

## FACTORS OCURRANCE OF DEPRESSION IN THE ELDERLY AT TRESNA WERDA BUDI MULYA 1 BAMBU APUS JAKARTA TIMUR

Nova Sari<sup>1</sup>, Fajar Susanti<sup>2</sup>, Dinni Agustin<sup>3\*</sup>

<sup>1,2,3</sup>Nursing Study Program, Faculty of Health Sciences, Universitas Respati Indonesia  
\*corresponding author: dinniagustin126@yahoo.com

### Abstract

Depression itself is one form of mental disorders in the affective mood. Mood depression is very risky for the elderly, this is caused by many factors including gender factors, health conditions, stress, family support and social interaction. This study aims to identify factors that cause depression using questionnaire measuring instruments including Kessler K10 questionnaire to measure stress, GDS questionnaire for depression screening in the elderly, family Apgar questionnaire to measure family relationships, FS questionnaire to measure social interaction, and the Pulse Profile questionnaire to measure physical health conditions in the elderly. quantitative methods with t analysis techniques to test hypotheses using Chi Square. The study showed that there was no significant relationship between the five factors examined in this study, which had lower algae values or p value > 0.05, which means there was no relationship between variables and depression in the elderly.

**Keywords:** depression, elderly

### 1. INTRODUCTION

The increase in life expectancy has become the concern of both the government and health workers. Because of this enhancement well as the number of elderly population in many countries, especially Indonesia which is the elderly population continues to increase from year to year.

The 2013 Indonesia Health Profile noted that the population aged 65 years and over reached 12,553,221 million, while the Indonesia Health Profile in 2014 noted that the number of people aged 65 years and over increased to 12,740,265 million, and if counted, the increase in 2013 to 2014 as many as 1.47% or 187,044 thousand people.

Along with the increasing number of elderly people, on the other hand the elderly are always associated with the age group who experience many health problems because of aging or aging processes, one of the problems that can arise because the aging process is a psychological problem in the elderly. According to the theory when the aging process occurs, change does not only occur in the physical but also changes in the psychological or mental in the elderly.

These changes can lead to mental disorders that occur in the elderly, including depression. Depression itself is a form of mental disorder in the affective feeling, mood (Hidayat 2008), whereas depression at the end of life is the occurrence of depression in adults 60 years or older (Taylor 2014).

The prevalence of depression in the elderly occurs around 2-3% of the elderly who live in the community, while the elderly who are in long-term care facilities are much higher, around 10% (WHO 2015). Data on the prevalence of depression in the elderly in Indonesia itself is high.

The prevalence of depression in elderly in primary health care that is 5-17%, while getting home care services is 13, 5%. The incidence of depression in the acute geriatric space was 76.3% with the proportion experiencing mild depression at 44.1%, moderate depression 18%, severe depression 10.8%, and very severe depression as much as 3.2% (Djali & Sappaile 2013).

According to Darmojo (2011) the prevalence of depression in the elderly is higher in incidence in the elderly in institutions, this has been proven by several studies that have been done in several institutions in Indonesia including research conducted at social institutions of Theodora Makassar by Anton (2014) showed that the elderly who experienced mild depression were 43.3% and those with severe depression were 10%.

The risk of elderly people living in institutions to experience depression can be influenced by risk factors that may cause or contribute to the occurrence of depression, such as retirement from work, decline in employment, changes in routine, and loss of social environment, where all of these occur together with decreased body function, decreased health conditions, decreased cognitive function, and the emergence of chronic diseases (Djaali & Sappaile 2013).

The delay in identifying depression in the elderly can have a poor impact on the elderly because it will poor the depression experienced and depression can lead to suicide risk in the elderly. Someone is determined to commit suicide due to depression, and the most powerful indicator of suicide is depression (Joseph 2009).

American statistics show 65-year-olds make up 13% of the population in the United States, but 18% of them commit suicide and the suicide rate is consistently the highest among the elderly; 16.4% of suicides occur per 100,000 populations between people aged 75 years or older ( Centers for Disease Control and Prevention, 2007; Centers for Disease Control and Prevention , 2009).

Because it is important to identify factors that can cause depression in the elderly, it prevents the increase in the incidence of depression in the elderly, and prevents suicides carried out by the elderly in Indonesia. Based on the phenomena that occur above, this study was conducted to identify factors that can cause depression in the elderly at the social institution Tresna Werda Budi Mulya 01 Bambu Apus Jakarta Timur.

