RESEARCH ARTICLE

The Impact of Counseling on the Anxiety Level of the Surrounding Community Due to Positive Indication of Residents of Covid-19

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ABSTRACT This pandemic period has multiple impacts on all aspects of life. Both economic, social, religious, and psychological. The psychological side is the great fear in the community as the virus spreads very quickly from the sick to the healthy. Changes in interpersonal relationships and in the economy are often followed by changes in politics, including the life of the nation and the state. Various everyday problems also need to be observed and solved with new approaches. The aim of this research is to examine the impact of counseling on the anxiety level of the surrounding community due to residents found to have positive COVID-19 infection. So that people can understand Covid-19 properly and don't experience anxiety even though there are local residents who are confirmed positive for Covid-19. This study was a quasi-experimental study with a pre-post test control group design. The purpose of this study was to analyze the effectiveness of counseling in reducing anxiety levels in the surrounding community due to residents indicated as positive for Covid-19. Test results showed a significant difference in the treatment group before (pre-test) and after (post-test) counseling (p-value 0.000). The test results between the treatment group and the control group also showed a significant difference in the post-test (p-value of 0.000). Anxiety or stress during this pandemic leads to an increase in concern for one's own health and that of the family. The situation is exacerbated by the fact that information arriving in bewildering abundance will increase public anxiety. There is a need for participation and collaboration between health care facilities and health care workers and health cadres to provide accurate information so that people are properly informed and can reduce their fears so that they are able to take appropriate action. There is a significant effect of counseling to reduce the anxiety level of the surrounding community due to residents who tested positive for Covid-19.

INDEX TERMS Counseling, anxiety, Covid-19.

I. INTRODUCTION

This pandemic has multiple impacts on all aspects of life[1]. Both economically, socially, religiously, and psychologically[2][3]. The psychological side is the great fear in the population, as the virus spreads very quickly from sick to healthy people. As of September 12, 2020, 37,109,851 Covid-19 cases have been confirmed with 1,070,355 deaths (CFR 2.9%) in 215 infected countries, while in Indonesia, the number of people tested was 2,338,550 and 336,716 were positive for Covid-19. Recovered (positive for Covid-19) are 258,519 people, died (positive for Covid-19) 11,935 people (CFR 3.5%) and negative for Covid-19 are 2,001,834 people.[4]

The population needs to be educated so that transmission of the Covid-19 virus is not misunderstood. In addition, the infection must be avoided through healthy lifestyles by washing hands with soap as often as possible and wearing a mask when leaving the house, and keeping distance [5][6][7][8]. It has never been reported how health education about covid-19 affects people's anxiety in their residential areas because there are people who have been detected with covid-19[9][10][11][12]. The purpose of this study was to examine the impact of counseling on the anxiety levels of residents of surrounding communities who were found to test positive for COVID-19[13][14].

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The benefit of this research is that health promotion in the form of good public education is likely to reduce confusion and fears, as well as Fake News, which confuses the situation and cannot solve the problem. Proper counseling about Covid-19 will sensitize people so that they do not misbehave by excluding other members of the community who have been shown to be positive for Covid-19. The intended outcome of this study is counseling about Covid-19 for some residents in the treatment group. The control group will receive counseling after data collection is complete. So far, counseling is done in general and through social media without face-to-face meetings, leaving people confused about what information is true and what is untrue.

II. METHOD

This study was a quasi-experimental study with a pre-post test control group design. The purpose of this study was to analyze the effectiveness of counseling in reducing anxiety levels in the surrounding commu[15]nity as residents indicated positive for Covid-19[3][11][15][14].

The population in this study was community members who were in the working area of Tambak Rejo Health Center Surabaya. The population of this study was 108 residents. The sample in this study was part of the population that met the inclusion criteria, that is, residents who had never tested positive for Covid-19, were older than 21 years, had never received counseling about Covid-19, were in good health at the time of data collection, and could use the social media WhatsApp, google meet, and zoom meeting[13][15]. The sample size of each treatment and control group was 25 people, and a nonrandomized sampling technique was used among residents of the study area who gave consent to participate in the survey.

