

WhatsApp™ Seminar as Hoax Buster and Health Promotion Medium of COVID-19: A Field Trial

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ABSTRACT

Accurate information and guidance on protective measures that can reduce the level of exposure to acute respiratory coronavirus 2 syndrome (SARS-CoV2) is the most important component in controlling the spread of coronavirus 2019 (COVID-19). As one of the largest social media in Indonesia, WhatsApp™ is a messaging service that is very close to the lives of Indonesian people, especially in the countryside. At the time of this research, no studies were published about using WhatsApp™ as an Online Media used for the Seminar. This study aims to meet this information need and test its effectiveness as a health promotion medium, specifically Covid-19. The online seminar was conducted using WhatsApp™ media in the period 20 April 2020 - 30 April 2020. It was conducted 33 times in 33 groups, where each group was attended by an average of 176 participants, for 715 minutes and 724 questions. These groups present competent experts in their fields, and question and answer sessions are held between participants and experts. The results showed that 5,822 people who attended the seminar gave very positive feedback. The conclusions from the results of this field test show that WhatsApp™ can be an effective medium in health promotion to prevent transmission of COVID-19 in Indonesia.

Keyword: WhatsApp™, promotion, hoax, COVID-19, prevention.

INTRODUCTION

Several cases of pneumonia with unknown etiology were reported in Wuhan, China in December 2019.¹ The rate of this new pneumonia cases is getting higher every day in China, with an increasing

number of new cases every day at the end of January 2020 averaging 1,939 cases.² World Health Organization (WHO) finally declared that this outbreak became the world's main concern.³ Eventually, the disease was officially named by WHO on February 11, 2020 as coronavirus disease 2019 (COVID-19) with an etiology in the form of severe acute respiratory syndrome coronavirus 2 virus (SARS- CoV-2).⁴ The disease continues to grow massively and WHO finally declared it as a pandemic at March 11, 2020.⁵

Countries continue to carry out mass screening to ascertain the number of cases in their country and the status of their local transmission. Examination of COVID-19 disease in Indonesia itself is still quite low, which naturally results in inaccuracies in the number of cases as a transmission rate in Indonesia.⁶ In addition, there are no proven treatment and specific prevention available for tackling this disease.⁷ This higher estimated-transmission rate than the current reports while no possible cure to this disease would certainly cause the health care system to become overwhelmed.³ Therefore, some efforts are needed to effectively break the chain of COVID-19 transmission.

One of the most important aspects of an effective effort to minimize COVID-19 transmission is accurate information conveyed in media that is understood by the public. Google shows a significant increase in the search for the word "COVID-19" since early February 2020, which means there was a rise in COVID-19 related interest.⁸ It might bring lights into the situations, but as WHO stated this surge of information as "infodemic", it could also bring detrimental effect to the society.⁹ To combat this, WHO has routinely uploaded content on various social media that contains COVID-19 information from reliable sources.¹⁰ In Indonesia itself, *Gugus Percepatan Penanganan COVID-19* that was established on March 13, 2020 has launched the "Hoax Buster" feature to deal with disinformation and misinformation circulating in the community.¹¹ Indonesia's Ministry of Health has also launched *Infeksi Emerging*, as the latest official information media on emerging infectious diseases, including COVID-19.¹²

Indonesia has a lot of its people reside in rural areas, working in informal sectors with various educational background. They are widely spread throughout the archipelago. The communication facilities in this area is not very well-established, that the internet connection is not supporting some media such as video and pictures to be accessed by the public. The form of two-way communication is also limited in these areas, that they barely support video calls or conferences. Therefore, the availability of health promotion media is sparse in these areas. As a result, there is a high potential for misinformation and disinformation that spreads throughout the community, especially in this COVID-19 pandemic situation.^{13,14}

As one of the largest social media in Indonesia, WhatsApp™ is a messaging application owned by Facebook™ that are often used by the public to obtain and disseminate various information, including regarding COVID-19.¹⁵ Furthermore, WhatsApp is used in various walks of life in Indonesia, especially in rural areas that has limited resources in terms of online communications. WhatsApp is also flexible that it can store the information for quite long time. People can access it whenever they want, despite the tight schedule they might have. Therefore, WhatsApp is a media that is very close to the lives of Indonesian people. Unfortunately, with this all primacies, WhatsApp is often used as a place to spread misinformation and hoaxes that can cause negative impacts on the subsequent handling of COVID-19.¹⁶

This causes the need for accurate information dissemination via WhatsApp that can promote preventative measurements and also combat the hoaxes that disturbed the COVID-19 handling. In addition, we have not found any research especially in the field of public health that looks at this phenomenon further. Therefore, this study aims to meet the information needs and see the effectiveness of this method as a promotional media through field trial.

METHODS

Online seminars were carried out by the Division of Public Health-Community Medicine (IKM-IKK), Faculty of Medicine, Sriwijaya University. This online seminar used WhatsApp™ media and was held in the period of April 20, 2020 - April 30, 2020. Online seminar was conducted 33 times in 33 groups, where each group was attended by 100 participants. All groups have their respective moderators who are interns of the IKM-IKK Faculty of Medicine, Sriwijaya University. This WhatsApp™ group featured experts who are lecturers of IKM-IKK Faculty of Medicine, Sriwijaya University, and also Members of the Indonesian Family Medicine College.

