The Relationship On Health Education Against Anxiety Concerning COVID-19 Transmission

Najman\textsuperscript{a}, Kistan\textsuperscript{b}, Ita Novianti\textsuperscript{c}

Corresponding Author\textsuperscript{a}

Abstract

Corona Virus Disease (COVID-19) is a type of virus that is transmitted from human to human and directly attacks the respiratory system. This virus is a pandemic, a severe world problem because it is increasing every day. Attacking everyone regardless of age, gender, or nationality. The rapid increase and the increasing number of cases of death due to COVID-19 have had a negative impact in every aspect of life with changes in new habits both from an economic, social, religious, and psychological perspective. From a psychological perspective, mental anxiety and stress can affect health, especially vulnerable groups such as children and the elderly. This study To determine the relationship between health education and elderly anxiety about the transmission of COVID-19 in Pappolo Village, the working area of the Blue Puskesmas, Bone Regency. This study used a one-group quasi-experimental research design—pretest-posttest. The sample was 150 respondents. The sampling was purposive, and the data were collected utilizing a questionnaire. The data were analyzed using the SPSS version 23 statistics and univariate and bivariate analysis with t – dependent or T Paired statistical tests and presented in the form of a frequency distribution table.

Keywords

anxiety and COVID-19; education; elderly; health; transmission;

International Journal of Health Sciences © 2020. This is an open access article under the CC BY-NC-ND license (https://creativecommons.org/licenses/by-nc-nd/4.0/).

Contents

Abstract ................................................................................................................................. 69
1 Introduction ..................................................................................................................... 70
2 Materials and Methods .................................................................................................. 70
3 Results and Discussions ............................................................................................... 70
4 Conclusion ..................................................................................................................... 72
Acknowledgments ............................................................................................................ 72
References .......................................................................................................................... 73

\textsuperscript{a} Batari Toja Nursing Academy, Indonesia
\textsuperscript{b} Batari Toja Nursing Academy, Indonesia
\textsuperscript{c} Batari Toja Watampone Midwifery Academy, Indonesia
1 Introduction

COVID-19 is a type of virus that is transmitted from human to human and directly attacks the respiratory system. This virus is a pandemic, a severe world problem because it is increasing every day. Attacking everyone regardless of age, gender, or nationality (Jaji, 2020). According to Kistan & Musni (2020), since the government implemented the new ordinary policy, there is undoubtedly a risk of increasing COVID-19 cases in Indonesia. Data from WHO (2020), on September 21, 30,949,804 were confirmed positive, 959,115 died, and about there were 272,585 new cases found around the world. Meanwhile, at the same time, the distribution data in Indonesia recorded 248,852 patients, 180,797 were declared cured, and 9,677 die. It explains that the increase in Corona cases around the world continues to increase, including Indonesia (Ministry of Health, 2020). The rapid growth and the increasing number of cases of death due to COVID-19 have had a negative impact in every aspect of life with changes in new habits both from an economic, social, religious, and psychological perspective.

From a psychological standpoint, it is mental anxiety, and stress can affect health, especially for vulnerable groups such as children and the elderly (Ilpaj & Nurwati, 2020). The age factor and lack of knowledge can be the reasons for anxiety and worry, excessive fear that disturbs and reduces the immunity of the human body so that it is very vulnerable to being exposed or affected by COVID-19. In general, the exemption is the body's response to defend the body against foreign bodies, both molecular and cellular (Gumantan et al., 2020). Besides, not a few older adults have chronic diseases, such as heart disease, diabetes, asthma, or cancer. It has made it even more at risk with an increasing number of older adults who are exposed to Covid-19 every day (Fullana et al., 2020; Asmundson et al., 2020). The phenomenon found the field, and from the observations of many researchers found that people of all ages seem uneasy and feel excessive fear. It will lower the body's immune system so that it will be more susceptible to the Corona Virus (Huang & Zhao, 2020; Mazza et al., 2020; Mann et al., 2020). To make people calmer and stay alert, they must have good knowledge of mental health education to increase public knowledge and insight. Based on this background, researchers are interested in knowing the relationship of health education to elderly anxiety about the transmission of Corona Virus Disease (COVID 19) in Pappolo Village, the working area of Puskesmas Biru, Bone Regency.

