

Research article

Animal Assisted Therapy is an effort to reduce symptoms of violent behavior in patients with mental disorders

Tati Nurbiyati¹, Pawestri Pawestri¹, Lily Kusuma Dewi¹, Arum Lia Arivani¹, Eugene Indira¹

¹ Universitas Muhammadiyah Semarang, Indonesia

Article Info

Article History:

Submitted: Feb 22nd 2023

Accepted: August 8th 2023

Published: Dec 1st 2023

Keywords:

animal-assisted therapy;
violent behavior; mental
patients

Abstract

Violent behavior is a situation in which a person performs an action that can physically harm himself, others, and the environment. The risk of violent behavior is an angry response that is expressed by making threats or injuring oneself or others. Animal-assisted therapy with betta fish is a therapy to reduce anxiety behavior towards uncomplicated violent behavior with the principles of distraction and relaxation resulting from the interaction of therapy animals. The study aimed to determine the effect of animal-assisted therapy on reducing signs of violent behavior in patients with mental disorders. Research Methods Quasi-experimental research design with a one-group pretest and posttest design approach. Identification of respondents who fit the criteria, namely someone who experiences violent behavior in patients with mental disorders. Research Results Data analysis obtained an α -Symp Sig value of $0.004 < 0.05$, so there is an effect of animal assistance therapy on reducing symptoms of violent behavior in patients with mental disorders. The process of interaction with animal therapy can reduce the stimulus symptoms of violent behavior. Patients can control themselves by forming more positive behaviors such as reducing anger, appearing to have decreased tension, blood pressure does not increase. Conclusion There is an effect of animal-assisted therapy on reducing signs of symptoms of violent behavior in patients with mental disorders. Animal-assisted therapy suggestions can be used for violent behavior in mental patients.

INTRODUCTION

Mental disorders can be divided into two, namely emotional mental disorders and severe mental disorders. Severe mental disorders are also known as psychosis and one example of psychosis is schizophrenia¹ Violent behavior is a situation in which a person commits an action that can physically harm himself, others, and the environment it is done to express

unconstructive feelings of annoyance or anger. Violent behavior is carried out by the inability to identify the stimulus being faced and the inability to control the urge to carry out violent behavior.^{2,3}

The risk of violent behavior is one of the angry responses expressed by making threats, or hurting oneself and others, in addition to that in suffering from violent behavior, in general, will appear signs such

Corresponding author:

Tati Nurbiyati

tatiknurbiyati06@gmail.com

South East Asia Nursing Research, Vol 5 No 3, Dec 2023

ISSN:2685-032X

DOI: <https://doi.org/10.26714/seanr.5.3.2023.18-23>

as a Red face and tense, bulging eyes/sharp gaze, clenching fists, clenching the jaw firmly, Rough speech High voice, screaming or shouting, threatening verbally and physically, throwing or hitting objects/other people, damaging things or differences, not having the ability to prevent/control violent behavior.⁴

In addition, major and minor signs in patients of violent behavior, subjective major: threatening, swearing with harsh words, loud noises, speech abrupt, objectively: attacking others, hurting oneself / others, damaging the environment, aggressive/clumsy behavior, while the minor is objective: bulging eyes or sharp eyes, clenched hands, jaws clenched, flushed face, stiff posture.⁵

On the physical aspects blood pressure increases, pulse and breathing increase, anger, irritability, tantrums, and can injure oneself. Changes in cognitive, physiological, affective, behavioral and social functions to the risk of violent behavior. The risk of this violent behavior can be seen from speaking in a loud tone and abusive behavior accompanied by violence.^{1,4}

Violent behavior can be identified with non-pharmacological techniques, namely (AAT) Animal-assisted therapy with betta fish is a therapy to reduce anxiety behavior towards uncomplicated intoxication behavior with the principle of distraction and relaxation produced by animal interaction therapy⁶ Animals are an easy choice in this case with betta fish creating a good relationship between people with mental disorders and violent behavior towards fish media. Joint activities with fish start from getting to know animals, looking at animals in this case fish, where the fish have interesting shades of color, and layers create a comfortable, calm atmosphere.⁷⁻⁹AAT is a therapy using animals for treatment purposes in improving individual well-being. Interactions between individuals and animals can

improve body functions physically, socially, emotionally, as well as cognitively.^{8,10,11}

METHODS

This study is a quasi-experimental design with pre and post-test. It is carried out between September to October 2022. The population is people with mental disorders with violent behavior who are treated at RSJD dr. Amino Gondohutomo Semarang. Each participant is informed of the nature, purpose, benefits, right to refuse or withdraw at any time, as well as the confidentiality of the data obtained.

