The Role of "Meta Wing" Webinar to Improve Public Knowledge about Mental Health during Covid-19 Pandemic

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Abstract

Based on the Sustainable Development Goals (SDGs), especially the third point, namely "Good Health and Well-Being" to create a healthy and prosperous society, especially during the COVID-19 pandemic, it is necessary to deliver fast and accurate information, one of which is educating the public. META WING (Mental Health Awareness during Pandemic) webinar is a community service activity that aims to increase public knowledge, understanding, and awareness regarding mental health during the COVID-19 pandemic. Webinars are conducted virtually (online) by utilizing video conferencing technology. The mental health themes discussed in the webinar are insecurity, suicidal thoughts, and self-harm. Achievement results regarding whether there is an increase in public knowledge about mental health during the pandemic are measured by comparing the values obtained through pre-test and post-test. 43.24% of all participants got a post-test score higher than the pre-test and the statistical test results obtained a p-value of 0.000 which means that there is a significant difference between the value of understanding before the presentation and the value of understanding after the presentation.

Keywords: COVID-19, mental health, pandemic, webinar

1. Introduction

Currently, almost all countries in the world are experiencing the COVID-19 pandemic. It started with the discovery of a pneumonia case in Wuhan, Hubei Province, China in December 2019, at which time the process of transmission was not known for certain (Rothan and Byrareddy, 2020). In the same month, five patients were admitted with acute respiratory distress syndrome (Huang et al., 2020). Since then, cases of respiratory disorders increased rapidly and spread to several countries.

Samples studied in China showed a novel coronavirus etiology (Ren et al., 2020). Initially, this virus was called nCoV (novel coronavirus) because it was still in the research stage. On February 11, WHO announced a new name for this virus, namely Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) (WHO, 2020). The disease caused by SARS-CoV-2 is called Coronavirus Disease-19 (COVID-19) and was declared by WHO as a pandemic on March 12, 2020 (WHO, 2020).

COVID-19 can cause respiratory system disorders with various symptoms, ranging from mild symptoms such as flu to lung infections such as pneumonia (Nasution et al., 2020). As of July 15, 2021, positive cases in Indonesia reached 2,726,803 cases with a death rate of 70,192 (Covid-19 Task Force, 2021).

The COVID-19 pandemic brought various kinds of significant changes in human life, both in the fields of education, economy, tourism, religious activities, and social interaction (Harahap and Rahma, 2020; Kartiko and Nafis, 2020; Kosasih et al., 2020; Nasution et al., 2020). Especially with the increasing number of cases every day, people's mobility is limited to a minimum. Almost all activities that were originally carried out offline have turned online to reduce the transmission rate.

The effects of the pandemic also impact mental health. Mental health is one aspect that must be considered in balance with physical health. Mental health is one of the important aspects in the third point of the Sustainable Development Goals (SDGs), namely "Good Health and Well-Being", especially during a pandemic. Twenge and Joiner (2020) found that 41% of the adult population reported experiencing anxiety and depression during the pandemic. There is a tendency for the emergence of mental health disorders in adults during the pandemic, such as sleeplessness (36%), eating disorders (32%), increased alcohol consumption (12%), and worsening of chronic conditions (12%) due to the stress experienced by the coronavirus (Hamel et al., 2020). More extreme impacts such as suicidal thoughts and suicidal actions were reported to increase by 11-26% during the pandemic, with the largest population experiencing this being the young adult population (Panchal et al., 2021)

These figures show that knowledge about mental health among the community needs to be increased to minimize the emergence of more severe disorders and the increasing number of deaths due to unstable mental conditions during the pandemic. Therefore, it is necessary to make prevention efforts, one of which is by conducting socialization and counseling that is packaged attractively in a series of webinars by utilizing video conferencing technology. The implementation of the META WING (Mental Health Awareness during Pandemic) webinar is one of the efforts to increase public understanding and awareness of mental health during the pandemic.

2. Method

COVID-19 pandemic has caused the world to adapt in many ways. All activities are very limited and must consider various factors such as health protocols as an action to stop the transmission of the coronavirus, including the education system in Indonesia. This has forced universities to conduct online distance learning to support the government in breaking the chain of transmission of the coronavirus.

