



Supportive Therapy to Reduce Anxiety Levels of COVID-19 Nurses in Isolation ICU Room

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Abstract

BACKGROUND: COVID-19 for this year has had a negative impact on life, particularly the psychological impact of anxiety. Anxiety occurs in the general public and in health workers, one of which is a nurse. If anxiety continues, it will affect the quality of life and performance of nurses. Supportive therapy is one of the non-pharmacological treatments to reduce anxiety.

AIM: This study was to determine the effectiveness of supportive therapy in reducing the anxiety of COVID-19 nurses in isolation ICU.

METHODS: This study used quantitative research with a quasi-experimental design. The researcher wanted to know the effectiveness of a treatment, namely, supportive therapy, against the anxiety of the COVID-19 nurses of isolation ICU room. This study used a pre-post-test one-group intervention method. The therapy mechanism applied 1–4 sessions of supportive therapy by dividing each session into 3 days. Forty respondents participated in this study. The data obtained were analyzed using paired t-test.

RESULTS: The results show that 55% of respondents experience moderate anxiety before supportive therapy, and 60% are not anxious after supportive therapy. It is also found that $p = 0.000$ is considered and lower than the alpha value of 0.05 ($0.000 < 0.05$). Therefore, there is a statistically significant difference before and after supportive therapy.

CONCLUSION: The conclusion that can be drawn is the influence of supportive therapy on reducing anxiety in COVID-19 isolation ICU nurses.

Edited by: Branislav Filipović
Citation: Hidayati E, Wijayanti DN, Rahayu DA, Nurhidayati T, Mariyam M, Alfiyanti D. Supportive Therapy to Reduce Anxiety Levels of COVID-19 Nurses in Isolation ICU Room. Open-Access Maced J Med Sci. 2022 Apr 10; 10(T5):175-180. https://doi.org/10.3889/oamjms.2022.7837
Keywords: Supportive therapy; Anxiety; COVID-19 nurse
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E-mail: eni.hidayati@unimus.ac.id
Received: 29-Nov-2021
Revised: 19-Dec-2021
Accepted: 31-Mar-2022
Copyright: © 2022 Eni Hidayati, Dian Nike Wijayanti, Desi Ariyana Rahayu, Tri Nurhidayati, Mariyam Mariyam, Dera Alfiyanti
Funding: This research did not receive any financial support
Competing Interest: The authors have declared that no competing interest exists
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Introduction

The COVID-19 virus has become a global pandemic that has spread throughout the world until now. The spread of this virus was first seen in Wuhan (China) on December 31, 2019. This virus then spread rapidly throughout the world and caused a pandemic known as COVID-19 [1]. Indonesia is one of the countries in Asia where the increase in coronavirus infections is very significant. It becomes a serious concern because the impact is on the community's anxiety. Anxiety is a natural emotional reaction caused by an unexpected situation that is assumed to cause harm [2].

Anxiety becomes a serious problem, whether it is high anxiety or low anxiety [3]. Some individuals with high anxiety during a pandemic can cause crowding in the health system by going to independent doctors or hospitals simultaneously. Conversely, individuals with low anxiety may be reluctant to comply with warnings about a pandemic and may behave very casually [4]. This opinion, of course, must be included with other data that the theory also states that anxiety can affect or worsen the immune system so that it will be prone to infection in the crowd [5].

Anxiety will respond to the body to quickly take protection to ensure safety. This emotional reaction to anxiety is positive and good if it is responded to appropriately. But suppose it is responded to excessively or reactively. It will cause an anxiety disorder. It is characterized by worry, anxiety, panic, fear of death, fear of losing control, racing heartbeat, shortness of breath, nausea, bloating, diarrhea, headache, heavy-headedness and lightheadedness, and dizziness, itchy, tingling, muscle stiffness, and sleep disturbances [6].