The study was conducted with 20 respondents who met the inclusion criteria. Participants were selected based on inclusion criteria: (1) Experiencing a mental disorder with violent behavior in the last 1 year, (2) Willing to be a respondent, and (3) Being able to communicate Information about the capacity to give consent also provided during this process. The experimental group (n = 20) was enrolled in this animal-assisted therapeutic activity. Once consent is obtained, the activity begins by identifying the signs and symptoms of a mental disorder with violent behavior.

Data collection and treatment. Patients with mental disorders with violent behavior that meets the criteria will be given animal-assisted therapy treatment using betta fish media, where each session begins with providing brain gymnastics activities first. Physical examination and manifesting the signs and symptoms of mental disorders with violent behavior are again carried out at the end of the activity.

Signs and symptoms of mental disorders with violent behavior as well as vital signs of respondents before and after the intervention were assessed through observation sheets in people with mental disorders with violent behavior. Respondents reported their frequency of performing various activities during the

activity. Before the final analysis, the data is filtered for assumptions of normality. Univariate analysis was performed to obtain a descriptive statistical picture of each variable including the characteristics of the respondents. Test the normality of the data with kolmogorof smirnov. If the data is normally distributed, the differences in levels of independence, and cognitive function, before and after treatment are analyzed by paired t-test. Alternate test when the data is not normally distributed using the Wilcoxon test.

RESULTS

Descriptive characteristics of respondents

The study involved 20 respondents who were post-stroke sufferers. Demographic characteristics of age, gender, and education can be seen in Table 1.

Based on Table 1 of elementary school education respondents 6 people (30%), junior high school education 6 people (30%), and high school education 8 people (40%). Average age is 31.45 years, the lowest age is 19 years, and after highest is 54 years.

Table 1
Characteristics of respondents based on respondents' education (n=20)

Indicators	f	%
Education		
Elementary school	6	30
Primary high school	6	30
Senior high school	8	40

Based on table 2 Average physical violent behavior before being given animal therapy intervention was 9.65; average verbal violent behavior was 7.45; average behavior was 4.10; average emotional behavior was 8.50; average intellectual behavior was 5.55; average spiritual behavior was 9; average spiritual behavior 7.20; average social behavior 5.05.

Based on table 2 Average physical violent behavior after being given animal therapy interventions is 21.00; average verbal violent behavior is 19.75; average behavior is 16.45; average emotional behavior is 27.35; average intellectual behavior is 14.25; average spiritual behavior is 20.90; average spiritual behavior 20.90; average social behavior 12.70.

Table 2
Analysis based on violent behavior before and after animal therapy intervention (n=20)

Indicators	Min	Max	Mean	SD
Before therapy				
Physical	7	13	9.65	2.134
Verbal	5	11	7.45	1.605
Behaviour	4	5	4.10	.308
Emotional	7	10	8.50	1.051
Intellectual	4	9	5.55	1.146
Spiritual	6	9	7.20	1.056
Social	4	6	5.05	.605
After therapy				
Physical	17	25	21.00	2.920
Verbal	12	24	19.75	3.338
Behaviour	8	68	16.45	12.559
Emotional	18	77	27.35	12.364
Intellectual	10	19	14.25	2.245
Spiritual	14	28	20.90	3.684
Social	8	16	12.70	1.750

Based on table 3 Average violent behavior before animal therapy in mental patients is 1.88 and the average after animal therapy in mental patients was 3.00 with α -Symp Sig 0.004

Table 3
Differences in violent behavior before and after animal therapy in mental patients n=20