As is the case with the Community Service Program (KKN) program, which is routinely carried out by university students every semester, it must be carried out even though it is online. For the successful implementation of the COVID Module Community Service Program (KKN) carried out by the Faculty of Medicine, Universitas Airlangga, group 21 held a webinar that focused on mental health during the COVID-19 pandemic. In this case, the title of the webinar on "META WING (Mental Health Awareness during Pandemic)" was raised which was held on Sunday, July 11, 2021, with the target audience of teenagers and adults being active users of social media Instagram and the public.

Interventions are carried out online in the form of delivering material by experts and conceptual discussions in groups that are recorded through an online meeting platform. Then, a discussion was recorded online in collaboration with a team of doctors and psychologists from the Faculty of Medicine, Airlangga University, Surabaya. In the discussion, public concerns were discussed which resulted in the disruption of mental health during the COVID-19 pandemic, especially regarding insecurity, suicidal thought, and self-harm. Achievement of results is done by comparing the values obtained during the pre-test and post-test.

2.1. Results and Discussion

Based on the results of the pre-test, post-test, and questionnaires obtained from 444 respondents who took part in the META WING webinar, the samples were included, including the profiles of respondents consisting of age, gender, and last education.

- Characteristics of Participants in the META WING Webinar

Table 1. Characteristics of Participants in the META WING Webinar

Category	Alternative Answer	Total (n=444)	Percentage (%)
Age	12-16 (early teens)	66	14.9
	17-25 (late teens)	365	82.2
	26-35 (early adults)	10	2.3
	36-45 (late adults)	3	0.7
Gender	Man	46	10.4
	Woman	398	89.6
Last Education	Junior High School	30	6.8
	Senior High School	341	78.2
	Diploma	3	0.7
	Undergraduate	6	14
	Master	2	

Source: primary data, 2021

The META WING (Mental Health Awareness during Pandemic) webinar was attended by 444 participants, which exceeded the target of 100 participants. Table 1 shows that most of the participants who took part in the webinar were in their late teens aged 17-25 years (82.2%) as many as 365 participants. Early adolescence (12-16) years was the second-largest age category with 66 participants (14.9%), followed by the early adult age group (26-35) years with 10 participants (2.3%) and late adulthood as many as 3 participants (0.7%). The majority of participants were female with a total of 398 participants (89.6%) more than men with a total of 46 participants (10.4%). Based on the latest education, a total of 341 participants (78.2%) studied up to high school, as many as 30 participants (6.8%) studied up to junior high school, 6 participants (14%) studied up to S1, 3 participants (0.7%) studied up to a Diploma, and 2 participants (0.5%) studied up to a master's degree.

- Pre Test and Post Test Analysis

The level of participants' understanding of the mental health theme was compared through a pre-test assessment given before the presentation of the material, starting with a post-test given after the presentation of the material. The pre-test and post-test questions consist of ten questions each and are uniform questions (the questions issued in the pre-test are the same as the post-test questions).

Table 2. List of pre-test and post-test questions for the META WING webinar

Theme	No	Question	Question Type
Insecurity	1	The definition of eustress is...	Multiple-choice questions
	2	Causes of insecurity include, except…	Multiple-choice questions
	3	How to make peace with the pandemic so you don't feel insecure, unless…	Multiple-choice questions
	4	Insecurity makes it easy for individuals to develop negative thoughts on others, find it difficult to trust, and have control issues that are synonymous with toxic relationships.	True/false question
	5	Seeing other people's lifestyle posts, then comparing ourselves with others will encourage us to feel insecure and afraid to miss the trend.	True/false question
Suicidal thought dan self-harm	6	The difference between Non-Suicidal Self Injury (NSSI) and suicide is...	Multiple-choice questions
	7	The most important thing to do when listening to someone talk about suicidal thoughts is...	Multiple-choice questions
	8	One of the simple steps that can be taken in an effort to prevent the occurrence of self-harm, among others…	Multiple-choice questions
	9	Suicidal tendencies are something that is passed down. This tendency is passed down from generation to generation and cannot be prevented.	True/false question
	10	There are more cases of women who die from suicide than men.	True/false question

