



## The Effect of Reading the Qur'an on the Cognitive Function of the Elderly

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### Abstract

**Background:** The increasing population of the elderly can cause health problems in the elderly, including a decrease in cognitive function that is clearly visible in memory and intelligence. This can be prevented by doing activities that maximize brain power through increasing spiritual activities, such as reading the Qur'an.

**Objective:** To determine the effect of reading the Qur'an on cognitive function in the elderly. The study population was 60 years of age or older, with an indicator of reading the Qur'an regularly every day. Cognitive function was assessed using the Mini-Mental State Examination (MMSE).

**Method:** The type of literature study used is the literature review by assessing, identifying, and interpreting all findings on a research topic. Conducted using PubMed and Google Scholar restricted from 2010-2020. The keywords used in the article search were elderly, reading the Qur'an, and cognitive function. Results: Reading the Qur'an has a significant impact on the cognitive function of the elderly.

**Results:** This study used seven journals, where five journals were obtained from Google Scholar and two journals from PubMed.

**Conclusion:** From several studies collected, it can be concluded that the longer the duration (>15 minutes) and the more regularly the elderly read the Qur'an, the better their cognitive function.

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## INTRODUCTION

Islam, as both religion and the basis for civilization, is known to be grounded on the culture (in its high sense of the word) of reading Al-Qur'an, that the first verses revealed to Prophet Muhammad emphasized the importance of reading (*iqra'*).<sup>1</sup> Scholar has interpreted the meaning of these first five verses from Sūrah al-'Alaq as relating to how mankind shall not only read the Al-Qur'an as the form of God's Revelation (in which by its literal meaning meant something to read) but also to read up on the world by the Names of Allah:

أَقْرَأْ بِأَسْمِ رَبِّكَ الَّذِي خَلَقَ، خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ. أَقْرَأْ  
وَرَبُّكَ الْأَكْرَمُ. الَّذِي عَلَّمَ بِالْقَلَمِ، عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ.

“Read, (O Prophet) in the Name of your Lord Who created humans from a clinging clot. Read! And you Lord is the Most Generous, Who taught by the pen, taught humanity what they knew not.” (Al-'Alaq, 1-5).

In relationship with the discussion on Allah's Names, it could be understood that there is a relationship between the world of the creations with Allah, that one can find Allah by enacting reading in its broad manner, both the Revealed signs (as the literal translation of *āyat*) as in Al-Qur'an and the worldly signs that are scattered all upon the world including within oneself (*āyat al-kauniyyah*).<sup>2</sup> It is by relating the objects of the reading (both Al-Qur'an itself and the world) with the Names of Allah, pertaining that Allah as the Reality, that one shall interpret its reading. It is fundamental, as detailed by verses 26-27 in Al-Baqarah that Allah stressed the possibility for one to be misguided in reading the same fact (*wāqi'*) in relating how one

acknowledges True Identity as the one having the eternal Covenant with Allah. Those who cherish and manifest such Covenant will be able to see meaning in every of Allah's creations, even for something as insignificant as a mosque, while the disbeliever will be misguided due to their denial of their true Origin.<sup>3</sup> It is from this intertextual reading of these Qur'anic verses that one gets the idea of the meaning of a healthy cognitive function on a man: how one can be self-aware of their relationship with the world in a Qur'anic framework of meaning. Through an interconnected reading of the Qur'an as well with Sunnah, one will be able to manifest a good cognition in how one will read reality, in which such act will form a framework in how one finds meaning and cognitively active by the intense Qur'an reading reflection.<sup>4</sup> Therefore, to have a proper cognitive function in man, in an Islamic paradigm, is to be able to have a functional capability to comprehend meaning pertaining to one's capacity that corresponds with reality.

A person is said to be elderly if he has reached the age of 60 years or more. Aging is not a disease but a process that slowly causes cumulative changes so that the body's resistance decreases in the face of stimuli both from within and outside the body. Law No. 13 of 1988 states that national development with the aim of realizing a just and prosperous Indonesian society based on Pancasila and the 1945 Constitution has made the social conditions of the community better and life expectancy increasing, of course, resulting in increasing elderly people.<sup>5</sup>

Globally, the elderly population is predicted to continue to increase. In the journal *An Aging*

*World* (2015), it was stated that in 2015 the population aged 65 years and over was 617 million (8.5%) of the world's population. This figure is expected to increase to 17%, and the number of elderly people will reach 1.6 billion by 2050.<sup>6</sup>

The structure of an *aging population* is an illustration that the average life expectancy (UHH) of the population in Indonesia is getting higher. This is one of the indicators of success, especially in the health sector from the achievement of national development. Since 2014 Life Expectancy (UHH) in Indonesia has shown an increase from 68.6 years to 70.8 years, and it is estimated that in 2030-2035 it will reach 72.2 years.<sup>7</sup>

