

## ***Improving Knowledge, Attitudes and Skills of Wani Ngandani Cadres on Effective Communication Dissemination of Health Protocols and Continuous Monitoring (Surveillance) for Covid 19 Management in Surabaya***

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### **ABSTRACT**

**Background:** COVID-19 preventive behavior plays a role in reducing infection rates and controlling the spread of the disease. In order to optimize the behavior of preventing COVID-19 in the Pacar Keling Sub-district, Tambaksari District, a health promotion program is needed by involving the active participation of the community, so that the community is able to overcome health problems with their existing potential. **Objectives:** This study aimed to determine the increase before and after being given knowledge and skills on how to communicate effectively when socializing the 5M health protocol, planning and evaluating in conducting socialization activities and how to carry out continuous surveillance on Wani Ngandani cadres as well as increasing knowledge related to health protocols during the COVID-19 pandemic for webinars. **Methods:** In each activity, 1-3 and RTL Webinar, Pre-test, and Post-test data are collected to measure the level of knowledge of participants. A paired t-test is used as the data analysis to determine the difference before and after being given training. The methods applied in measuring cadre skills are presentation and role play. Meanwhile, RTL activities are held online in the form of Community Service Webinars. The materials provided in training activities 1-3 are in the form of PPT materials and manuals. **Results:** Based on the results of the paired t-test, it is known that there were significant differences (sig <0.05) in the results of the pre-test and post-test on the four training activities. **Conclusion:** This program was effective and its implementation has succeeded in achieving the expected target and there has been a strengthening of knowledge in the community.

**Keywords:** Continuous Monitoring; COVID-19; Planning; Prevention; Socialization.

### **INTRODUCTION**

COVID-19 has caused panic in the world community and has been declared by WHO as an extraordinary event. Further explanation regarding COVID-19 that can be understood easily by the patients, families, and the community is needed to reduce panic and provide knowledge on how to prevent the disease (Thamrin, n.d.). COVID-19 is caused by a type of influenza virus that suppresses the immune system which allows the virus to grow in respiratory tissues and organ

(Republik & Indonesia, 2020). Common signs and symptoms of COVID-19 infection include symptoms of acute respiratory distress namely fever, cough, and shortness of breath. The average incubation period is 5-6 days with the longest incubation period to 14 days.

Standard recommendations to prevent the spread of infection are regular hand washing, practicing coughing and sneezing etiquette, avoiding direct contact with livestock and wild animal as well as avoiding close contact with anyone showing symptoms of respiratory

disease including coughing and sneezing (Republik & Indonesia, 2020). World Health Organization (WHO) established the COVID-19 Protocol as a Public Health Emergency of International Concern (PHEIC) on January 30, 2020. The increase in the number of COVID-19 cases has taken place quite rapidly and the spread has happened cross-countries, as of March 2020, were reported globally 90,870 confirmed cases among 72 countries with 3,112 deaths (CFR 3,4%) (Republik & Indonesia, 2020).

According to the latest data obtained from COVID-19 Response Acceleration Task Force, on December 16, 2020, the number of recovered patients increased by 521,984 people. However, on the other hand, there has also been an increase in confirmed cases as many as 643,508 people and a total of 19,248 people died. The data is spread among 34 provinces. The data COVID-19 Response Acceleration Task Force showed East Java as the province with the second largest number of cumulative cases in Indonesia. As of December 16, 2020, COVID-19 Response Acceleration Task Force's data reported as many as 72,979 confirmed cases in East Java.

The city of Surabaya is one of the cities in East Java province which is included in the moderate risk zone category in the spread of COVID-19 cases. One of the districts which densely populated in the city of Surabaya is Tambaksari District. Tambaksari District is included in the 10 districts with the largest number of confirmed COVID-19 cases districts in Surabaya, as of December 16, 2020, the confirmed cases are reported as many as 1,329 people. According to this data, Pacarkeling Sub-district is reported as the sub-district with the sixth-largest number of confirmed COVID-19 cases in the Tambaksari District with a total of 140 people.

