



## The Effect of Deep Breath Relaxation Techniques on The Risk of Violent Behavior in Patients with Mental Disorders at Soerojo Hospital

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### ABSTRACT

*Background: The increasing cases of mental disorders in Indonesia need special attention in the application of nursing practice, the need for simple effective interventions to control violent behavior is important to do in hospitals. Objective: This study aims to examine the effect of deep breathing techniques in managing the risk of violent behavior in patients with mental disorders. Research method: Descriptive case study method with sampling technique used is purposive sampling, the number of samples is 1 person in Lily Room 3 Soeroyo hospital, the research process includes assessment, nursing diagnosis, planning, implementation, and nursing evaluation. Research results: The use of breath relaxation techniques for 3 days reduced the score of aggressive behavior, speaking harshly, loud voices from 1 (increased) to 5 (decreased). Conclusion: this study shows a decrease in violent behavior and increased patient self-control along with the application of nursing interventions.*

**Keywords:** Deep breath relaxation, Risk of violent behavior

### 1. INTRODUCTION

According to the WHO definition, mental health is a positive combination of attributes that reflect an individual's emotional balance and well-being. Meanwhile, according to Law No. 18 of 2014, mental disorders are defined as patterns of behavior with clinical significance, causing suffering, and resulting in limitations in one or more aspects of human life.

According to the WHO, nearly 450 million people worldwide suffer from mental disorders, with about a third in developing countries. According to the 2018 Riskesdas conducted by the Indonesian Ministry of Health, the prevalence of mental disorders shows significant variation. Based on treatment coverage for those with

schizophrenia/psychosis, about 84.9% receive treatment, while 15.1% do not. Among those receiving treatment, approximately 48.9% take medication regularly, while 51.1% do not (Ministry of Health RI, 2018).

Mental disorders are complex health issues and are often associated with various behavioral risks, including violence. The involvement of mental disorders in violent behavior has become a serious concern in mental health and community safety. Patients with mental disorders who are not well-managed are often vulnerable to various forms of violent behavior, both towards themselves and others around them.

One approach used to manage mental disorders, including reducing the risk of violent behavior, is through breathing therapy.

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Breathing techniques have been shown to be effective in reducing levels of stress, anxiety, and aggression in individuals with mental disorders, as demonstrated by research (Pertiwi et al., 2023). However, there is still limited research exploring the impact of breathing techniques on violent behavior in mental disorder patients.

This case study aims to investigate the effect of deep breathing techniques in managing the risk of violent behavior in patients with mental disorders. The results of this case study are expected to provide valuable insights for mental health practitioners in designing more effective intervention strategies to manage the risk of violent behavior in mental disorder patients.

## 2. METHODS

This research uses a descriptive case study model which includes the stages of assessment, treatment diagnosis, planning, implementation, and treatment evaluation. The location of the research was Lily Room 29 Soerojo Hospital Magelang. The implementation of the case study was carried out from 13-15 May 2024. The sampling technique used was purposive sampling, the patient who was the focus of this case study was 1 person with a diagnosis of Relsiko treatment for behavioral delinquency. The duration of therapy implementation is 10 - 15 minutes.

## 3. RESULT AND DISCUSSION

### 3.1 Result

The results and discussion show the results of the treatment interventions that have been applied to clients. This treatment process includes steps from assessment, diagnosis, planning, implementation, to nursing evaluation (Potter & Perry, 2010). The assessment was conducted on Tuesday, May 7, 2024 at 10:00. Patient name: Mr. Mr. A, Age: 75 years old, Gender: Male, Reason for Admission: Irritability. The patient said he saw the figure of his dead wife, the patient also heard voices without a source in his ears telling him to just die. The patient was angry and disappointed because his children never paid attention to him and then broke things.

Predisposing Factors, History of mental disorders, the client did not experience mental disorders in the past. Previous treatment history, the client has no history of mental treatment because the client was first treated at Soeroso Hospital Magelang. Family history of mental illness, none of the client's family members have mental illness like him. Unpleasant past experiences: His wife died.

Precipitating Factors, the patient was angry and disappointed because his children never paid attention to him and then broke things. The client was irritable during the interaction during the interview. Perception The client feels angry because he feels unnoticed by his son and sees his wife who has died. The client's thought process has a perseveration thought process, namely talks that are repeated many times.