The association of psychiatric specialists released data on psychological problems in the COVID-19 era. From the Association of psychiatric specialists released data on psychological problem in the covid-19 era, female respondents dominated anxiety by 72%, and 49% thought about death. Symptoms of anxiety disorders appear from a lousy situation, excessive worrying, irritability or irritation, and difficulty winding down or relaxing. Meanwhile, symptoms of depression vary from sleep disturbances, lack of confidence, fatigue, and loss of interest [7].

Anxiety occurs not only in public but also occurs in health workers. Some factors cause increased anxiety in health workers: The number of discriminations, high

transmission due to incomplete personal protective equipment, physical stress, and other psychological factors [8]. Detik.com and CNN in March 2020 reported that there was a rejection of the nurses' bodies infected with COVID-19 and the expulsion of nurses from the boarding house [10].

The data from the Rumah Sakit Cipto Mangunkusumo Hospital consultation center showed that there were 45 counseling registrants due to anxiety and depression, of which 38 were nurses and doctors, and most of them were nurses in the emergency unit [10].

Other studies are related to the psychological impact on health workers coping with the coronavirus (COVID-19) pandemic in Indonesia. The data showed that 65.8% experienced anxiety due to the COVID-19 outbreak, by which 3.3% was at severe anxiety level, and 33.1% was at mild anxiety level. Meanwhile, those who experienced stress levels due to the COVID-19 outbreak were 55%, with 0.8% being hefty, and 34.5% being mild. Moreover, 23.5% of health workers experienced depression, with severe and mild depression was 0.5% and 11.2%, respectively. From the data, it also showed that there was a strong correlation between anxiety ($r = 0.152$, $p = 0.000$), stress ($r = 0.086$, $p = 0.029$), and depression ($r = 0.111$, $p = 0.005$), on health workers that were being isolated due to the coronavirus.

Other studies also showed that from 155 respondents, 45.1% experienced anxiety caused by COVID-19. Most anxieties occurred on females living in urban areas. Depression was commonly experienced by women with chronic illness and an emerging psychiatric history [11]. This research is supported by another study on anxiety focusing on increasing the number of cases confirmed of COVID-19 [12].

The impact of anxiety will significantly affect the performance and quality of a person's mental health, especially health workers. Therefore, it is necessary to do an intervention to overcome this anxiety, one of which is supportive therapy. Supportive therapy is provided by forming a support group consisting of people who plan, organize, and respond directly to issues and special or detrimental stresses. It aims to provide support and reduce anxiety from each member [13].

A preliminary study was conducted by interviewing five COVID-19 nurses in the isolation ICU room of Dr. Kariadi Semarang. The result showed that all felt anxious, got trouble sleeping, and were discriminated against because of their profession. Five respondents stated that they were terrified of contracting COVID-19 because of its effects. They often had palpitations, insomnia, and even decreased appetite. Some of them also said that they were sensitive to their emotions when they were working. Therefore, the researchers are interested in doing therapeutic interventions to cope with anxiety [14].

There are many non-pharmacological therapies to treat anxiety, that is, deep breath relaxation therapy, music therapy, psycho-religious therapy, hypnotherapy,

and supportive therapy. Anxiety therapy aims to create a safe and comfortable atmosphere and improve the individual's coping strategy. This study uses supportive therapy to enhance individual coping of nurses who experience anxiety [15].

Supportive therapy is therapy in the form of encouragement and motivation to relieve symptoms of existing psychological disorders and promote positive personal growth and development. It provides support and resolves the anxiety experience of every nurse on duty in the ICU COVID-19 isolation room. Those given supportive therapy reduce stress by performing five principles of intervention, namely: (1) Raising self-esteem, (2) activating external support, (3) advising and giving advice, (4) solving existing problems, and (5) structuring [16].

