Mindfulness Meditation Based on Spiritual Care to Reduce Community Anxiety due to the Impact of Pandemic Coronavirus Disease

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Abstract

BACKGROUND: The spread of coronavirus disease (COVID-19) has spread throughout the world and has created a level of fear, uncertainty that has an impact on several aspects of life including mental health. The rapid spread of the Corona Virus or COVID-19 throughout the world has damaged the order of life starting from the economy, social, politics, education, culture, religion, and health. The spread of COVID-19 has a long incubation period, easy transmission, high mortality rate, and high lack of symptoms [3], [4]. The spread of COVID-19 has caused panic and anxiety in people. "People who have previously experienced anxiety disorders and it is a common occurrence of anxiety disorders associated with the COVID-19 outbreak in Indonesia [8]."

AIM: The purpose of this study was to analyze the effect of mindfulness meditation based on spiritual care on the level of community anxiety due to the COVID-19 pandemic.

METHODS: This type of research uses experimental quantitative research using a randomized controlled trial research design. This research was conducted for 4 weeks in January-February 2021. The population of this study is the Surabaya community. The sampling technique used consecutive sampling technique and was divided into two groups, namely the intervention group as many as 61 respondents and the control group as many as 61 respondents. Data analysis used paired t test and independent t test with a significance value of p < 0.05. This research questionnaire uses the DASS 42 questionnaire has reliability 0.82 and the validity test gets the Cronbach alpha value is 0.85.

RESULTS: The average level of anxiety before doing the spiritual care-based mindfulness meditation intervention in the intervention group was 17.28 (severe anxiety) and 17.18 in the control group (severe anxiety) with p = 1.000 which means there is no difference in the average level of anxiety whereas After being given the intervention, the average level of anxiety in the intervention group was 6.03 (normal anxiety) and 18.06 in the control group (severe anxiety) with p = 0.000, which means that there is a difference in the average level of anxiety in the intervention group and the control group after being given the intervention.

CONCLUSION: Mindfulness meditation based on spiritual care can reduce people’s anxiety levels during the COVID-19 pandemic.

Introduction

Coronavirus disease (COVID-19) changes human life around the world [1]. The World Health Organization (WHO) announced on January 30, 2020, that COVID-19, which is the cause of acute respiratory syndrome, is becoming a world health emergency [2]. COVID-19 has a long incubation period, easy transmission, high mortality rate, and high lack of intervention [3], [4]. The spread of COVID-19 has spread throughout the world and created a level of fear, uncertainty that has an impact on several aspects of life including mental health [5]. The rapid spread of the Coronavirus or COVID-19 throughout the world has damaged the order of life starting from the economy, social, politics, education, culture, religion, and health.

Various efforts have been made by the Indonesian government by social distancing or physical distancing, washing hands with soap, and staying active at home [6]. Social distancing and staying at home have psychological effects such as depression, anxiety, financial worries, social support, and loneliness [7]. People who are accustomed to living with a high social level physically require distance for fear of spreading the virus through physical contact. So that it causes a stressful situation for some people, especially people who have previously experienced anxiety disorders and it is a common occurrence of anxiety disorders associated with the COVID-19 outbreak in Indonesia [8]. Adaptation to changes that occur in carrying out new activities is not an easy thing. Difficulty dealing with change can increase stress. In addition, the rapid spread of the virus statistical data with the number...
of confirmed positive patients increases and there is death, which has an impact on community anxiety [9].

The number of confirmed COVID-19 sufferers in the world on January 26, 2020, was 98,925,221 with 2,127,294 deaths [10]. The number of confirmed COVID-19 sufferers in Indonesia is 1,012,350 with a death toll of 28,468 people [11]. In East Java, there were 106,162 confirmed cases with a death toll of 7,381 [12]. In Surabaya the cumulative confirmed was 19,510 with confirmation in the care of 250 people [13].

COVID-19 affects mental health as many as 77% of people experience anxiety, 56% show depression or depressive symptoms [14]. Conditions that change suddenly will make people unprepared to deal with it, especially in the psychological condition of the Indonesian people who experience a lot of anxiety when infected [15]. When mental health declines or is unhealthy, it will cause anxieties that tend to control themselves and basically disturbed mental health begins with feelings of anxiety [16]. Feelings of anxiety originated from COVID-19 that entered Indonesia, many people who contracted it and even lost their lives. Then there was large-scale social restrictions, many people were cutoff from work, went to school from home. Work from home, all recreational areas are closed, religious and cultural activities are carried out at home, activities using transportation modes stop, the economy decreases, causing high levels of stress by causing symptoms of panic, anxiety, fear [17], [18], [19].

