Original Article

Anxiety, Age, and Gender in Agitation Patients Installed Conventional Restraint in Inpatient Room

Heru Suwardianto[1], Sandy Kurniajati[2]

[1] *Department of Emergency and Critical Care, Kediri Baptist Hospital Collage, Kediri, East Java, Indonesia*
[2] *Department of Community Nursing,, Kediri Baptist Hospital Collage, Kediri, East Java, Indonesia*

ARTICLE INFO

Article History:
Submit : Nov 23, 2022
Revised : Dec 1, 2022
Accepted : Dec 20, 2022

Keywords:
Anxiety, Age, Gender, Agitation, Restraint

ABSTRACT

Background: Some variables that may influence age and gender. The study aimed to determine whether there is a relationship between anxiety and gender in Agitation patients with conventional restraint in the Inpatient Room.
Methods: This research method uses the correlation method with a cross-sectional design. A research sample is several patients who receive restrain intervention, totaling 27 respondents. The sampling technique was purposive, with the patient inclusion criteria on the RASS scale of +1 to -1. The family agreed for the patient to be a respondent. The independent variable is anxiety, while the dependent variable is age and gender. Anxiety instrument using FASS (Face Anxiety Scale Statistical Test using Spearmen rho with a <0.05. This study has received Ethical Approval from the STIKES Kediri Baptist Hospital.
Results: The statistical test results on anxiety with age obtained a p-value of 0.051 with a <0.05, which means there is no relationship between anxiety and age in respondents with anxiety in patients with restraints. The results of statistical tests on the anxiety variable with sex get a p-value of 0.551 with a <0.05, which means that there is no relationship between anxiety and type gender in patients with restraint
Conclusion: Age and gender have no relationship with anxiety in patients. Agitation is installed with Conventional Restraints in the Inpatient Room. For further research, it is necessary to use a more significant number of respondents to see the broader significance.

Corresponding Author : Heru Suwardianto
Affiliation : Department of Emergency and Critical Care, Kediri Baptist Hospital Collage, Kediri, East Java, Indonesia
Email : herusuwardianto7@gmail.com
Cite this as : Suwardianto, H., & Kurniajati, S. (2022). Anxiety, Age, and Gender in Agitation Patients Installed Conventional Restraint in Inpatient Room. Journal of Applied Nursing and Health, 4(2), 349–355. https://doi.org/10.55018/janh.v4i2.108

Introduction

Critical patients who are under care in the intensive care unit will experience anxiety, agitation, fear n, and pain. Patients in the intensive care unit are given mechanical ventilation, making them uncomfortable. For this reason, it is necessary to provide sedation and analgesia so that the patient feels comfortable. Management of analgesia and sedation in the intensive care unit requires evaluation and monitoring parameters to detect and measure the degree of pain, agitation, and sedation. Violent or aggressive behavior is a form of behavior

that aims to injure someone physically or psychologically. Agitation behavior and the appearance of violent behavior are characterized by clenched fists, bulging eyes, sharp glances, and loud and harsh speech, which can result in actions that endanger oneself, others, and the environment (Dewi et al., 2019; Liasanil, 2019). Based on the results of previous studies, restraint resulted in physical discomfort (81.8%), abrasions due to the installation of restraints that were too tight (72.7%), increased incontinence (72.7%), ineffective circulation (54.5%), increased occurrence of contractures (36.6%), skin irritation (27.3%), physiological injury (aggressive) (60.0%), increased anger (20.0%), (Kandar & Pambudi, 2013)

