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## COMPARISON OF KNOWLEDGE BEFORE AND AFTER COUNSELING ABOUT HANDWASHING DURING THE COVID-19 PANDEMIC IN ELDERLY SOCIAL SERVICES

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### *Abstract*

*The knowledge referred to in this study is knowledge before and after counseling about hand washing during the COVID-19 pandemic. Prior knowledge of counseling is the things respondents know about hand washing during the COVID-19 pandemic which is assessed based on their ability to answer the questions on the questionnaire correctly before counseling. Based on the results of the pre-test questionnaire with a rating scale if answered Yes-1 and No-0 it is known that the 30 elderly respondents have an average score of knowledge before being given counseling is 2.3667 rounded up to 2.37. This was obtained from the total amount of pre-test data divided by 30 respondents. It can be seen that the answers of the elderly are still relatively low because they have not received more information about hand washing during a pandemic (COVID-19). Based on the post-test questionnaire that has been distributed with a rating scale if the answers are Yes-1 and No-0, it is known that the 30 elderly respondents have an average score of knowledge after being given counseling which is 9.6667 rounded up to 9.67. This was obtained from the total post-test data divided by 30 respondents. It can be seen that Jansia's answers greatly improved after the counseling about hand washing during the COVID-19 pandemic. This increase in value indicates that there is a difference in the average score of knowledge about prior knowledge and knowledge after counseling about hand washing during the COVID-19 pandemic. Based on the SPSS test that has been carried out ( $P=0.000$ ;  $\alpha=0.05$ )  $H_a$  (alternative hypothesis) is accepted because the  $p$ -value is  $< 0,005$  so that  $H_0$  is rejected at the price of the level of significance ( $\alpha$ ) - 5% so that the alternative hypothesis is accepted. Thus the conclusion in this study was that there were differences in knowledge before and after counseling about hand washing during the COVID-19 pandemic at the Pematangsiantar Elderly Social Service.*

**Keywords:** Knowledge of Hand Washing Extension

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## INTRODUCTION

COVID-19 or better known as the corona virus is the topic that is most discussed by all groups in all countries in the world today. Lifestyles have changed drastically and are quite extreme, including social interactions that were suddenly restricted due to social distancing: limited physical movement due to physical distancing rules and healthy lifestyles such as washing hands properly with antiseptic soap, cleaning the body and other objects with disinfectants and so on that were not usually done before (Putra, YM, 2020).

One of the most vulnerable groups to be infected with COVID-19 is the elderly (elderly) aged 60 years and over. Based on research conducted by the Chinese CDC, it is

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known that most cases occur in men (51.4%) and occur at the age of 30-79 years and the least occur at the age of 10 years (1%). As many as 81% of cases were mild cases, 1494 were severe, and 51 were critical (Wu Z and McGoogan JM, 2020). According to the 2020 COP7D-19 prevention and control guidebook for the Indonesian Ministry of Health, it says that Indonesia reported its first case of COVI/D-19 on March 2 2020 and the number continues to increase until now. As of June 30 2020, the Ministry of Health reported 56,385 confirmed cases of COVID-19 with 2,875 deaths (CFR 5.196) spread across 34 provinces. As many as 51.% of cases occurred in men. Most cases occur in the age range of 45-54 years and the fewest occur in the age range 0-5 years. The highest mortality rate was found in patients aged 55-64 years. As a person ages, the body will experience various declines due to the aging process. Starting from decreased hormone production, skin elasticity, muscle mass, bone density, to the strength and function of the body's organs. Then the immune system as a body protector in the elderly cannot work optimally like when they were young. As a result, it is difficult for the elderly to fight various kinds of bacteria or viruses that cause disease, including being infected with COVID-19. As a person ages, the body will experience various declines due to the aging process. Starting from decreased hormone production, skin elasticity, muscle mass, bone density, to the strength and function of the body's organs. Then the immune system as a body protector in the elderly cannot work optimally like when they were young. As a result, it is difficult for the elderly to fight various kinds of bacteria or viruses that cause disease, including being infected with COVID-19. As a person ages, the body will experience various declines due to the aging process. Starting from decreased hormone production, skin elasticity, muscle mass, bone density, to the strength and function of the body's organs. Then the immune system as a body protector in the elderly cannot work optimally like when they were young. As a result, it is difficult for the elderly to fight various kinds of bacteria or viruses that cause disease, including being infected with COVID-19.

Along with increasing life expectancy, the elderly population is also increasing day by day. The rapid growth of the elderly population worldwide has outpaced the growth of other age groups. The number of elderly population is 18.96 million people and this number has increased to 20,547,541 people in 2009. According to WHO in 2025, Indonesia will experience an increase in elderly people by 41.4%, which is the highest increase in the world Even the United Nations estimates that the number of Indonesian citizens will reach approximately 60 million.

Hand washing is a process that mechanically removes dirt from the hands by using soap and water, starting from the tips of the fingers to the elbows and arms in a certain way. needs (Al-Zahrani, 2012). How to wash your hands with soap and water for 40-60 seconds (Kemen.Kes. RI., 2011).

Based on the background above, the researcher wanted to study the differences in knowledge before and after counseling about hand washing during the | period the COVID-19 pandemic at the Pematangsiantar Elderly Social Service in 2020 using the method *pre-experimental designs*. Researchers chose the elderly as research subjects because based on

a survey at the Pematangsiantar Elderly Social Service, many elderly people lacked the habit of washing their hands.

