

**Conference Paper** 

# The Utilization of WhatsApp in Increasing Knowledge of Integrated Services Post (Posyandu) Cadres on Preventing COVID-19

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#### **ABSTRACT**

Integrated Services Post (Posyandu) Cadres are a volunteer that helps to manage community health care issues. Normally, they play an important role in mother, child, and elderly health issue prevention and promotion. However, in the COVID-19 pandemic time, the role of Posyandu cadres should be optimized for the prevention of the disease. This research aimed to assess the efficacy of the utilization of WhatsApp in increasing knowledge of Posyandu cadres on preventing COVID-19, through Whatsapp group (WAG). The Quasi-experiment was conducted on 30 cadres in Bekasi Barat. They were invited to received counseling sessions using the Whatsapp Group (WAG) on how to prevent the disease and how to correctly use the mask. They were provided with all the counseling material that they could read before the question and ask session with the mentor. Changes in the knowledge level of the cadres were assessed using the pretest and post-test methods. There was a significant increase in the level of knowledge (Wilcoxon Signed Ranks Test, p = 0.004) which was indicated by a higher post-test score (mean 75.46) than the pre-test score (mean 60.69). The correct use of masks was the cadres' most significant increase in knowledge post-WAG-counseling session. Most of the cadres enjoyed the education process through WAG and would like to use the educational materials as a tool to provide education to the wider community. Education through WAG is effective for increasing the knowledge of Posyandu cadres about COVID-19 prevention and can be emulated by cadres to educate the wider community.

Keywords: Mask, COVID-19, Cadre, Posyandu

### Introduction

Healthy and quality human resources are the main capital or investment in the healthy development of the Republic of Indonesia. Increased indicators of human resource development, such as: increasing the degree of welfare from the nutritional status of the community, increasing gender equality, increasing optimal growth and development, welfare and child protection, controlling the number and rate of population growth, and decreasing disparities between individuals, between community groups, and between regions while still prioritizing preventive, promotive and empowering families and communities in the health sector. One form of community empowerment efforts in the health sector is to develop Posyandu (Kementerian Kesehatan RI, 2011).

Posyandu (integrated service post) is an effort from, by, and for the community in coordination with the Puskesman to facilitate the Indonesian people in obtaining maternal and child health services. The main purpose of Posyandu is in the form of promotive and preventive efforts that focus on preventing an increase in maternal and infant mortality during pregnancy,

childbirth, or after through community empowerment (Kementerian Kesehatan Rl, 2011; Muljono et al., 2016; Saepudin et al., 2017). Community empowerment is all non-instructive facilitation efforts, to increase the knowledge and abilities of the community so that they can identify the problems they face, their potential, plan and solve them by utilizing local potential. Departing from this, it can be understood that the Posyandu has a goal to support the acceleration of reducing the Maternal Mortality Rate (MMR), Infant Mortality Rate (IMR), and Under-five Child Mortality Rate (AKABA) in Indonesia through community empowerment efforts (Kementerian Kesehatan Rl, 2011).

In carrying out the implementation of Posyandu programs, there are elements of the community that act as Posyandu cadres. Posyandu cadres, hereinafter referred to as cadres, are community members who are willing, able, and have the time to voluntarily organize Posyandu activities. They were selected who had received education and training from the *puskesmas* regarding basic health services. These Posyandu cadres are the program implementers around the community and are part of the community. They are given training and skills to carry out routine programs and activities that are monitored and coordinated with their respective local health centers. Therefore, the role of this cadre is stated to be very important to bridge communication from the government through the local Health Service Health Center to the community (Soedirham, 2012; Sujarwoto & Maharani, 2020). This very important role of cadres is carried out regularly. Therefore, Posyandu is a communication platform for technology transfer in public health services, by the community, and the community with service support and technical guidance from health workers (Saepudin et al., 2017).