**2. MATERIALS AND METHODS**

This study uses quantitative research using the cross sectional approach method, carried out at the Panti Sosial Tresna Werda Budi Mulya 01 Bambu Apus, Cipayung, East Jakarta with a large sample of 73 people among 200 elderly populations uses a systematic random sampling method and uses calculations using formulas.

The formula used is Slovin's formula. This data collection tool is a questionnaire that consists Kessler questionnaire Physiological Distress scale, GDS questionnaire (geriatric depression scale), The Friendship Scale Hawthorne questionnaire, questionnaire Apgar Milstein family, and physical health status questionnaire. These five tools have been tested by other researchers and proved valid to be used as research instruments.

**3. RESULTS AND DISCUSSIONS**

**Gender**

Table 1. Relationship between Gender and Depression, May 2016 (n = 73).

Gender	Level of Depression				Total		OR (95% CI)	P Value
	Not Depression		Depression		N	%		
	n	%	n	%				
Man	5	13.5	32	86.5	37	100	0.406 (0.123-1.338)	0.157
woman	10	27.8	26	72.2	36	100		
Total	15	20.5	58	79.5	73	100		

The results of the analysis of the relationship between the sexes of respondents and the level of depression found that there were 32 (86.5%) male respondents experiencing depression, while female as many as 26 (72.2%) experienced depression. Statistical test results using the test Chi square the results were obtained that the p value was  $0.157 > 0.05$ , which means there was no significant correlation between Gender and Depression in the elderly.

**Physical Health Conditions**

Table 2. Distribution of Respondents Based on Physical Health Conditions and Depression Levels, May 2016 (n = 73).

Physical Health Conditions	Level of depression				Total		OR (95%CI)	P value
	Not Depression		Depression		n	%		
	n	%	n	%				
Good Physical Health Conditions	12	18.2	54	81.8	66	100	0.296 (0.58-1.501)	0.148
Poor Physical Health Conditions	3	42.9	4	57.1	7	100		
<b>Total</b>	<b>15</b>	<b>20.5</b>	<b>58</b>	<b>79.5</b>	<b>73</b>	<b>100</b>		

The results of the analysis of the relationship between the health conditions of respondents with the level of depression were obtained were as many as 54 (81.8%) respondents with good health conditions experiencing depression, while respondents with poor health conditions as many as 4 (57.1%) experienced depression. H acyl statistical test using chi square test in get the result that the value of p value is  $0.148 > 0.05$ , which means that there is no significant relationship between physical health conditions and depression in the elderly.

**Stress Levels**

Table 3. Distribution of Respondents Based on Stress Levels and Depression Levels, May 2016 (N = 73)

Level of Stressing	Level of Depression				Total		OR (95%CI)	P value
	Not Depression		Depression		n	%		
	n	%	n	%				
Not Stress	10	37.0	17	63.0	27	100	4.824 (1.434-1.629)	0.14
Stress	5	10.9	41	89.1	46	100		
<b>Total</b>	<b>15</b>	<b>20.5</b>	<b>58</b>	<b>79.5</b>	<b>73</b>	<b>100</b>		

The results of analysis of the relationship between stress levels of respondents with depression levels obtained results were 17 (63.0%) of respondents who do not experience stress with depression, whereas respondents who experienced stress while 4 (57.1%) were depressed. Statistical test results using the Chi test square results obtained that the value of p value is  $0.14 >$

0.05, which means there is no significant relationship between stress levels and depression in the elderly.

### Family Support

Table 4. Distribution of Respondents Based on Family Support and Depression Levels at Social institution Tresna Werda Budi Mulia 01 Bambu Apus East Jakarta, May 2016 (n = 73).

Family Support	Level of Depression				Total		OR (95% CI)	P value
	Depression		Not Depression		n	%		
	n	%	n	%				
Poor Family Support	9	21.0	49	79.0	62	100	1.194 (0.229-6.215)	1.000
Good Family Support	6	18.2	9	81.8	11	100		
Total	15	20.5	58	79.5	73	100		

The results of the analysis of the relationship between family relationships of respondents with depression levels were obtained that there were as many as 9 (21.0%) respondents whose family relationships were poorly depressed, while those of respondents who had good family relations as many as 6 (18.2%) experienced depression. The results of statistical tests using the Chi square test obtained results that the value of p value is 1,000 > 0.05, which means there is no significant relationship between family support and Depression in the elderly.