Many people experience anxiety in facing major changes during the COVID-19 pandemic [14], [18], [20]. This pandemic is a tense experience, generates intense fear and anxiety and causes regular emotions in adults and children which can be managed with pharmacological and non-pharmacological measures. Handling anxiety during social distancing, self-isolation, and quarantine requires a multi-pronged approach that rests on support, reassurance, obtaining useful information, solving practical problems for patients and using drugs [21]. Individuals with psychiatric disorders may experience exacerbations or worsening of symptoms during a pandemic [8]. Individuals who do not have a history of psychiatric disorders, non-pharmacological actions have good benefits for people who experience anxiety [21].

The hypothalamus-pituitary-adrenal axis will be activated by the fear and anxiety caused by the COVID-19 pandemic [22]. The hypothalamus releases corticotrophin-releasing hormone in response to emotional distress then activates the pituitary gland to release adrenocorticotropic hormone, causing the release of cortisol and adrenal glands. Cortisol, a glucocorticoid hormone affects the body such as sleep and wake cycles, glucose metabolism, blood pressure, and increases energy so that individuals can handle stress [23]. Ultimately all cycles result in a depletion of energy in the body, lowering immunity and mental endurance [24].

Experienced anxiety can be reduced by means of mindfulness meditation based on spiritual care which is a non-pharmacological measure [25], [26], [27], [28], [29].

Mindfulness meditation is a meditation practice that focuses on mindfulness techniques through relaxation and concentration exercises [30]. In a study by Hoge et al. (2018), it was shown that mindfulness meditation exercise had an effect on decreasing adrenocorticotropic hormone (ACTH) in the treatment group compared to the control group and that the Area Under the Curve concentration on the hormone ACTH and inflammatory cytokines had an even greater decrease [31]. A University of California study found that patients who took a mindfulness meditation program for 8 weeks had less depression and anxiety symptoms, better self-control and higher well-being [32].

This research is mindfulness meditation combined with spiritual care. Spiritual care is very important and is one of the pillars that need to be fulfilled so that individuals can become holistically healthy [33], [34]. Spiritual care is a religious practice that includes a relationship with God [35]. Spiritual care can increase patient resilience to mental health crises [36]. In Moeini et al.’s research, spiritual care through a supportive approach and religious rituals in the form of prayer, call to prayer, pray listening to the Quran, reading tawasul prayers, and spiritual guidance by priests for religions but Islam [26], [37]. There are many studies on mindfulness meditation but not based on spiritual care, this study wants to emphasize spiritual care so that the health felt by the community is comprehensive health both physically, mentally, and spiritually so that there is an acceleration of decreasing the level of anxiety experienced by the community during the COVID-19 pandemic. Seeing the high level of community anxiety due to COVID-19, this study aims to analyze the effect of mindfulness meditation based on spiritual care in reducing community anxiety levels due to the impact of the COVID-19 pandemic.

Methods

This type of research uses experimental quantitative research using a randomized controlled trial research design. This research was conducted for 4 weeks in January-February 2021 sampling using consecutive sampling technique. The sample in this study is the Surabaya community which is included in the inclusion and exclusion criteria. The inclusion criteria in this study were Surabaya residents aged 15–60 years, experiencing mild to very severe anxiety, not being exposed to COVID-19, and willing to participate in the study for up to 4 weeks. The exclusion criteria in this study were participants who were not willing to participate until the end of this study. In this study, each participant consented by filling an informed consent form. Participants in this study have the right to withdraw.
This study was divided into two groups, namely, the intervention group and the control group. The intervention group was given treatment in the form of mindfulness meditation based on spiritual care for 4 weeks, while the control group received no treatment.

