



**COMMUNITY BEHAVIOR IN RURAL AREAS: WASHING HANDS AND WEARING MASKS DURING THE COVID**

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**ABSTRACT**

The spread of the Covid-19 virus is currently still increasing even though the Covid-19 vaccine has started to be given to the public. The development of Covid -19 cases as of April 20, 2021, totaling 1,614,849 positive cases. The increase in the spread of the virus requires the application of health protocols through hand washing and the wearing of strict masks during the Covid 19 pandemic. Objective: This study aims to determine the description of hand washing behavior and a description of the wear of masks in the Banjar Dinas Muntigunung community, West Tianyar Village, Kubu District, Karangasem Regency in the Covid-19 Pandemic Era. The type of research used in this research is quantitative research with a descriptive exploratory research design. The population of this research is the whole society Banjar Dinas Muntigunung. The sampling technique used in this study is non-probability sampling with simple random sampling technique of 360 people, the available population is made a lottery number then randomized until 360 samples are collected. Data collection is done online. Data analysis was carried out by univariate namely the frequency distribution. The results showed that the average age of respondents was 33 years with the majority of respondents being female, 58.9%, having a history of high school education of 57.8%. The results showed that the majority of respondents had good hand washing behavior, as many as 360 people (100%) and in the use of masks in the good category, 273 people (75.8%). The community is expected to be able to implement and improve hygiene and healthy living habits, especially the behavior of washing hands with soap in running water and using masks when leaving the house or interacting with other people. The results showed that the average age of respondents was 33 years with the majority of respondents being female, 58.9%, having a history of high school education of 57.8%. The results showed that the majority of respondents had good hand washing behavior, as many as 360 people (100%) and in the use of masks in the good category, as many as 273 people (75.8%). The community has good behavior in washing hands and wearing masks during the Covid 19 pandemic.

**Keywords:** COVID-19; handwashing behavior; mask use

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**INTRODUCTION**

The spread of the Covid-19 virus is currently still increasing even though the Covid-19 vaccine has started to be given to the public. The development of Covid -19 cases as of April 20, 2021, totaling 1,614,849 positive cases. The rapid spread of the Covid 19 virus requires appropriate intervention to control the wider spread of the virus. There are at least two types of coronavirus that are known to cause diseases that can cause severe symptoms, such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Indonesian Ministry of Health, 2020).

On December 31, 2019, the WHO China Country Office reported a case of pneumonia of unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China

identified the case as a new type of coronavirus. On January 30, 2020, WHO designated this incident as a Public Health Emergency of International Concern (PHEIC) and on March 11, 2020, WHO declared COVID-19 a pandemic (Indonesian Ministry of Health, 2020) .

Based on research conducted by the Chinese CDC, it is known that the most cases occurred in men (51.4%) and occurred at the age of 30-79 years and the least occurred at <10 years old (1%). The increase in the number of cases took place quite rapidly, and spread to various countries in a short time. As of 9 July 2020, WHO reported 11.84,226 confirmed cases with 545,481 deaths worldwide (Case Fatality Rate / CFR 4.6%). Indonesia reported its first case on March 2, 2020. Cases are increasing and spreading rapidly throughout Indonesia. As of 23 August 2020 the Ministry of Health reported 151,498 confirmed cases of COVID-19, of which 105,198 cases were cured, 39,706 cases were in treatment, and 6,594 cases died (CFR 4.4%). COVID-19 cases in Bali province until 23 August 2020 were reported 4,513 confirmed COVID-19 cases of which 3,953 cases were cured, 508 cases were under treatment, and 52 cases died (CFR 1.2%).