The increase in the elderly population can cause health problems in the elderly, including changes in cognitive function. As they get older, the elderly realize that they cannot remember as well as before. This aging process causes anatomical and physiological changes in the body so that it can affect cognitive function, which is clearly seen in changes in memory and intelligence. This problem must be addressed as early as possible, either in the form of prevention or efforts to maintain the cognitive function of the elderly. One way to prevent the decline of cognitive function in the elderly is to carry out activities that involve the thinking function.<sup>8,9</sup> By improving cognitive function in the elderly, it is hoped that it can help to overcome various problems related to the aging process, such as dementia and depression, so as to reduce dependence on others and improve the quality of life.<sup>9</sup>

Reading can be one of the activities that can affect a person's cognitive function. Wreksoatmodjo (2015), in his research, states that the el-

derly who do not like to read newspapers, magazines, or books will be at risk of experiencing a decline in cognitive function 1.5 times compared to the elderly who read more than once a week.<sup>10</sup> Research conducted by Ai Lizuka et al. (2020) and Hiroyuki et al. (2014) said that reading books frequently can prevent memory decline for the elderly.<sup>11,12</sup>

Al-Qur'an is the holy book of Muslims that is able to affect cognitive function. In addition, the Qur'an can be used as a medium for reading. Handayani (2013) mentioned that spiritual activities such as reading the Qur'an, studying spiritual tourism, praying Sunnah, obligatory prayers, and dhikr in congregation regularly for two months could maximize brain power and be able to have an influence on improving the cognitive function of the elderly.<sup>13</sup>

## METHODS

The type of literature study used is the literature review by assessing, identifying, and interpreting all findings on a research topic. Conducted using PubMed and Google Scholar restricted from 2010-2020. The keywords used in the article search were elderly, reading the Qur'an, and cognitive function. The study population was 60 years of age or older, with an indicator of reading the Qur'an regularly every day. Cognitive function was assessed using the Mini-Mental State Examination (MMSE). This study used seven journals, where five journals were obtained from Google Scholar and two journals from PubMed.

## LITERATURE REVIEW

### Elderly

The Elderly is someone who is 60 years old or more. Aging is not a disease but a process that slowly causes cumulative changes so that the body's resistance decreases in the face of stimuli both from within and outside the body. Law No. 13 of 1988 states that national development with the aim of realizing a just and prosperous Indonesian society based on Pancasila and the 1945 Constitution has made the social conditions of the community better and life expectancy increasing, of course, resulting in increasing elderly people.<sup>5</sup>

WHO explains the limitations of the elderly as follows: 1) Elderly between the age of 60-74 years, 2) Old: 75-90 years, and 3) Very old age is >90 years.<sup>14,15</sup>

The Indonesian Ministry of Health explains that the elderly are divided into three categories, namely: 1) age 45-59 years is the advanced age of pre-senior, 2) age 60 years and over is elderly, 3) age 70 years and over is elderly at risk or age 60 years up with health problems.<sup>16</sup>

### Reading the Qur'an

The language of the Qur'an has many meanings, one of which is *reading* or *something that must be read* or *studied*. As for the terminology, the Qur'an is the Word of Allah SWT, which was revealed to the Prophet Muhammad through the Angel Gabriel and later collected in the *Mushaf*, which is accepted as a miracle (*mu'jizat*) of the Prophet Muhammad and for those who read it as a form of worship.<sup>17</sup>

Reading the Qur'an is very beneficial for health because The verses in the Qur'an contain the chanting of Allah's holy words to the Prophet Muhammad so as to be able to provide physical and spiritual tranquility for the reader. The

intensity of reading the Qur'an by the elderly illustrates a positive attitude that can be done every day in getting closer to Allah SWT.<sup>15</sup> Therefore, the Prophet Muhammad (PBUH) encouraged us to read the Qur'an. He said:

(اقْرَأُوا الْقُرْآنَ فَإِنَّهُ يَأْتِي يَوْمَ الْقِيَامَةِ شَفِيعًا لِأَصْحَابِهِ).  
رواه مسلم.

"Read the Qur'an, for it will come as an intercessor for its reciters on the Day of Resurrection." (Shahih Muslim, no: 804 (1/553)).<sup>18</sup>

Allah the Almighty has stated that the Qur'an was revealed as mercy and healing for those who believe in Him:

وَنُنزِلُ مِنَ الْقُرْآنِ مَا هُوَ شِفَاءٌ وَرَحْمَةٌ لِّلْمُؤْمِنِينَ

"We send down the Quran as a healing and mercy for the believers." (Al-Isra: 82).

