

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

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ABSTRACT

The motivation for the study is to improve the quality of life for elderly in residential care particularly the mental health aspect. Hence, 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 gradually declined among the modern Malays. 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. They were chosen according to the following criteria: Malay ethnic, aged 60 years and above, able to communicate and with no severe mental and/or physical health problem. The Geriatric Depression Scale (GDS-30) was used to assess depression among the elderly. Overall, the study found that 70.4% of the Malay elderly in the residential care were diagnosed with depression, where 39.8% had mild depression and 30.6% were suffered from major depression. Five factors were identified as the high risk factors of depression among the Malay elderly i.e., sadness, helplessness, isolation, loneliness and loss of interest in activities (76.8-86.9%). As a conclusion, the prevalence of depression among the Malay elderly in the present study is high. Besides arranging a regular program on screening for depression, it is also important for the residential care providers to create and organize special activities for the elderly in order to reduce them from the risk factors of depression. They should be ensured to have a healthier and happier life at the institutions, if the residential care providers would like to increase the elderly mental health status.

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 (Farzianpour *et al.*, 2014; 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; Eshagi *et al.*, 2006; 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; Blazer and Hybels, 2005; Onya and Stanley, 2013). According to Onya and Stanley (2013), weight loss is one of the most common causes of depression in the elderly. Other common symptoms of depression include memory loss, inability to feel pleasure, malnutrition, loss of motivation, fatigue, agitation, insomnia, feeling of hopelessness, helplessness and worthlessness, decreased appetite and libido as well as emotional changes such as feelings of sadness, loneliness, anxiety and irritability (Blazer and Hybels, 2005;

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Suzana *et al.*, 2013; Majdi *et al.*, 2011; Onya and Stanley, 2013). When these symptoms become severe and influencing social, work or family life, depression becomes an illness (Jampawai *et al.*, 2011; Pereira *et al.*, 2012; Alavi *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 are living in institution, are generally limited (Majdi *et al.*, 2011; Farzianpour *et al.*, 2012; Pereira *et al.*, 2012; Onya and Stanley, 2013). It has been reported that the level of depression among the elderly in sheltered accommodation or residential care is higher than those of community residing elderly (Kim *et al.*, 2009; Majdi *et al.*, 2011; Jampawai *et al.*, 2011). In Canada, the prevalence of major and minor depression among elderly were 2.6 and 4% and were higher for females, specifically those in institutions (Ostbye *et al.*, 2005). In the United States, 20.3% of the elderly dwelling in nursing homes or institutionalized type of care were depressed (Smith, 2010). Kim *et al.* (2009) found in their study that 66.7% of institutionalized Korean elderly and 41.7% of institutionalized Japanese elderly 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 Tehran, Nazemi *et al.* (2013) found that 90.2% of 244 elderly in nursing homes interviewed had some degree of depression; 50.0% mild, 29.5% moderate and 10.7% severe.

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 suffering 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 was 67.0% (major depression 13.2%, minor depression 53.8%), with more depression in males. In another study by Suzana and 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). Women were indicated having more experience of depression (47.1% mild to moderate depression and 31.4% major depression) than men. Suzana and Charn (2009) also noted that the prevalence of depression among elderly in their study was higher than those reported by Visvanathan *et al.* (2005) who found that 65.0% of

elderly people in institutions in Peninsular Malaysia were depressed. Furthermore, it was three to four times higher than the rate observed by Farzianpour *et al.* (2012) 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 is not prevented, the elderly may fail to adjust and adapt well to their life in the institution, resulting in a low level of life satisfaction and quality (Eshagi *et al.*, 2006; Blazer and Hybels, 2005; De Souza *et al.*, 2008; Farzianpour *et al.*, 2012; Jampawai *et al.*, 2011). Furthermore, if depression is not treated effectively, it may impair cognitive, physical and psychological to be worsen, delayed recovery from medical illness, decreased social functioning, increased health care requirement and suicide (Farzianpour *et al.* 2012; De Souza *et al.*, 2008; Farzianpour *et al.*, 2014; Dahlan *et al.*, 2010).