This research data collection was conducted in the work area of Tambak Rejo Health Center Surabaya from August to October 2021. The data were collected after the ethical standards of the Ethics Committee of the Health Poltekkes of the Surabaya Department of Health were published on October 5, 2021. The respondents are divided into two groups, namely the treatment group and the control group. Determination of the group by simple random selection. The treatment group received an intervention in the form of counselling on Covid-19, while the control group received no intervention. The analysis of the research data begins with a homogeneity test. The homogeneity test was conducted to ensure that the control and treatment groups had the same characteristics. If the characteristics between the groups are the same, then any differences that occur are due to the treatment and not the characteristics of the subjects. The homogeneity test was performed for the characteristics of the respondents, i.e., education, gender, and age. The subsequent analysis examined the differences between the two groups both before and after the intervention. The tests used were the T-test and Fisher's exact test.

III. RESULTS

The study was conducted in the working area of Tambak Rejo Health Center where the Puskesmas are located in Simokerto District, whose working area consists of three villages, namely Simokerto Village, Tambak Rejo Village, and Kapasan Village. The data collection was conducted on October 5, 2021. After respondents completed the pre-test questionnaire through Google form https://formfaca.de/sm/Ro_q-Bc9w, the treatment group was counseled in a Zoom session on October 5, 2021, at the link https://
/us02web.zoom.us/j/6218921456?pwd=dnZTVFdhMmU4O HpISW9HWEVCWDVnUT09. The posttest will also be conducted online by completing the Google Form https://formfaca.de/sm/Ro_q-Bc9w on October 6, 2021. The detailed results are presented in the following description.

1. Residents indicated as positive for Covid-19 in the working area of Tambak Rejo Health Center Surabaya.

The number of residents identified as positive for Covid-19 in the work area of Tambak Rejo Health Center, Surabaya, has decreased significantly compared to June with more than 200 cases, and in July 2021, about 180 cases of residents were indicated as positive for Covid-19. There were 79 cases in August, 21 cases in September, and 8 cases in October 25, 2022.

2. Testing the homogeneity of respondents' characteristics.

The homogeneity of respondents was tested by the characteristics of gender, education, age, occupation, marital status, and presence of family members who tested positive for Covid-19.
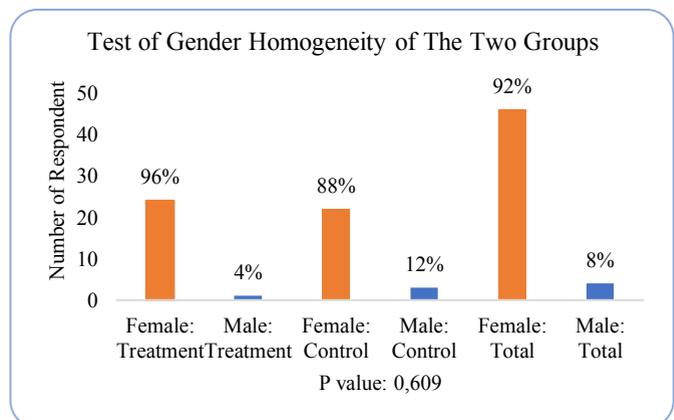

FIGURE 1. Test of Gender Homogeneity of The Two Groups

3. Different tests before and after counseling for the two groups. This study will examine the impact of counseling on the anxiety level of the surrounding community caused by residents who tested positive for Covid-19[9][16][3][17][18][13][15]. Observations will be conducted before and after the intervention.