When the seminar started, a document containing basic information about COVID-19 was given to the participants which can be accessed through each participant's cellphone. After that, participants were invited to ask the experts either directly in the group or through a private message to the moderator. The expert answered the questions from participants through the voice note feature. Then after the question and answer session, participants will be given a closing statement and take-home message, and also participants will be asked for feedback about the organization and the content delivered at the seminar.

These groups will be analyzed in the seminar process and discussion. The number of participants, the duration, and the number of questions entered will be analyzed descriptively. Feedback from participants will be analyzed qualitatively.

RESULTS

This online seminar used WhatsApp™ media and was held in the period of April 20, 2020 – April 30, 2020. The total number of participants were 5,822 people. Online seminars were conducted 33 times in 33 groups, with an average number of participants of around 170 people in each group, past the initial target of around 100 people. The enthusiasm of the community in participating in the seminar was quite high, marked by the time of the seminar which was on average more than the allotted time (1 hour). This was due to the many questions that come in (649 questions in total) and the huge community curiosity about the prevention of COVID-19, especially related to preventive measurements that can be carried out by themselves independently.

Table 1. Number of participants, duration, and number of questions entered during the online seminar.

Group	Number of Participants (in people)	Duration	Number of Questions	Group	Number of participants	Duration	Number of Questions
1	208 people	1 h	12 questions	18	114 people	1 h 10 min	20 questions
2	130 people	1 h 40 min	27 questions	19	156 people	1 h 40 min	19 questions
3	115 people	1 h 30 min	23 questions	20	150 people	1 h 20 min	18 questions
4	230 people	1 h 30 min	17 questions	21	144 people	1 h 30 min	22 questions
5	184 people	1 h 30 min	24 questions	22	150 people	1 h 50 min	16 questions
6	145 people	1 h 30 min	28 questions	23	125 people	1 h 10 min	13 questions
7	169 people	1 h 30 min	21 questions	24	135 people	1 h 20 min	15 questions
8	240 people	1 h 30 min	24 questions	25	254 people	1 h 20 min	23 questions
9	120 people	1 h 30 min	22 questions	26	252 people	1 h 40 min	27 questions
10	168 people	1 h	15 questions	27	193 people	1 h 10 min	19 questions
11	206 people	1 h 10 min	30 questions	28	164 people	1 h 30 min	21 questions
12	207 people	1 h 20 min	25 questions	29	112 people	1 h 10 min	17 questions
13	185 people	1 h 20 min	19 questions	30	188 people	1 h 20 min	27 questions
14	179 people	1 h	21 questions	31	255 people	1 h 30 min	24 questions
15	198 people	1 h 20 min	17 questions	32	110 people	1 h	13 questions
16	129 people	1 h 20 min	13 questions	33	257 people	1 h 20 min	24 questions
17	250 people	1 h 15 min	18 questions				

The participants were dominated by females (68,7%) with the average age was 27 years-old, ranging from 14 to 69 years-old. The majority of them have graduated college (65,8%). Most of the participants was college students (34,4%), followed by office workers and housewives. However, this data was only collected from 900 participants, due to unwillingness of the participants to fill the questionnaire.

Based on the results of this online seminar, there were a lot of positive feedbacks from the seminar participants presented in table 2. From this positive feedback, the public seemed to want to break the COVID-19 transmission chain through good hand hygiene, social distancing and independent isolation, and they want to commit to participate in running it. As stated by one participant (CH, group 1), "Thank you, the moderator for holding this very useful online seminar. Please do this often, so this #stayathome can be useful. To the doctor, thank you too, for the excellent delivery, the voice and the way it was delivered made me amazed. May all of us always be protected by God. And this epidemic soon ends quickly".