The result of primary data collected through interviews with stakeholders in the Pacarkeling Sub-district, Tambaksari District, found various problems related to the high number of COVID-19 cases, namely the lack of public knowledge that assumed COVID-19 as a conspiracy theory, the lack of public awareness in keeping the distance during the new normal period, and the absence of surveillance system for online motorcycle-taxi which entering

a certain area as well as the protection at the entrance of the village to implement health protocol.

According to the result of the Forum Group Discussion (FGD) at the Balai RW 10 Pacarkeling Sub-district with stakeholders and referring to the result of the Rapid Health Assessment (RHA) conducted in the Pacarkeling Sub-District, it was found that the community had implemented the health protocol, however, the discipline in implementing COVID-19 prevention behavior in the community had not been implemented optimally due to the lack of knowledge regarding the benefit of COVID-19 prevention behavior and the perception among the community which assumed COVID-19 as a conspiracy theory. This condition is supported by the information obtained from the informants of Healthy City which stated that the community in Pacarkeling Sub-District only implements the 3M health protocol if the local COVID-19 Task Force is around. In addition, the lack of public awareness in maintaining distance during the new normal period is also influenced by the condition of the settlement in the Pacarkeling Sub-district which is located so close to the market area and culinary center, causing the entire area in Pacarkeling Sub-district to be at risk for crowds due to limitations in maintaining distance.

Several causative factors in the lack of public awareness regarding COVID-19 prevention behavior including the public's assumption that the public will not be at risk as long as have never been in direct contact with the contaminated people, the perception of the seriousness of the disease that only vulnerable groups are most at risk of death from COVID-19, and the disability to carry out the prevention behavior (Freeman et al., n.d.). Certain beliefs that develop regarding COVID-19 have also affected public behavior. The right and accurate beliefs will encourage healthy behavior, meanwhile, the false beliefs will encourage individuals to behave unhealthy (Al-Hanawi et al., 2020). The false beliefs will grow stronger within the community, especially if the Protocol is faced with external conditions that can trigger preventive behavior such as the COVID-19 Protocol (Georgiou et al., 2020).

COVID-19 preventive behavior plays a role in reducing infection rates and controlling the spread of the disease (Chen et al., 2020). Preventive behaviors such as the use of masks, keeping a distance, and washing hands using running water and soap are important things to slow the spread of the Coronavirus in the community (Van den Broucke, 2020). In order to optimize the behavior of preventing COVID-19 in Pacarkeling Sub-district, Tambaksari District, a health promotion program is needed by involving the active participation of the community, thus the community is able to overcome health problems with the existing potential. To assist in the faster response to COVID-19, the government of Surabaya City formed a team of Wani Jogo Surabaya Cadres which is further divided at the Hamlet level into 4 namely Wani Sehat Cadres, Wani Sejahtera Cadres, Wani Jodo Cadres, and Wani Ngandani Cadres (Asyary & Veruswati, 2020).

The influence of knowledge, attitude, and behavior on communication effectiveness are positive which means that if the knowledge, attitude, and behavior are improved, it will increase communication effectiveness and vice versa, if there is a decrease in knowledge, attitude, and behavior factors, there will be a decrease in communication effectiveness (Asyary & Veruswati, 2020). This study aimed to determine the differences in the increase of knowledge as well as communication skills, knowledge and skills in planning along with evaluating activities of disseminating Health Protocol and knowledge also skills regarding continuous surveillance on Wani Ngandani cadres before and after given a training, thus expected that Wani Ngandani cadres have a good knowledge and skills to help prevent and control COVID-19.

## METHODS

This study used a quasi-experimental design. Observations were carried out twice, before and after training as well as community service activities. The variables in the study were the knowledge and skills of Wani Ngandani cadres in carrying out effective communication and COVID-19 surveillance. The study was conducted in the Pacarkeling Sub-district, Tambakasi

District, Surabaya, in September 2021. The sample of the study was obtained from the total population of Wani Ngandani cadres in the Pacarkeling Sub-district as many as 32 respondents of Wabu Ngandani cadres in the community of Pacarkeling Sub-district.