The variable measured is the level of anxiety[11][12][12]. The level of anxiety is tested using the t-test. Here are the full test results
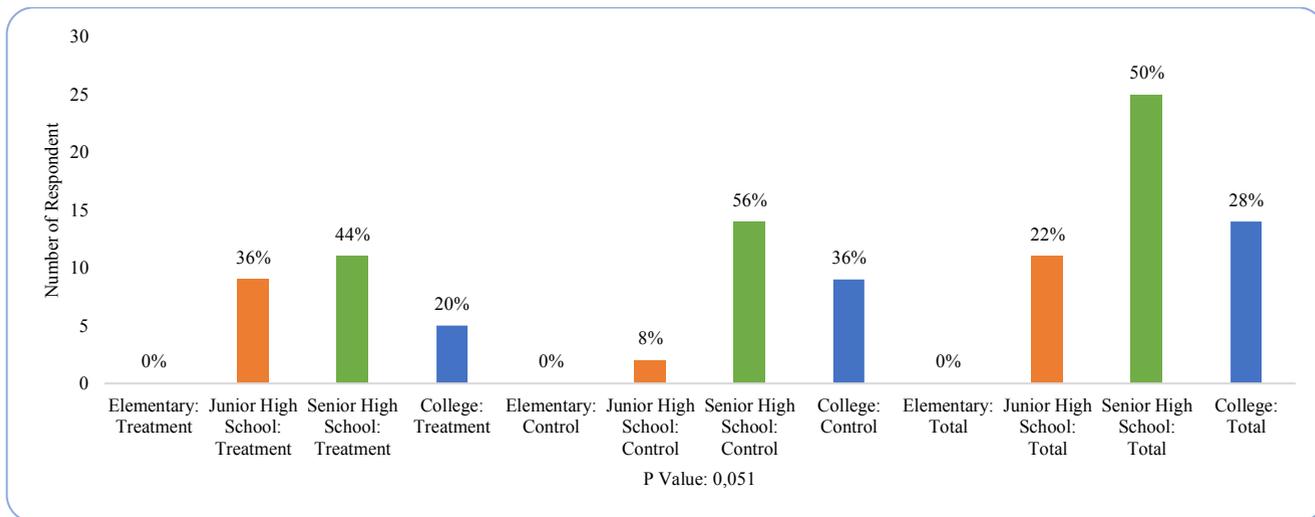
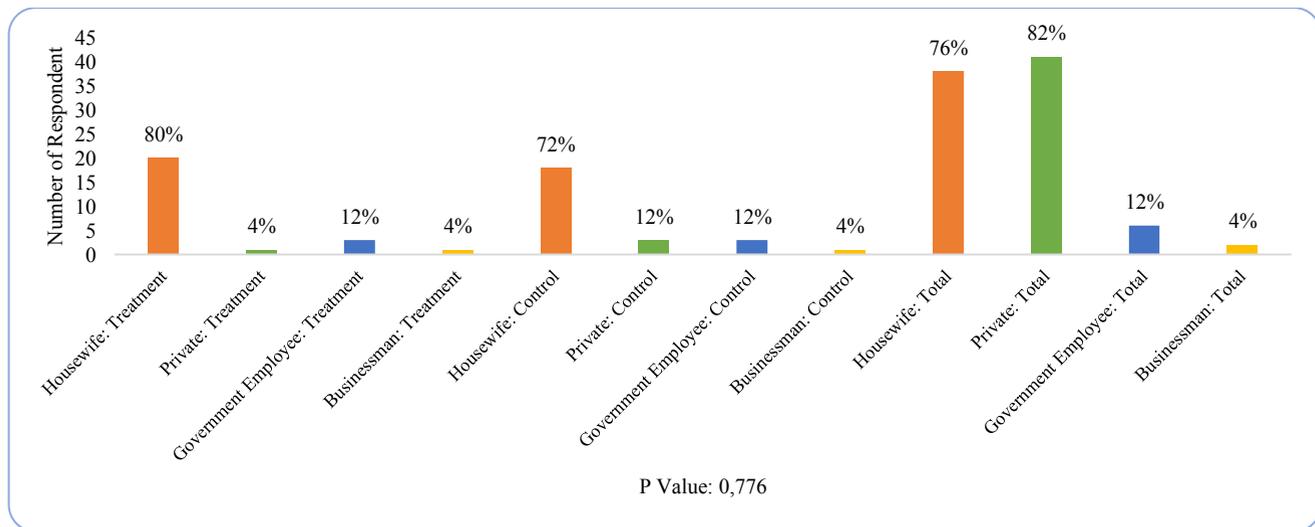**FIGURE 2.** Test of Educational Homogeneity of Respondents in Two Groups