Source: primary data, 2021

Table 3. Distribution of Changes between Pre-test and Post-test scores

Changes in pre-test and post-test scores	Total (n=444)	Average Pre-test scores	Average Post-test scores
Decrease	93	71,41	58,15
Fixed	160	75,69	75,69
Increase	191	63,54	79,90
Total		30880	32800
Average		69,54	73,87

Source: primary data, 2021

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number of questions

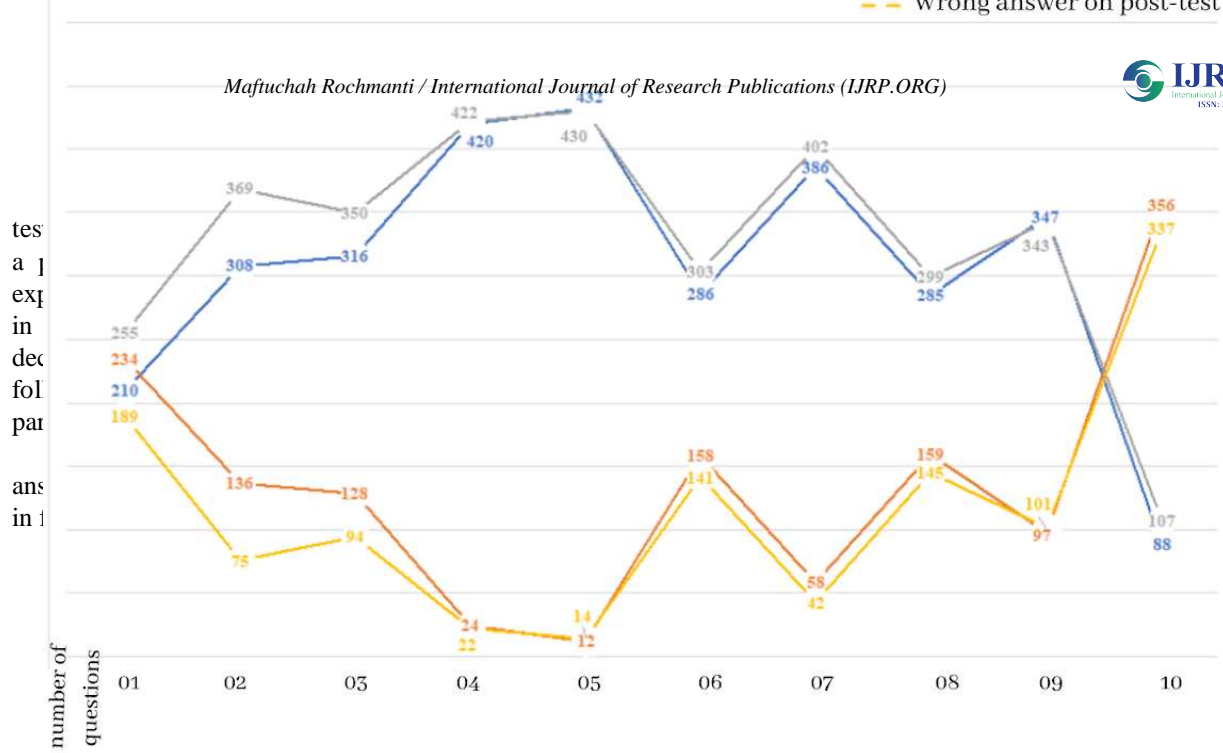01   02   03   04   05   06   07   08   09   10

Fig.