The highest number of COVID-19 cases in Bali was in Denpasar City with 1,527 cases and the lowest was in Jembrana Regency with 88 cases. Karangasem Regency until 12 October 2020 ranks 5th with 860 cases where 82 cases are still being treated, 731 cases have recovered, and 45 cases died. Positive cases of Covid-19 in the Banjar community of the Muntigunung Service, West Tianyar Village, Kubu District, Karangasem Regency until October 12, 2020, recorded 16 cases. One of the government programs in dealing with this pandemic in preventing and spreading in the community is by maintaining hand hygiene. Efforts made in maintaining hand hygiene are routine hand washing (Kementrian Kesehatan RI, 2020). Washing hands is an easy and safe step to protect yourself from the COVID-19 corona virus, but not many people know how to wash hands properly (Meok, 2020). This is in line with the statement (Rosyidah, 2019) which states that until now there are still many people who do not know how to wash their hands properly and correctly to avoid the corona virus.

A 2018 report by the United States Department of Agriculture (USDA) found that up to 97 percent of the public was washing their hands improperly. Other data from a study in the Journal of Environmental Health found that only 5% of Americans wash their hands properly, although the CDC recommends washing their hands for 20 seconds, the average person only washed their hands for about six seconds (Belluz & Irfan, 2020) . In the survey in Indonesia, not much data was found regarding the number of ineffective hand washing, but several articles show that many people have not washed their hands properly and said that they would not wash their hands when they felt that their hands looked clean and had no smell (Anggraeni, 2020).

One of the media for transmitting Covid-19 is through the respiratory tract. This transmission can occur when someone who is positive for COVID-19 experiences coughing symptoms and spreads the virus to people through the nose. Prevention that can be done is by using masks. Masks can be the first barrier if there are droplets / droplets either from yourself or from others. Respiratory protective equipment or masks are tools used to protect the mouth and nose with a material that can filter out dust or vapors. The mechanism that occurs is by capturing particles or aerosols from the air with a filtering or absorption method, so that the air that passes through the mask is clean from particulates (Pratiwi, 2020).

These results are supported by research conducted by (Prasetyo, 2017) with the title Knowledge Relationship and Student Attitudes Toward Compliance with Hand Washing with the Hand Wash Method at IGD RSUD DR. R. Goeteng Taroenadibrata Purbalingga. The results of the study were that students with good knowledge were 14 (36.8%) in practice, and 11 (28.9%) had less knowledge. Practical students with negative attitudes were 22 (57.9%), positive attitudes were 14 (42.1%). Practical students with obedient obedience as much as 20 (52.6%), obedience as many as 18 (47.4%). The results of the chi square test value for knowledge of 0.001, the results of the chi square test for attitude of 0.003, so it can be concluded that there is a relationship between knowledge and attitudes of students towards compliance with washing hands in the emergency room of dr. R. Goeteng Taroenadibrata Purbalingga.

The preliminary study was carried out on August 18, 2020 at the Muntigunung Dinas banjar, Tianyar Barat Village, Kubu District, Karangasem Regency. Based on the results of interviews with 10 people living there, it was found that 8 out of 10 residents said that they wash their hands with soap without knowing how to wash their hands properly. They assume that washing hands is sufficient only with soap and water without knowing the principles of proper hand washing. There are also 6 out of 10 residents who wash their hands without using running water. Based on the description of the use of masks, it was found that 7 out of 10 residents said that they had occasionally used a mask during their daily activities. Most of the masks used by the community there use cloth masks and only a few use surgical masks. Most of them are reluctant to use masks because they feel tight when wearing them. In addition, there were some residents who said that the price of masks was still too expensive to buy. These results indicate that people's understanding of hand washing and the use of masks in the new normal era is still minimal. The purpose of this study is to describe the behavior of washing hands and a description of the use of masks in the Banjar Dinas Muntigunung community, West Tianyar Village, Kubu District, Karangasem Regency in the Covid-19 Pandemic Era.

