

**Original Research****Education By Nurses To Reduce Anxiety For Families Of Patients Treated In The Covid-19 Isolation Room****Jumini Jumini<sup>1</sup>, Hanna Hanidyastiti<sup>2</sup>, Supriyadi Supriyadi<sup>3\*</sup>, Ayu Budiati<sup>4</sup>**<sup>1,2,3,4</sup> Unit Medical of Rumah Sakit Umum Pusat Surakarta, Indonesia**ABSTRACT**

**Background:** Anxiety disorders experienced by families with patients being treated in the COVID-19 isolation room are harmful to the mental and physical health of the family. This study aims to determine the effect of education provided by nurses through digital media on reducing the anxiety level of the patient's family in the isolation room.

**Methods:** True experiment study with the number of samples taken 36 people. The samples consist of 18 people in an experimental group who were given digital education and 18 people in a control group who were given face-to-face education. Data analysis using an independent t-test.

**Results:** There is a significant effect of providing education by nurses both through digital media and face-to-face in reducing the anxiety level of families of isolated inpatients at RSUP Surakarta (P value 0.000).

**Conclusion:** Education through digital has proven to be more effective in reducing the anxiety of the patient's family in the isolation room of RSUP Surakarta compared to education through face-to-face.

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**INTRODUCTION**

Coronavirus Disease 19 (COVID-19) is a respiratory tract infection caused by a new type of coronavirus (SARS-CoV-2), which was first identified in Wuhan, China, in December 2019 (WHO, 2022). The virus then quickly spread to other areas. After nearly two months of this virus outbreak, finally, on January 30, 2020, the World Health Organization (WHO) declared a global emergency against the coronavirus because this virus has spread widely to many countries.

In Indonesia, the first case of COVID-19 was confirmed on March 2, 2020 and on April 10, 2020, it spread to 34 provinces. As of October 30, 2020, the number of COVID-19 cases in Indonesia has reached 406,945 cases, with the number of recoveries reaching 334,295 cases and the number of patients who died as many as 13,782 cases (SatgasCovid-19, 2021). RSUP, as a central government hospital under the auspices of the Ministry of Health, is one of the referral hospitals for patients with COVID-19.

The ward, which was originally intended for patients with infections such as tuberculosis, has finally turned into an isolation ward to treat suspected COVID-19 patients and confirmed COVID-19 patients. Ward Sadewa 1 was opened to accommodate moderately ill COVID patients. The ICU ward also provides a COVID isolation room to accommodate COVID patients with severe illnesses who require more intensive supervision and more complex breathing apparatus.

Based on reports of inpatient visits in 2020 at the Central General Hospital of Surakarta, or RSUP Surakarta, that included suspected and confirmed cases of COVID-19 in early January 2020, the BOR was 4%, increasing to 76% in December 2020. This is the basis for Surakarta Hospital establishing an isolation ward. The increasing number of inpatient isolation patients and the increasing number of families who experience anxiety are because there are family members who are treated in isolation rooms (Heymann, 2020).

Anxiety disorders experienced by families where one of their family members is treated in the isolation room of the Surakarta Hospital are normal (Kamenidou, Stavrianea, & Liava, 2020). The average patient's family anxiety includes how the patient's condition is currently, what if no one accompanies the patient when he needs help in the isolation room, what about the patient's dirty clothes, what about hospital visits, what if the patient needs a delivery from the family and much more anxiety experienced by families whose family members are being treated in isolation rooms. This anxiety disorder can cause the patient's family to have no appetite, not sleep well, experience stress, and have many more physical and psychological disorders if not immediately handled optimally (Muto, Yamamoto, Nagasu, & Tanaka, 2020).

In order to reduce the anxiety of families whose family members are cared for in isolation rooms, one way is to provide education (Prtorić, 2016). The provision of this education has become a standard operating procedure (SOP) at RSUP Surakarta for all patients, both outpatients and inpatients. Education can be given to the patient or to the patient's family.