Various programs and activities carried out regularly and periodically by cadres, of course, are affected by the pandemic conditions that hit the world in early 2020 (Damara, 2020; Al Gafi et al., 2020; Arsyati & Chandra, 2020; Khasanah et al., 2020; Prasetyorini & Kustriyani, 2021). The COVID-19 (Corona Virus Disease-19) pandemic has not only hit the joints of health but the economy, education and can be said to have hit all aspects of people's lives. Moreover, about the monthly routine activities held by Posyandu, the pandemic also has a big impact. Mothers and children, who were scheduled to receive counseling, weight measurement, and anthropometric measurements, did not receive this. The various activities temporarily suspended by the Indonesian government certainly have strong reasons to reduce the spread of infection and reduce morbidity and mortality due to COVID-19.

For this reason, various efforts to continue to follow the rules from the government regarding the Limitation of Face-to-face Community Activities (offline), are carried out. In particular, the effort to educate cadres from health workers, which is usually done face-to-face, it must be carried out by making several modifications, including online counseling. The method that is considered to be a way out of this is counseling through social media.

The high use of social media by the community can be used as a way out in this outreach effort. Based on the results of the BPS survey, in September 2020, 83.6% of respondents stated that they received information about health protocols and corona prevention from social media. 78.5% of respondents got this information from television. Meanwhile, 76% of respondents received information about health protocols and corona prevention from the Whatsapp (WA) conversation application. WA is an Instant Messaging technology like short messages using internet data that can easily and comfortably be used to communicate with each other. One of the features available on this platform is the existence of group conversations or often known as Whatsapp Group (WAG), which can accommodate more than 250 participants in each group. From some of these apologies, it can be understood that the WhatsApp Messenger application is recognized to provide convenience and comfort for users in communicating so that it has the potential to be used as a learning tool (Jumiatmoko, 2016). This of course can also be a solution as a vehicle for counselling cadres while maintaining health protocols in the form of reducing crowds and face-to-face meetings.

Based on this, a problem was formulated in the form of WA's role in helping to improve the understanding of Posyandu cadres in COVID-19 preventive efforts.

#### **Material and Methods**

The method used in this activity is a survey with a pre and post-test design. The provision of counseling was carried out in the WAG group in July 2020 to 30 Posyandu cadres recruited in the West Bekasi area, West Java. The initial stage in the form of a preparation stage was carried out by making counseling materials about the role of Posyandu in carrying out their duties while still carrying out health protocols and materials on the proper use of masks, making WAGs that invited all recruited cadres, as well as a pretest containing questions related to the material provided and also satisfaction survey. The implementation stage was carried out by providing counseling materials at WAG and a question-and-answer session with 3 medical experts who were competent in their fields. The post-test was carried out after the question-and-answer session ended, and data analysis was carried out.

## **Results and Discussion**

Table 1. Respondent's characteristic

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Respondent's characteristic	N	%	Total (%) (30 in total)
Gender			100
Male	0	0	
Female	30	100	
Age			100
<40yo	4	13	
40-50yo	11	37	
>50yo	15	50	
Profession			100
Teacher	1	3	
Student	3	10	
Housewives	26	87	
Being a Posyandu Cadre			100
<3 yrs	9	30	
3-6 yrs	5	17	
>6 yrs	16	53	

From a total of 30 respondents, it can be seen from Table 1 the characteristic data of the cadres who participated in this counseling. All participating Posyandu cadres are women (100%), half of whom are over 50 years old (50%). Almost all respondents are housewives (87%), who have been cadres for more than 6 years (53%). This data is data that is commonly seen in scientific reports on the characteristics of Posyandu cadres in Indonesia. This is a useful thing considering that the target of achieving the Posyandu program, namely mothers and toddlers, is very closely related to the involvement of the mother's role in the household.

<b>Counselling Data</b>	N	%	Total (%) (30 in total)
<b>Counseling frequency</b>			100
Every 3 month	11	37	
Every two month	5	17	
1-2x/month	7	23	
Never	7	23	
Targets of counseling			100
General	3	10	
Family	21	70	
Never	6	20	
Method on counseling			100
Directly	4	13	
Books/posters	15	50	
Photos	3	10	
Never	8	27	

Table 2 shows that Posyandu activities by cadres are carried out at various time intervals ranging from 1-2 times a month (23%), every two months (17%), and every three months (37%), there are still 23% of respondents who have never done counseling at the Posyandu. This provides information that the implementation of the Posyandu program varies greatly depending on the location of each region.