Based on the graph above, it appears that 9 out of 10 pre-test and post-test questions were answered correctly by the majority of participants. Only question number 10, the number of wrong answers is more than the number of correct answers even after the presentation of the material. Question number 10 contains questions to test people's knowledge about the prevalence of suicide. Most answered incorrectly by stating

that women have a higher prevalence. The high number of participants answering incorrectly may occur because of the high level of difficulty of the questions or because participants do not have enough time to answer the last question carefully. Moreover, this processing time limit is shorter for participants who are late in accessing or are constrained by internet connections so that the accuracy of the answers in the last question is lower

Table 4. Number of participants who answered correctly

No	Pre-test	Post-test	Description
1	true: 210 (47%) false: 234 (53%)	true: 255 (57%) false: 189 (43%)	The number of participants who answered correctly increased
2	true: 308 (69%) false : 136 (31)	true:369 (83%) false: 75 (17%)	The number of participants who answered correctly increased
3	true : 316 (71%) false : 128 (29%)	true: 350 (79%) false: 94 (21%)	The number of participants who answered correctly increased
4	true : 420 (95%) false: 24 (5%)	true: 422 (95%) false: 22 (5%)	The number of participants who answered correctly increased
5	true : 432 (97%) false: 12 (3%)	true: 430 (97%) false: 14 (3%)	The number of participants who answered correctly decreased
6	true : 286 (64%) false: 158 (36%)	true: 303 (68%) false: 141 (32%)	The number of participants who answered correctly increased
7	true: 386 (87%) false: 58 (13%)	true: 402 (91%) false: 42 (9%)	The number of participants who answered correctly increased
8	true : 285 (64%) false: 59 (36%)	true: 299 (67%) false: 145 (33%)	The number of participants who answered correctly increased
9	true : 347 (78%) false: 97 (22%)	true: 343 (77%) false: 101 (23%)	The number of participants who answered correctly decreased
10	true : 88 (20%) false: 356 (80%)	true: 107 (24%) false: 337 (76%)	The number of participants who answered correctly increased

Source: primary data, 2021

The increase in the percentage of correct answers in the pre-test compared to the post-test occurred in questions number 1, 2, 3, 4, 6, 7, 8, and 10. Meanwhile, the decrease in the percentage of correct answers occurred in questions number 5 and 9. Based on the results, it can be concluded that there is an increase in public understanding regarding the important points in questions number 1, 2, 3, 4, 6, 7, 8, and 10. The important points are: (1) Definition of eustress, (2) Causes insecure, (3) How to overcome insecurity, (4) Negative thoughts that arise in insecurity, (5) The difference between NSSI and suicide, (6) Responses to someone who has suicidal ideation, (7) Simple steps to prevent self-harm, and (8) Epidemiological distribution of cases of death due to suicide. Meanwhile, the decrease in understanding occurred at important

points related to the relationship between insecurity and the attitude of comparing oneself to others and facts about suicidal tendencies. This decrease can occur due to time constraints and internet signals can reduce the accuracy of participants in understanding the material.

The decline in understanding indicates that there is a need to emphasize public education about mental health, especially regarding the relationship between self-comparison with insecurity and facts about suicidal tendencies. The public needs to be given an understanding that the habit of comparing themselves with others can encourage insecurity and feelings of fear of missing out on trends which, of course, have an impact on decreasing psychological conditions. In addition, the public's understanding of suicidal tendencies should also be clarified, namely that suicidal tendencies, which in some cases are passed down in families, are something that can be prevented through various interventions.

The results of the statistical test to assess the normality of the understanding value data of the webinar with the Kolmogorov-Smirnov test, the results of the normality of the understanding value data obtained a p-value of 0.000. This result indicates that the data is not normally distributed because the p-value $<= 0.05$ so that the comparison test is carried out with the Wilcoxon non-parametric statistical test. Wilcoxon test results data as follows:

Table 5. Wilcoxon signed rank test

Statistic test	
	Post Test - Pre Test
Z	-6.614[b]
Asymp. Sig. (2-tailed)'	
	0.000

[a]=Wilcoxon Signed Ranks Test, [b]=Based on negative ranks

The results of the Wilcoxon statistical test with SPSS version 25 obtained the result of z count -6.614. This negative result means that the value of understanding before the presentation of the material is lower than the value of understanding after the presentation of the material on the META WING webinar. The results of the statistical test of the difference in values before and after material exposure with Wilcoxon showed that the p-value was 0.000 (p $\leqslant$ 0.05), then Ha was accepted. There is a significant difference between the value of understanding before the presentation of the material and the value of understanding after the presentation of the material.