FIGURE 3. Test of Work Homogeneity of Respondents in Two Groups
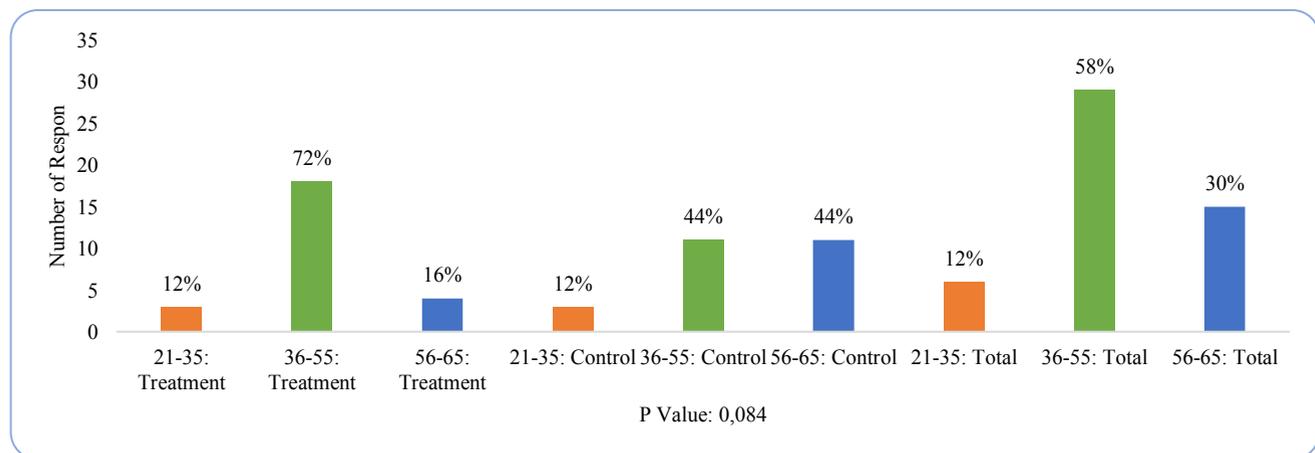

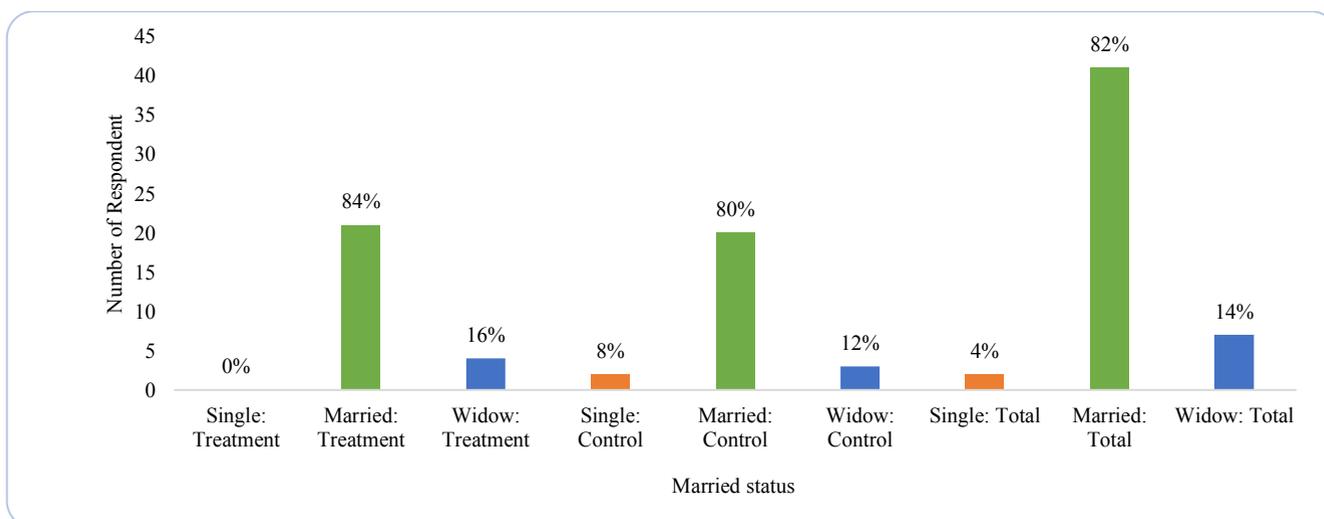
FIGURE 4. Test of Age Homogeneity of Respondents in Two Groups