### Social Interactions

Table 5. Distribution of Respondents Based on Social Interactions and Depression Levels at Social institution Tresna Werda Budi Mulia 01 Bambu Apus East Jakarta, May 2016 (n = 73).

Social Interactions	Level of depression				Total		OR (95% CI)	P value
	Not depression		depression		n	%		
	n	%	n	%				
Good Social Interactions	2	10.0	18	90.0	20	100	2.925 (0.597-14.333)	0.211
Poor Social Interactions	13	24.5	40	75.5	53	100		
Total	15	20.5	58	79.5	73	100		

The results of the analysis of the relationship between social interaction respondents with depression levels obtained that there are as many as 18 (90.0%) respondent that good social interaction with depression, whereas social interaction while respondents were poor as much as 4 (7.5%) were depressed. The results of the statistical test using the Chi square test obtained results that the value of p value is 0.211 > 0.05, which means there is no significant relationship between social interaction with depression in the elderly.

## **DISCUSSION**

### **Relationship between Gender and Depression**

The results of the analysis of the relationship between sexes and depression were obtained that between the sexes of respondents did not affect the occurrence of depression in the elderly with each number 32 (86.5%) male respondents, while female respondents there were 26 (72.2%) who experienced depression. The results of the analysis obtained  $p$  value =  $0.157 > 0,05$  which means there is no significant relationship between Gender and Depression in the elderly.

Generally higher prevalence occurs in women than men. The cause of this difference is the fact that the increase in the prevalence of depression correlates with hormonal changes in women, especially during puberty, before menstruation, pregnancy and pre menopause, indicating that female hormonal fluctuations may be a trigger for depression (Albert 2015). According to Nlen-Hoeksema (2002 in Addis 2008), men may be less than women resonating in response to feelings of depression and more likely to distract themselves.

The second reason is that men are more likely to seek help when they are depressed than women (Addis & Mahalik, 2003 in Addis 2008). The results of this study are also not consistent with the results of research in Iran conducted by Rabiei (2015) Prevalence and Underlying Depression Risk Factors in the Elderly of Hamadan, who get results with a percentage of 61.3% of women experiencing depression, while for men in the percentage as much as 35.7% which shows the results that there are significant differences or there is a relationship between sex and the occurrence of depression.

Based on the results of the research obtained, and the analysis carried out, it can be concluded that gender factors do not affect the occurrence of depression in the elderly, especially in the statement that women are more likely to be at risk.

### **Relationship between Health Conditions and Depression**

The results of the analysis of the relationship between sexes and depression showed that Health Conditions did not have an influence on the occurrence of depression in the elderly with each number as many as 54 (81.8%) respondents with good health conditions experienced depressions, while respondents with poor health conditions were 4 ( 57.1 %) experience depression. The results of the analysis obtained  $p$  value =  $0.148 > 0,05$  which means there is no significant relationship between physical health conditions with Depression in the elderly. Health conditions and depression are reciprocal relationships between both for example chronic disease is a common cause of depression, and sometimes a symptom of depression, depression aggravates pain, and pain increases depression (Miller 2012). Symptoms of depression that occur in the elderly more often arise as somatic complaints (Elvira 2010), one example of which is reduced weight and loss of energy. Some people who experience the disease also experience the same symptoms and this is what makes the reciprocal relationship between physical health and depression.

Elderly respondents who have health conditions less assumed that it had been casually as her due to age and they will receive with what it is against their natural conditions in this. It is the response and acceptance of this disease which can then prevent the elderly from occurring from depression because he has received the disease in his nature, and this disease is not something that is a burden on his life. Based on the results of research carried out and based on the results obtained, as well as explanations from related theories and theories, it can be concluded that depression that occurs in the elderly cannot be influenced by physical health conditions.

### **Relationship between Stress and Depression**

The results of the analysis of the relationship between Stress and Depression obtained that stress factors have no effect on the occurrence of depression in the elderly with each number of 17 (63.0%) respondents who did not experience stress experienced depression, while a number of respondents who experienced stress as much as 4 (57.1%) experienced depression. The results of the analysis obtained  $p$  value = 0,14 > 0,05, which means there is no significant relationship between the level of depression with Depression in the elderly.

