

The effectiveness of the implementation of deep breaths on psychosocial problems in the family during the pandemic

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Abstract

Background: Outcome expectancy could mediate the psychological effects of exercise-related interventions, which implies that part of the psychological benefits of physical activity could be ascribed to placebo effects. (Szabo & Kocsis, 2017)

Purpose: Knowing the effects of relaxation breathing on Anxiety in patients with psychosocial problems in the family during the pandemic

Methods: The type of research used is quantitative quasi experimental, non-equivalent, control group pretest and posttest design. The population in this study was some family members who have anxiety problem with the sample of 39 respondents. Samples were taken using purposive sampling technique.

Results: The average levels a score before 61,08% and after 60,82% deep breath of relaxation with p value = 0.043 (<0.05). It can be concluded that deep breathing relaxation techniques has effects on the reduction of anxiety in some of family member

Conclusion: Deep breathing relaxation techniques can reduce reduction in effects on the reduction in some of family member. Recommendation to reduce management to be applied a deep breathing relaxation techniques as standard of operational procedures (SOP) in the context of nursing care, especially to effects on the reduction in some of family member especially at pandemic.

Keywords: Relaxation breathing; Psychosocial; Therapeutic Communication.

INTRODUCTION

Stress is a person's reaction both physically and emotionally (mentally/psychologically) when there is a change in the environment that requires a person to adjust.

Kemenkes RI, (2018) data shows the prevalence of mental emotional disorders (symptoms of depression and anxiety) of 6% for ages 15 years and over. This means that more than 14 million people suffer from mental emotional disorders in Indonesia. Meanwhile, for serious mental disorders such as psychosis disorders, the prevalence is 1.7 per 1000 population. This means that more than 400,000 people suffer from serious mental disorders (psychosis). The rate of shackling in people with mental disorders weight 14.3% or about 57,000 cases.

The purpose of therapy to prolong life and also to restore quality of life such as found problems in family for maintained, most of them experience symptoms that interfere with their ability to function according to their normal capacity and hamper quality of life (Lovejoy, 2013)

For more than a year, as a result of preventing the spread of COVID-19, all members of the community were forced to always stay at home and generally some of member falsity as a client would make a psychological stress and another temporary complication after their simple problems such as intradialytic hypotension, muscle cramps, headaches, nausea, hypertension, disequilibrium syndrome, and diaphoresis.

Muscle weakness, impaired physical function, shortness of breath and depression are the most prominent in patients with end-stage kidney. Some studies show that symptoms have a significant relationship with sleep problems, poor physical health status and depression (Kim, & Kim, 2005).

The chronic psychological distress can cause depression, patient's feels hopeless, downcast that their life a dependence on

hemodialysis for a lifetime, role changes, loss of job and income with a prevalence of 15% -69%. The emergence of sleep disturbance and decreased interest to do activities. The decreased in physical activity was reported by study found of (75%) only participate in household activities in mild activities category. Decreased physical activity results in a decrease in muscle mass, muscle atrophy (Putri et al., 2015)

There are two methods of handling anxiety can be carried out, namely pharmacology and non- pharmacology. While exercise, yoga, relaxation, acupressure, acupuncture, electrical stimulation as non- pharmacological methods. Exercise may help reduce depression. (Harding, Kwong, & Roberts, 2016).

The exercise can be in various ways such as aerobics, muscle stretching, and exercise using tools and progressive muscle relaxation. Relaxation techniques are considered successful in improving the condition of patients as suggested by several research studies (Ahmed, & Younis, 2014; Zakerimoghadam, Tavasoli, Nejad, & Khoshkesht, 2011). The part of a holistic self-care strategy is to deal with various complaints such as pain, sleep disorders, stress and anxiety and healing techniques experienced is the definition of deep breathing relaxation techniques. Deep breathing exercises will maximize the amount of oxygen that enters and is supplied to all tissues so that the body can produce energy and reduce levels of anxiety (Black, Hawks, & Keene, 2013).

Deep breathing relaxation techniques can reduce oxidative stress, increase cellular energy, increase elasticity of blood vessels and improve circulation to all tissues so that the body can produce energy, so that the final result can reduce and even overcome inconveniences. The technique is easy to do, easy to learn, does not harm and a less costs is the advantage of deep breathing relaxation techniques.

This exercise is done in a short time and can be done before, during, after activity daily living at home (Fidiansyah, 2020).