Education can be delivered face-to-face, for example, through consultation or leaflet distribution, but it can also be delivered digitally, via WhatsApp links, website links, or patient links. Providing education to patients and their families is one of the efforts made by nurses in order to provide information on patient health problems that are not yet known to patients and their families. While this must be known in order to assist and support medical management or other health workers, the purpose of this education is to change the behavior of individuals, families, and communities so that they can change the way they think, behave, and act so that they can help with treatment, rehabilitation, disease prevention, and the promotion of healthy living (Setyorini, Ardesa, & Darmawan, 2022).

The patient's family's anxiety is understandable given that the outbreak began around the world and has now spread to Indonesia. Many family members were hospitalized as a result of COVID-19 disease due to moderate-to-severe symptoms. Anxiety is experienced by patients and their families, it could be due to a lack of health information about the disease, how to overcome it, how to prevent transmission, the healing process, or how the patient's condition was while being treated in the isolation room.

However, the hospital is trying to overcome this by providing information about various things that are worried about and asked about by patients and their families, so it is hoped that the anxiety of patients and their families can decrease and be resolved after

receiving a thorough education from the hospital (Castañeda et al., 2012) (Hwang, Rabheru, Peisah, Reichman, & Ikeda, 2020). Anxiety can be measured with the HRSA tool, which was developed in 1956. In this HRSA, there are 14 question items, including anxiety, tension, fear, anxiety, sleep disturbances, intelligence disorders, feelings of depression, somatic muscle and sensory symptoms, cardiovascular symptoms, respiratory symptoms, digestive symptoms, urinary symptoms, autonomic symptoms, and behavior during the interview.

Each question is given a score of 0–4, with a score of 0 for no symptoms at all and a score of 4 if the symptoms are very severe. All of these scores will be added together later to produce the range values from lowest to highest. The range of the total score obtained will determine the value of a person's anxiety, namely: a score of less than 14 = no anxiety, a score of 14–20 = mild anxiety, a score of 21–27 = moderate anxiety, a score of 28–41 = severe anxiety, and a score of 42–52 = very anxious (Mojtahedi et al., 2021).

## **MATERIALS AND METHOD**

This type of research is a true experiment, with a population of inpatients in the Sadewa 1 ward from April to December 2021. The number of samples taken is 36, namely 18 from the experimental group who were given digital education and 18 from the control group. The control group was given face-to-face education.

The samples for the control and treatment groups were chosen at random using simple randomness, with those with an odd serial number entering the control group and those with an even serial number entering the treatment group. The normality test used is Saphirowilk because the data is less than 50. The data collection technique used in this study is direct observation through a Google Form.

The nuclear family of the patient (father, mother, child, wife, husband, and sibling), aged 18–60 years, can operate an Android cellphone, and are willing to be respondents, are the criteria for the sample to be selected in this study. The samples that were excluded from the sample were those that did not complete the research questionnaire.

## **RESULTS**

The normality test is used to test whether, in the regression model, the confounding or residual variables have a normal distribution. The normality test method that can be used to test for normality with fewer than 50 observations is the Shapiro-Wilk data normality test. The normality test of the research data shows that the value generated in the Shapiro-Wilk normality test is 0.002, which is smaller than 0.05, so it can be said that the data is not normally distributed. In the homogeneity test using Levene's test method, the value based on the mean is 11, (sig) of 0.001, which is less than 0.05, which means that there is an inequality of variance between groups, or that it is not homogeneous.

The t-test is known as the "partial test," which is to test the influence of each independent variable individually on the dependent variable. From the results of the paired t-test above, in the treatment group with a significance of 0.000, which means a sig value  $< 0.05$ , there is a significant effect of providing digital education on reducing patient anxiety levels, while in the control group with a significance value of 0.000, which means a sig  $< 0.05$ , there is a significant effect of providing face-to-face

education on reducing anxiety levels in the families of patients who are hospitalized at the Surakarta Hospital in the isolation room.