2. MATERIALS 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 respect highly their elderly 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. However, only eight of these residential cares had agreed and given their permission to establish contact with overall 122 residents. Of this number, only 98 (41 men and 57 women) were able to participate. This study utilized 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 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 (Sherina *et al.*, 2006). The GDS-30 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 and Stanley, 2013). The validity and reliability of the scale have been supported through both clinical practice and research (Wancata *et al.*, 2006). 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 min to complete. Scores of 0-9 are considered normal; 10-19 indicate mild depression; and 20-30 indicate severe depression (Yesavage *et al.*, 1983). Name of respondents that had been found experiencing depression were submitted to the residential care provider as requested. The information released is neither intended to undermine nor to harm the elderly. The institution needs to refer the depressed elderly to mental health professional for further evaluation and treatment. In this case, permissions from the elderly were sought and the purpose of the submission was

explained in the beginning of interview. Here, research ethical, moral and value was never side-stepped.

The second part of the study is identifying depression risk factors among the elderly who were diagnosed with mild and major depression. After the initial assessment session, respondents with mild and major depression were asked for permission to participate in the second interview. They were respectfully and kindly encouraged to describe in details about factors related to their depression over the past week. The interviewer used the list of 13 depression risk factors for elderly 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 developed based on previous studies (Suzana and Charn, 2009; Kim *et al.*, 2009; Pereira *et al.*, 2012; Ostbye *et al.*, 2005; Krishnaswamy, 1997; Blazer and Hybels, 2005; Eshagi *et al.*, 2006; Dahlan *et al.*, 2010; Onya and Stanley, 2013; Sherina *et al.*, 2006; Suzana *et al.*, 2013). Each respondent was interviewed in average 20 to 30 min. Based on observation of the residential cares, elderly living environment, routines and activities, rules and regulations of the institutions, as well as the Malay culture and value in terms of respecting and taking care of the elderly, the 13 depression risk factors can be categorized into three groups as shown in **Table 1**. There are three hypotheses that have been developed from the circumstances and these are what the study makes an attempt to find out.

Table 1. Research hypotheses based on suggested risk factors of depression

Depression related factors	Hypotheses
Sadness	High risk factors H ₁ : 71-100% of the depressed Malay elderly in this study is expected to be experiencing these four risk factors of depression.
Isolation	
Loneliness	
Insomnia	
Anxiety	Medium risk factors H ₂ : 31-70% of the depressed Malay elderly in this study is expected to be experiencing these five risk factors of depression.
Unsatisfied life	
Hopelessness	
Helplessness	
Worthlessness	
Loss of memory	Low risk factors H ₃ : 0-30% of the depressed Malay elderly in this study is expected to be experiencing these four risk factors of depression.
Loss of concentration	
Loss of interest in activities	
Fatigue	

3. RESULTS

A total of 98 Malay elderly (men 41.8%, women 58.2%) were 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 sufferers of major depression. Only 29.6% were considered normal.

For the 70.4% respondents who were found suffering from mild and major depression, their risk factors of depression had been examined. **Table 3** shows that one depressed respondent 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 only not in line, but in fact, contradicted with the H₃. Sadness, isolation and loneliness are the three high risk factors of depression found corresponding and consistent with the H₁. Interestingly, helplessness and loss of interest in activities are considered the high risk factors of depression among elderly in the residential care instead of insomnia.

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

Table 3. Risk factors of depression among malay elderly in residential care

Hypotheses	Research findings (N = 69)
H₁: High risk factors (71-100%)	
Sadness	High risk factors Sadness (86.9%)
Isolation	Helplessness (85.5%)
Loneliness	Isolation (84.1%)
Insomnia	Loneliness (82.6%)
	Loss of interest in activities (76.8%)
H₂: Medium risk factors (31-70%)	
Anxiety	Medium risk factors Worthlessness (68.1%)
Unsatisfied life	Loss of memory (68.1%)
Hopelessness	Loss of concentration (65.2%)
Helplessness	Fatigue (65.2%)
Worthlessness	Insomnia (60.9%)
	Unsatisfied life (59.4%)
	Anxiety (53.6%)
	Hopelessness (53.6%)
H₃: Low risk factors (0-30%)	
Loss of memory	-
Loss of concentration	-
Loss of interest in activities	-
Fatigue	-

The study also found that loss of memory, loss of concentration and fatigue cannot be considered as low risk factors of depression, since majority of the depressed elderly had experienced these factors while living in the residential care.

