



THE EFFECTIVENESS OF MANDALA COLORING THERAPY ON STRESS LEVELS IN THE ELDERLY

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ABSTRACT

Psychological disorders in the elderly include dementia, anxiety, sleep disorders and depression. Anxiety is the most common disorder. Based on data from the Ministry of Health, emotional disorders in the elderly in Indonesia occur 10% in the age range of 65-74 years and 13% occur in the elderly aged more than 75 years. Elderly people who experience anxiety need good handling in reducing their anxiety otherwise it can cause cognitive damage and depression. Objective: aims to determine the effect of coloring therapy on anxiety and stress levels in the elderly conducted at Tresna Werdha Social Services, Pakem, Sleman, Yogyakarta. Method: This is a case report with a pre post test design on 10 elderly people. Patients were intervened in the form of mandala coloring therapy, then re-measured to assess anxiety and stress in the elderly. The samples in this study were 10 elderly women who experienced anxiety and stress. Patients were given an intervention in the form of coloring mandalas for \pm 15 minutes. Results: The results obtained by doing coloring therapy can help reduce anxiety and stress levels in the elderly. Conclusions: coloring can help reduce anxiety and stress levels in the elderly.

Keywords: anxiety; art therapy; coloring; elderly

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INTRODUCTION

Elderly is someone who is 60 years old or older (Kurniasih et al., 2021). The elderly generally experience several setbacks, such as biological, psychological, social, and spiritual setbacks (Elsa Yuli Rachamawati, 2019). The decline that occurs can largely cause the elderly to experience stressful conditions (Dewi, 2019). Degenerative diseases suffered by the elderly often do not go away, even getting worse so that there is little hope for recovery (R. Pratiwi et al., 2024). In the end, this causes the elderly to experience psychological disorders such as anxiety (Riyanti et al., 2023). Anxiety disorders have a high incidence in the elderly. The prevalence of anxiety in adults and the elderly in the world ranges from 15% to 52.3% and in developing countries around 50% (Setiana et al., 2018). Indonesia alone has an incidence of anxiety of around 39 million out of 238 million people (Sirojudin & Pratiwi, 2020). Emotional disorders in the elderly in Indonesia occur 10% in the age range 65-74 years and 13% occur in the elderly aged more than 75 years (Ayu TP et al., 2019). Signs and symptoms of anxiety which are psychological symptoms include fear, difficulty concentrating, excessive alertness, difficulty sleeping / insomnia, decreased libido and nausea in the stomach (Samsuni et al., 2024).

Decreased physical abilities cause the elderly to become stressed because of the feeling of burdening others. Changes in physiological function affect individual lives so that they can cause stress in the elderly (Ruriyanty et al., 2023). Experience, nature, personality type and perspective are psychological conditions that influence in dealing with stressful conditions. Stress can be triggered due to social relationships with other people around or due to other social situations (Dyna Salawaty, Mutiara Nurul, Serlyna, 2021). Stress is a physical, mental, and chemical reaction from within the individual to an unpleasant situation (Zaini Miftach, 2018). Individual stress conditions that are not handled properly will lead to depression (Linnas et al., 2024). Appropriate interventions are needed for the elderly to reduce anxiety experienced by providing positive, interesting and fun activities. One of them is art therapy; coloring, drawing expressive forms of therapy using art materials, such as paintings, chalk, markers, and others (Kaunang et al., 2019). Art therapy can be an appropriate way to express emotions, such as: feelings of anger, fear of rejection, anxiety, and low self-esteem. One of the activities obtained in art therapy itself is through drawing and coloring (Daeli et al., 2022). Drawing and coloring activities are fun activities and can be done by anyone even if the individual cannot draw (Hunowu et al., 2024).

Through the drawing media, it can help understand the perceptions and feelings that occur in individuals and try to help explore how to solve problems. And hope to be able to help to live better and not get stuck in the past (Shokiyah & Syamsiar, 2022). Mandala coloring therapy nursing action for approximately 15-30 minutes. So from some of the above studies that show that there is an effect of mandala coloring therapy, the authors are interested in applying mandala coloring techniques to the elderly with anxiety and stress at the Tresna Werdha Social Service Center, Pakem, Sleman, Yogyakarta. This study aims to apply mandala coloring techniques in reducing anxiety and stress in elderly patients using the DASS (Depression Anxiety Stress Scale) approach. Operational Standards for the implementation of actions in this case study were adopted based on Susanto's research (2018) which has been developed and modified with other studies. The inclusion criteria in this case study are elderly patients who experience anxiety and stress who have received mandala coloring therapy and elderly people who want to do coloring techniques by doing group activity therapy.

Evaluation is carried out by reviewing by giving the format or reading the DASS (Depression Anxiety Stress Scale), asking how the elderly feel after taking action by looking at the measurement results on the DASS (Depression Anxiety Stress Scale). The data analysis method used in the application of this case study is carried out by means of a simple description using the average value. Referring to this information, the authors conducted a study that aimed to determine the level of anxiety and stress in the elderly before and after mandala coloring therapy conducted at the Tresna Werdha Social Service Center, Pakem, Sleman, Yogyakarta.

