# RELATIONSHIP OF AGING AND DEPRESSION LEVEL OF OLDER PEOPLE IN BANTEN: A COMPARISON STUDY

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#### **ABSTRACT**

Population of elderly worldwide is growing rapidly include ing in Indonesia. This triggers increased health issues such as depression. But, the literature is lacking on more evidence on age as the risk factors of elderly depression. Hence the study aimed to investigate age as one of the risk factors for elderly depression. The purpose of this study was to compare depression levels between two life-stage subgroups: young-old (65-74 years old) and old-old (75-84 years old) group at nursing home in Banten area. This was a quantitative study with comparative cross-sectional design, which included a total of 40 elderly respondents. Data was analyzed using Mann-Whitney U test The study results showed that there was no significant difference on depression level between the two life-stage subgroups (p-value= 0.381). One possible factors which effected the study results may be protective factors such as family supports, socioeconomics status, engeagement in social activities and religious or spiritula involvement. The further research needed to explore more on the risk factors and protective factors related to elderly depression.

Keyword: Depression, Older People, Aging, Young-old, Old-old.

#### INTRODUCTION

Aging is a process that converts healthy adults into frail ones, with diminished reserves in most physiological systems and increasing vulnerability to most diseases and death (Hazzards et al, 2003). The elderly may characterized as anyone over the age of 65 years old (Frisch & Frisch, 2006). There are physical problems and mental problems that resulted in this group of ages. More importantly, mental health can worsen the physical ability which may serious problems to elderly. lead to Common mental problem in elderly are anxiety, severe cognitive impairement and depression (Frisch & Frisch, 2006).

Depression is the most prevalent functional mental disorder amongst older population (WHO, 2004 as cited in Chan et al, 2009). WHO estimated that depressive disorders among elderly varies between 10 and 20 % depending on cultural situations (Barua et al, 2011). The symptoms of depression may be emotional, self-degradation, difficulty in concentration and thinking and disturbance of appetite and sleep. Memory loss and change in cognition also occur among elderly with depression (Hazzard et al, 2003). Without proper treatment, there are many serious negative consequencs for elderly clients, such as cognitive impairement, physical disability, diseases, social isolation, substance abuse and suicide (Rinaldi et al., 2003).

There are several risk factors associated with depression in late life such as gender, over 85 years old, marital status, low socioeconomic support, traumatic life experiences, chronic diseases, physical abilities, lack of social support and decreased ability to perform daily living (Waugh, 2006).

In this study, researcher will focus on age as one of contributing factors in eldery depression. Aging bringing many changes in elderly life that may lead to the development of depression (Hoyer & Roodin, 2008). The biological theory of aging stated that the elderly tend to have decreasing functional ability associated with developing of diseases and diability. Besides, the psychosocial theory said that the older the person the more likely to have separation with social life (Saxon, Etten & Perkins, 2008). Age become the important part among all the factors of elderly depression because of its complexity and relation with other factors.

Indonesia is a developing country with many social, economic and health problems with growing number of elderly about 11.34 % to total population. This phenomenon leads to increasing number of geriatric home care that may become the places for elderly to spend their days

peacefully. According to Ministry of Social and Division of Elderly Service Indonesia, the total number of aged care homes or Panti Sosial Tresna Wherda is 235 units with total population 11,397 elderly, both in public and private aged home care. Being away from family and living with other elderly can also bring a stressful condition for eldery (Saxon, Etten & Perkins, 2008). According to preliminary study in a large private geriatric home in Tangerang, three out of five elderly in Panti Wherda Bina Bakti Tangerang stated that they feel depressed while living in geriatric home care with many reasons and three of them were older that the other two elderly. Based on the phenomena, researcher want to identify the depression level for each level of age group and compare the depression level between young-old (65-74 years old) and old-old (75-84 years old) elderly in this geriatric home.

#### **METHOD**

The study design was conducted in comparative cross-sectional quantitative study. The population of this study is the elderly who are the members of Panti Wherda Bina Bakti Tangerang between age 65-84 years old, using the total samping technique the eldery divided into two age group with total 40 respondents included

and based on inclusion criteria; 18 elderly for young-old group and 22 elderly for oldold group. The other 32 respondents excluded because of severe cognitive impairement and dementia and one elderly in acute state of illness. The instrument used in this study was divided into two parts, the first part included demographic data such as initials, gender and date of birth. The second part is the Geriatric Depression Scale (GDS) short-from and was translated into Indonesian Language and to prove the validity and reability of the instrument, reseacher did a pilot study in another geriatric home in Bogor with same characteristics to test the questionnaire. The results of the pilot study is there 11 questions that are valid and the other four questions were revised. The alpha value is 0.795 and it is realiabe and validity has point biser value more than 0.361 (r table value for 30 participants). Data collection using interview based on the instruments to filled out the questionnaire. The data was analyzed using the univariate and bivariate data processing methods with Mann-Whitney U test in SPSS. In this research the confidentiality of information related to participants is guaranteed through the anonymity for the names and letter of agreement to participate voluntary in this study.

## RESULTS

The researcher assess the depression level using GDS in both age group. The categories of Depression Level divided on four level; Normal, Mild Depressive, Moderate Depressive and Severe Depressive based on the scoring level on the assessment results. The tables below show the description of depression level of each age group.

