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# The Stress Level of Elderly who Lives with Family at Home and at Nursing Home

**Abstract** 



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Elderly is the last stage of human life. Adaptation to loss and limitations in old age is influenced by previous personalities. The presence of people closest to the elderly can affect the level of stress and feelings of worthlessness that lead to depression. The objectives of the study analyzed the differences stress levels in the elderly who received social support from family at home and from peers in the nursing home. The design of the study was comparative study. The population was the elderly who live in nursing home and who live with their families in East Java. The sample was 60 people, divided into 2 (two) groups, each group was 30 people taken by purposive samples. The stdy was done on Malang Raya and Tresna Werdha Social Service Pandaan nursing home (East Java). The study was conducted in 2018. The instruments study used questionnaires. The data analysis used independent sample t-test. The results showed that there was no difference in the psychological condition stress level of the elderly who received social support from family at home and from peers in the nursing home with Alpha value 0.053 greater than alpha 0.05. It is expected that families and managers of the nursing home to provide good support to the elderly so that the elderly avoid the stress.

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#### INTRODUCTION

Elderly is a stage of human life that is the last in the period of life. As stated by Hurlock (2011) that elderly or old age is the closing period in a person's life span, which is a period in which a person has moved away from the previous period that was more pleasant or moved from a time that was full of benefits.

The success of development in all fields including development in the health sector is able to boost the quality of human life and the quality of their health. The impact of improving the quality of health is an increase in life expectancy. The projection of the average life expectancy of the Indonesian population compared to the world population in 2000 to 2100 shows a slightly higher trend where in 2000 the life expectancy of the Indonesian population was 68.1 while the world population was 67.1. Meanwhile, in 2100, the life expectancy of the Indonesian population is 84.5 and the world's is 82.8. This shows the success of Indonesia's development, but on the one hand increasing the life expectancy is a big challenge in terms of the increasing burden of dependents (Depkes RI, 2018).

The increase in the elderly population from year to year when compared to other age groups. In 2013 there were 8.9% in Indonesia and 13.4% in the world. In 2050 there will be 21.4% in Indonesia and 25.3% in the world. In 2100 there will be 41% in Indonesia and 35.1% in the world. On the other hand, there is a downward trend for the 0-14 years and 15-59 years age groups. The composition of the elderly population in Indonesia in 2012 was 7.59% of the total population, with the number of female elderly population 54% or 10,046,073 people which was higher than men 46% or 8,538,032 people. As the number of elderly people increases, the number of dependents, which is a number that expresses the ratio between the number of unproductive ages (<15 years and >64 years) and the number of productive ages (15-64 years) increases(Depkes RI, 2018).

Aging is a natural process experienced by human. Age development also has an impact on increasing health problems. At this time, humans will experience a process of physical, psychological and social decline that cannot be avoided. This process is a universal picture, where various changes occur in the human body, including mental and social changes at different rates between individuals. At

this time a person has experienced various things in his life, faced many problems and challenges and carried out various activities that were beneficial for himself and his environment.

Along with increasing age, psychosocial changes occur in the elderly, including: retirement, feeling or being aware of death (sense of awareness of mortality), changes in way of life, loss in the socio-economic field due to dismissal from office (economic deprivation), family, close friends, social position, residential home, money, greatly affects their sense of security, chronic illness and disability, sensory disturbances, physical disorders, especially related to blood vessel and brain disorders, nutritional disorders due to loss of position, series of losses, namely loss of relationship with friends and family, loss of physical strength and strength, for example: changes in self-image, and changes in self-concept, sex in the elderly also changes and can cause problems (Wahjudi Nugroho, 2000).

Adaptation to loss and limitations in old age is influenced by previous personalities. Someone who was previously able to adjust and had good social integration was generally more able to adapt in old age. But not infrequently encountered problems of stress and anger mixed with fear due to limited ability. Factors that influence mental changes in old age include: physical changes especially the sense organs, general health, education level, heredity and environment. One of the environmental factors is living conditions.

In old age, there are elderly people who live together with loved ones, but there are also those who have to live in nursing home. Of course, these conditions are very much different from each other and are thought to affect the psychological condition of the elderly. The presence of people closest to the elderly can affect the level of stress and feelings of worthlessness that lead to depression.

This elderly psychological condition needs to get comprehensive treatment so that it does not continue to have serious mental health problems. Support for the elderly through communication between the elderly and other people needs to be encouraged so that the elderly get friends as consolation, as stated by Rakhmat,J (2012) that one of the functions of communication is entertaining, sending entertaining messages so that the communicant enjoys. This can be obtained by the elderly both from the family if they live at home with their fam-

ily and from their peers if the elderly live in a nursing home.

Based on the description above, it is necessary to conduct study on "Differences in the psychological condition of stress levels in the elderly who receive social support from family at home and from peers at nursing home. The purpose of this study was to analyze differences in the psychological condition of stress levels in the elderly who live with their families at home and in nursing home.