METHOD

The research conducted was a quasi experimental with one group pretest- posttest. The intervention was carried out by providing mandala coloring therapy to the elderly with anxiety and indicated stress. The samples taken amounted to 10 elderly people from the Tresna Werdha Social Service Center, Pakem, Sleman, Yogyakarta Measurement of stress levels in the elderly using a stress measuring instrument, namely DASS (Depression Anxiety Stress Scale). The research instrument used in this study is the Depression Anxiety and Stress Scales (DASS) questionnaire by Lovibond & Lovibond (1995) which has been translated into Indonesian. This questionnaire contains 21 statements consisting of 7 statements about stress,

7 statements about anxiety, and 7 statements about depression. DASS 21 is a short version of the DASS 42 scale used to measure a person's level of depression, anxiety, and stress. This study obtained patient data using interview methods, observation, documentation studies and literature studies. The research used in the interview is self-research with the tools of assessment guidelines and implementation strategies (SP). While other instruments using physical examination sheets, monitoring sheets and nursing care documentation

RESULTS

Table 1.
Physical examination

No	Name patient	TD	N	RR
1.	Ny.G	130/90	110	22
2.	Ny.M	120/80	82	22
3.	Ny.A	110/80	80	20
4.	Ny.U	130/90	120	22
5.	Ny.K	120/80	80	20
6.	Ny.S	100/70	80	18
7.	Ny.T	110/80	80	20
8.	Ny.P	110/80	80	20
9.	Ny.M	130/90	120	22
10.	Ny.T	150/90	135	24

Table 1, the patient's clinical findings consist of blood pressure, pulse and breath frequency in 10 elderly people. The range of blood pressure in the elderly still tends to be within normal values because the pressure is also influenced by the age of the elderly of 10 respondents who are more than 60 years old.

Table 2.
Comparison results before and after coloring intervention

NO.	Name patient	Result	
		Pre test	Post test
1.	Ny.G	26 : severe	15: mild
2.	Ny.M	27: severe	21: moderate
3.	Ny.A	18: mild	8: normal
4.	Ny.U	17: mild	7: normal
5.	Ny.K	20: moderet	15: mild
6.	Ny.S	23: moderet	18: mild
7.	Ny.T	15: mild	12: normal
8.	Ny.P	15: mild	7: normal
9.	Ny.M	16: mild	11: normal
10	Ny.T	19: moderet	15: mild

The 10 elderly people above were given therapy in the form of coloring mandalas with a duration of \pm 15-30 minutes. The results of the intervention were measured by looking at the comparison of hemodynamic data in the form of DASS (Depression Anxiety Stress Scale) results before and after mandala coloring therapy. Before coloring therapy, the highest level of elderly stress was severe as many as 2 elderly and the lowest level of stress was mild as many as 5 elderly. After coloring therapy, the elderly stress level decreased with the highest being moderate as many as 1 elderly and the lowest stress level was normal as many as 5 elderly.

DISCUSSION

The research was conducted at the Tresna Werdha Social Service Center, Pakem, Sleman, Yogyakarta with a total of 10 respondents. Stress is a non-specific response of the body to any

demands on it (Linnas et al., 2024). Stress in the elderly can be influenced by various factors including biological factors, psychological factors, and the environment. Prolonged stress can increase the chances of illness both physically and mentally and it is likely that they will easily experience depressive disorders (Dewi, 2019). The elderly often experience stress because they have to deal with loss of self-role, social residence and separation from loved ones (R. Pratiwi et al., 2024). In old age, the greatest support for the elderly is obtained from those closest to them and if this is not fulfilled, the elderly feel increasingly useless. The existence of the elderly in institutions makes them feel like a failure when compared to the elderly who can still live with their families (Setiana et al., 2018).

Even when the elderly are in good physical condition, they are often overwhelmed by health and physical processes. They tend to complain about their health and often exaggerate minor illnesses. They also often show attitudes that seem to be so controlled by themselves (N. W. Y. Pratiwi et al., 2019). Age is the main cause of cognitive decline in the elderly. The older the age, the greater the risk of senility (Djajasaputra & Halim, 2019). Old age is a period of decline, namely a time when loss of confidence in physical and cognitive changes and feeling useless, so anxiety often arises (Pragholapati et al., 2021). Based on the data above, the elderly as many as 10 people above were given therapy in the form of coloring mandalas with a duration of \pm 15-30 minutes. The results of the intervention were measured by looking at the comparison of hemodynamic data in the form of DASS (Depression Anxiety Stress Scale) results before and after mandala coloring therapy. Before coloring therapy, the highest level of elderly stress was severe as many as 2 elderly and the lowest level of stress was mild as many as 5 elderly.

After coloring therapy, the elderly stress level decreased with the highest being moderate as many as 1 elderly and the lowest stress level was normal as many as 5 elderly. This research is supported by Sokhiyah's research in 2021 on the effect of providing drawing and coloring therapy on the elderly who experience anxiety about the covid-19 pandemic, concluding that changes in anxiety levels before and after intervention in participants showed a change in total anxiety scores. Agree with Andriani and Satiadarma wrote that through drawing media, individuals will understand the perceptions and feelings that occur to them and help individuals to explore ways to solve problems and find hope to help life get better. Art Therapy is suitable for someone who has verbal difficulties in expressing their feelings openly.

CONCLUSION

Based on the results of this study, it was found that coloring therapy (art) had an effect on reducing stress levels in the elderly. The results of this study can contribute knowledge in the field of science, especially gerontic nursing. For the elderly, art therapy can provide relaxation of thoughts and emotions so that they have self-control and a positive self-concept towards themselves, with the hope of remaining productive and psychologically healthy. Thank you to Universitas Muhammadiyah Surakarta and Tresna Werdha Social Service Center, Pakem, Sleman, Yogyakarta for providing opportunities and facilitating me in conducting this research.

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