Table 2. Feedback and Evaluation from Online Seminar Participants

No.	Item	Responds	Source
1.	Participant's feedback on the problem asked about COVID-19 preventive measurements (hand hygiene, social distancing, and the use of mask)	<i>"The answer is understandable enough doctor."</i>	A (Group 11)
		<i>"Thank you, Doctor, apparently shaking hands can transmit too."</i>	S (Group 30)
		<i>"Wow, it must be more than 1.8 meters yes dock. Thank you doctor. "</i>	F (Group 3)
		<i>"Huhuhu is okay doc, even though I'm sad I won't go home 😞"</i>	I (Group 4)
		<i>"Ready. Thanks doc. So you have to use this mask everywhere, okay? "</i>	PB (Group 3)
2.	Participant's feedback on the problem asked about COVID-19 hoaxes: Participant feedback on the problem of Covid-19 treatment with drinking and gargling salt water. Participant feedback on community issues rejecting the burial of the dead caused by Covid-19 in public cemeteries because Covid-19 can be transmitted through burial ground.	<i>"Yes, thank you doctor for the answer, no longer drinking salt water"</i> <i>"Thank you for the information Doctor, we will accept the burial of the body at our place."</i>	L (Group 3)
3.	Feedback from participants regarding the holding of an online seminar	<i>"Thank you to the moderators for holding this very useful online seminar. Please often hold a Whatsapp Seminar like this, so that we who are in remote villages and stay at home can get useful information. For doctors too, for their excellent delivery, the voice and the way it was delivered impressed me ... May we all be always under God's protection. And this plague ends immediately." "Only Whatsapp Seminar that we can reach in this village, thank you for watching us in the village"</i>	CH (Group 1)
		<i>"Thank you doctors and moderators, a lot of knowledge gained today is a blessing and is useful, Healthy greetings "</i>	SA (Group 22)
4.	Evaluation from seminar participants after the moderator asks for an evaluation in the form of: 1. What should our discussion media be? 2. How long should this online seminar be? 3. Are the material delivered useful and understandable? 4. Please give an opinion / input to the Moderator, 5. Please give your opinion / input to the expert	<i>"Bismillah, only opinions and suggestions 1. For the conditions when the online seminar is indeed the solution 2. 1 hour 30 minutes 3. The material is very useful and easy to understand, if added with the minutes it becomes very easy to understand 4. The moderator is very good at guiding the discussion but I prefer the rules at the beginning of the discussion but maybe because of time constraints and fear there are questions that are not conveyed 5. Very good resource person, the voice that indicates is not just telling but there are things that must be kept informed so that this pandemic will soon pass, jazakillah khair bu doctor. Jazakumullah khayran katsiiran friends of FK Unsri IKM-IKK "</i>	YY (Group 1)

From this feedback, it was also apparent that participants liked this method because of two-way communication and openness between the speakers and other participants. In this online seminar the participants also seemed very receptive and hoped to hold another similar online seminar like this. As stated by one of the participants (YY, group 1), "Thank you, the moderator and the team who have organized this seminar. This seminar is very useful, and for the doctor, the way to deliver it is very informative and easy to understand".

Some participants who asked also seemed satisfied and understood the answers regarding hand hygiene, social distancing and independent isolation, as well as the use of masks. One participant (Y, group 5) delivered "Very detailed and clear doc. the delivery was very helpful for the community, medical personnel, and others. Thank you doctor for the very useful answer in adding performance. And thank you, the moderator for giving the opportunity to ask".

DISCUSSION

The online seminar which was attended by 5,822 participants indicated that WhatsApp™ has indeed become a medium used by many people to communicate and search for information. Information on the biological, pathophysiological and epidemiological aspects of COVID-19 is still developing rapidly. The only thing we can be sure of right now is that personal protective measurements is the best way to prevent transmission of COVID-19 disease.

Furthermore, accurate information to tackle hoaxes and guidance on personal protective measurements are important elements in tackling the spread of COVID-19. The main prevention of all diseases depends on two components, namely reducing exposure to disease and reducing one's susceptibility to the disease. COVID-19 is a propagated epidemic (human-to-human spread), and expected to spread through direct and indirect contact.¹⁷ The CDC recommends some measurements that can protect the community by reducing exposure levels is good hand hygiene (including washing hands, avoiding touch the nose, mouth and eyes), avoid close contact with social distancing, and wearing masks.¹⁸ The Indonesian Government through *Gugus Tugas Percepatan Penanganan* COVID-19 has also recommend the public to access their website to fact-check the news they saw/heard online.¹¹ This appeal may be difficult to understand, especially with the level of literacy of Indonesian people is quite low.¹⁹

The usage of posters and other visual media of public health is not helping either, since it's not accessible and the effectiveness of those are still questionable.²⁰ In that order, the use of the voice notes features on the WhatsApp™ application can be an alternative to convey important information to the public. Looking at the responses given by online seminar participants, researchers believe there will be changes that occur in the level of public knowledge about good personal protective measurements of COVID-19. This is expected to cause behavioral changes, which can reduce the risk of transmission.²¹

From participants' responses to the holding of online seminars themselves, it can be seen that the public likes this method and hopes to hold similar seminars again. This shows that this method can be accepted in the wider community. Data on social media penetration in Indonesia that shows the large number and variety of social backgrounds of WhatsApp™ users also explains the high level of community acceptance of this seminar.²² It is hoped that this media can be developed into a method that can be used more widely in the future and reach more people in the future.

CONCLUSIONS

With the unavailability of vaccines and treatment of the Gold Standard in handling COVID-19, promotion and public education to implement preventive measures is the only way to break the chain of transmission of Covid-19 to this Pandemic. This research shows that WhatsApp™ can be used as an effective media in achieving this goal. This interactive communication method via WhatsApp™ successfully educates, mobilizes, and invites people to start understanding and familiarizing themselves with preventive measures such as washing hands, maintaining social distance, and wearing masks. This method can also discuss and eliminate the "negative stigma" and "hoax news" that reach the community. We hope that research into the use of WhatsApp™ will need to complete participant data so that it will be able to provide more comprehensive results.

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