The results of data analysis obtained by the client revealed that on the previous day he felt angry because he was bullied by his friend. The client looks tense and tends to be irritable. When speaking, the client uses a loud tone of voice and a firm attitude. The patient reported that yesterday he heard whispering voices. The voices appeared mainly at night. The patient looks confused. The patient often seems lost in his own thoughts. The patient seems to have difficulty focusing or concentrating. The client feels that he is not suitable for interacting with others and feels low about the achievements he has achieved or has never achieved. The nursing diagnoses taken in the case study were risk of violent behavior, sensory perception disorder, and situational low self-esteem.

The intervention provided for the nursing diagnosis of risk for violent behavior in this case study focused on anger management. The steps of the intervention included identifying the causes or triggers of anger and understanding the patient's expectations for expressing anger. A therapeutic approach was used with a calm and reassuring demeanor, supporting the patient in applying strategies for anger management and adaptive anger expression. Additionally, the meaning, function of anger, frustration, and anger response were explained to the patient. The patient was advised to seek help from nurses or family members during moments of heightened tension, and deep breathing relaxation

techniques were taught to control emotions. Collaboration in administering medication was conducted if necessary.

The goal of the treatment over three 24-hour periods was to reduce violent behavior. The expected outcome criteria included a decrease in self-harming behavior from a score of 1 (increased) to a score of 5 (decreased). Additionally, aggressive or violent behavior was expected to decrease from a score of 1 to a score of 5, irritable speech from a score of 1 to a score of 5, destructive behavior from a score of 1 to a score of 5, loud voice from a score of 1 to a score of 5, and assaultive behavior from a score of 1 to a score of 5.

The nursing implementation began on May 13, 2024, at 10:00 AM, with actions such as initiating communication with the patient, measuring vital signs, and identifying the causes or triggers of anger. The patient was taught deep breathing relaxation techniques to control anger. Acetylcysteine 200 mg and Cefixime 100 mg were administered at 8:00 AM. After the deep breathing relaxation techniques were performed, the patient reported feeling calmer. Objective data showed that the patient was able to perform the deep breathing relaxation techniques, although the patient still spoke irritably.

On May 14, 2024, the nursing implementation continued with similar actions, including identifying the causes or triggers of anger, initiating communication with the patient, teaching deep breathing relaxation techniques, and providing lunch. The same medication was administered at 8:00 AM. The evaluation results indicated that the patient's anger had decreased. The patient was able to identify the content, triggers, and emotions and appeared less tense. Although the patient still spoke irritably, they were able to perform deep breathing techniques independently.

The nursing intervention on May 15, 2024, involved providing breakfast, identifying the causes of anger, and communication. The patient was taught how to control anger using five proper medication principles. The evaluation on that day showed a decrease in aggressive behavior, irritable speech, and loud

voice to a score of 5. The patient appeared calmer and was able to communicate well.

### 3.2 Discussion

The care process is a scientific method used by nurses when providing care to patients in all practice situations. This approach ensures the quality of care provided by nurses because it is systematically and orderly arranged, beginning with assessment, diagnosis formation, care planning, implementation, and continuous evaluation (Hadinata & Abdillah, 2021).

Assessment is a structured process of collecting information aimed at evaluating the patient's health status and functional ability at present and in the past, as well as identifying the patient's response patterns at present and in the past (Potter & Perry, 2010).

Each nurse caring for patients with violent behavior or risk of violent behavior needs to evaluate the potential for increased agitation and identify any history of violent behavior. The nurse must pay attention to both verbal and nonverbal expressions of the patient. A comprehensive evaluation approach will facilitate the nurse's tasks and strengthen the trust relationship between the nurse and the patient, allowing the evaluation and implementation of nursing care to proceed according to plan effectively (Pongdatu et al., 2023).

The assessment conducted on May 13, 2024, at 10:00 AM revealed that the patient appeared tense, spoke tersely, and could not maintain eye contact. This is consistent with the theory (Kelliat et al., 2019) focusing on patients with violent behavior, including History of abuse, physical, sexual, Experience of rejection, Violence in the family environment, Criminal acts, Motor activity showing lethargy, Muscle tension, Anxiety, Restlessness or agitation, Body movement disorders (Tremor, Involuntary Movement Disorder), Facial expressions indicating discomfort, Tremor, Compulsive behavior, Interaction during interviews, Hostile attitude, Lack of cooperation, Easily offended, Lack of eye contact, Defensive attitude, Suspicious feelings. After completing the assessment process where baseline data has been collected, the next step is the nursing diagnosis stage. At

this stage, the nurse forms a conclusion about the diagnosis which will become the basis for the nursing care provided to the client (Hadinata & Abdillah, 2021). The diagnosis established for the patient is the risk of violent behavior, which is in line with (Bunga et al., 2022) showing that patients with violent behavior can be diagnosed with nursing diagnosis risk of violent behavior and violent behavior.

