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WHATSAPP REMINDER AS AN EFFORT TO IMPROVE COVID-19 PREVENTION BEHAVIOR

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Abstract

Background. Covid-19 is a health problem in a growing world. On January 30, 2020, WHO designated Covid-19 as a Public Health Emergency of International Concern (PHEIC) or a public health emergency that is troubling the world. Preventive efforts are needed to deal with the Covid 19 pandemic.
Objective. To investigated whether there is an effect of using WhatsApp social media on Covid 19 prevention behavior.
Method. The approach used was pre-experimental with pre-post test without control group. The data collection technique uses the Google Play Store and online questionnaires. The sample taken was 55 people, which is the minimum sample size based on the conservative assumption that 50% of second semester students have good behavior with a 5% error margin and 95% confidence interval. The analysis technique used is the paired T test.
Result. The results showed that the mean value before treatment was 31.00 (7,437) and after treatment was 35.81 (6,003) (Table 5) and the significance was p = 0.000 (p <0.05).
Conclusion. There is an effect of Whatsapp Reminder on Covid-19 Prevention Behavior.
Keyword : WhatsApp Reminder, Behavior, Covid-19 Prevention

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INTRODUCTION

As we know at the end of 2019, Covid-19 has become a health problem in an ever-growing world[1, 2]. On January 30, 2020, WHO designated Covid-19 as a *Public Health Emergency of International Concern* (PHEIC) or a public health emergency that is troubling the world. Until February 12, 2020, WHO officially designated the novel coronavirus disease in humans as Coronavirus Disease (Covid-19). On March 2, 2020, Indonesia reported 2 confirmed cases of Covid-19. On March 11, 2020, WHO declared Covid-19 a pandemic[2]. Data released by the Task Force for the Acceleration of Covid-19 Handling shows that the total number of positive cases of corona in Indonesia has reached 1,414, based on the update as of 15.45 WIB on March 30, 2020. Meanwhile, there are 1,217 positive patients with Covid-19 who are still undergoing treatment. Only 75 patients were declared cured[1, 3, 4].

Based on scientific evidence, Covid-19 can be transmitted from person to person through close contact and droplets, not through the air. People who are most at risk of contracting this disease are people who have close contact with Covid-19 patients[4]. Standard recommendations to prevent the spread of infection are through regular hand washing, applying cough and sneezing ethics, avoiding direct contact with livestock and wild animals and avoiding close contact with symptoms that show symptoms of respiratory diseases such as coughing and sneezing[2]

Prevention and mitigation measures are key applications in health and community services. Along with the rapid development of technology, cell phones are not there for the people. From the infographic, it can be seen that the total population of Indonesia reaches 268.2 million, it is not known that Mobile users (smart phones and tablets) reach 355.5 million. This means that the circulation of smart phones and tablets is more than the total population in Indonesia[5]. Turning to Internet users, there are 150 million active internet users, this means that 56% of the total population of Indonesia already uses the internet. Likewise with social media, on average 50% more Indonesians are actively using social media.

WhatsApp is an internet-based application where users can send text, voice, image, location, and even video messages to friends using any type of cellphone. WhatsApp can be used as a reminder / reminder[6]. WhatsApp shows significant growth by gathering 1.5 billion monthly active users[7]. The high number of WhatsApp Messenger users in Indonesia is because people like to chat, there is no need to pay for short message services or short messages.

Bahar and Nadhim's research[5, 8] states that there is an authority for oral health education through the WhatsApp application media with visual aids to change the behavior of students of SMAN 3 Padang. Based on the background description of the problem, researchers are interested in researching WhatsApp Reminder as an Effort to Improve Covid-19 Prevention Behavior.

METHODE

This study was a pre-experimental study with a one group pre-post test design without a control group. The target population of this study is the teaching staff at Pekalongan University, a total of 61 people, so that the required sample is 53 respondents which is the minimum sample size based on the conservative assumption that 50% of Pekalongan University teaching staff have good behavior with a 5% margin of error and a 95% confidence interval. The pretest and postest data were obtained by using an online questionnaire. Treatment is given every other day in the form of sending reminder messages via WhatsApp. Data were analyzed using Paired Sample T-Test.

RESULTS

This study used 53 respondents with the following characteristics (See Table 1). Based on table 1, it can be seen that the majority of respondents aged 31-40 were 28 people (52.8%), 32 people were male (60.4%), 32 people (60.4%) last education for Strata I , all are Muslim (100%), the most married status is 40 people (75.5%), 24 people live in the Pekalongan district (45.3%) and work indoors as many as 47 people (88, 7%)

Table 1. Characteristics of Respondents (n = 53)

Characteristics		Frequency (f)	Percentage (%)
Age			
a.	20 – 30 year	20	37.7
b.	31 – 40 year	28	52.8
c.	41 – 50 year	4	7.5
d.	> 50 year	1	1.9
Gender			
a.	Male	32	60.4
b.	Female	21	39.6
Education level			
a.	High school	14	26.4
b.	Diploma	5	9.4
c.	Bachelor	32	60.4
d.	Master	2	3.8
Religion			
a.	Islam	53	100
b.	Catholic	-	-
c.	Christian	-	-
d.	Buddha	-	-
e.	Hindu	-	-
Marriage Status			
a.	Single	12	22.6
b.	Married	40	75.5
c.	Divorce	-	-
Residing City / Regency			
a.	Pekalongan City	23	43.4
b.	Pekalongan Regency	24	45.3
c.	Batang Regency	5	9.4
d.	Pemalang Regency	1	1.9
Work Area			
a.	In the room	47	88.7
b.	Outside the room	6	11.3

The Covid-19 prevention behavior carried out by respondents before being given a reminder via WhatsApp is as follows (table 2).