In the book of *Fath al-Qadīr*, Imam ash-Shaukānī commented on the verse that the Qur'an is a healer, both physically and mentally.<sup>19</sup>

Reading the Qur'an is an activity of one's worship and understanding and deepens the knowledge of Islamic teachings through the holy book that was revealed to the Prophet Muhammad. The intensity of reading the Qur'an is a study activity that is carried out regularly and continuously by studying the Qur'an itself. Thus, the habit of reading the Qur'an, if done repeatedly on a regular basis, can train the memory of the elderly.<sup>8</sup>

### Cognitive function in the elderly

Cognitive comes from the word cognition which means the activity or process of gaining knowledge or trying to recognize something through one's own experience.<sup>15</sup> Cognitive

function is a person's ability to pay attention, register, calculate, memory, language, consider things, write and read and visuospatial abilities.<sup>20</sup>

Based on the PERDOSSI Neurobehavior module (2008), cognitive function consists of:<sup>21</sup>

1. Attention is the ability to be able to ignore other stimuli that are not needed by acting or paying attention to one stimulus.
2. Language is a primary communication and primary modality in building cognitive function.
3. Memory is a mental state that will be recalled in the future and allows a person to retain information.
4. Visuospatial is a constructional ability such as imitating and repeating several pictures and also includes arranging blocks.
5. Executive function is a person's process of solving a new problem or problem in a complex manner.

Cognitive function in the elderly will experience changes along with changes in physical, psychological, health status, heredity, education level, environment, nutrition, and spiritual level. From this statement, it can be concluded that human cognitive function involves the ability of attention, memory, calculation, memory, and language, where a cognitive function can change with changes in the spiritual level of the elderly.<sup>22</sup>

The decline in cognitive function in the elderly is caused by morphological and biochemical changes in the central nervous system of an elderly person. The reduced protein and fat content in the elderly makes the brain weight in the elderly decrease, and the brain becomes lighter. Many changes occur in the axons, dendrites, and cell bodies of nerves. The function of dendrites as a means of communication between

cells will lose contact between nerve cells and become thinner, so that nerve conductivity decreases.<sup>23</sup>

### Effects of reading Al-Quran on the cognitive function of the elderly

In a study conducted by Irawati (2017) at the Menur Padokan Elderly Posyandu Lor Tirtonirmolo Kasihan Bantul Yogyakarta in April-July 2017 with the *cross sectional*. Sampling in this study used *purposive sampling*, the number of respondents was 96 elderly, and the data was taken using the M questionnaire *Mental State Examination* (MMSE). The results showed that there is a relationship between the duration of reading the Qur'an with cognitive function in the elderly, and as many as 97.8% of respondents who read the Qur'an for more than 15 minutes did not experience cognitive impairment (standard).<sup>22</sup>

Another study conducted by Lestari (2012) also supports that based on the proportion of the intensity of the habit of reading the Qur'an, which is carried out regularly, it is found that 70.9% of respondents who have an intense habit of reading the Qur'an do not experience cognitive impairment and who are elderly who have the habit of reading the Qur'an with an intensity rarely experience severe cognitive impairment (60%). This is in line with the research conducted by Mukarramah (2016) with the results of the analysis of the relationship between the intensity of reading the Qur'an with the cognitive function of the elderly, and it was found that 82.2% of the intensity of reading the Qur'an had an excellent cognitive function.<sup>23</sup> And research conducted by Rosdiana (2017) shows that 89.5% of the elderly who practice reading the Qur'an regularly have a good cognitive function.<sup>19</sup>



Kaheel (2010) explains that the Qur'an has a unique harmonic feature that other sentences do not have. The verses contained in the Qur'an contain words that are full of goodness so that they have a positive effect and provide peace. When listening to the recitation of the Qur'an, a series of Qur'anic sound waves that reach the brain will have a positive effect on the responsiveness of its cells. In accordance with the nature of Allah SWT, the brain will respond to the right harmony.<sup>20</sup>

The results of some of these studies state that there is a relationship between the duration or the length of time and the intensity of an elderly person in reading the Qur'an with their cognitive function. Reading is a person's process of thinking that involves the process of interpreting, interpreting meaning, analyzing the intent of the sentence, and applying ideas so as to get the meaning or message in writing.<sup>21</sup> To read is not only walking across words and letters, but that one comprehends and processes the propositions contained within the text. Reading comprehension is reading that involves cognitive function (reading to understand) so that people who read it are required to be able to understand the contents of the reading.<sup>22</sup>

## CONCLUSION

From the several studies above, it can be concluded that there is a relationship between the duration and intensity of an elderly person in a reading of the Qur'an with their cognitive function. The longer the duration (> 15 minutes) and the more regularly the elderly read the Qur'an, the better their cognitive function. Improving cognitive function in the elderly, it is hoped, can help to overcome various problems

related to the aging process, such as dementia and depression, so as to reduce dependence on others and improve the quality of life.

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