FIGURE 5. Test of Homogeneity of The Martial Status of Respondents in Two Groups
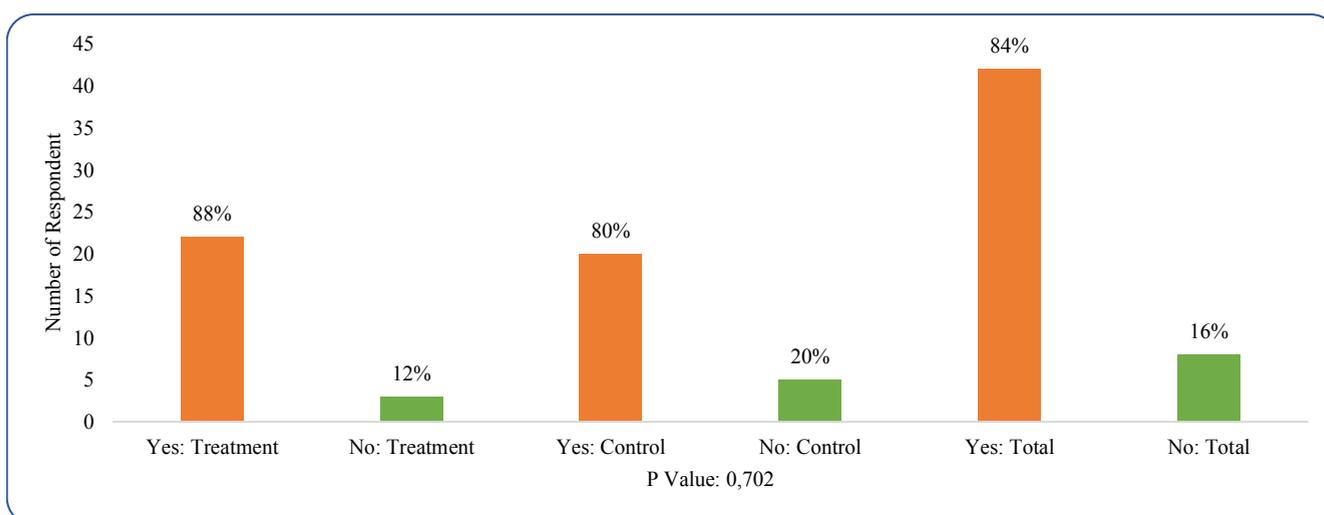

P Value: 0,702

Figure 6. Test of Homogeneity of Existence of Family Members Positive for Covid-19 Respondents in Two Groups Table 5

The total of 50 respondents in this study are divided into two groups, the treatment group and the control group. The respondents in the treatment group (n=25) and in the control group (n=25). FIGURE 1-6 shows that the two groups do not differ significantly in their general characteristics. Almost all respondents were female (96% and 72% respectively) in both the treatment and control groups. Almost half of the respondents in the treatment group had a high school degree (44 %) and most (52 %) in the control group. Almost all in the treatment group were housewives. (80%) and most in the control group (72%). The proportion of those aged 36-50 was highest in the treatment group (72%) and almost half in the control group (44%). Marital status is almost entirely married in both groups (84% and 80%). Most of them are almost entirely family members from both groups (88 % and 80 %), who are reported as positive for Covid-19. It can be concluded

that the two groups are homogeneous, so that the differences can be attributed to the counselling intervention offered.

3.   Different tests before and after counseling for the two groups

This study will examine the impact of counseling on the anxiety level of the surrounding community caused by residents who tested positive for Covid-19[17][3][13][15][14]. Observations will be conducted before and after the intervention. The variable measured is the level of anxiety[18][19]. The level of anxiety is tested using the t-test. The test results showed that there were significant differences in anxiety levels in TABLE 6 the treatment group before and after the intervention with a p-value of 0.00 (p < 0.05). After treatment, there was a decrease in the mean rank score. Here are the full test results:

TABLE 6.
Different tests of the pre-post test of citizen anxiety

Treatment Group			Control Group		
Variabel	Mean Rank	p value	Variabel	Mean Rank	p value
Pre intervention-anxiety	29.72	0.000	Pre-anxiety	27.92	0.002
Post-intervention -anxiety	23.96		Post-anxiety	29.52	

The test results showed that in the control group, there was a significant difference in anxiety before and after the intervention with a p-value of 0.002 (p < 0.05). After the intervention, there was an increase in the mean rank score. The posttest results showed that there was an increase in anxiety levels in the control group.

4. Different tests of control and treatment groups.
The second test was used to determine the difference between the treatment group and the control group before and after the intervention. The test used is the T-test. The following table explains the full results:

TABLE 7.
Different tests of treatment and control on citizens' anxiety

Variable	Mean Treatment	Mean Control	P- value
Pre intervention -anxiety	29.72	27.92	0.217
Post intervention -anxiety	15.60	35.40	0.000

The results of testing the anxiety level using the t-test in TABLE 7 the pretest showed that there was no significant difference between the treatment group and the control group (p>0.05), and after the extension, there was a significant difference between the treatment group and the control group (p <0.05). The control group had a higher score after counseling than before counseling, indicating an increase in anxiety level. This indicates that Covid-19 counseling influences anxiety levels in the surrounding community, as residents are perceived to be positive for Covid-19[16][10][5].