Figure 1. Counseling material

Figure 1 shows the counseling materials given to cadres to be studied to increase cadres' knowledge of preventive efforts in the COVID-19 pandemic condition. This counseling material is also given to cadres as a provision for counseling which they will provide to the target Posyandu participants in their respective places. The language conveyed is attempted to be as simple as possible to be understood by the cadres and also by the community.

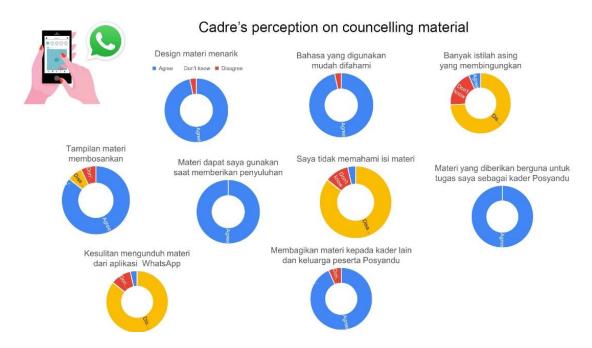


Figure 2. Cadre's perception of counseling material

From the survey given, it can be seen in Figure 2 regarding the perception of cadres on the counseling material provided. Almost all of them answered that the extension materials used easy-to-understand language, attractive material design, and almost all answered that this material could be used for cadres when providing counseling and would distribute this material to other cadres and families of Posyandu participants.

There was a significant increase in the level of knowledge (Wilcoxon Signed Ranks Test, p = 0.004) which was indicated by a higher post-test score (mean 75.46) compared to the pre-test value (mean 60.69). Figure 3 shows the results of cadre knowledge on cadres who received counseling through Whatsapp media before being given treatment (pre-test) with good categories as many as 8 respondents (26.7%) and fewer categories as many as 22 respondents (73.3%), and after being given treatment (post-test) known knowledge with good category as many as 19 respondents (63.3%) and less category as many as 11 respondents (36.7%). This indicates that there is an increase in cadre knowledge through cadre counseling using WAG media, especially regarding preventive efforts against COVID-19 in the implementation of the Posyandu program.

From the data obtained and the results of the resulting statistical analysis, it can be seen that counseling has a significant impact in increasing the knowledge of cadres. This is supported by several other studies, which report that the role of extension has a significant impact in increasing respondents' understanding of the material carried by extension workers, from various respondents in the community (Damara, 2020; Al Gafi et al., 2020; Arsyati & Chandra, 2020; Rusni & Lubis, 2017). The increased knowledge of these cadres is expected to help the understanding of the target community of the Posyandu where the cadres work, especially regarding community preventive efforts against COVID-19.

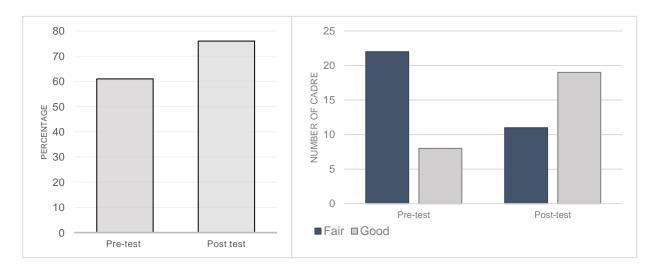


Figure 3. Knowledge level pre and post-test

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# **Conclusion**

The correct use of masks was the cadres' most significant increase in knowledge post-WAG-counseling session. Most of the cadres enjoyed the education process through WAG and would like to use the educational materials as a tool to provide education to the wider community. Education through WAG is effective for increasing the knowledge of Posyandu cadres about COVID-19 prevention and can be emulated by cadres to educate the wider community. It needs a longer period for the counseling session to be conducted, on a bigger samples quantity to see the significance of this method of counseling (using WAG).

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