Table 2. Covid-19 Prevention Behavior Before Reminder Is Given Via Whatsapp (n = 53)

Criteria	Frequency (f)	Percentage (%)
Well	14	26.4
Enough	20	37.7
Less	19	35.8
total	53	100.0

Based on table 2, it can be seen that the preventive behavior before being given a reminder via WhatsApp, the majority was included in the sufficient category as many as 20 people (37.7%).

The Covid-19 prevention behavior carried out by respondents after being given a reminder via WhatsApp (see table 3).

Table 3.Covid-19 Prevention Behavior After Given a Reminder via Whatsapp (n =53)

Criteria	Frequency (f)	Percentage (%)
Well	24	45.3
Enough	22	41.5
Less	7	13.2
total	53	100.0

Based on table 3, it can be seen that after being given a reminder via

WhatsApp, the majority were in the good category as many as 24 people (45.3%).

The effect of reminders via WhatsApp on Covid-19 prevention behavior is as follows: (see table 4).

Table 4. Effect of reminders via WhatsApp on Covid-19 prevention behavior (n = 53)

Perilaku	n	Mean *M (Std. D)*	Paired T-Test T	df	Sig. (2-tailed)
Pre Test	53	31.00 (7.437)	-6.947	52	0.000*
Post Test	53	35.81 (6.003)			

The results of the Paired Sample T-Test showed a significant number between the pre and posttest values with a significance value of p = 0.000 (p <0.05) (Table 6). So it can be concluded that there is an effect of Whatsapp Reminder on Covid-19 Prevention Behavior. After the respondent was given a reminder through WhatsApp, the behavior increased significantly.

DISCUSSION

Preventive behavior data before being given a reminder via WhatsApp, that as many as 554 false news or information (hoaxes) about the corona virus (COVID-19) were spread on a number of social media platforms[9].

Researcher in the further said that as many as 893 hoaxes had been taken down from various social media. Meanwhile 316 hoax info are still in the process of being taken down[3, 10]. Covid-19 is a new disease, so generally everyone will find out from any source. After being given behavior in the form of reminders via the WhatsApp application the majority were in the good category as many as 24 respondents (45.3%) out of 53 respondents, and included in the category of less than 19 respondents to 7 respondents (13.2%) (Table 5). From this data, after respondents were given reminders via WhatsApp, the majority experienced changes in behavior for the better. This is in accordance with that stated by Pool et al[7] who was mention one of the intervention strategies that have proven effective in improving the care that clients receive

is to remind clients to ask their provider specific questions that lead to changes in their care[3, 7].

A number of studies have observed that this method is effective in improving preventive services such as immunization. Researcher by Chang, Choi, Kim, & Song[10] stated that information, motivation and behavioral skills are related to the desired behavior outcomes[10]. Interventions based on this model have been effective in influencing behavior change in a variety of clinical applications. Researchers assume that by being given a WhatsApp reminder, the respondent's behavior increases because getting information through WhatsApp reminder will change the Covid-19 prevention behavior to a more positive behavior, namely in the form of better behavior[4, 6, 11].

Based on the results of the Paired T Test, it shows that WhatsApp Reminder has an effect on Covid-19 Prevention Behavior. This can be seen from the mean value before treatment of 31.00 (7.437) and after treatment 35.81 (6.003) (Table 5) and the significance of p = 0.000 (p <0.05) (Table 6). Studies show that WhatsApp Reminder is effective as a reminder to reduce forgetfulness of preventive behavior[3, 12]. WhatsApp Reminder can encourage them to comply. These results are consistent with previously study , which found that two-thirds of patients felt that reminder messages could reduce forgetting[3, 4, 6, 11]. In an article describing the long-term effects of the message reminder service. On the health care results obtained from the 13 articles included, 3 reminder messages were assessed as a tool to improve attendance compliance at the hospital or clinic[1, 3, 12, 13]

Several studies have stated that social media has become a source of increasing cognitive aspects to skills in the health sector[4, 12, 14]. The internet and social media in the current technology era have a huge opportunity to achieve health[14]. However social media, especially whatsApp, is one of the media that can be optimized in an effort to improve health education. Health promotion through the use of internet-based applications is an opportunity in sending educational messages and some empirical evidence has explained

the evidence-based positive impact in increasing knowledge through sending image messages and educational text on social media[1, 10, 11, 15].

The discussion aspect of whatsApp features has a significant opportunity to increase learner interest in cognitive enhancement programs[6, 15]. The theory of Information Manipulation by Liu et al[1]"explains that the information received by the target if the information source uses certain methods and techniques to increase the amount of information and do it repeatedly, the target will be easier to receive the message given[10].

CONCLUSION

Preventive behavior before being given a reminder via WhatsApp, the majority was in the moderate category as many as 20 people (37.7%). After being given a reminder via WhatsApp, the majority were in the good category as many as 24 people (45.3%). So it can be concluded that there is an effect of Whatsapp Reminder on Covid-19 Prevention Behavior with a significance value of 0.000 (p <0.005).

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Conflict of Interest

All authors declared that there is no conflict 319 of interest regarding the publication of this article

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