The study on supportive therapy showed a decrease in adolescent anxiety levels by $p = 0.000$ ($\alpha = 0.05$) [17]. This finding is supported by other studies that supportive therapy with guidance techniques has a positive impact. There is a behavior change of depression toward a better one, decreased mental disorders, is not easily discouraged, can accept existence, socialize, improve relationships with family, and identify the purpose of his life. It is supported by an analysis of the development of the intervention supported by the pre-test and post-test results with the Suicide Intent Scale. The pre-test score was in the medium category (medium Intent), while the post-test score was in a low category (low intent). Supportive therapy can also improve coping, supported by the result of the study focusing on the effect of group supportive therapy on family burdens and family coping mechanisms in caring for family members with schizophrenia.

Methods

Study Design was a quantitative study with a quasi-experimental design. It was aimed to know the effectiveness of supportive therapy on the anxiety of the COVID-19 nurses in the isolation room. This study used a pre-post-test group intervention method. The supportive therapy was applied to 1–4 sessions by dividing each session into 3 days. Forty samples were involved in this study by willing to be a respondent, experiencing anxiety symptoms and not being a COVID-19 patient.

Data Collection and Instrument Assessment
Data collection was conducted using checklists and standard questionnaires Hamilton Anxiety Rating Scale (HARS). The questionnaire consists of 14 question items. The list contains three primary standards for implementing supportive therapy. The standard is creating a safe and comfortable atmosphere for telling stories, being empathetic, and describing options for positive and negative impacts.

Data analysis was carried out using univariate, bivariate, and data processing software. Shapiro–Wilk was used to test the normality because the respondents were <50. The significance value of pre- and post-test was > 0.05. It means that the data were distributed normally. Accordingly, the paired t-test was employed. The results of the validity and reliability of HARS showed that the alpha value was 0.897, and the Pearson's product-moment was 0.876 [18]. Other studies also mentioned that the alpha value was 0.987 and the Pearson's product-moment was 0.577.

This research obtained an ethical statement from the Health Research Ethics Commission Kariadi Hospital No. 708/EC/KEPK-RSDK/2021.

Results

The study results are based on statistical processing and analysis of 40 respondents from the ICU COVID-19 isolation nurse Dr. Kariadi Semarang. The initial respondents were 55, but 40 were screened for anxiety, and supportive therapy was carried out for four meetings. Supportive therapy is done online. Numerical data are grouped by age and length of employment, categorical data in groups of gender, education, and marital status. Another result is the distribution of pre- and post-anxiety frequencies and different tests.

Table 1 shows that 67.5% of participants aged from 31 to 40, 42.3% the length of work by 6–10 months, 70% female, 52.5% nursing diploma, and 90% married.

Table 1: Distribution of the characteristics of COVID-19 isolation

Characteristics	Frequency (n)	Percentage	Min–Max	M	SD
Age (years)					
20–30 years	11	27.5	26–46	34.34	5.304
31–40 years	27	67.5			
40–50 years	2	5.0			
Length of work					
1–5 months	11	27.5	3–11	7.6	7.67
6–10 months	17	42.5			
>10 months	12	30.0			
Gender					
Man	12	30.0			
Woman	28	70.0			
Education					
DIII	21	52.5			
S1/Ners	19	47.5			
Status					
Married	36	90.0			
Single	4	10.0			

The result shows that 55% of participants are at moderate anxiety before supportive theory, and 60% are not anxious after supportive therapy (Table 2).

The paired t-test shows that the significance value is 0.000 and lower than the alpha value of 0.05 ($0.000 < 0.05$) (Table 3). It means that there is a significant difference before and after supportive therapy. Accordingly, supportive therapy effectively reduces the anxiety of COVID-19 nurses of the isolation ICU room at RSUP Dr. Kariadi Semarang.

Discussion

This study determines the effect of supportive therapy on reducing anxiety levels of COVID-19 nurses in the Isolation ICU room. Demographic characteristics, the result shows that 67.5% range in age from 21 to 40. Age shows the process of individual growth and development. Age correlates with experience that connects with knowledge, understanding, and views of an event to shape perceptions and attitudes. Maturity in adults who are more likely to use coping mechanisms than children shows that children who experience an accident have more anxiety than adults [19]. This finding is supported by other studies focusing on the relationship between age and anxiety in which there are differences between anxiety disorder of children and adults. Anxiety occurs in most children. It is because children manifest many fears and anxieties as part of typical development. The data show that 4.8% of adolescents experience severe anxiety, 26.8% moderate anxiety, 52.4% mild anxiety, and 0% adult. The Spearman correlation result also shows 0.036, which means a significant relationship between age and anxiety levels [20]. This finding is also strengthened by other studies in which more than 19 in age 24 at severe anxiety and <19 in age 22 experience anxiety. It indicates that there is a significant difference in anxiety levels [21].