Based on the results of data processing, it is known that the average value of the anxiety level in the treatment group is -7.40, while for the control group it is -3.05, thus, statistically speaking, it can be concluded that there is a difference in the average level of anxiety between the treatment group and the control group. It can be concluded that the relationship variable with the patient has a p-value  $<0.005$ , which means that the relationship variable with the patient has an influence on the respondent's anxiety. The other 3 variables have a p-value  $> 0.005$ , which means that the gender of the respondent, the respondent's education level, and the respondent's age have no effect on the level of anxiety.

## **DISCUSSION**

The growing number of COVID cases increases a person's anxiety because this epidemic has never existed before, it is the first of its kind in the world, and it quickly becomes a pandemic that kills many people. A person who gets anxiety often gets it because of several situations, including a feeling of rejection by the community because someone in their family has been exposed to COVID-19 (Claresta, Christian, & Sa'id, 2021). In Surakarta, there are still many people who isolate their citizens for fear of being infected by this virus.

Even in the Banaran Grogol Sukoharjo area, there are residents whose houses are surrounded by bamboo fences, preventing them from leaving. This will greatly increase anxiety for anyone affected by the COVID-19 virus in the surrounding area. The anxiety of patients and their families who are hospitalized in the isolation ward of RSUP Surakarta can be reduced by providing education to patients and their families, whether they are still in the ER, at the polyclinic, or when the patient is initially admitted to the hospital in the isolation room.

As in the journal Lailiyah, Hakim, & Alifah, (2021) by providing education, one's knowledge, and self-control will increase, so it can improve lifestyle and behavior patterns that will improve one's health status. According to another journal, Yanti et al., (2020) providing education has a significant effect on the level of community knowledge. In RSUP Surakarta, every patient who is hospitalized is always given face-to-face education as an SOP for inpatients.

In face-to-face education, nurses will explain the outline of hospital regulations, how families send goods to patients or take things from patients, and explain the rights and obligations of families and patients, rooms, and other related matters. Education for the patient's family may not just happen once. In the future, if the patient's family comes again to ask for an explanation regarding the patient's condition and other health information, the health worker will still explain well and politely.

Patient education is not only done face-to-face as an initial SOP for inpatient admission, but the patient's family is also provided with education facilities through digital media, such as WhatsApp calls, e-patients, and e-booklets provided by the Surakarta Hospital, to make it easier for the patient's family to access information from home without having to come to the hospital. This will be very helpful for families who live a bit outside the city of Surakarta. In a journal article about the influence of gender on anxiety, it was found that women tend to experience more anxiety than men (Bottan, Hoffmann, & Vera-Cossio, 2020).

This is because women are more sensitive and rely more on feelings than men, while men are more sensitive. Active and can explore what he has felt so that anxiety in men is lower than in women. This is different from the results obtained in this study, where gender had no effect on the level of anxiety of a person whose family members were treated in the isolation room.

## CONCLUSION

Based on the findings of the analysis and discussion of the effect of nurse education on the level of anxiety of the patient's family in Surakarta Central General Hospital inpatients, it is possible to conclude that educating families of isolated inpatients at RSUP Surakarta through both digital and face-to-face means has a significant impact on anxiety reduction. Nurse education via digital media has a significant impact on reducing the level of anxiety among patients' families in isolation at RSUP Surakarta. Factors that affect the level of anxiety in the patient's family include gender, education level, family relationship with the patient, and age.

Of the four factors, the one most influencing the decrease in anxiety levels is the family relationship with the patient. Education through digital media is proven to be more effective in reducing the anxiety of the patient's family in the isolation room of RSUP Surakarta compared to face-to-face education.