## METHODS

### 1. Research design

The design of this research is a One-Group Pretest-Positest Design study. One-Group Pretest-Posttest Design is a form of Preexperimental Design. It is said to be Pre-Experimental Design because there are still external variables that influence the formation of the dependent variable. So the experimental results which are the dependent variable are not solely influenced by the independent variable. This happened because there was no control variable, and the sample was not chosen randomly. In this design there is a pretest, before being given treatment. Thus the results of the treatment can be known more accurately, because it can be compared with the conditions before being given treatment (Sugiyono, 2017). Based on Sugiyono (2017).

### 2. Research sites

Research Location The place of this research was carried out at the UPT Social Services for the Deaf, Speech and Elderly Social Service in Pematangsiantar which is located at Jalan Sisingamangaraja No. 68, Pematangsiantar, North Sumatra.

### 3. Research time

This research was conducted in September-October 2020.

### 4. Data analysis

Data analysis was carried out in stages which included univariate, bivariate,

#### a. Univariate analysis

Univariate analysis was performed to get an overview of each dependent variable and independent variable. The data will be presented in the form of a frequency distribution.

#### b. Bivaria analysis

Bivariate analysis is to find out whether there is a relationship between the independent variables (categorical) and the independent variables (categorical) by using the Kai Square Test or Chi Square.

To determine the significance of the results of statistical calculations, a significance limit of 0.05 was used. Thus if the p value  $< 0.05$  then the calculation results are statistically significant and if  $p > 0.05$  then the results of the statistical calculations are not significant.

## RESULTS AND DISCUSSION

### **Differences in Knowledge Before and After Counseling on Handwashing During the COVID-19 Pandemic Period at the Pematangsiantar Social Service Office in 2020**

According to Notoatmodjo (2007), knowledge is a person's ability to re-express what he knows in the form of evidence of answers either verbally or in writing which is a stimulation of the question. Knowledge or cognitive is a very important domain in shaping one's actions (over behavior). Measurement of knowledge can be done by interviews or questionnaires that ask about the content of the material to be measured from research subjects or respondents (Notoatmodjo, 2007).

Knowledge is the result of knowing that occurs after sensing a particular object. Sensing occurs through the human senses, namely the senses of sight, hearing, touch, smell, and taste. Knowledge or the cognitive domain is a very important dominant factor in shaping one's actions, because from the results of research it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge (Notoatmodjo, 2012).

The knowledge referred to in this study is knowledge before and after counseling about hand washing during the COVID-19 pandemic. Prior knowledge of counseling is the things respondents know about hand washing during the COVID-19 pandemic which is assessed based on their ability to answer the questions on the questionnaire correctly before counseling.

Based on the results of the pre-test questionnaire with a rating scale if answered Yes-1 and No-0 it is known that the 30 elderly respondents have an average score of knowledge before being given counseling is 2.3667 rounded up to 2.37. This was obtained from the total amount of pre-test data divided by 30 respondents. It can be seen that the answers of the elderly are still relatively low because they have not received more information about hand washing during a pandemic (COVID-19).

Based on the post-test questionnaire that has been distributed with a rating scale if the answers are Yes-1 and No-0, it is known that the 30 elderly respondents have an average score of knowledge after being given counseling which is 9.6667 rounded up to 9.67. This was obtained from the total post-test data divided by 30 respondents. It can be seen that Jansia's answers greatly improved after the counseling about hand washing during the COVID-19 pandemic.

This increase in value indicates that there is a difference in the average score of knowledge about prior knowledge and knowledge after counseling about hand washing during the COVID-19 pandemic. Based on the SPSS test that has been carried out ( $P < 0.000$ ;  $\alpha < 0.05$ )  $H_a$  (alternative hypothesis) is accepted because the  $p$ -value is  $< 0.005$  so that  $H_0$  is rejected with a price of level of significance ( $\alpha$ ) - 5% so that the alternative hypothesis is accepted. Thus the conclusion in this study was that there were differences in knowledge before and after counseling about hand washing during the COVID-19 pandemic at the Pematangsiantar Elderly Social Service.

These results are consistent with previous research by Istigomah in his research on Healthy Handwashing with Soap (CTPS), which is one of the Clean and Healthy Behaviors (PHBS), which based on statistical tests produces a p-value of  $0.000 < 0.005$ . These results mean that there is an influence of hand washing counseling with poster media on the hand washing practices of students at SDN Sandang Harjo Minggir.

## CLOSING

### Conclusion

Based on the results of research on differences in knowledge before and after counseling about hand washing during the COVID-19 pandemic at the Pematangsiantar elderly social service in 2020, it can be concluded that:

1. Obtained the value of knowledge prior to counseling about hand washing during the COVID-19 pandemic at the Pematangsiantar elderly social service in 2020 was 2.3667 rounded up to 2.37.
2. There is a difference in knowledge after counseling about hand washing during the COVID-19 pandemic at the Pematangsiantar elderly social service in 2020 which is 9.6667 rounded up to 9.67.
3. There were differences in knowledge before and after counseling about hand washing during the COVID-19 pandemic.

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