About 70% of women participated in this study. Concerning anxiety in men and women, Myers, in his theory, says that women are more anxious about their inability than men; men are more active, explorative, while women are more sensitive. It is also mentioned that women are more prone to panic and anxiety than men, who are more relaxed and relaxed about a problem. Other studies reveal that 30.4% of women experience severe anxiety and 52% moderate anxiety. Meanwhile, males do not experience moderate and severe anxiety with $p = 0.000$, indicating a strong relationship between gender and anxiety. Other studies also show that women and men experience 64% and 36% anxiety, respectively. This study is supported by other studies that women at severe and mild anxiety of 8.6% and 45.7%. In contrast, 20% of men experience moderate anxiety.

Furthermore, it is also found that 52.5% are educated in Nursing DIII and 47.5% in Ners professions program. Education is directly proportional to knowledge. The higher the level of education, the better the knowledge achieved. Stuart and Sudden assert that someone who is highly educated can use his understanding in responding to an event adaptively than someone with low education. This condition shows mild anxiety in someone with high education and severe anxiety in those with low education [22]. In addition, 90% of respondents are married. Marital status is closely related to a support system, at this point, family

support. The family will provide psychosocial support by building interpersonal relationships to protect a person from the bad effects of stress. In general, if a person has a robust support system, the susceptibility to mental illness will decrease. This support includes emotional support, appreciation, instrumental support, and information support [23].

The anxiety result shows that a moderate anxiety level and no anxious level of 55% and 60% occur in pre-intervention and post-intervention. Anxiety feelings include anxiety, lousy feeling, fear of one's thoughts, and irritability. It indicates that based on the result of the HARS assessment, 60% experience two symptoms, 10% three symptoms, and 1% all symptoms. Other studies also support this finding that health workers are at risk of experiencing psychological disorders in treating COVID-19 patients. The result also shows that 50.4% of respondents have depression symptoms, and 44.6% have anxiety symptoms because of feelings of depression [24]. Another support of study shows that moderate anxiety level, severe anxiety level, and mild anxiety level are 13%, 1.7%, and 15%, respectively. Moreover, it is also supported by a study focusing on a survey-based study of mental health from 1,257 health workers treating COVID-19 patients in 34 hospitals in China. The result shows that symptoms of depression, anxiety, insomnia, and psychological distress are 50%, 45%, 34%, and 71.5% [25].

Anxiety is influenced by tension, which is the clinical manifestation of feeling tense, lethargic, unable to rest calmly, easily surprised, easy to cry, trembling, and restless. About 65% of respondents experience two symptoms, especially anxiety. Anxiety in other pre-intervention is also shown by fear of crowds. It is in line with the World Health Organization that crowds are one of the most significant sources of COVID-19 transmission [26]. Almost 100% of respondents experience infrequent to frequent intensity such as sleep disturbances, feelings of depression, somatic symptoms such as stiff joints pain, feeling tired, frequent breathing, nausea, dizziness, and restlessness. Under the theory, anxiety is usually accompanied by certain physical complaints such as palpitations, heartburn, chest pain, heavy breathing, stomach pain, or headaches. Those conditions are natural because, physically, the body prepares the organism to face threats. It is also in line with the research of anxiety in women who are about to enter menopause, in which they experience pain, insomnia, and palpitations [27]. Other studies on signs of anxiety in pre-operative patients show physical symptoms such as pain, insomnia, and shaking. At the same time, psychological symptoms can be seen from constant thoughts and feelings of excessive anxiety.