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 the Malays (Alavi *et al.*, 2011). They are regarded as a guru, a knowledgeable person, a problem solver and a source of reference on lives and livelihood for the younger generation. They are sought by younger generation for consultation, opinion, advice or view in many aspects of life including matrimonial decisions or even on the choice of marriage partners. Their blessings are 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 wish for respect and good care during your old days, you must first respect and take care of the elders especially your own parents". The cycle of filial piety and altruism in caring, respecting and looking after elderly people has deep roots in Malay culture and are continuously being practiced generation by generation (Lukman *et al.*, 2011). However, the value is now lessening. Based on the Public Welfare Department's statistics in 2012, it is estimated that presently more than 2,000 Malay elderly are living in public and private residential cares in Malaysia. When there are aged people living in the institution, younger generations are morally accused as being irresponsible and frowned upon for neglecting and disrespecting their elderly. Living in residential care has changed the elderly social status, putting them in turmoil and causing emotional distress, as one of them revealed:

"I have five children but no one cares about me. None came to visit me or wants to look after me. All claimed to be busy working ... I am their father. Why do they dump me in this home (residential care)? Have they forgotten that I was the one who fed them and worked hard for the money for their education? ... When they were kids, I was the one they called daddy. Now that they are grown up and become successful, they forget about me ... This is my fate. If I die tomorrow and they don't even want to see me for

the last time, I have no regret or sadness. After all, for what they did to me, they do not deserve to be my children".

The statement above shows the elderly emotional state along with factors that lead them to depression. The study proposes that many of the occupants in the residential care experienced more than one risk factor 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 that can be drawn on why the depressed elderly experienced more than one risk factor of depression while living in the residential care:

- Lack of routine activities in the institution
- Family members do not visit them regularly
- Living in overcrowding room or institution
- Sharing room with other bed-ridden elderly or those who are suffering from chronic illness
- 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.* (2006) (54.0%), Al-Jawad *et al.* (2007) (67.0%), Visvanathan *et al.* (2005) (65.0%), Kim *et al.* (2009) (41.7% for Japanese and 66.7% for Korean) and Haralambous *et al.* (2009) (34.7%). Though, it is lower than the study conducted by Suzana and 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.* (2007) (53.8%) and Suzana and Charn (2009) (46.0%). However, the prevalence of major depression in the study (30.6%) is higher than reported by Al-Jawad *et al.* (2007) (13.2%) and Suzana and Charn (2009) (27.0%). The residential care provider is advised to give special attentions and more efforts in caring and looking after the elderly particularly those who are afflicted with major depression.

5. CONCLUSION

In conclusion, the study suggests that the prevalence of depression among the Malay elderly in the residential care is high. This is in line with findings reported by other researches or studies locally and globally. The result also indicates that majority of depressed elderly had experienced more than one risk factor of depression

i.e., sadness, helplessness, isolation, loneliness and loss of interest in activities.

Residential care providers should develop a proper program on screening for depression among the elderly in their institutions. 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 need to be alleviated and addressed in order to increase the level of mental health of the elderly and to ensure that they have a healthier and happier life at the institutions.

The obvious limitation of the current study is that the results cannot be generalized for all Malay elderly in residential care in Malaysia. There were only 98 respondents from eight institutions participated in the study due to inadequate cooperation from residential care providers. For the institutions agreed to participate in the study, a few number of residents were unable to be recruited as respondents because of severe mental and/or physical illness.

Despite the high prevalence of depression among elderly people documented in literatures, the study of depression among them in residential care still not fully investigated. Considering the lack of research in this area, several series of studies will be conducted in the future to improve the generalizability of the study. The number of respondents will be increased to participate. 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.