The procedure in this research is firstly the researcher obtains a research permit and then the researcher visits the houses of Surabaya residents in the west, east, south and north, residents who agree to have their anxiety level measured. Participants sign the informed consent and participants have the right to resign. In this study, participants received two questionnaires in the form of demographic data (age, gender, profession, and the DASS 42 questionnaire which was retested and had reliability 0.82. The validity test gets the Cronbach’s alpha value is 0.85 [38]. The DASS 42 questionnaire taken number (2, 4, 7, 9, 15, 19, 20, 23, 25, 28, 30, 36, 40, 41) with normal anxiety assessment indicators with a value range of 0–7, mild anxiety 8–9, moderate anxiety 10–14, severe anxiety 15–19, and very severe anxiety >20 [39]. A description of the DASS assessment of one’s perceived results starting with the number 0: Absent or never, 1: According to what is experienced to a certain degree, or sometimes, 2: Often, and 3: Very much according to what is experienced or almost every time it is experienced. Before analyzing general data, the data were analyzed for normality first, and then analyzed the data using paired t test and independent t test.

Mindfulness Meditation steps based on spiritual care.
1. Sit with your feet in touch with the earth, feel it calmly or sleep with your hands at your sides
2. Close your eyes, open your attention to the moment that makes anxiety happen to the individual
3. Adjust the breath, then focus on the breath
4. Pay attention to bodily sensations
5. Supportive presence and religious rituals: Build trust, empathy, and honesty between nurses and clients, provide support to clients about problems that occur so that anxiety levels increase, nurses provide a detailed description of COVID-19, when speaking use a supportive approach, invite clients pray, listen to Al-Quran, perform prayers. If you have another religion, listen to soothing religious music or read the scriptures that they believe in Mansurifard et al. [25], Mansurifard et al. [26], Hatmalyakin [27], Hoge et al. [28].

Results

Table 1 shows that the characteristics of the respondents in this study according to age showed that almost half (45.9%) of respondents in the intervention group were at the age of 15–25 years, while for the control group respondents almost half (49.1%) were at the age of 15–25 years. Characteristics of respondents according to gender showed that most of the respondents (72.1%) in the intervention group were female, while almost all of them in the control group (77.1%) were male. Most of the respondents in the intervention group (52.5%) did not work and most of the control group (60.7%) do not work.

Table 2: Anxiety in the intervention group and control group (n=61; n=61)

| Category | Group | Anxiety | p |
|----------|-------|---------|---|
|          | Intervention (n=61) | Control (n=61) |   |
| Age (years) | | | |
| 15–25 | 28 | 45.9 | 30 | 49.1 |
| 26–35 | 16 | 26.2 | 15 | 24.6 |
| 36–44 | 11 | 19.0 | 12 | 19.7 |
| 55+ | 6 | 9.9 | 4 | 6.6 |
| Gender | | | |
| Male | 17 | 27.9 | 14 | 22.9 |
| Female | 44 | 72.1 | 47 | 77.1 |
| Profession | | | |
| Work | 29 | 47.5 | 24 | 39.3 |
| Does not work | 32 | 52.5 | 37 | 60.7 |

Table 2 shows that the results of the normality test for the variable level of anxiety pre-est and post-test in the intervention group and control group with the Kolmogorov–Smirnov test obtained a p > 0.05, which means that the data distribution is normal so that data analysis can be continued using the statistical test paired t-test and independent t-test.

Table 3: Anxiety in the intervention group and control group before being given the intervention (n=61; n=61)

| Group | Mean | SD | Min | Max | SE | p value |
|-------|------|----|-----|-----|----|---------|
| Intervention | 17.18 | 4.677 | 10 | 26 | 0.59 | 1.000 |
| Control | 17.18 | 4.614 | 10 | 26 | 0.57 | | |

Table 3 shows that the average level of anxiety in the intervention group was 17.18 (severe anxiety) and 17.18 in the control group (severe anxiety) with p = 1.000 meaning that there was no difference in the average level of anxiety in the intervention group and the control group before intervention.

Table 4: Anxiety in the intervention group and control group after being given the intervention (n=61; n=61)

| Group | Mean | SD | Min | Max | SE | p value |
|-------|------|----|-----|-----|----|---------|
| Intervention | 6.03 | 2.529 | 2 | 10 | 0.32 | 0.000 |
| Control | 18.06 | 4.269 | 10 | 26 | 0.54 | | |
Based on Table 5, the results of the Paired t-test statistical test obtained $p = 0.000$ in the intervention group and obtained $p = 0.001$ in the control group, $p < 0.05$, it can be concluded that there is a significant change in the level of anxiety before and after being given mindfulness intervention meditation-based spiritual care in the intervention group and the control group.