The psychological response experienced by health workers to this infectious disease pandemic has increased due to feelings of anxiety about one's health and the spread to the family [28]. About 90% of COVID-19 nurses of isolation ICU room are married.

It is one of the factors they experience anxiety when treating positive patients with COVID-19 or conducting examinations on people who have symptoms of COVID-19. Health workers are worried that they will transmit the COVID-19 to their families [29]. They also feel stigmatized because they feel connected with patients who are infected with the virus. These findings indicate that the status of health workers who have families tends to have a more significant influence on anxiety than unmarried health workers ($r = 0.38$; 95% CI = 0.15–0.81). This virus can move rapidly from human to human through direct contact [30].

Indeed, this anxiety should not be ignored because it affects all aspects. In addition, mental health, relationships with other people, and morale will decrease. Considering the effects, health workers, at this point, should have stability in mental health or physical health to care for patients optimally. Therefore, it is required to intervene by forming a medical team in psychological management and applying a health belief model for health workers [31].

The results show that supportive therapy is effective in reducing anxiety. It is in line with Friedman's theory that supportive therapy is a place where a group exchanges experiences and supports each other to reduce anxiety. Pardede asserts that supportive therapy is effective for various psychiatric disorders and medical conditions, such as schizophrenia, bipolar disorder, depression, personality disorders, substance abuse, and anxiety [32]. Supportive therapy is carried out by exploring individual abilities, analyzing sources of family support and outside, and evaluating them. When analyzing the family support, respondents with mild anxiety explain that their family and relatives always fully support and provide support covering encouragement, prayer, food, and additional intensive care from the hospital. The outside support is by watching movies, playing games, reading novels or books, and ignoring news that can increase anxiety, especially the issue of COVID-19. During the therapy and evaluation, anxiety decreases significantly. There is a decrease in the anxiety of Ponkal villagers after landslides after supportive therapy [33]. There is a decrease in anxiety in adolescents given supportive therapy. Another is strengthened by research on reducing the anxiety of HIV AIDS patients using supportive therapy.

Supportive therapy emphasizes exploring and utilizing support from both families and outside to effectively reduce anxiety. It is also found that social support such as emotional, instrumental, informational, or rewarding can reduce anxiety. In this case, respondents can exchange information to reduce their anxiety. They also have a comfortable space to express their emotions, whether they are angry, sad, disappointed, and so on [34]. Expressing feelings in groups are a constructive coping mechanism to increase knowledge and create good social relationships. It can foster positive experiences in all participants until they

Table 2: Anxiety levels of COVID-19 isolation ICU

Anxiety	Pre f (%)	Post f (%)
No anxiety	-	24 (60.0)
Mild	11 (27.5)	13 (32.5)
Moderate	22 (55.0)	3 (7.50)
Severe	7 (17.5)	-
Total	40	40

realize what they feel is also experienced by others, the best support is received from individuals who share the same problems [35].

Table 3: Decreased level of anxiety after given supportive therapy to COVID-19 isolation ICU

Anxiety	Mean	SD	Sig*
Pre-intervention	22.7500	5.30964	0.000
Post-intervention	11.1750	5.09342	

Conclusion

Supportive therapy is significantly effective in reducing the anxiety of COVID-19 nurses in isolation ICU rooms. The mean age value is 34.4, 70% of females, 52.5% nursing diploma education, 42.3% the length of work by 5–10 months, and 90% married. Before supportive therapy, the respondents' anxiety level is 27.5% at mild anxiety, 55.0% at moderate anxiety, and 17.5% at severe anxiety. After supportive therapy, the respondents' anxiety level is 60.0%, mild anxiety is 32.5%, and moderate anxiety is 7.5%. Supportive therapy is significantly effective in reducing anxiety in ICU nurses.

Acknowledgments

The authors would like to thank the Nursing Study Program at Universitas Muhammadiyah Semarang and the parties who have helped this research. Thanks to all colleagues who helped completed this research.

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