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7. REFERENCES

- Alavi, K., M.S. Rahim, M.S. Mohamad, M. Omar and N. Subhi *et al.*, 2011. Exploring the meaning of ageing and quality of life for the sub-urban older people. *Pertanika J. Social Sci. Humanities*, 19: 41-48.
- 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. *Med. J. Malaysia*, 62: 375-379. PMID: 18705469
- Blazer, D.G. and C.F. Hybels, 2005. Origins of depression in later life. *Psychol. Med.*, 35: 1-12. DOI: 10.1017/S0033291705004411
- 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 J. Occupat. Therapy*, 20: 71-79. DOI: 10.1016/S1569-1861(11)70006-7
- De Souza, P.M.L., W.J. Filho, J.M. Santarém, P.C.C. Da Silva and A.R. Da Silva *et al.*, 2008. Progressive resistance training on elderly HIV⁺ patients: Does it work? *J. Am. Infect. Dis.*, 4: 215-219. DOI: 10.3844/ajidsp.2008.215.219
- Eshagi, S., M.A. Ramezani, A. Shahsanaee and A. Pooya, 2006. Validity and reliability of the short form- 36 items questionnaire as a measure of quality of life in elderly Iranian population. *Am. J. Applied Sci.*, 3: 1763-1766. DOI: 10.3844/ajassp.2006.1763.1766
- Farzianpour, F., S. Hosseini, M. Rostami, S.B. Pordanjani and S.M. Hosseini, 2012. Quality of life of the elderly residents. *Am. J. Applied Sci.*, 9: 71-74. DOI: 10.3844/ajassp.2012.71.74
- Farzianpour, F., B. Farokhi, S. Shojaei, M. Shafii and F. Manafi, 2014. Status of the elderly healthcare costs. *Am. J. Agric. Bio. Sc.*, 9: 194-201. Doi:10.3844/ajabssp.2014.194.201
- Haralambous, B., X. Lin, B. Dow, C. Jones and J. Tinney *et al.*, 2009. Depression in older age: A scoping study. National Ageing Research Institute, Melbourne.
- Jampawai, S., S. Pothinam and M. Kanato, 2011. Model development for health promotion in the elderly participating in communities. *Am. J. Applied Sci.*, 8: 843-847. DOI: 10.3844/ajassp.2011.843.847
- Kim, O., Y.S. Byeon, J.H. Kim, E. Endo and M. Akahoshi *et al.*, 2009. Loneliness, depression and health status of the institutionalized elderly in Korea and Japan. *Asian Nurs. Res.*, 3: 63-70. DOI: 10.1016/S1976-1317(09)60017-7
- Krishnaswamy, S., 1997. Psychiatric problems among the elderly in Malaysia. *Med. J. Malaysia*, 52: 222-225. PMID: 10968089
- Lukman, Z.M., R. Nasir, I Fauziah, N. Sarnon and S.T. Chong *et al.*, 2011. The relationship between dysfunctional family and the involvement of children in prostitution. *World Applied Sci. J.*, 12: 7-12.

- 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 J. Psychiatry Behav. Sci.*, 5: 17-21.
- Nazemi, L., I. Skoog, I. Karlsson, S. Hosseini and M. Hosseini *et al.*, 2013. Depression, prevalence and some risk factors in elderly nursing homes in Tehran, Iran. *Iranian J. Public Health*, 42: 559-569. PMID: 23967423
- 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. *Int. Res. J. Med. Sci.*, 1: 17-24.
- Ostbye, T., B. Kristjansson, G. Hill, S.C. Newman and R.N. Brouwer *et al.*, 2005. Prevalence and predictors of depression in elderly Canadians: The Canadian study of health and aging. *Chronic Dis. Canada*, 26: 93-99. PMID: 16390626
- Pereira, P.D., R. Miranda, M. Orsini, M.A.A. Leite and v.h.d.v. bastos *et al.*, 2012. assessment of risk of falls in elderly patients with osteoarthritis of the knee and low back pain. *Am. Med. J.*, 3: 231-236. DOI: 10.3844/amjsp.2012.231.236
- Sherina, M.S., L. Rampal, M.A. Hanim and P.L. Thong, 2006. The prevalence of depression among elderly warded in a tertiary care centre in Wilayah Persekutuan. *Med. J. Malaysia*, 61: 15-21. PMID: 16708729
- Smith, G., 2010. A Study of Clinical behavior in intensive care unit. *Int. J. Res. Nurs.*, 1: 21-24. DOI: 10.3844/ijrnsp.2010.21.24
- Suzana, S. and Y.B. Charn, 2009. Factors influencing appetite and depression among institutionalised Chinese elderly in Penang. *J. Sains Kesihatan Malaysia*, 7: 73-88.
- 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 J. Nutr.*, 19: 65-75.
- 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. *Eur. J. Clin. Nutr.*, 59: 318-324. PMID: 15523487
- 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*, 114: 398-410. PMID: 17087788
- Yesavage, J.A., T.L. Brink, T.L. Rose, O. Lum and V. Huang *et al.*, 1983. Development and validation of a geriatric depression screening scale: A preliminary report. *J. Psychiatric Res.*, 17: 37-49. PMID: 7183759