Table 5: Anxiety level (pre- and post-test) in the intervention group and the control group (n=61; n=61)

| Group      | Mean  | Std. dev | Count statistics | Significant |
|------------|-------|----------|------------------|-------------|
| Intervention | Pre 17.18 | 6.977 | 15.4 | 0.000 |
|            | Post 6.03 | 2.529 | -3.4 | 0.000 |
| Control    | Pre 17.18 | 4.514 | -3.4 | 0.001 |
|            | Post 18.06 | 4.269 | -3.4 | 0.001 |

Discussion

Anxiety is an affective disorder characterized by a deep and continuous feeling of fear or concern, no interference in assessing reality (reality testing ability), personality is still intact, behavior can be disturbed but still within normal limits. There are conscious aspects of anxiety itself such as fear, helplessness, shock, a sense of sin or threat, besides that there are aspects that occur outside of consciousness and cannot avoid unpleasant feelings [29]. In this study, it was found that the 15–25 year age group was still classified as adolescents. In addition, in this study, it was found that most of them were female and did not work. The COVID-19 pandemic has caused mental symptoms or disorders, especially for the most vulnerable population groups. The COVID-19 pandemic increases psychiatric illness and morbidity in different population groups, such as among women, children, adolescents, the elderly, and health professionals due to various aspects of the COVID-19 pandemic such as social distancing policies, negative news, increased numbers confirmed, and died [5], [18].

Anxiety reactions will be different for each individual. For some people, the reaction to anxiety is not always accompanied by a physiological reaction. However, in certain people there will be a complex response by causing temporary physiological reactions such as a faster heart rate, sweating, stomach pain, headaches, itching and other symptoms. After a person begins to feel anxiety, the self-defense system will then reassess the threat accompanied by efforts to overcome, reduce or eliminate the feeling of being threatened. Someone can use self-defense (defense mechanism) by increasing cognitive or motor activity [18]. Anxiety usually comes from the perception of uncontrolled events, so that individuals will focus on controlled actions [40].

The average level of anxiety before doing the spiritual care-based mindfulness meditation intervention in the intervention group 17.28 (severe anxiety) and 17.18 in the control group (severe anxiety) with $p = 1.000$ which means there is no difference in the average level of anxiety while after it was given The intervention obtained an average level of anxiety in the intervention group 6.03 (normal anxiety) and 18.06 in the control group (severe anxiety) with $p = 0.000$, which means that there is a difference in the average level of anxiety in the intervention group and the control group after being given the intervention. This study combines mindfulness meditation with spiritual care, spiritual care in the form of the role of religion, prayer, support for religious rituals and supportive presence (non-religious rituals) have a major influence in reducing anxiety levels [37]. The results of this study are consistent with research by Zwan et al. that mindfulness meditation can reduce anxiety levels in adult patients [41], [42].

Mindfulness meditation focuses on an individual's personal experiences, such as breath, body sensations, feelings, and thoughts [43]. Mindfulness techniques serve to present problems to present events. In addition, mindfulness meditation has benefits for mental conditions, namely, in the form of mental calmness as well as relaxation and converting negative energy into positive energy so that it can reduce anxiety, stress, and depression [44], [45]. Spiritual care is one of the most important aspects for health, the spiritual aspect has a harmonious relationship and is interconnected with life stability and inner strength, provides peace, strengthens relationships with oneself, community gods, and the environment. Spiritual care is the only force in coordinating the physical, psychological, and social dimensions [25], [46].

Spiritual care when combined with other interventions will be able to speed up recovery from an illness, improve spiritual health and control anxiety especially forayakat future pandemic COVID-19 [47], [48]. Mindfulness meditation is a practice that supports health professionals, patients, caregivers, and the general community during times of crisis such as the global pandemic caused by COVID-19. This practice is based on awareness and spiritual care, is low cost and low risk. This exercise has been shown to have an impact on quality of life and biological outcomes in many different populations including both COVID-19 and cancer patients and this practice can be practiced on a daily basis so as to improve mental health especially anxiety [26], [45], [49].

Conclusion

The provision of mindfulness meditation based on spiritual care interventions has a positive effect on reducing public anxiety during the COVID-19 pandemic so that this therapy can be used by all ages and has
no adverse effects. The results of this study can also be used as a reference for nurses’ actions in providing non-pharmacological therapy that can be done independently.

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