

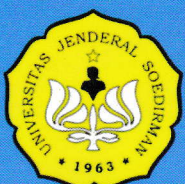
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FROM LIVING WELL
TO AGING WELL:
A MULTIDISCIPLINARY APPROACH

Purwokerto, 4-5 November 2017



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**FROM LIVING WELL TO AGING WELL :
A MULTIDISCIPLINARY APPROACH**

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Improving the Cognitive Function of Elderly by Reading the Al-Qur'an

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Abstract

Human life is divided into several phases including infant, toddler, adolescent, adult, and elderly. At the time a person has entered elderly age there are biological changes in his life such as a change in brain function. The brain is a part of the human body that serves to regulate the body system and as a cognitive center. Difficulties of memory function and expressing verbal functions (speech) are examples of cognitive forms impairment in elderly people. One way that can be used to hold up the incidence of cognitive impairment function in the elderly is by therapy of reading the Al Qur'an. Reading the Al Qur'an therapy can be conducted by reading slowly and harmonious to be able to reduce stress hormones. This study aims to determine the effect of the the Al Qur'an reading therapy on cognitive function in the elderly. This study used quasi experimental method with one group pre test-post test design. 35 samples were taken by purposive sampling at posyandu (Integrated Health Service) for elderly in Semondo Village, Kalitengah, and Kemukus Gombong. Data analysis used descriptive analysis and bivariate using paired t test. Respondents given 12 days the Al- Qur'an reading therapy experienced improvement of their cognitive function score after the post-test. This therapy can be the way as one of the interventions to improve the cognitive function and quality of life. It because there are changes in muscle electric flow, blood stream changes, heart beat changes, and blood level of the skin. These changes indicate the relaxation or decline of nerve tension resulting in dilation of blood vessels and blood perfusion in the skin, accompanied by a decrease in heart rate (Faradisi, 2009). The results indicate that most respondents (71.4%) had normal cognitive function before doing the Reading the Al Qur'an therapy of Most of the respondents (91.4%) had an increased cognitive function score after doing therapy. There is an influence of Reading the Al Qur'an therapy toward cognitive function in elderly with $p = <0.001$ (<0.05). Reading the Al Qur'an therapy can be done routinely for the elderly to improve cognitive function and prevent dementia.

Keywords: cognitive function, elderly, reading the Al Qur'an therapy

Introduction

Human's life is divided into some stages of life such as baby, toddlers, teenage, adult and elderly. Each stage has it own development demand due to reach optimum growth. Each stage is also accompanied by various developmental tasks that must be done to reach development optimally. In addition each stage of development is also characterized by various events such as changes from the previous stage to the next stage. By the time a person has entered old age, he/she will undergo a change. Difficulties with memory function or in expressing verbally or speaking are examples of the form of cognitive impairment in elderly people (Suardiman, 2011).

Data sourced from the World Health Population Prospect 2015 Revision explains that by 2015 there are a total of 910,000,000 people aged 60 or over who are included in 12% of the global population and by 2050, it is predicted the number of elderly population will be much more than the global population as much as 2-fold that reaches 2.1 billion people (Unites Nations, 2015).

Kebumen regency is one of the regencies in Central Java Province. Based on data sourced from the Central Bureau of Statistics (BPS) Kebumen Regency in 2015, the population of Kebumen regency is as many as 1.184.938 residents. As for the elderly in

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Kebumen District there are 1,181,006 people who are divided into various sub-districts (BPS Kebumen) Meanwhile, based on preliminary study results that have been conducted on November 09, 2016, the results of the total number of elderly people in the work area of Gombong Primary Health Center 2 (Puskesmas) are 4615 people. On February 09, 2017, the elderly who actively follow the activities in elderly Posyandu are 346 persons starting from January 2017.

A literature study has found that the number of elderly population who experience decreased cognitive function is increasing and is proportional to the increase of the elderly population number. The incidence of cognitive decline in the elderly population is estimated to reach 121 million people with a composition of 5.8% of men and 9.5% of women (WHO, 2012).

When the brain begins to aging it will be a decline in brain function from a human that can lead to a decrease in cognitive function and balance the body, therefore an elderly will experience a decrease in cognitive function of memory loss. Decreased cognitive function in the elderly can not be avoided but can be slowed down in various ways. One way that can be used to slow the incidence of cognitive impairment function in the elderly is to use Qur'an reading therapy. This study aims to determine the effect of reading the Al Qur'an therapy on cognitive function in elderly at Posyandu.