2 Materials and Methods

This research method used a quasi-experimental research design with a one group pretest-postest approach. The goal of this study was to determine the effect of health education on elderly anxiety about the transmission of Corona Virus Disease (COVID-19). Determination of the sample using a non-random sampling technique with a purposive sampling type so that the sample is the elderly who are assisted by Puskesmas Biru Kab. Bone number of 150 respondents who met the inclusion criteria. The instrument used to measure anxiety is a questionnaire that was previously tested for validation and reliability—anxiety measured before being given health education and one week after being given health education. Data were analyzed using a statistical test-dependent t-test with a significant level of α = 0.05.

3 Results and Discussions

| Table 1 | Gender distribution of respondents |
|-----------------|-----------------|-----------------|
| Gender          | Frequencies (n) | Percentage (%)   |
| Male            | 74              | 49.3            |
| Female          | 76              | 50.7            |
| Total           | 150             | 100.0           |

Source: Primary data, 2020
Table 1 found that the majority of respondents were female is 76 (49.3%) of respondents, and the male gender is 74 (50.7%) of respondents.

Table 2
Distribution of the elderly by age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequencies (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 – 60 ys</td>
<td>70</td>
<td>46.7</td>
</tr>
<tr>
<td>61 – 70 ys</td>
<td>59</td>
<td>39.3</td>
</tr>
<tr>
<td>&lt; 71 ys</td>
<td>21</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Primary data, 2020

The table 2 shows that the majority of respondents are around 55 - 60 years old is 70 (46.7%) respondents, around 55 - 60 years as many as 59 (39.3%) respondents, and around <71 years 21 (14%) respondents.

Table 3
Distribution of respondents by anxiety transmission COVID-19 before and after the intervention is to the elderly in urban village Puskesmas Pappolo Blue

<table>
<thead>
<tr>
<th>Covid-19 Transmission Anxiety</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Education Intervention</td>
<td>16.45</td>
<td>4.619</td>
<td>150</td>
</tr>
<tr>
<td>Post Education Intervention</td>
<td>16.09</td>
<td>3.744</td>
<td>150</td>
</tr>
</tbody>
</table>

Source: Primary data, 2020

Table 3 shows that as many as 150 samples, on average, anxiety about COVID-19 transmission before educational interventions was 16.45 with a standard deviation of 4.619. Meanwhile, the moderate anxiety about Covid-19 transmission after the educational intervention was 16.09, with a standard deviation of 3.744.

Table 4
The t - a dependent test of the relationship between health education and anxiety in the elderly in Pappolo Village, the Blue Health Center work area

<table>
<thead>
<tr>
<th>Covid-19 Transmission Anxiety</th>
<th>Mean</th>
<th>SD</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Educational Intervention</td>
<td>16.45</td>
<td>4.619</td>
<td>0.018</td>
</tr>
<tr>
<td>After Educational Intervention</td>
<td>16.09</td>
<td>3.744</td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary data, 2020

The statistical test results obtained that the p-value is 0.000 <0.05, it can be said that there is a significant difference between anxiety before being given and after being given health education about the transmission of COVID-19 in the elderly who are assisted by the Blue District Health Center Bone.

Respondent characteristics

The results of statistical tests showed that the female gender faced more anxiety and those aged 54-60 years experienced more stress. Balkhi et al. (2020), found that men tend to wash their hands more often than women. However, in general, the ratio between the sexes was not significantly different with only slight changes such as men being more likely to be afraid to leave the house after the pandemic, pretending to be sick to avoid coming to work or college, and considering quitting or taking time off. Meanwhile, women are more likely to buy more food to stock for fear of running out. The study found that over 35 years of age felt

more anxious compared to the 35-year-old group because those under 35 felt anxious due to watching or reading and listening to news about COVID-19.

Research results George, et al. in John W, Santrock, older adults have a higher likelihood of experiencing anxiety disorders than depression. This statement was supported by Tamber & Noorkasiani in Suryani & Rosyid (2016). They revealed that the psychological problems that mostly occur in the elderly include anxiety, loneliness, and feelings of sadness (Annisa & Ifdil, 2016) research conducted by Bergman et al. (2020), corroborates this statement, Cohen-Fridel et al. (2020), which explains that elderly anxiety is a concern about physical health during the COVID-19 disease pandemic. The study found that health concern in the elderly is associated with anxiety and seen among older people with high levels of anxiety.