Violence also affects nurses as health workers. The principles of dealing with violent behavior consist of prevention, anticipation, and restraint or crisis management. Preventive strategies include nurse self-awareness, education, anger management, cognitive therapy, and cognitive behavioral therapy. Anticipation strategies include communication techniques, environmental changes, family psychoeducation, and the administration of antipsychotic drugs. The third strategy is restraint or restraint, which includes crisis management measures, binding, and movement restrictions. One strategy that is often used in hospitals is restraint. Restraint is a direct action using physical force on an individual to limit freedom of movement. This physical strength can use human power, mechanical devices, or a combination of both (Gerace & Muir-Cochrane, 2019; Yusuf et al., 2020). Restraint with human labor occurs when the nurse physically controls the client (Al-Maraira & Hayajneh, 2019; Burry et al., 2018). Then, restrain it by mechanical means using standard equipment. Nurses in emergency departments and intensive psychiatric rooms often become victims of aggressive patient behavior. Therefore nurses working in intensive care units must be able to assess patients who are at risk for violent behavior. Then, nurses must effectively treat patients before, during, and after violent behavior takes place

Methods

This Research uses a correlation method with a cross-sectional design. The study population was all inpatients who received restraint interventions. The research sample consisted of 27 patients who received restraint intervention. The research location is at Kediri Baptist Hospital. The sampling technique was purposive, with the patient inclusion criteria on the RASS scale of +1 to -1. The family agreed for the patient to be a respondent. The independent variable is anxiety, while the dependent variable is age and gender. Anxiety instrument using FASS (Face Anxiety Scale. This study has received Ethical Approval from STIKES RS Baptist Kediri. Statistical test using Spearmen rho with a<0.05.

Figure 1. Face Anxiety Scale (McKinley et al., 2003)

Results

Table 1 Distribution Frequency Data

Variable	Frequency	Percentage	P value
Age			0.051
41-50 years	6	22.2	
51-60 years	8	29.6	
>60 years	13	48.1	
Age			0.511
Male	9	33.3	
Female	18	66.7	
Anxiety			
Not Anxious	1	3.7	

Mild anxiety	13	48.1	
Moderate anxiety	3	11.1	
Severe anxiety	10	37.0	

The study's results found that most of the respondents treated using restraint were aged > 60 years (48.1%), while those aged 51-60 (29.6%) and those aged 41-50 years were 22.2 years. The results also showed that most respondents treated using restraint were female (66.7%), while those who were male were 33.3%. The results also showed that most respondents treated t with restrain had mild anxiety (48.1%), while those with severe anxiety amounted to 37%, and those with moderate anxiety amounted to 11.1%. Juha's research showed that there were respondents who were not anxious, namely 3.7%.

The results of statistical tests on anxiety with age obtained a p-value of 0.051 with a <0.05, which means that there is no relationship between anxiety and age in respondents and anxiety in patients with restraint. The statistical test results on the anxiety variable with gender obtained a p-value of 0.551 with a <0.05, which means that there is no relationship between anxiety and gender in patients with restraint.

Discussion

Statistical tests found no relationship between anxiety and age in respondents with anxiety in patients with restraints. The statistical test results found that there was no relationship between anxiety and gender in patients with restraint. The results also showed that most of the respondents treated using restraint were female (66.7%), while those who were male were 33.3%. The study's results also showed that most of the respondents treated using restraint had mild anxiety (48.1%), while those with severe anxiety 37%, and those with moderate anxiety 11.1%. Juha's research showed that there were respondents who were not anxious, namely 3.7%.

Conventional restraints are restraints tied to the hands using gauze or sometimes tied to the fingers using plaster. Conventional restraints use makeshift fastenings such as gauze or scraps of cloth to bind the patient. Bonding is done at the patient's bed. Many risks, such as redness, itching, blisters, and contractures, can occur. Agitation is a subtype of delirium described as a continuum of behavioral disturbances (Agustin et al., 2022; Janssen, 2022; Luetz et al., 2019; Phyland et al., 2020; Ullah, 2022). In addition, agitation is characterized by emotional lability, excessive motor activity, verbal aggression, or physical aggression caused by psychiatric, medical, or substance-related disorders that can cause disability. The triggers for agitation are multifactorial, including the underlying disease, pain, delirium, withdrawal syndrome, and some medications (Aubanel et al., 2020). In the underlying disease, neurological disease is one factor contributing to this agitation (Irwansa, 2022).