#### **METHODS**

This methodology of the study was a causal comparative study which was a study that compares 2 groups without study intervention, where a different test of stress level variables was carried out in the elderly group who lives at home with their family and the elderly group who lives in a nursing home.

The population in this study was the elderly who live in nursing home and who live with their families in East Java. The sample was determined by the sample size table from Sugiyono (2010), with an alpha of 5%, the sample size is 58 people. Furthermore, the sample size was rounded up to 60 people, who were divided into 2 (two) groups, each with 30 people per group. The sample in this study

was a part of the population that met the inclusion criteria. The respondents' inclusion criteria were as follows: 1). Age 45 years and over (middle age according to WHO); 2). Lives at home with family in Malang Raya or in nursing home East Java; 3). Do not have dementia; 4). Not suffering from chronic disease and terminal illness; 5). Willing to be a respondent. The sampling technique used purposive sampling, which was done by taking subjects not based on strata, random or regional but based on certain goals (Suharsimi Arikunto, 2013).

The study instrument used to measure stress levels was a questionnaire from the Kessler Psychological Distress Scale (Gavin Andrews, 2001). Study location: Malang Raya and Tresna Werdha Social Service Pandaan nursing home (East Java), the study was conducted in 2018

The results of the study were processed using descriptive statistics and inferential statistics, independent sample t-test with an alpha of 0.05. This study was conducted by taking into account the ethical principles of study that prioritize the safety and welfare of the respondents.

#### **RESULTS**

In the following, data on the results of the study are presented including demographic data, stress

Table 1. Distribution of demographic data of elderly respondents in East Java in 2018

Variables	The elderly who lived with their families n (%)	The elderly who lived in nursing home n (%)
Gender:		
- Male	14 (46,7)	2(6.7)
- Female	16 (53,3)	28 (93,3)
Age:		
- Middle Age (45-59 years old)	26 (86,7)	2(6,7)
- Elderly (60-74 years old)	3 (10.0)	19 (63,6)
- Old (75-90 years old)	1 (3.3)	8 (26,7)
- Very old (>90 years old)	0(0)	1 (3,3)
Education:		
- No school	0(0)	12 (40,0)
- Graduated from elementary school	6 (20,1)	8 (26.7)
- Graduated from Middle School	7 (23,3)	3 (10,0)
- Graduated from High school	7 (23,3)	5 (16,6)
- Graduated from College	10 (33,3)	2(6,7)
Profession:		
- Retired	8 (26,7)	1 (3,3)
- Actively working	15 (50,0)	0(0)
- Does not work	7 (23,3)	29 (96.7)

The elderly who lived with their families n (%)	The elderly who lived in nursing home n (%)
17 (5 (7)	26(87.7)
	·

8 (26,7)

3(10,0)

2(6.6)

Table 2. Distribution of stress levels of elderly respondents in East Java in 2018

levels and differences in stress levels in the elderly between those living with their families at home and in nursing home for the elderly.

Score > 30 (severe stress/mental disorder)

#### 1. Respondent Demographic Data

Score 20-24 (mild stress)

Score 25-29 (moderate stress)

Based on Table 1, it is known that most of the elderly are women who live with their families (53.3%) and who live in nursing home (93.3%). The age of most of the elderly in the group living in the family is middle age 45-59 years old (86.7%) and most of the elderly in the group living in nursing homes are elderly 60-74 years old (63.6%). The oldest age in the family is 83 years old and in the nursing home is 93 years old. The education level of most of the elderly who living in the family is college graduate (33.3%) and most of the elderly in the group living in nursing homes are not school (40.0%). For work status, most of the elderly living in the family are actively working (50%) and most of the elderly in the group living in nursing home does not working (96.7%) or in other words, their lives have been guaranteed by the nursing home management.

#### 2. Stress Level

Based on Table 2, it is known that most of the elderly who live with their families are not stressed (56.7%), but in fact there are those who experience severe stress, namely 6.7%, while most of the elderly who live in nursing home do not experience stress (87.6%).

### 3. Differences in Psychological Conditions of Stress Levels in Elderly who Living with Family at Home and in Nursing Home

The results of the inferential test (difference test) independent sample t-test between stress levels in the elderly who live with their families at home and in the nursing home, obtained a sig-2 tailed value

of 0.053 which is greater than alpha 0.05. So there is no significant difference between the level of stress in the elderly who live with their families at home and in nursing home.

3 (10,0)

0(0)

1(3,3)

#### **DISCUSSION**

In the following, a discussion is presented which is the relationship between the results and the literature review. The discussion will be presented in accordance with the study objectives.