Mc Nemey (1984 in the Yosep 2007) mentions stress as a physical, mental and chemical reaction from the body to a situation that is frightening, surprising, confusing, encouraging and troubling a person. Theories suggesting the presence of stress before the first episode causes long-term changes in the biology of the brain, this change causes various changes in the neurotransmitter and interneuron signaling systems including loss of several neurons and decreased contact snaps (Elvira 2010). Based on the results of the research obtained, the research and related research, it can be concluded that the stress factor is not a definite cause of depression in the elderly.

### **The Relationship between Family Support and Depression**

The results of the analysis of the relationship between family support and depression found that the factor of family support had no influence on the occurrence of depression in the elderly with each number as many as 9 (21.0%) respondents whose family relationships were well depressed, while those who had family relationships less good as many as 6 (18.2%) experience depression. The results of the analysis obtained  $p$  value = 1,000 > 0,05 which means that there is no significant relationship between family support and Depression in the elderly. Family support is needed the elderly in customizing themselves face psychosocial stressors especially stress-related stressors (Ahmadiyanto 2015) therefore this is the reason that family support can also contribute to depression in the elderly, but the role of family support factors in depression in the elderly can also be caused by other factors besides this factor remember that depression is a collection of complex problems or factors.

Based on the results of the research obtained, the related theory and research it can be concluded that the factor of family support has no relationship with the occurrence of depression in the elderly. In a place where research is carried out the elderly are basically the elderly who have not had family members for a long time or are living alone, this is what allowing that since the beginning of the function family hot RGA for respondents who live joints is not running (dysfunctional), therefore they are already accustomed to not getting the support of all family has them, so this depression experienced by respondents is not affected by family support.

### **Relationship between Social Interaction and Depression**

The results of the analysis of the relationship between family support and depression found that the factors of social interaction of respondents did not have an influence on the occurrence of depression in North Sumatra with each of the 18 (90.0%) respondents who had good social interaction experience depression, while those with social interactions bad as many as 40 (75.5%) experience depression. The results of the analysis obtained  $p$  value = 0.211 > 0,05 which means that there is no significant relationship between social interaction with Depression in the elderly.

Factors of own social interaction in the elderly associated with depression can be proven by one of the symptoms shown when a person experiences depression such as withdrawing from others, this is in line with the existence of a depression theory about the existence of cognitive deviations put forward by the wrong beck one of which is the environment, namely the tendency to assume the world is hostile towards it (Elvira 2010).

Based on the results of the research, it can be concluded that the inter-social action factor is not a definite cause of depression in the elderly in social care institutions because of the fact that older people with good interactions have a significant degree of depression. Elderly people who have good social interaction have not had the risk of depression as well as the elderly who have less interaction, this tends to be more of an elderly personality itself where the elderly in general are less able to interact properly and prefer to express with other things. This could have happened because of the elderly living in homes they live in an environment which is full with other elder people in there and has a lot of activities so that they can interaction with one another.

#### 4. CONCLUSION

Based on the results of research that has been done on the Factors of Depression in the Elderly at Social institution Tresna Werda Budi Mulya 01 in Cipayung, East Jakarta, conclusions are as follows:

- a. Research conducted on 73 respondents at the Social institution Tresna Werda Budi Mulya 01 in Cipayung, East Jakarta, found no relationship between gender factors and the occurrence of depression in the elderly.
- b. Research carried out on 73 respondents at the Social institution Tresna Werda Budi Mulya 01 in Cipayung, East Jakarta, found that there was no relationship between factors in health conditions and the occurrence of depression in the elderly.
- c. The research was conducted on 73 respondents on the Social institution Tresna Werda Budi Mulya 01 in Cipayung, East Jakarta obtained none the relationship between stress factors and the occurrence of depression in the elderly.
- d. The research was conducted on 73 respondents on the Social institution Tresna Social Home Werda Budi Mulya 01 in Cipayung, East Jakarta obtained none the relationship between family support factors and the occurrence of depression in the elderly.
- e. The research was conducted on 73 respondents on the Social institution Tresna Werda Budi Mulya 01 in Cipayung, East Jakarta obtained none relationship between factors of social interaction with the occurrence of depression in the elderly.

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