In patients with neurological disease, the pathophysiology of agitation is not known with certainty (Intan, 2021; Mortimer & Berg, 2017; Phyland et al., 2020; Yunin et al., 2022). Several clues can be found as the mechanism underlying the occurrence of agitation, including neuroinflammatory mechanisms, oxidative stress, neurotransmitter dysfunction, neuroendocrine dysregulation, and the neural aging hypothesis (Haymore & Patel, 2016). Related to injury severity, lower cognitive function is a predictor of subsequent agitation. In addition, damage to the frontoparietal cortex, subcortical areas, and brainstem is closely related to

the predisposition to agitation because these areas are responsible for attention, memory, and emotional regulation. These are some of the pathomechanisms that currently explain the occurrence of agitation, which can pose a risk of danger, not only to patients but also to health workers, especially nurses. Nurses play a role in carrying out nursing interventions to overcome the agitation experienced by patients. This aims to ensure the safety of the patient and the nurse itself in an effort to manage patient agitation during the acute phase. Theoretically, the management of agitation includes pharmacological and non-pharmacological management. Pharmacological management includes administering antipsychotic drugs combined with benzodiazepines such as Haloperidol, Risperidone, Olanzapine, Ariprazole, Lorazepam, Methylphenidate, and Valproic acid. Meanwhile, non-pharmacological management includes verbal de-escalation approaches, early mobilization, sleep management, music therapy, aromatherapy, and massage, as well as the use of physical restraints as a last resort (Barr et al., 2013; Davidson et al., 2013). Pharmacological and non-pharmacological management plays a vital role in managing patients in a state of agitation, and in practice, the two types of agitation management can be combined with each other.

In a systematic review, it was explained that the management of agitation must follow the sequence of interventions, starting with the referral of the patient to an appropriate environment, management by a trained team, use of verbal techniques, physical and mental assessment, use of drugs, and if unavoidable, then action. Mechanical restraint is the final intervention option. Several theories state that agitation has several possibilities, including genetics, dysregulation of nerve transmission, remodeling of nervous tissue, and other neurochemical systems. Dysregulation of dopaminergic neurotransmission, for example, is often correlated with changes in behavior following neurological disorders. Agitation involves conscious and unconscious behavior and motor hyperactivity. These three aspects are related to activity in the cortex (voluntary behavior), the subcortex and limbic system (unconscious behavior), and the basal ganglia-globus pallidus-substantia nigra c of the central nervous system (CNS). The cortex is the seat of executive function, decision-making, judgment, and abstraction. Aberrations in the cortex impair a person's capacity to act socially appropriately and maintain control of behavior in non-hazardous circumstances (Newton, 2020; Nielson et al., 2021).

Other subcortical structures have been involved in agitation. In the medial temporal lobe, the amygdala and hippocampus are required for memory and emotional memory, respectively. Isolated amygdala degeneration has been found to cause agitation, cognitive impairment, and mood swings (Anasulfalah et al., 2020; Dewi et al., 2019). The basal ganglia, globus pallidus, and substantia nigra are structures with direct and indirect connections to the cortex and subcortex involved in agitation motor hyperactivity. Agitation causes involuntary or self-removal of urinary catheters, tubes, drains, and other medical devices in 20-25% of cases. This unexpected event also occurs in patients with a life-threatening risk (mechanical ventilation). Agitation can also cause infection and sepsis due to repeated surgical procedures and forced removal of urinary catheters, tubes, and drains (Agustin et al., 2022; Suwardianto & Astuti, 2020).

Conclusion

Based on the study's results, there was no relationship between anxiety and the age and sex of the patient with restraint in the inpatient room. The research results with limited respondents and recommendations from research need to be re-researched with a more significant number of respondents.

Authors Contributions

The author carries out tasks from data collection, data analysis, making discussions to making manuscripts

Conflicts of Interest

There is no conflict of interest

Acknowledgment

Thank you to the respondents and to those who have helped in this research

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