The data collection technique in this study used a questionnaire known as the data collection technique which carries out by giving a series of questions or written statements to respondents to be answered. Data collection was conducted before and after the intervention, then processed and analyzed using the paired t-test and data processing tools from SPSS version 25 software.

The knowledge of respondents was assessed using a questionnaire and the results in scores are compared before and after socialization are given. Communication skills were assessed using the role-play method, in which respondents were given the task of providing socialization. Planning and evaluation preparation skills were assessed by giving each respondent a task sheet to prepare planning and evaluation of socialization activities in accordance with the planning and evaluation procedures that have been provided. Surveillance was assessed using a questionnaire by comparing the score before and after socialization is given. Surveillance skills were assessed using the role-play method, in which respondents were given a case study and asked to conduct surveillance based on the cases that have been given.

This study has passed the ethical review with no. 2383-KEPK from the Health Research Ethics Commission, Faculty of Nursing, Universitas Airlangga.

## RESULTS AND DISCUSSION

### 1) Respondents Characteristics

**Table 1.** Characteristics of Participants based on Aged, Gender, Education.

Characteristics	n	%
Gender		
Male	18	56.25
Female	14	43.75
Number of Participants		
Wani Ngandani Cadres	23	71.87%
PKK (Empowerment Family Welfare)	9	28.13%
Participants Age		
Average	48 years old	
Min	32 years old	
Max	71 years old	

According to table 1 above, it is known that the characteristics of the majority of the participants were men as much as 56.25%, with a total of 71.87% of the participants being a cadre with an average age of 48 years old. The older an individual, the more mature the level of maturity to think and work. This also affects an individual's cognition. In terms of public trust, the more mature an individual, the more trusted by the public than those who are not mature enough (Hertzog et al., 2008).

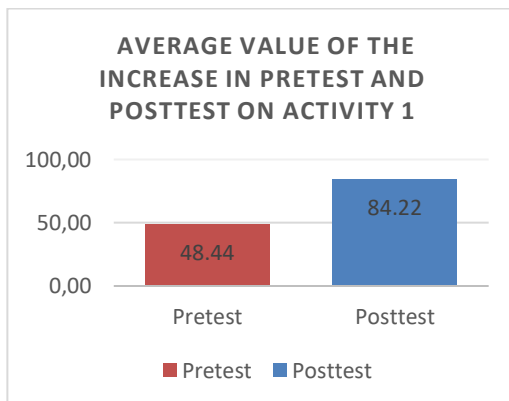


Figure 1. The average score of the comparison before and after program activity 1 takes place.

According to the result of the pre-test and post-test given which showed in Figure 1 above, there was an average increase in knowledge regarding the way to carry out an effective communication on preventing COVID-19 with 5M in each participant before and after socialization given. The average score of knowledge before the socialization was around 48.44 and has increased to 84.22 after the socialization. The average score of pre-test and post-test showed an increase in the participant's average knowledge by more than 70%, namely 79.03%. The increase in knowledge occurred because the material

presented by the source was easy for the participants to understand. The ease of understanding of the participants was due to the use of socialization media including power point and audio-visual (video). By using a video as the media, the learning process was more interesting and exciting. A crucial aspect of using video as a medium was to help clarify the material, thus the media took the role as the tool to clarify the message conveyed in the teaching and learning process (Smeda et al., 2014).

Video is anything that allows audio signals to be combined with a motion picture. A previous study stated video as media gave effectiveness in the skill of writing a simple German essay in grade 11<sup>th</sup> Science, SMA Negeri 11 Makassar (Fauziah, n.d.).

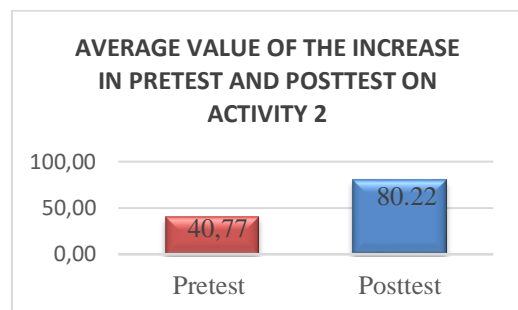


Figure 2. The average score of the comparison before and after program activity 2 takes place.