## **METHOD**

The type of research used in this research is quantitative research with a descriptive exploratory research design. The sampling technique used in this research is non probability sampling with simple random sampling technique of 360 people. This research was conducted at Banjar Dinas Muntigunung, Tianyar Barat Village, Kubu District, Karangasem Regency from December 17, 2021 to January 7, 2021. The inclusion criteria of this study were people aged  $\geq 15$  years. Ethical Approval Number for this research: 04.0003/KEPITEKES-BALI/I/2021. The data was collected online by distributing handwashing behavior questionnaires and wearing masks to respondents who had been selected according to the sampling technique. The questionnaire has been tested for validity and reliability. The results of the validity test of the hand washing behavior questionnaire r count 0.499-0.823, while the questionnaire for using masks gets r count 0.509-0.874.

The results of the reliability test on the handwashing questionnaire got an alpha value of 0.961 while the mask use questionnaire got a value of 0.927. In this study, the analysis technique used is univariate analysis. Operational definition Hand washing behavior is a form of response or reaction to stimuli or stimuli from outside the organism (people), especially those related to washing hands. The categories of behavior were divided into two: Good hand washing behavior = 40-80. Bad hand washing behavior = 20-39. The operational definition of a cloth mask is a mask made of cloth that can be cleaned and reused. Surgical masks are masks commonly used by health workers in health services. The N95 mask is a special type

of mask that is used to protect against particles with a size of <5 microns that are carried by the air. masks are divided into two categories: Score 30-45 = good, Score 15-29 = less. Univariate analysis showed the distribution and percentage of the characteristics of the study subjects, features of washing hands and wearing masks.

## RESULTS

This research was conducted in Banjar Dinas Muntigunung, Tianyar Barat Village, Kubu District, Karangasem Regency with a total of 360 respondents. The results of this study will be described as follows:

Table 1 D.  
 Distribution of Frequency Characteristics of Research Subjects by Age (n= 360)

Variabel	N	Average	Min	Max	SD
Usia	360	33,03	15	65	16.696

Based on table 1, the results show that the average age of the respondents is 33.03 years with the youngest age being 15 years and the oldest being 65 years.

Table 2.  
 Frequency Distribution of Characteristics of Research Subjects by Gender and Education Level (n=360)

Variabel	f	%
Gender	Men	148
	Female	212
Level of Education	Not School	6
	Primary School	22
	Elementary School	28
	Senior High School	208
	College	96

Based on table 2, it is found that the majority of respondents are female, as many as 212 people (58.88%). Based on the level of education, it was found that the education level of the respondents had more high school levels, namely as many as 208 people (57.78%).

Table 3.  
 Description of Handwashing Behavior (n=360)

Hand Washing Behavior	f	%
Good Behavior	360	100,00
Bad Behavior	0	0,00

Based on table 3, it is found that all people in Banjar Dinas Muntigunung, Tianyar Barat Village, Kubu District have hand washing behavior in a good category, namely as many as 100% (360 people).

Table 4.  
 Description of the Use of Masks (n=360)

Use of Masks	f	%
Good	273	75,83
Less	87	24,17

Based on table 4, the results show that the use of masks in the community has good behavior as much as 75.83% (273 people).

## **DISCUSSION**

### **Characteristics of Respondents**

The results showed that the average age of the respondents was 33.03 years with the youngest being 15 years old and the oldest being 65 years old. As a person gets older, there will be behavior changes where they will find it difficult to receive information, they are less active, prone to disease and tend to ignore PHBS. Young people are more receptive to information and more dynamic than old age, so they are more receptive to behavior changes (Juntra, 2020).

This is in line with research conducted by Benny Karuniawati & Putrianti (2020), where the results of data analysis show that most of the respondents are in the healthy reproductive age category, namely the age of 20-35 years as much as 52.1% and the least is age. This study found that most of the respondents were female, as many as 212 people (58.88%). Based on research conducted by Apriluana et al (2016), in their research it was found that more female respondents (76.10%) had good behavior in using PPE compared to less (23.90%), as well as male respondents. More men (78.80%) had good behavior in using PPE, compared to less behavior (21.20%). So it can be seen that there is no significant relationship between gender and the behavior of using PPE.