Methods

The research used quasi experimental with one grup pre dan post-tests designs. To test the independent variable toward the dependent variable pre-test and post test were conducted. The observation was conducted before the research. Observation before the research (O) is pre-test and observation after the research (O1) is Post-test with O1 O1 pattern (Arikunto, 2006). the populations are all elderly who visit the Posyandu in the working area of Gombong 2 Primary Health Center (PUSKESMAS) from january 2017 as many as 346 elderly. The samples consist of 46 respondents. Reading the Al-qur'an therapy was conducted for 15 minutes in 12 days after Subuh prayer time.

Results

1. Description of elderly characteristics in elderly Posyandu of Semondo Village, Kalitengah, and Kemukus, Gombong.

Indicator	Characteristics of the Respondents	f	%
Sex	Male	4	11.4
	Female	31	88.6
Age	60 – 65	22	62.8
	65 – 70	7	20,0
	70 – 75	3	8.6
	75 – 80	3	8.6
Education	Elementary School	25	71.4
	Junior High School	7	20.0
	Senior High School	3	8.6
Total Number		35	100.0

The table shows the biggest frequency based on age is female (31 respondents /88.6) whereas Male is only 4 respondents/ 11.4%.

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2. Cognitive function of the elderly before treatment of Al-qur'an reading Therapy.

Cognitive Function Score	f	%
<i>Pre Test</i>		
24 – 30 (Normal)	25	71.4
17-23 (<i>Probable</i>)	10	28.6
0 – 16 (<i>Definite</i>)	0	0
Total Number	35	100.0

The table shows the frequency distribution of the respondents based on the biggest results of pre-test cognitive score is for 25 respondents (71.4 %) with normal cognitive function.

3. The elderly cognitive function after reading the Al-Qur'an therapy treatment.

Cognitive Function Score	F	%
<i>Post Test</i>		
24 – 30 (Normal)	32	91.4
17-23 (<i>Probable</i>)	3	8.6
0 – 16 (<i>Definite</i>)	0	0
Jumlah	35	100.0

Respondents frequency distribution based on the post test cognitive score shows the biggest score is for 32 respondents (91.4 %) with normal cognitive function.

4. The influence of reading the Al Qur'an therapy toward the elderly cognitive function.

Cognitive Score	Mean	T	P
<i>Pre Test</i>	24.34		
<i>Post Test</i>	26.40	-7.748	<0.001

The average cognitive score of the elderly from the intervention group before the Al-Qur'an reading therapy is 24.34 and became 26.40 after the therapy.

Discussion

The statistical test results show that the proven therapy of reading the Al Qur'an affects the elderly cognitive function that is with the increase of value or the cognitive function score before and after therapy. The influence of reading Qur'an therapy is supported by the procedure that had been done by reading the Qur'an 15 minutes. One of the Surah in the Qur'an that the researcher chose was Surah Taha. The statistical test result shows p value <0.001 which means reading the Al- Qur'an therapy gives effect on cognitive function for the elderly. The respondents who had been doing the 12-day recitation of the Qur'an experienced an increase of the cognitive function score after the post test. This is supported by the design of solutions from Hoyer & Verhaeghen in Suardiman (2011) that can provide the effect of improving cognitive function. The way to improve cognitive function (memory) of the elderly is by giving nursing intervention to achieve health outcomes and improving the quality of life because applying memory stimulation habits by reading a good reading will be able to provide cognitive development of the elderly. The benefits of improved cognitive function (memory) techniques for the elderly significantly influence outcomes on the health and mental status of the elderly. The influence of reading the Al Qur'an therapy is due to changes in electric current in the muscle, changes in blood circulation, changes in heart rate, and blood levels in the skin. These changes indicate the relaxation or decline of nerve tension resulting in dilation of blood vessels and blood perfusion in the skin, accompanied by a decrease in heart rate (Faradisi, 2009). This is relevant to research conducted by an expert named Ahmad Al-Qadhi, president of the Islamic Medicine Institute for Education and Research in Florida, USA. At the XVII Annual Conference of the American Physicians Association, the US

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Missouri region, Ahmad Al-Qadhi made a presentation on his research with the theme of the influence of the Qur'an on humans in the perspective of physiology and psychology. From the explanation it can be concluded that by reading the Qur'an it can bring some vibration of sound that reaches the ears, flow into the brain cells then bring the effect to the reader through the electronic field that is born in the cells. Then the cells will respond to the fields and compensate for the vibrations. This vibration change is what we find and understand after going through long and repeated experiences (Al-Kaheel, 2012).

Recommendation

Based on the research findings it is recommended for the elderly and the family to give emotional support and specific attention for the elderly who experience cognitive function problems specially those with probable cognitive function. Family plays important roles in maintaining the cognitive function of the family. Al-Qur'an reading therapy can be implemented to maintain the cognitive function and can be done independently by the elderly. The therapy is good not only for the elderly but also for any age of human life.

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