Figure 2 above shows that there was an increase in the result of pre-test and post-test of knowledge before and after socialization was given regarding planning and evaluation of socialization activity about 5M Health Protocol in each participant. Before the socialization, the average score of the participant's knowledge was 40.77, and after socialization has increased by 80.22. According to the average score of pre-test and post-test, it showed that the expectation or the main goal of the socialization in activity 2 has been achieved including achieving an increase in the average score of knowledge by more than 70%, namely 96.73%. It means that the material given by the source in Activity 2 can be easily understood by the participants.

In Activity 2, the participants were given a task sheet that contain the steps for planning and evaluating, thus the participants will get a better understanding and will be skillful in arranging planning and evaluation. Planning is a systematic process



in the form of decision-making regarding target selection, objectives, strategies, policies, program forms, and assessment for success by considering the change that will occur to achieve effective and efficient goals (Kørnøv & Thissen, 2000).

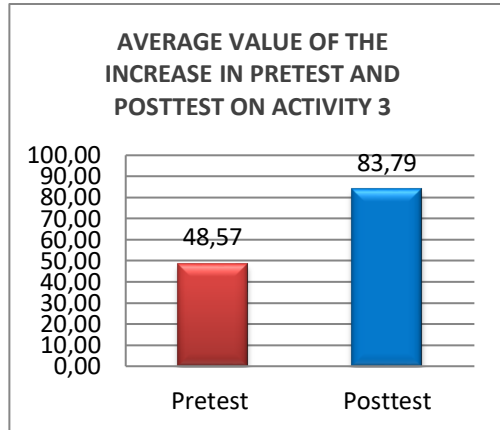


Figure 3. The average score of the comparison before and after program activity 3 takes place.

According to the result of the pre-test and post-test given which showed in Figure 3 above, there was an average increase in knowledge regarding COVID-19 Surveillance in each participant before and after socialization was given. The average score before the socialization was around 48.57 and after the socialization has increased by 83.79. The average score of the pre-test and post-test showed that the average score was almost the same, thus the percentage of the increase was more than 70%, namely 72.50%. It means that the cadres have had good knowledge of COVID-19 Surveillance during Activity 3.

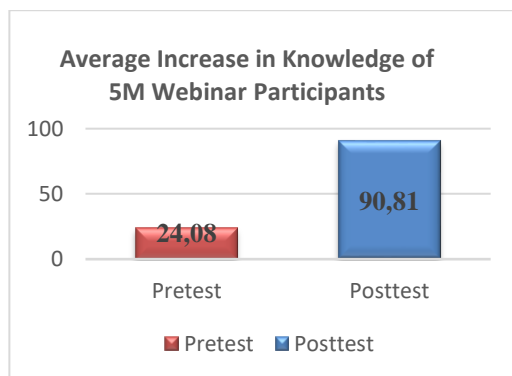


Figure 4. The average score of the comparison before and after the Webinar follow-up plan takes place.

Figure 4 above shows an increase in knowledge before and after Webinar socialization regarding 5M was given to each participant. The average score in knowledge before the socialization was only

as much as 24.08 then increased to 90.81 after the socialization was given. This result indicated that the expectation of the 5M Webinar activity to increase the knowledge by 70% in the participants has been achieved, namely 277.12%. It means that 5M Webinar was beneficial for the participants and the material conveyed by the source can be understood easily.