This study found that the education level of the respondents was mostly high school level, namely as many as 208 people (57.8%) and as many as 98 respondents (26.7%) had a history of tertiary education. In line with the results of research conducted by Benny Karuniawati and Putrianti (2020), based on the education of the most respondents, the most respondents were Undergraduate Education with 38% followed by Diploma Education by 28.2%. Characteristics of respondents based on education, the majority have high school level education, as many as 208 people (57.8%) and as many as 98 respondents (26.7%) have a history of tertiary education. The level of education can affect the behavior of a clean and healthy life, where the higher the level of education, the understanding of knowledge, especially environmental health and awareness of environmental health, includes the application of health behavior principles (Rahardjo & Setiyowati, 2017).

Researchers assume that respondents aged 20-35 years are able to receive information well, in this case, especially information about how to prevent the transmission of the Covid-19 virus, both information from the task force, mass media, social media, television and others. In this study, all respondents were able to behave using masks based on the questionnaire scores given. Educational factors are also very influential with the results of this study, high school level children are deemed very capable of receiving information, especially the dangers of the impact of the Covid-19 virus, so respondents obey using masks as an effort to prevent it.

### **Handwashing Behavior**

The results of the identification in this study showed that all people in Banjar Dinas Muntigunung, Tianyar Barat Village, Kubu District had hand washing behavior in a good category, namely as many as 360 people (100%). The most important prevention of corona disease includes washing hands with soap and clean running water. Wash your hands frequently with soap and clean, running water for at least 20-30 seconds. Wash hands frequently, especially after contact with the respiratory tract, before eating, and after using the toilet. Washing your hands using clean running water and using soap can clean your hands

from dirt that contains germs, viruses and bacteria (Marwadah, 2020). Washing hands with soap with running water is one of the most effective ways to prevent the spread of the Covid-19 virus. This has also been confirmed by the World Health Organization (WHO). This method is even more effective at killing viruses than using a hand sanitizer. Our hands are an important vector for the transmission of microorganisms between humans so that awareness raising on hand washing, especially in health facilities is a standard protocol (Alzyood et al., 2020).

In line with the results of research conducted by Benny Karuniawati & Putrianti (2020), regarding the habit of washing hands with soap after leaving the house of 71 respondents, 83.1% of respondents always wash their hands, wash their hands with soap before eating from 71 respondents 76.1% respondents said they always wash their hands, but there are still 2.8% of respondents who only occasionally wash their hands before eating. Also supported by the results of research conducted by Mawardah (2020), in his research, it shows that people have more good categories of prevention behavior for coronavirus disease, namely as many as 53 people (53.0%) than in the less category, namely 47 people (47.0%) ), namely the indicator of washing hands using soap and clean running water as much as 58 (58%).

The results of this study are not in line with the results of the research obtained by (Siahaineinia et al., 2020) showing that of the 30 respondents studied, the majority did not wear masks, namely 23 people (76.67%), and the minority wore masks, as many as 7 people (23.33%) ). The reasons for respondents not using masks were several, namely being short of breath, uncomfortable, feeling good about themselves and not worrying about Covid. The reason why the respondents did not wash their hands was because the cleanliness of the existing sink and washbasin was also questionable, and there was no soap for washing hands. Based on the results of the research which shows that all respondents (100%) are able to have good hand washing behavior, researchers can assume that the community's handwashing behavior is good because the proper socialization has been carried out by the government, especially the covid-19 task force or team in Muntigunung village. Based on the results of interviews with the covid-19 response task force in Muntigunung village, he said that if he carried out patrols every day to continue to socialize and remind people of the importance of washing hands. In addition, based on research data which shows that the average age of the respondents is 33.03 years which is the productive age. Young people are easier to accept and get new information than parents and even the elderly. Young people are more receptive to behavior changes so they are expected to be able to have a positive impact on their parents and the community in their environment.