Group	Mean	SD	p
Before	1.88	0,221	
After	3.00	0,242	0,004

DISCUSSION

A person with a mental disorder that can interfere with the mind normally, even in severe cases can interfere with the psychological commonly called Schizophrenia.² This disorder can disappear if the person dies. This disease is

a chronic, disabling disease, a brain disorder characterized by several symptoms ranging from chaotic speech, speech, and hallucinations, to strange behaviors.^{2,3} In addition, negative and positive symptoms in a person experiencing schizophrenia are violent behavior.¹²⁻¹⁴ Symptoms, where a person who experiences this starts from a sense of anger power, and loss of self-control so that this is felt to be a form of behavior physically and verbally, can harm oneself and others.^{3,15}

A person with a risk of violent behavior seen from a person's expression is characterized by behaviors such as threatening, damaging the surrounding environment, and changes in cognitive, affective, and psychological functions. In terms of physique, it seems restless, the desire to be angry, tense, unable to stand still, pacing, blood pressure rises, and pulse increases to the chaos of nature.^{2,3,15,16} The impact that can arise from the appearance of these behaviors is that a person feels lost control of himself, and feels himself dominated by a sense of anger that can hurt himself and others around him. However, to suppress signs and symptoms in a person who has a mental disorder, especially a disorder in violent behavior, therapy can be given to reduce symptoms.¹³

Attempts to deal with someone with violent behavior by providing nursing actions. Various nursing measures can be used to control violent behaviors such as physical exercises, deep breath exercises, hitting pillows to divert anger, and speaking well well.¹⁵ This can be done by providing therapy. In this study, animal-assisted therapy was used to suppress symptoms in a person who has a mental disorder in violent behavior. Animal-assisted therapy is defined as structured, directed planning implemented by health workers using animals as therapeutic instruments and as tools in the rehabilitation process.¹⁷

Animal-assisted therapy can be applied to various animals of dogs, cats, and horses that can provide a positive thing for the patient.¹⁰ However, in this study, the animal instruments used were fish, especially betta fish or fish betta. Animal-assisted therapy in patients with this violent behavior, explains a way of interaction between companion animals, patients, therapists as well as health professionals who have the objective of seeing if the role of animal involvement can benefit the treatment process.⁷ Patients who are mentally disturbed by this violent behavior, have signs of symptoms that can appear physically and psychically so the resolution of such problems can be the goal of this animal-assisted therapeutic intervention. Patients benefit from therapy through interactions with animals. These benefits can start from self-management to control stress, anxiety, anger.¹⁰

The process of interaction with fish carried out in this study has shown how the relationship between animals in this case betta fish with humans increases the social support perceived by the patient and facilitates strategies for the prevention of the appearance of signs of violent behavior such as lowering the level of psychological stress, which can be seen from the results of blood pressure measurement.^{18,19}

The interaction between the patient and the animal in this case is betta fish, starting with the patient getting to know the fish. Looking at the fish with beautiful shades of color and feeding these fish gives a positive effect on mental patients with violent behavior. When the focus of the patient with violent behavior focuses on the process of interaction with betta fish flexibly does not force the situation, making the patient become more relaxed in receiving stimuli naturally from interactions with betta fish.^{7,11}

It is this process of interaction that can lower the stimulus of symptomatic stimuli

from violent behavior. The patient can control himself in forming more positive behaviors such as reducing anger, appearing decreased tension, blood pressure does not increase. This animal-assisted therapy program with betta fish is able to increase the patient's efforts to control emotions and reduce the symptoms that appear in disorders in violent behavior.^{10,18,20}

CONCLUSION

There is an effect of animal-assisted therapy on reducing signs of symptoms of violent behavior in patients with mental disorders. Animal-assisted therapy suggestions can be used for violent behavior in mental patients

ACKNOWLEDGMENT

The researcher expresses gratitude to the research respondents who have contributed to the implementation of this study. The researcher also thanks all parties who have assisted in the conduct of the research and the publication of this scientific work.

CONFLICT OF INTEREST

The research is free from conflict of interest.