2) Pre-test Post-test Analysis Results

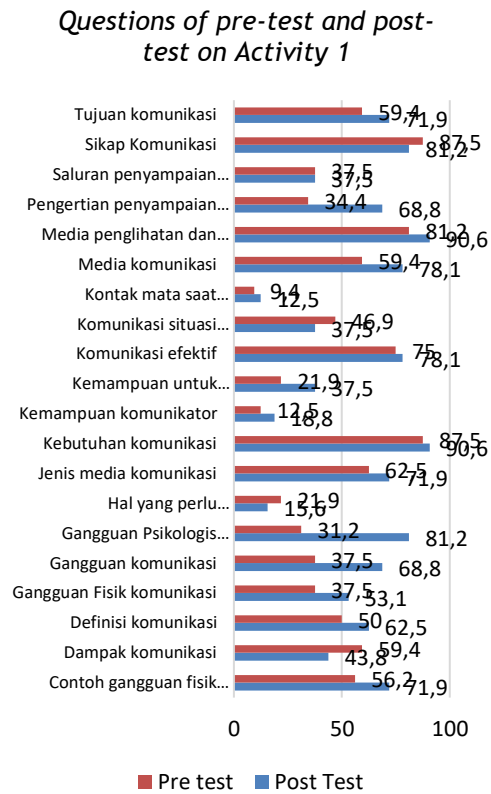


Figure 5. Results of Pre-test and Post-test on Activity 1.

According to the result of the pre-test and post-test given during Activity 1 which showed in Figure 5 above, there was an increase in knowledge of training material regarding how to communicate during the socialization of the 5M Health Protocol including communication psychological disorders, material about the example of physical interference in communication and communication media. The results of this study were similar to the study conducted by Sartika and Susilawati (2021) which stated that there was an improvement in the communication skills of cadres after being given intervention in the form of socialization as seen from the average score achieved which was in line with the standard passing grade (Sartika, 2015).

During the COVID-19 pandemic, accurate information and the right way to deliver the information related to COVID-19 have become an urgency. The improper communication strategy will eventually cause an unwanted impact. Communication strategy is the best combination of all communication elements including the communicator, messages, channel (media), and receiver until the impact (effect) which is designed to achieve optimal communications goals.

making, as well as accountability needs and existing phenomena.

Planning is the main function of management, while evaluation is the function that is “accompaniment” to management. The success of an organization in achieving its goals depends on planning and the good or bad of an organization will be known through the result of the evaluation. Thus, even though the plan has been arranged well, the expected goals will not be achieved by the organization without evaluation.

Questions of pre-test and post-test on Activity 2

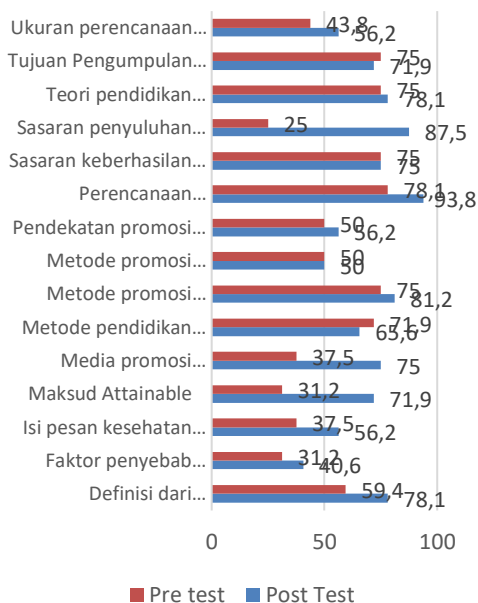


Figure 6. Results of Pre-test and Post-test on Activity 2.

Figure 6 above as seen on the result of the pre-test and post-test given during Activity 2 shows an increase in knowledge of the planning and evaluation training material of 5M Health Protocol socialization activity about socialization targets, health promotion media, and the definition of planning. Health planning is a process to formulate health problem that develops in society, determine the needs and available resources, set the goals, and arrange practical steps to achieve the goals that have been set.