Previous research conducted by applied breathing relaxation techniques to 94 patients with terminal kidney disease who underwent hemodialysis for six weeks. The result was 53% of respondents felt relaxed and 27% felt no more easily become anxiety and energy levels was increased (Stanley, Leither, & Sindelir, 2011).

Deep breathing exercises has a affect the Deep breathing relaxation techniques can reduce reduction in anxiety in family during pandemic COVID-19. Recommendation to community management to be applied a deep breathing relaxation techniques as standard of operational procedures (SOP) in the context of family nursing care.

RESEARCH METHODS

This research is a quantitative quasi experimental, non-equivalent, control group pre- test and post-test design. This study was aimed to determine the effect of deep breathing relaxation techniques in some of family members. The population in this study was member of family with the sample of 39 respondents and taken using purposive random sampling technique.

The criteria respondent who are Clients with psychosocial problems for < 1 week, without any comorbid disease can communicate well, are able to read and write and are willing to participate in research. The measurement of the levels anxieties by two group; experimental

group and control group used a questionnaire. The measurement will be done twice (pre-test and post-test). The experimental group would do some deep breath relaxation techniques in 15 minutes by individually in while in the control group would do the guided imagination technique for approximately 10 minutes. Finally, both groups would have a posttest to know levels of anxiety.

Self-Reporting Questionnaire (SRQ) is a questionnaire developed by the World Health Organization (WHO) for screening for psychiatric disorders and for research purposes. Basic Health Research (Riskesdas) 2007 used the SRQ to assess the mental health of the Indonesian population. Although this questionnaire is valid and reliably used as a measuring tool for mental emotional distress or distress, it is still necessary to analyze the items that make up the construct of this questionnaire. The general objective of this research is to analyze the SRQ question items. The specific objectives were to assess the items most experienced by individuals with mental emotional disorders, to assess the SRQ questions in the group with mental emotional disorders and no mental emotional disorders, to identify groups experiencing symptoms of cognitive impairment, anxiety-depression, somatic, and decreased energy. This SRQ which consists of 20 statement items using a Likert scale (1-5). This study uses univariate and bivariate analysis with dependent t-test and independent t-test statistical tests.

RESEARCH RESULTS

Table 1. Characteristics of Respondents N=39

Characteristics	Frequency (f)	Percentage (%)
Age (Years)		
21-35	25	64,1%
>35	14	35,9%
Gender		
Male	12	30,77%
Female	27	69,23%
Education Levels		
Elementary school	4	10,2%
Junior high	5	12,8%
Senior high	15	38,5%
College	15	38,5%
Occupation		
Employed	18	46,15%
Unemployed	21	53,85%

Table 2. Levels Anxiety of Patient Between Experimental group and Control Group

Groups		Mean	Difference	SD	SE	95% CI	p-value
Experimental group	Before	50.28	3,72	2.84	0.46	2.805- 4.669	0,001
	After	44.43					
Control group	Before	71.87	0,34	1.19	0.19	-0.050- 0.734	0,085
	After	72.21					

Statistical results showed the mean difference of levels Anxiety before and after in the experimental group was 3,72 while in the control group was 0,34. This relationship of levels Anxiety difference was significant in the experimental group.

Table 3. The Effects of Deep Breath Relaxation Techniques on Anxiety

Groups	Mean	Difference	SD	SE	95% CI	p-value
Experimental Group	52.76	6.31	17.168	2.785	(-)12.421- (-) 0.210	0,043
Control Group	46.45		7.875	1.278		

Based on the results of the calculation of the independent sample t-test, the average increase in the experimental group was 52,76 while the increase in the average of the control group was 46,45 and the significance value was less than 0,05 ($p = 0,043 < 0,05$), so it can be stated that there was a significant influence in a significantly reduced anxiety in the experimental group compared to the control group.

Discussion

The Effect of Deep Breath Relaxation Techniques on Anxiety levels

Anxiety is an unpleasant subjective feeling in the form of a decrease in energy which is the main complaint of Client undergoing anxiety with a prevalence reaching 70 to 97%. The condition of uncomfortable in anxiety clients can cause decreased concentration, malaise, sleep disorders, emotional disturbances and decreased ability of patients to carry out their daily activities, which in turn can reduce the quality of life of clients. Deep breathing relaxation is an action that can cause relaxation for the patient. This action uses diaphragmatic breathing then air is exhaled through the lips like blowing (Lewis, Bucher, Heitkemper, Harding, Kwong, & Roberts, 2016).