### **The Use of Masks**

The results of the identification in this study showed that most of the people in Banjar Dinas Muntigunung, Tianyar Barat Village, Kubu District in the use of masks in the good category were 273 people (75.8%). One of the media for transmitting Covid-19 is through the respiratory tract. This transmission can occur when a person who is positive for COVID-19 experiences coughing symptoms and spreads the virus to other people through the nose. Prevention that can be done is by using masks. Masks can be the first barrier if there are droplets / droplets either from yourself or from others. Respiratory protective equipment or masks are tools used to protect the mouth and nose with a material that can filter out dust or vapors. The mechanism that occurs is by capturing particles or aerosols from the air with a filtering or absorption method, so that the air that passes through the mask is clean from particulates (Pratiwi, 2020).

The results of this study are in line with the results of research conducted by Sri Untari & Kodiyah (2020), where the results of the research show that most respondents in Grobogan Regency always use masks when going out of the house (65.8%) of respondents. However, there were still (29.7%) respondents who claimed to rarely use masks when leaving the house and there were (4.54%) respondents who claimed not to use masks when leaving the house. This is also supported by the results of research conducted by Pratiwi (2020), where the results of the study show that most respondents in Muna Regency always wear masks when traveling outside the house (57.8%). However, there were still 35.5% who admitted that they rarely used masks when leaving the house and 6.7% who claimed not to use masks when leaving the house. It is known that the reason some respondents rarely use masks when they are outside the home are because the supply of masks is limited (51.6%), uncomfortable (23.5%), running out of masks (13.1%), and they do not feel the need to use masks 56 (11.8%).

The impact of the Covid-19 pandemic has indeed made masks a rare and expensive item. The increase in the price of medical masks since Covid-19 is far from normal. Many respondents limit the use of masks by rarely using them so that the supply of masks is available until the time that masks are indeed mandatory. In line with research conducted (Macintyre & Ahmad, 2020), regarding influenza, influenza-like illness, and human coronavirus (other than COVID-19) provides evidence that the use of medical masks can prevent the spread of droplet infections from infected and symptomatic people (source control ) to others and environmental contamination due to these droplets.

Basically, people actually understand very well the importance of using masks during the COVID-19 pandemic like now. However, sometimes there are still many residents who don't want to wear masks because they have difficulty breathing (Ningrum et al., 2020). The use of a mask requires an adaptation for someone to breathe harder to meet oxygen in the body, however wearing a mask does not reduce the supply of oxygen in the blood. The impact of the pandemic has indeed made masks a rare and expensive item. Respondents have limited the use of masks by rarely using them because they do not have sufficient supplies for daily use.

Based on the results of the research which shows that there is still a bad behavior in using masks, namely as many as 87 respondents (24.2%). Researchers assume that this occurs due to many factors, one of the most influential factors is the economic factor, where in general, people in the village of Muntigunung are people with lower middle income because the impact of the Covid-19 pandemic has indeed made masks a rare and expensive item. Since the Covid 19 pandemic began to enter Indonesia, especially the island of Bali, the government has a mandatory policy of wearing masks for all people. This situation was used by individuals to seek profit in the midst of the epidemic, so they sold masks at high prices. Masks are more effective if they are used for a long time and are not used repeatedly. It is better to keep wearing it until it is completely finished than to take it off and put it back on. The corona virus will infect the body more if we often or have intense time to touch our faces (Mawardah, 2020).

## **CONCLUSION**

The results of this study identified people in rural areas, the behavior of washing hands and using masks during the Covid 19 pandemic. Rural areas are conditions of people who are still very close to culture and customs, where every community activity is completed by mutual cooperation, identifying the behavior of washing hands and using it. masks during the Covid 19 pandemic provide descriptions of people's behavior during the pandemic.

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