Meanwhile, evaluation is the information assessment process regarding the value and benefits by describing, obtaining, and providing a description of the goals of the object, designs, implementations, and impacts of decision

Questions of pre-test and post-test on Activity 3

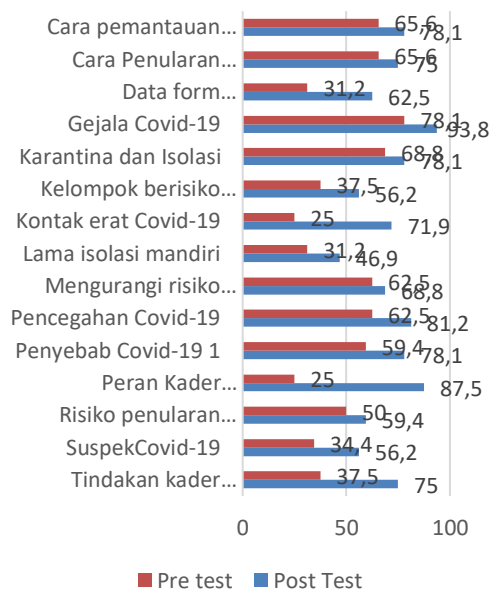


Figure 7. Results of Pre-test and Post-test on Activity 3.

According to the result of the pre-test and post-test given during Activity 3 which showed in Figure 7 above, there was an increase in knowledge of Wani Ngandani Cadres’ COVID-19 Surveillance training material regarding the role of cadre in controlling COVID-19, close contact of COVID-19, and cadre’s action on COVID-19 patients. Surveillance training has improved the understanding and the skills of cadres, thus the cadres are able to optimize their role in preventing and controlling the spread of COVID-19 in the Pacarkeling sub-district.

Public health surveillance is an activity carried out continuously in the form of systematic data collection, analysis, and interpretation of data regarding an event related to health matters to be used in

public health actions in order to reduce morbidity and mortality as well as improve health status. A health survey during this pandemic is necessary to be conducted, in addition to determining the health of the local community as well as helping the community leaders and the government to easily find out about the condition of the local community (Schoch-Spana et al., 2007).

### 3) Comparative Paired T-test Results

Table 2. Normality Test Results of Pre-test and Post-test Data on Activities 1 - 3

Group	Description	Score a	Asymp.sig (2 tailed)	Result
Pre-test	Activity 1	0.05	0.637	Normal
	Activity 2	0.05	0.709	Normal
	Activity 3	0.05	0.215	Normal
Post-test	Activity 1	0.05	0.240	Normal
	Activity 2	0.05	0.238	Normal
	Activity 3	0.05	0.094	Normal

Table 3. Statistical Test of Pre-test and Post-test Score

Paired t-test	95% CI	T	df	Sig.
Pre-test - Post-test Activity 1	-41.933 -34.629	-21.379	31	0.000
Pre-test - Post-test Activity 2	-43.868 -32.203	-13.380	27	0.000
Pre-test - Post-test Activity 3	-39.190 -31.238	-18.173	27	0.000

The cadres who have been trained gained a significant increase in knowledge. The intervention in the form of training caused an increase in understanding and self-confidence after the training and socialization have been carried out. The increase can be due to the prior knowledge of the cadres obtained from media, personal experiences, as well as from peers around.

### CONCLUSION

The aim of the study was to determine the increase of knowledge and skills on how to communicate during the socialization of the 5M Health Protocol of "Wani Ngandani" cadres, the knowledge and skills of "Wani Ngandani" cadres to arrange planning and evaluation activity of carrying out 5M Health Protocol socialization, knowledge and skills regarding continuous surveillance on "Wani Ngandani" cadres, and the increase of

According to the normality test data using Kolmogorov-Smirnov, the result showed  $p > 0.05$ , thus the data was normally distributed. The analysis used was the parametric paired t-test.

According to the results of the paired t-test, it is known that there were significant differences ( $\text{sig} < 0.05$ ) in the results of the pre-test and post-test on the four training and community service activities. It means that there were significant changes due to the training and socialization given to cadres in four activities (Glenys, 2017).

knowledge related to health protocol during COVID-19 pandemic to the participants of the webinar. According to paired t-test, it is known that there was a significant difference ( $\text{sig} < 0.05$ ) in the results of the pre-test and post-test of the four training and community service activities. It means that there was a significant change due to the training and socialization of the cadres in four activities.

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