The third stage of the nursing process is the care plan, which is a phase characterized by consideration and systematic approach. It involves decision-making and problem-solving related to care (Hadinata & Abdillah, 2021). Nursing interventions refer to all actions performed by the nurse based on knowledge and clinical judgment, with the aim of achieving the expected outcomes (Hadinata & Abdillah, 2021). The intervention established for the diagnosis of risk of violent behavior in Mr. A is anger management with the goal of increased self-control and the criteria for expected outcomes are Self-injurious behavior, Aggressive/acting out behavior, Terse speech, and Loud voice decrease. This is consistent with (PPNI, 2018) showing that the main outcome of violent behavior is self-control with outcome code (L.09068) while one of the primary interventions for the diagnosis of risk of violent behavior is anger management with intervention code (I.09290).

The implementation of nursing actions is a series of activities carried out by the nurse to help the client address health problems and achieve good or optimal health conditions (Hadinata & Abdillah, 2021). Implementation is the application of the intervention plan to achieve the established goals. The stages of implementation begin after the intervention plan is prepared and directed through nursing orders, with the goal of helping the client achieve the expected outcomes (Hadinata & Abdillah, 2021). Implementation for Mr. A with the diagnosis of Risk of Violent Behavior includes identifying triggers/cause of anger, Teaching deep breathing relaxation techniques to control emotions, measuring vital signs, Collaborating with the doctor in administering antipsychotic medication, Providing nutrition in the morning and afternoon.

Evaluation involves assessing by comparing changes in the patient's condition (observed outcomes) with the goals and criteria set during the planning stage. It is a process of assessment, stage, and improvement (Hadinata & Abdillah, 2021). The evaluation obtained for Mr. A with the nursing diagnosis of risk of violent behavior from May 13-15, 2024, is as follows:

**Table 1. Evaluation of nursing diagnoses of risk of violent behavior**

Outcome Criteria	Pre	Day 1	Day 2	Day 3
Aggressive/tantrumal behavior	1	3	4	5
Speaking harshly	1	3	4	5
Loud voice	1	3	4	5

Table description:

1. Increased
2. Moderately increased
3. Moderately
4. Moderately decreased
5. Decreased

The results of the nursing intervention evaluation using deep breathing techniques over 3 days show a decrease in the outcome criteria scores for Mr. A with violent behavior issues. This finding aligns with research by Sumirta et al. (2014), which indicates that deep breathing relaxation therapy performed three times over three days can reduce violent behavior. This is further supported by Pertiwi et al. (2023), who found that symptoms of violent behavior can be mitigated using deep breathing relaxation techniques within three days. Deep breathing relaxation enhances air circulation to the alveoli, maintains gas exchange, prevents pulmonary atelectasis, induces a sense of calm, and reduces both physical and emotional stress, thus diminishing excessive anger and its intensity. Deep breathing also stimulates the release of endogenous opioids such as endorphins and enkephalins, which help boost the immune system and lower aggressiveness in human interactions (Desak Made Ari Dwi

Jayanti et al., 2022). Deep breathing or consciously focused breathing techniques can help soothe emotions due to their effect on the autonomic nervous system, particularly the parasympathetic nervous system. When experiencing intense emotions, such as stress or anxiety, the sympathetic nervous system tends to become active, triggering the "fight or flight" response, which increases heart rate, blood pressure, and breathing. Additionally, deep breathing helps shift focus from stress-inducing thoughts to the physical act of breathing itself, which can aid in calming the mind and reducing emotional turbulence (Nestor, 2021).

## CONCLUSION

The conclusion of the case study conducted on the patient Mr. A with a nursing diagnosis of risk of violent behavior is that the evaluation of the use of deep breathing techniques in nursing actions for 3 days shows a decrease in the score of the outcome criteria in Mr. A who is experiencing violent behavior problems. A who experienced violent behavior problems. This shows that deep breathing techniques may be effective in reducing the intensity of violent behavior.

This study has several limitations, namely:

1. The results of this case study only apply to a specific situation and cannot be generalized to a wider population because the data collected only comes from one individual.
2. The absence of a comparison group in this study limits the ability to evaluate the effectiveness or significance of the intervention outcomes or observed events.
3. In this study, there is great potential for selection bias. Respondents were selected because their cases were easily accessible, which may lead to unrepresentative results.

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