From the results of the study in Table 1, it is known that most of the elderly, both those living with their families and those living in nursing home, do not experience stress. This shows that wherever the elderly live, they feel comfortable. Of course all of that is related to social support, both from the family and from the management of the nursing home. Sources of family support can be in the form of internal family support, such as support from husband/wife, support from siblings, support from children and support from external families such as support from friends, neighbors, schools, extended family, places of worship, health practitioners Friedman (2010). Meanwhile, the elderly who live in nursing home must have guaranteed the fulfillment of their daily needs from the nursing home management. All of this gives them a sense of security even though they are far from their family or have no family anymore.

In terms of age, most of the elderly in the group who live in the family are middle age which according to the World Health Organization WHO (Wahjudi Nugroho, 2000) is 45-59 years old (86.7%) and most of the elderly in the group who live In nursing home, the age is elderly 60-74 years (63.6%). Aging is a natural process. Everyone will experience growing old. At this time humans will experience a process of decline both physically, psychologically and socially that cannot be avoided. Elderly or old age is the closing period in a person's

life span, which is a period in which a person has moved away from a more pleasant previous period or moved from a time that is full of benefits (Hurlock, 2011). In old age, the aging process occurs naturally with increasing age. Psychological changes that occur can also be associated with mental accuracy and an effective functional state (Maryam, 2018).

The results of the inferential test (difference test) independent-t test between the psychological condition of the stress level in the elderly who received social support from family at home and from peers at the nursing home obtained a sig-2 tailed value of 0.053 which was greater than alpha 0.05. The difference in the figures shown is actually very small, but it still shows a conclusion that there is no significant difference between the psychological condition of the stress level in the elderly who receive social support from family at home and from peers at nursing home.

General problems that are often experienced by the elderly according to Wahjudi Nugroho (2000) include being physically weak and helpless, so they have to depend on others, their economic status is very threatened, so it is reasonable to make major changes in their lifestyle, find new friends. to replace a husband or wife who has died, gone away or is disabled. This condition is a stressor for the emergence of stress in the elderly. The cause of this stress is called a stressor (Giardino, 2005; in Yekti Mumpuni & A.W, 2010).

Stress is the body's reaction (response) to the environment that can protect us which is also part of the defense system that keeps us alive. Stress is a certain reaction that appears in the body that can be caused by various demands, for example when humans face important challenges, when faced with threats, or when we have to try to overcome unrealistic expectations from the environment (Nasir, 2009).

According to Hans Selye (Don Colbert, 2011), there are 3 stages of the stress response, namely:
1) The alarm stage, generally this reaction causes an increase in adrenaline secretion in a short time, which results in a high emotional reaction; 2). Resistance stage. At this stage, the body tries to adapt to the negative situation that occurs. The body continues to secrete stress hormones, especially cortisol. Cortisol will stimulate the endocrine system in the body. When experiencing stress, the hypothalamus produces CRH (cortocothropin releasing hormone). Furthermore, the hormone causes the re-

lease of another hormone – ACTH (adrenocorticotropic hormone) by the pituitary gland. ACTH stimulates the adrenal glands to produce cortisol, which is a steroid hormone that can stimulate the release of fat, sugar, and amino acids into the blood to produce energy; 3). Exhaustion stage. At the stage of exhaustion, the body begins to increase the risk of developing chronic diseases. This stage refers to the occurrence of fatigue in the adrenal glands. This adrenal gland exhaustion will usually cause mental, physical, emotional, and organs and systems in the body that experience prolonged stress.

Stress is a condition that suppresses the individual caused by an imbalance between the abilities possessed and the existing demands. Stress is a complex mechanism and produces interrelated responses, both physiological, psychological and behavioral in individuals who experience it. Stress is a physiological and psychological reaction that occurs when a person feels an imbalance between the demands faced and his ability to cope with these demands (Nasir, 2009).

Basically, stress is divided into distress (negative) and eustress (positive). Stress is said to be positive if every event faced with positive thinking and every incoming stimulus is a valuable lesson and encourages a person to always think and behave how and what to do in order to bring benefits and not disaster. In the eustress condition, it should be realized when the condition of the body and mind is in a balanced state, feeling energetic, adaptable and in a relaxed state (Nasir, 2009).

As emphasized in Webster's dictionary, stress is a physical, chemical, or emotional factor that can cause tension in the body or mentally and which can act as a factor causing disease. With the condition that the majority are not stressed in elderly respondents, it will be able to reduce the factors that cause disease. The elderly can work optimally according to their age. Hopes to stay healthy and productive in old age will come true.

#### **CONCLUSIONS**

Based on the results of study and discussion, it is concluded that:

There is no difference in stress levels in the elderly who live with their families at home and in nursing home with a sig-2 tailed value of 0.053 which is greater than an alpha of 0.05. Most of the elderly who live with their families are not stressed

(56.7%), as well as the elderly who live in nursing home also do not experience stress (87.6%)

#### **SUGGESTION**

It is recommended for families and administrators of nursing home to: Continue to provide good support to the elderly so that the elderly avoid severe stress that can interfere with their health. Providing activities or always involving the elderly so they don't feel lonely and bored during their lifetime

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