Table 1. Depression of Young-old group Respondents in Panti Wherda Bina Bakti November 2011 (N = 18)

Depression Level	Frequency	Percentage
No Depression	6	33.3%
Mild	11	61.6%
Moderate	1	5.6%
Severe	0	0
Total	18	100%

In young-old age group, the highest percentage of depressive symptoms is 61.1 % with mild depressive symptoms. The lowest percentage is 5.6 % for moderate

depressive symptoms. So, there are 33.3 % elderly who are normal and 66.7 % elderly who have depressive symptoms in young-old group.

Table 2. Depression Level of Old-old group Respondents in Panti Wherda Bina Bakti November 2011 (N = 22)

Depression Level	Frequency	Percentage
No Depression	14	63.6%
Mild	3	13.6%
Moderate	4	18.2%
Severe	1	4.5%
Total	2	100%

In the old-old age group the depression level is identified using univariate analysis that show the highest percentage is 63.6 % for normal condition and 13.6 % with mild depressive, 18.2% with moderate depressive and 4.5% with severe depressive.

The difference of depression level of the two groups is done by comparing the mean rank. The difference is not significantly large, that can be seen in the value of Asymp.Sig or p-value (2-tailed) which is equivalent to the significant value. There will be difference if the p-value < 0.05 and conversely. The significant p-value is 0.318 that show there is no signicant difference between depression level of young-old and old-old age groups.

# **DISCUSSION**

Depression is not a normal part of aging and it is a mental illness that can have serious consequences if it is not recognized and treated well (Wynchank, 2004). The literature review also seemed convincing that the risk of depressive symptoms

increased with age (Waugh, 2006). The increasing age of the elderly would more like to face the loss of spouse, loss of work, social isolation and increased risk of chronic disease and disability and those become negative condition. According to Beck's Cognitive theory (Leahy, 2006), negative conditions can lead depression because of inferiority feeling.

Contrary to the hyphothesis, the results of the study shows that age has no statistically significant impact for depression in Panti Wherda Bina Bakti Tangerang. The results of Mann-Whitney U test value was less than 0.05 or constanta value which is 0.318. The results shows that the prevalance of depression is higher in young-old group with 66.7 % and old-old group with 36.4 %. The results is possible to find because the complexity of other contributing factors such as biological, environmental and also different onset of depressive symptomps for each person (Brodaty et al, 2001). The complexity of depression also may arouse because of the subjectiveness of people's

feeling that cause different attitude while facing negative conditions.

The results of this study is similar to Sherina et al. (2005) research results that found there's no statistically significant difference in depressive symptoms in elderly population with ages 60-93 years old. Instead of age, the researcher found that gender, ethnicity, presence of chronic illness, functional diability and cognitive impairement were identified as important factors to be emphasized when assessing for depression in the elderly.

Based on study finding is the young-old group, there are 66.7 % elderly who have depressive symptoms that spread into two levels which are mild and moderate. The higher percentage is the mild depressive symptoms. The mild depressive usually causes symptoms that are detectable and impact upon eldery daily activities by showing a diminished interest in things which elderly usually finds interesting and enjoyable but less intensity that moderate and severe level (Gruenberg et al, 2005). The study shows that even though they are still in the young-old group, they have high posibility to develop depressive symptoms. This finding similar to other research (Chen et al, 2004) in China, that found depression increased from age 65-79 and stated there is

no relation between age and depression. However, it contradicted with the results of Papadopoulosi et al. (2005) research that found the depressive symptoms tend to increase with age.

For the old-old group, the results are 36.4 % elderly with depressive symptoms that can be distributed differently into mild, moderate and severe level. The moderate and severe level can cause difficulties with job or everyday chores. It shows with low mood, lack of enjoyment, negative thinking and reduce energy, all of which lead to decreased social and occupational functioning. The difference of those two levels is the intensity and severity of symptoms (Gruenberg et al., 2005). The finding of this study is the same with Chen et al. (2004) that found the depression level above 80 years old is decreased compared to younger age. It is also the same with Imran et al. (2008) research results that found more non depressive elderly between 75-80 years old.

During the informal discussion in data collection, the researcher heard comments related to the supportive factors may have an impact for the development of depressive symptoms. Some elderly said spiritual activity helped them to be strong while facing problems. The elderly stated

that they also need proper caring from the home aged care. At the end, the results of this study did not provide information that is expected about relation of age and depression. It is more likely causes by the complexity of other factors that contributed to elderly depression that are not identified in this study. Depression is related with age but there are still other factors that affect it. Also it is subjective feeling that may vary in ecpression for each elderly.

Limitation of this study that the results of this study cannot be generalized because the sample just comes of one group of population, in addition the study only focus on age as the influencing factors and other factors needs to be explore more.

### **CONCLUSION**

The comparison of depression level between young-old and old-old elderly in Panti Wherda Bina Bakti Tangerang shows no statistically significant difference with the significant value 0.318 (>0.05).

The recommendations based on findings of this study are made for the need of further study, nursing practice, institution of home care and elderly. Further study is needed for exploring the other risk factors that may contribute to the elderly depression. In addition, the study of protective factors that prevent elderly from depression would also be helpful.

For the institution of geriatric home care, researcher recommend to improved awareness about the depression issues because the study also shows the moderate number of elderly with depressive symptoms. Hopefully, the geriatric home care can use the screening tools such as GDS for assessment tools that can be used while new elderly come in the facility and also for monitoring the physiological condition of the elderly.

For the nursing practice, nurses need to raised awareness on depression in elderly. By knowing and learning about the depression risk factors the nurse hopefully able to deal with depression issues, so the nurses can prevent and help the elderly with depression from developing it into severe condition that mau cause danger to elderly.

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