penang*. Jurnal Sains Kesihatan Malaysia, 7(2): 73-88. http://ejournal.ukm.my/jskm/article/view/1558/1351.

Suzana, S., P.C. Boon, P.P. Chan and C.D. Normah, 2013. *Malnutrition risk and its association with appetite, functional and psychosocial status among elderly Malays in an agricultural settlement.* Malaysian Journal of Nutrition, 19(1): 65-75. http://nutriweb.org.my/publications/mjn0019_1/6%20Suzana_Page%2065-76pdf.pdf.

Visvanathan, R., A. Zaiton, M.S. Sherina and Y.A. Muhammad, 2005. *The nutritional status of 1081 elderly people residing in publicly funded shelter homes in Peninsular Malaysia*. European Journal of Clinical Nutrition.

Wancata, J., R. Alexandrowicz, B. Marquart, M. Weiss and F. Freidrich, 2006. *The criterion validity of the geriatric depression scale: A systematic review*. Acta Psychiatrica Scandinavica.

Yesavage, J.A., T.L. Brink, T.L. Rose, O. Lum, V. Huang, M.B. Adey and V.O. Leirer, 1983. *Development and validation of a geriatric depression screening scale: A preliminary report*. Journal of Psychiatric Research.