There is an increasing trend in changes in understanding values before and after the presentation of the META WING webinar material. These results are indicated by the results of significant differences in statistical tests. Previous research showed that participants' understanding tended to increase after material exposure throughout-of-network counseling (Prasetyo, 2013).

- Questionnaire analysis

Table 6. Recapitulation of the Results of Filling out the Questionnaire

Statement	Scale (Strongly agree – Strongly disagree)	Total (n=444)	Percentage (%)	Description
What do you think after attending the entire	5	342	77	Very good
	4	93	21	God

META WING webinar	3	7	1,6	Enough
	2	0	0	Bad
	1	2	0,4	Very bad
Would you recommend this webinar to your colleagues/friends?	Yes	440	99	Highly recommended
	No	4	1	Not recommended
The webinar material presented is useful	5	405	91	Very helpful
	4	34	8	Helpful
	3	3	0,6	Quite helpful
	2	0	0	Useless
	1	2	0.4	Very useless

Source: Primary data, 2021

From the result of a questionnaire filled out by 444 respondents based on table 6, it can be seen that most of the respondents gave a scale of >3 with 435 participants (98%) on the satisfaction question regarding the META WING webinar. A total of 9 participants (2%) gave a scale of 3. It can be concluded that after attending the webinar, the majority of participants rated the META WING webinar as very good as an entire event.

Based on the results of the questionnaire, most participants (with a total of 440 respondents) will recommend the webinar to colleagues/friends. And 4 other participants chose not to recommend the webinar to colleagues/friends. It can be concluded that after attending the webinar, the majority of participants considered the META WING webinar very good to be recommended.

From the results of the questionnaire, on questions about the benefits of the webinar material, most of the respondents gave a scale of >3 totaling 439 participants. And the remaining respondents gave a scale of 3 as many as 2 respondents. Therefore, it can be concluded that the majority of participants felt the benefits after listening to the webinar material, namely about the art of making peace with one's shortcomings (anti-insecure steps) and caring about issues of suicidal thought and self-harm.

Overall responses from participants stated that the webinar was very good, recommended, and very useful. As for 1 out of 2 participants who stated that the quality was very poor on the three questions, but in the description, column stated the quality was very good and recommended this webinar. It is assumed that the participant does not understand the description of each scale. Therefore, the assessment of the questionnaire can be adapted into the form of images or symbols so that it is easier to understand. As 1 of 2 participants also stated that the quality was very poor on the three questions, they expressed disappointment because they felt that the questions in the question-and-answer session were not answered. After all, only the most asked questions were answered and the time for the question-and-answer session was limited. Therefore, it is necessary to adjust the time and system to answer unanswered questions for the quality of the delivery of the webinar.

3. Conclusion

The COVID-19 pandemic is enough to make people restless so that their mental health is quite disturbed. In addition, all activities are directed by the government in an online form (online). Considering that all

activities must be carried out online, a webinar is one of the effective media in providing education to the public, therefore the webinar entitled "META WING (Mental Health Awareness during Pandemic)" was held. In the META WING webinar, there were various sessions including material presentation and QnA with a team of doctors and psychologists from Universitas Airlangga who raised the sub-themes "The art of making peace with one's shortcomings" and "Caring for the issue of suicidal thought and self-harm" along with pretest and posttest with the material presented by the presenter. In this activity, it was clear that this webinar received positive feedback from the community, which was seen when there was an increase in public knowledge after watching QnA and the material reviewed by the presenters was clearly seen in the comparison in the form of a tendency to increase results from pre-test to post-test as well as community enthusiasm. High regard for the webinar program entitled "META WING".

4. Suggestion

Through the "META WING" webinar, it is clear that there is still a need to educate the public about mental health, especially during the COVID-19 pandemic. During the COVID-19 pandemic, people are categorized as lacking in understanding their mental health. Many of them underestimate mental health itself. Therefore, education about the importance of mental health is very much needed during the COVID-19 pandemic.

Acknowledgment

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