IV. DISCUSSION

Data collected during the study show that the number of residents found to test positive for Covid-19 is decreasing. This is also evident from the reports of several newspapers. The number of daily Covid-19 cases in Surabaya increased by only about 8 to 9 [20]. This drastic decrease in cases creates a calmer atmosphere in the community[3]. At the time of data collection, there were very few Covid-19 cases, but they still caused fear among the population, although they did not reach the level of severe fear or panic. Given the current decline in Covid 19 cases, the time is right to provide accurate and clear information to the public so they can deal with it calmly[21]. Public health workers as the first point of contact can involve health cadres to inform residents through meetings with limited invitations or consult directly and gradually cover the whole work area[20].
The results of the study show that there is a significant difference in the anxiety level of residents who tested positive for Covid-19 before and after counseling, as well as a significant difference between the treatment and control groups[9][19][3]. This result is consistent with Sinto Weni's (2021) statement that the pandemic causes stress and anxiety not only among those exposed to the covid virus, but also among all other groups, including children, parents, government agencies, businesses, and civil society[10][21].

Anxiety or stress during this pandemic leads to an increase in concern for one's own health and that of one's family, resulting in confusing and overwhelming information that increases anxiety in the community[9][18]. There is a need for participation and collaboration between health care facilities and health care workers and leaders to provide accurate information so that people are properly informed and can reduce their fears so that they are able to take appropriate action[22][23][24][16][25].
The results of the study show that there is a significant difference in the anxiety level of the surrounding community due to residents testing positive for Covid-19 before and after counseling, as well as a significant difference between the treatment group and the control group[3][10][18]. This result is consistent with the statement of Sinto Weni (2021) that the pandemic causes stress and anxiety not only among those exposed to the covid virus, but also among all other groups, including children, parents, government agencies, businesses, and civil society[17]. . According to Jia Haomiao et al (2021), who reported his research in America, the frequency of anxiety and depression symptoms among adults in the United States increased after August 2020 and peaked in December 2020-January 2021[26][10][27]. Thereafter, symptom prevalence declined but increased again in June 2021 compared with estimates from the 2019 NHIS. The increases and decreases in the relative frequency of reported anxiety and depression symptoms at the national and state levels reflect the weekly national number of new COVID-19 cases during the same time period[26][10]
The results showed that there was an increase in anxiety levels in the control group at the second data collection[3]. This is consistent with the results of a literature review conducted by Lakhan 2020 in China and India, which found that prevalence rates of all forms of depression, anxiety, stress, sleep problems, and mental disorders were higher in

the general population during the COVID-19 pandemic[26][10][27][25].

Anxiety and stress during the pandemic lead to an increase in concern for one's own and family's health, resulting in confusing and overwhelming information that increases anxiety in the community[9]. There is a need for participation and collaboration between health care facilities and health care workers and managers to provide accurate information so that people are properly informed and can reduce their anxiety so that they are able to take appropriate action[22][23][24][16].

Various tests have shown that counseling can significantly reduce the level of anxiety in surrounding communities due to residents testing positive for Covid-19[25].

The results of Fakhrana's (2021) study show that anxiety levels also change before and after health promotion. It is understandable that clear and correct information of the population by the nurses about Covid-19 can reduce the level of anxiety in a very tense situation for a certain period of time[16]. It is very important that health institutions, in this case the Puskesmas, plan to provide information (counseling) to the population to prevent excessive anxiety from leading to inappropriate actions and even anarchy. The counseling that was provided by nurses in this study can be modified by including the active role of health cadres to provide regular counseling every 1 to 2 months with different topics on current health problems and according to the existing trends.

The weakness of this study is that it was conducted during a pandemic, so data collection that should have involved interventions in the form of counselling residents directly is not possible, but face-to-face counselling is done online, through Zoom meeting media.

V. CONCLUSION

The purpose of this study was to examine the impact of counseling on the anxiety level of local residents who were declared positive for COVID-19. People who receive counseling about COVID-19 have reduced the level of anxiety of residents who have tested positive for Covid-19.

Further research can be done at a safe time (not during a pandemic), so that counseling can be done face-to-face.

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