The Relationship of Health Education to Elderly Anxiety about Covid-19 Transmission The results of statistical tests using the Paired T-test, before and after being given education, obtained a significant value of 0.018 <0.05, so it concluded that there was a significant difference between anxiety about COVID-19 transmission before and after being given an education. This study is in line with Anjarini (2018), with a sample size of 31 families aged 40-65 years using the Non-Equivalent Control Group design, the Wilcoxon test results found that there were differences in the two groups, where the experimental group obtained a p-value of 0.000 which means there is an influence health education on family anxiety.

As a new disease, there is little known about the COVID-19 pandemic. Moreover, humans tend to be afraid of something they do not know yet, which causes symptoms such as prejudice against other people, not wanting to socialize with other people, and tends not to do activities just staying at home (Dai, 2020; Datta & Tiwari, 2016). One of the symptoms of anxiety is feeling worried that bad things will happen, excessive worry, irritability, and difficulty relaxing. COVID-19 is a new source of stress and anxiety (Thakur & Jain, 2020) behavior. Educational activities are carried out by disseminating information and messages and instilling confidence so that people are not only aware, know, and understand but also willing and able to accept and implement recommendations.

They have to do with health (Anjarini, 2018) The expected result of health education is a change in the mindset and attitude of individuals, families, and communities to be able to instill a healthy mindset and principles in daily life to achieve optimal health degree. According to the assumption, the researchers explained that education about the transmission of COVID-19 is a collective obligation, education in the form of correct and unambiguous information can only obtaining from competent health workers. The elderly need special attention from health workers because they are a vulnerable group affected by the transmission of COVID-19. This trend is in line with research by Li et al. (2020), found that accurate health information about COVID-19 is needed to increase public awareness of health.

4 Conclusion

The results of research on the relationship of health education to elderly anxiety about the transmission of Corona Virus Disease (COVID - 19) in Pappolo Village, the working area of Puskesmas Biru, Bone Regency, it concluded that there is a significant difference in the frequency of anxiety about COVID-19 before the intervention and after the intervention. Health Education.

Acknowledgments

The completion of this research cannot be separated from the support of various parties. Researchers specifically express their deepest gratitude to the Director of the Batari Toja Watampone Nursing Academy, Puskesmas Biru, district. Bone, All Respondents, and the people of Pappolo Village, Tanete Riattang Subdistrict, Bone Regency, and all those who have helped, provide suggestions and input as well as an encouragement both moral and material.
References


Gumantan, A., Mahfud, I., & Yuliandra, R. (2020). A person's level of anxiety about the implementation of the new normal and knowledge of body immunity. Sport science and education journal, 1(2).


### Biography of Authors

<table>
<thead>
<tr>
<th>Author</th>
<th>Education and Work Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Najman</strong></td>
<td>Completed Diploma III Nursing Education in 2010 at the Batari Toja Watampone Nursing Academy, then continuing his undergraduate education in 2014 at STIKES Nani Hasanuddin Makassar, completing his master's education at Hasanuddin University Makassar in 2018 and completing Nursing Profession education in 2019 at STIKES Muhammadiyah Sidrap. Currently working as a Lecturer at the Batari Toja Nursing Academy from 2011 to the present. Email: <a href="mailto:Najman@bataritoja.ac.id">Najman@bataritoja.ac.id</a></td>
</tr>
<tr>
<td><strong>Kistan</strong></td>
<td>Completed Bachelor of Nursing Education in 2014, Nursing Profession 2015 at the Nani Hasanuddin School of Health Sciences in Makassar, and asked for a master’s degree at the Faculty of Emergency and Disaster Management at Hasanuddin University Makassar to be completed in 2017. Is a disaster volunteer and currently works as a Lecturer at the Batari Toja Academy of Nursing Email: <a href="mailto:Kistan@bataritoja.ac.id">Kistan@bataritoja.ac.id</a></td>
</tr>
<tr>
<td><strong>Ita Novianti</strong></td>
<td>Completed Diploma III Midwifery Education at the Batari Toraja Midwifery Academy in 2012, served as a midwife at Awaru Community Health Center, Bone Regency in 2013-2015. Completing Diploma IV at the Educator midwife at Stikes Mega Resky Makasar in 2015, as a staff managing student administration at the Toja Watampone Batari Midwifery Academy. In 2017, he completed his master's degree in midwifery at Hasanuddin University Makassar in 2019 and is currently active as an Administrative Staff for Curriculum Development and Permanent Lecturer at the Batari Toja Watampone Midwifery Academy. Email: <a href="mailto:ita.novianti91@gmail.com">ita.novianti91@gmail.com</a></td>
</tr>
</tbody>
</table>