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## REFERENCES

- Bottan, N., Hoffmann, B., & Vera-Cossio, D. (2020). The unequal impact of the coronavirus pandemic: Evidence from seventeen developing countries. *PLoS ONE*, *15*(10), 1–10. <https://doi.org/10.1371/journal.pone.0239797>
- Castañeda, S. F., Holscher, J., Mumman, M. K., Salgado, H., Keir, K. B., Foster-Fishman, P. G., & Talavera, G. A. (2012). Dimensions of community and organizational readiness for change. *Progress in Community Health Partnerships: Research, Education, and Action*, *6*(2), 219–226. <https://doi.org/10.1353/cpr.2012.0016>
- Claresta, A., Christian, S., & Sa'id, M. (2021). Public Obedience to Health Protocols during Covid-19 Pandemic in Indonesia: A Perspective from Health Belief Model Theory. *Journal of Social Sciences and Humanities*, *11*(2), 1–11. Retrieved from <https://ojs.pnb.ac.id/index.php/SOSHUM/article/view/2549>
- Heymann, D. L. (2020). A novel coronavirus outbreak of global health concern. *The Lancet*, *395*, 15–18. [https://doi.org/10.1016/S0140-6736\(20\)30185-9](https://doi.org/10.1016/S0140-6736(20)30185-9)
- Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International Psychogeriatrics*, *32*(10), 1217–1220. <https://doi.org/10.1017/S1041610220000988>

- Kamenidou, I. E., Stavrianea, A., & Liava, C. (2020). Achieving a Covid-19 Free Country: Citizens Preventive Measures and Communication Pathways. *Internasional Journal of Environmental Research and Public Health*, 17(4633), 1–18.
- Lailiyah, E. H., Hakim, D. A., & Alifah, A. (2021). Edukasi Perilaku Hidup Bersih dan Sehat (PHBS) dalam Pencegahan Covid-19 di Desa Plosowahyu Kabupaten Lamongan. *Community Empowerment*, 6(2), 99–104.
- Mojtahedi, D., Dagnall, N., Denovan, A., Clough, P., Hull, S., Canning, D., ... Papageorgiou, K. A. (2021). The Relationship Between Mental Toughness, Job Loss, and Mental Health Issues During the COVID-19 Pandemic. *Frontiers in Psychiatry*, 11(February), 1–16. <https://doi.org/10.3389/fpsy.2020.607246>
- Muto, K., Yamamoto, I., Nagasu, M., & Tanaka, M. (2020). Japanese citizens' behavioral changes and preparedness against COVID-19: How effective is Japan's approach of self-restraint? Retrieved from MedRxiv website: <https://www.medrxiv.org/content/10.1101/2020.03.31.20048876v1.full.pdf>
- Prtorić, A. V. (2016). *Severity Of Somatic Symptoms In Adolescence : How Distressing They Are ?* (2012), 2016.
- SatgasCovid-19. (2021). Monitoring Pemantauan Protokol Kesehatan di Wilayah Indonesia. In *Satuan Tugas Penanganan COVID-19*. Retrieved from <https://covid19.go.id/>
- Setyorini, Y., Ardesa, Y. H., & Darmawan, R. E. (2022). Indonesians' readiness in facing long-term COVID-19 pandemic. *Jurnal Ners*, 17(1), 14–18. <https://doi.org/10.20473/jn.v17i1.28707>
- WHO. (2022). WHO Coronavirus (COVID-19) Dashboard. Retrieved from WHO website: <https://covid19.who.int/>
- Yanti, B., Wahyudi, E., Wahiduddin, W., Novika, R. G. H., Arina, Y. M. D., Martani, N. S., & Nawan, N. (2020). Community Knowledge, Attitudes, and Behavior Towards Social Distancing Policy As Prevention Transmission of Covid-19 in Indonesia. *Jurnal Administrasi Kesehatan Indonesia*, 8(2), 4–14. <https://doi.org/10.20473/jaki.v8i2.2020.4-14>