Mostly patient with unhealthy function of daily living was manifested by worries and feelings of uncertainty. (Van Griensven et al., 2006). Deep breathing is a non-pharmacological experimental in the form of a breathing technique that can be done independently to improve lung ventilation and increase oxygen perfusion to peripheral tissues. Excreting the accumulated waste is a mandatory therapeutic process that must be carried out routinely. This is supported by research that there are significant differences regarding the level of anxiety of patients between before and after deep breathing. This is in accordance with the concept of the theory which states that deep breathing is one of the breathing techniques independently to improve pulmonary ventilation and increase oxygen perfusion to peripheral tissues which is able to relieve the symptoms. It is a reaction from the therapy that carried out. In addition, deep breathing can also be done anytime and anywhere not necessarily under the supervision of medical personnel considering that deep breathing does not have harmful effects (Black, Hawks, & Keene, 2013).

Deep breathing is part of a holistic self-care strategy to deal with various complaints. In physiology, deep breathing will stimulate the parasympathetic nervous system thereby increasing endoprone production, decreasing heart rate, and increasing lung expansion so that it can develop optimally so that the muscles become relaxed. Deep breathing also makes our body get an adequate supply of oxygen which is very important in the body's respiratory and circulation system. The incoming oxygen will be supplied to all tissues so the body can produce energy and reduce the level of anxiety. The results of anxiety level analysis before and after the experimental of deep breathing relaxation techniques shows that there are differences in the level of anxiety before and after given the experimental. To provide maximum results, it needs to be done regularly and routinely as previous study which states that deep breathing exercises affect the quality of life of 39 Clients who exercise regularly (Kim, & Kim, 2015). The deep breathing relaxation when be done for 4 times per day for 15 minutes would have a significant effect in reducing symptoms by increased perfusion of oxygen to the peripheral tissues in clients with chronic kidney disease (Zakerimoghadam, Tavasoli, Nejad, & Khoshkesht, 2011; Ossareh, Roozbeh, Krishnan, Bargman, & Oreopoulos, 2003).

Several studies on non-pharmacological experimentals such as exercise or regular exercise programs have an important role in reducing depression in hemodialysis patients (Rezaei, Abdi, Rezaei, Heydarnezhadian, & Jalali, 2015). The results showed that walking 3 times a week improves the physical and psychological condition of hemodialysis sufferers (Tsai, Lai, Lee, Chen, Lan, Yang, & Chiang, 1995). The previous research showed that there was a significant positive correlation between post dialysis fatigue and weight gain ($r = 0.18$, $p = 0.38$). Addition between weight and fatigue level results in a significant positive correlation (Locatelli,

Fouque, Heimburger, Drücke, Cannata-Andía, Hörl, & Ritz, 2002).

Significant positive correlation between post relaxation and age ($r = 0,17$, $p = 0,035$). Also anxiety cannot be separated from the characteristics inherent in patients such as increasing age, sex, frequency of breath, length of mood disorder, and occupation (Ossareh, Roozbeh, Krishnan, Bargman, & Oreopoulos, 2003).

Psychosocial symptoms as affects the performance of individual roles and functional status. The role of nurses in the family must emphasize the importance of a holistic approach to Clients who complain of inconveniences such as deep breathing techniques, because inconveniences has the potential to reduce the quality of life of the client. The results of this study indicate that nursing actions with deep breathing are proven to reduce the level of client anxiety. Nurses must care to recognize post-deep breath as an important nursing problem for anxiety clients.

Conclusion

The average reduction on anxiety after having experimental in experiment group was 46,45 with a standard deviation of 2,84 while the control group, the average reduction in anxiety was 71,87 with a standard deviation of 1,19 There is an effect of deep breathing relaxation techniques on decreasing the level of anxiety with p-value 0,043 ($< 0,05$).

Suggestion

Psychosocial symptoms as affects the performance of individual roles and functional status. The role of nurses in the family must emphasize the importance of a holistic approach to Clients who complain of inconveniences such as deep breathing techniques, because inconveniences (anxiety) has the potential to reduce the quality of life of the client. The results of this study indicate that nursing actions with deep breathing are proven to reduce the level of client

Anxiety. Nurses must care to recognize post- Anxiety as an important nursing problem for Psychosocial clients.

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