REFERENCES

1. Stuart GW. Prinsip dan Praktik Keperawatan Kesehatan Jiwa Stuart, Buku 2. elseiver; 2016.
2. Siregar SL. Manajemen Asuhan Keperawatan Jiwa Pada Tn. D Dengan Masalah Risiko Perilaku Kekerasan Melalui Strategi Pelaksanaan (SP 1-4): Studi Kasus. 2022;
3. Pangaribuan N, Manurung S, Amazihono V, Waruwu YD. Manajemen Asuhan Keperawatan Jiwa Dengan Masalah Risiko Perilaku Kekerasan Pada Penderita Skiozfrenia: Studi Kasus. 2022;
4. Keliat BA. Keperawatan Jiwa; Terapi Aktivitas Kelompok. In EGC; 2014.
5. Malfasari E, Febtrina R, Maulinda D, Amimi R. Analisis tanda dan gejala resiko perilaku kekerasan pada pasien skizofrenia. Jurnal Ilmu Keperawatan Jiwa. 2020;3(1):65-74.
6. PPNI TPSD. Standar Diagnosis Keperawatan Indonesia: Definisi dan Indikator Diagnostik, Edisi 1. Jakarta: DPP PPNI; 2016.
7. Rizky SR, Ardianingsih F. Animal Assisted Therapy Untuk Mengendalikan Perilaku Tantrum Anak Dengan Spektrum Autis. Jurnal Pendidikan Khusus. 2021;16(2).
8. Nimer J, Lundahl B. Animal-assisted therapy: A meta-analysis. Anthrozoos. 2007;20(3):225-38.
9. Marcus DA. The science behind animal-assisted therapy. Curr Pain Headache Rep. 2013;17(4):1-7.
10. Monfort M, Benito A, Haro G, Fuertes-Saiz A, Cañabate M, Baquero A. The Efficacy of Animal-Assisted Therapy in Patients with Dual Diagnosis: Schizophrenia and Addiction. Int J Environ Res Public Health. 2022;19(11):6695.
11. Widiyaningsih W, Yunani Y, Jamaluddin M. Terapi Kecemasan Dengan Animal Assisted Tehrapy. Jurnal Kesehatan Kusuma Husada. 2020;81-5.
12. Hasannah SU. Asuhan Keperawatan Jiwa pada Pasien Dengan Risiko Perilaku Kekerasan. STIKes Kusuma Husada Surakarta; 2019.
13. Pardede JA. Standar Asuhan Keperawatan Jiwa Dengan Masalah Risiko Perilaku Kekerasan. 2020.
14. Saswati N. Pengaruh penerapan standar asuhan keperawatan perilaku

- kekerasan. Jurnal Keperawatan Sriwijaya. 2016;3(2):1-7.
15. Susilawati P. Pengaruh Terapi Aktivitas Kelompok Terhadap Kemampuan Mengontrol Emosi Pada Klien Risiko Perilaku Kekerasan Di Rumah Sakit Khusus Jiwa Soeprapto Bengkulu. Jurnal Keperawatan Mandira Cendikia. 2022;1(1).
 16. Winranto A. Manajemen Asuhan Keperawatan Jiwa Pada Tn. B Dengan Masalah Risiko Perilaku Kekerasan. 2022;
 17. PPNI TPSD. Standar Intervensi Keperawatan Indonesia: Definisi dan Tindakan Keperawatan. 2016.
 18. Chen CR, Hung CF, Lee YW, Tseng WT, Chen ML, Chen TT. Functional Outcomes in a Randomized Controlled Trial of Animal-Assisted Therapy on Middle-Aged and Older Adults with Schizophrenia. *Int J Environ Res Public Health*. 2022;19(10):6270.
 19. Narvekar HN, Narvekar HN. Canine-Assisted Therapy in Neurodevelopmental Disorders: A Scoping Review. *Eur J Integr Med*. 2022;102112.
 20. Flynn E, Zoller AG, Gandenberger J, Morris KN. Improving Engagement in Behavioral and Mental Health Services Through Animal-Assisted Interventions: A Scoping Review. *Psychiatric Services*. 2022;73(2):188-95.