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Application of De-escalation Techniques in Intervening Violent Behaviors of Mental Disorder Patients in Outpatient Clinics

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Abstract: *Objective:* To analyze the impact of de-escalation techniques in reducing violent behaviors in the nursing management of mental disorder patients in outpatient clinics. *Methods:* A total of 214 mental disorder patients who visited the clinic from June 2024 to November 2024 were selected as samples. 107 patients admitted from June to August were assigned to the control group, and 107 patients admitted from September to November were assigned to the study group. The study group received de-escalation intervention, while the control group received routine intervention. Both groups were evaluated using the Chinese version of the Brøset Violence Checklist (BVC) to compare the incidence of violent attack behaviors, BVC risk proportion, and the satisfaction of escort unit staff towards outpatient clinic staff before and after intervention. *Results:* The incidence of violent attack behaviors in the study group was lower than that in the control group, but there was no significant difference ($P > 0.05$). There was no difference in BVC risk level between the study group before intervention and the control group ($P > 0.05$). The BVC risk level in the study group after intervention was lower than that in the control group ($P < 0.05$). The BVC risk level in the study group after intervention was lower than that before intervention ($P < 0.05$). The satisfaction of the escort unit staff in the study group was higher than that in the control group ($P < 0.05$). *Conclusion:* The application of de-escalation techniques in the nursing management of mental disorder patients in outpatient clinics, combined with targeted management based on BVC assessment, can effectively reduce violent behaviors and lower the risk of violence occurrence.

Keywords: Mental disorders; De-escalation techniques intervention; Violent behaviors; BVC

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1. Introduction

During the onset of mental disorders, patients may exhibit destructive behaviors towards themselves, others, or other targets. Inappropriate handling of violent behaviors by medical staff can increase the incidence of medical

disputes and even affect the operation of medical institutions. Violent behaviors of mental disorder patients often occur in medical workplaces, commonly manifesting as physical attacks, verbal violence, and other forms. These behaviors not only harm the physical health of medical staff but also lead to anxiety and fear, reducing their enthusiasm for treating and caring for mental disorder patients. How to reduce violent behaviors in outpatient mental disorder patients and how to handle violent incidents that have already occurred remain key focuses of psychiatric outpatient management [1]. Routine outpatient management relies on the experience of medical staff, which has limitations. De-escalation techniques, as modern nursing measures, consist of risk assessment, communication, self-monitoring, and maintaining the safety of both parties. They can be used to prevent concealed violent events, effectively reducing violent behaviors in mental disorder patients and lowering the usage rate of coercive management measures such as protective restraint. Based on this, this article explores the value of de-escalation intervention using a sample of 214 mental disorder patients who visited the clinic from June 2024 to November 2024.

2. Materials and methods

2.1. Materials

A total of 214 mental disorder patients who visited the clinic from June 2024 to November 2024 were selected as samples. 107 patients admitted from June to August were assigned to the control group, and 107 patients admitted from September to November were assigned to the study group. There was no statistically significant difference in baseline characteristics between the two groups ($P > 0.05$). The details are shown in **Table 1**.

Table 1. Analysis of baseline data of patients with mental disorders

Group	*n*	Gender (%)		Age (years)		Type of mental disorder (%)						
		Male	Female	Range	Mean ± SD	Undiag-nosed	Agitated state	Bipolar disorder	Schizo-phrenia	Depres-sive State	Hallucinato-ry-paranoid state	Mental re-tardation
Study group	107	66 61.68	41 38.32	20-70	39.50 ±8.82	7 (66.66)	8 (7.48)	2 (1.87)	7 (6.54)	6 (5.61)	10 (9.35)	3 (2.80)
Control group	107	75 70.09	32 29.91	19-71	38.76 ±8.79	58 (54.21)	12 (11.21)	3 (2.80)	8 (7.48)	8 (7.48)	16 (14.95)	2 (1.87)
x^2/t	-	1.6841		0.6147		0.6204						
P	-	0.1944		0.5394		0.5288						

2.2. Inclusion and Exclusion Criteria

Inclusion criteria: (1) Meet the criteria for mental disorders in the "Practice of Chinese Classification and Diagnostic Criteria for Mental Diseases" [2]; (2) Informed consent; (3) Normal organ function.

Exclusion criteria: (1) Pregnant women; (2) Severe physical illness; (3) Severe respiratory infection.

2.3. Methods

2.3.1. The control group received routine intervention

The Brøset violence checklist (BVC) was used to assess whether patients showed signs of violent behavior and to identify violence risk. A BVC score of 0 indicated a low risk of violence, and patients were closely monitored for fluctuations in their condition. A score of 1–2 indicated a moderate risk of violence, and prompt implementation of

emergency prevention and control measures was required, reporting to a physician, restraining one hand and one foot on the opposite side of the patient while in bed, assessing the patient's emotional state and blood circulation in the restrained area, and adopting appropriate methods to guide patients to vent their emotions, inducing them to talk about their needs, and satisfying their reasonable demands. A score of 3–6 indicated a high risk of violence, requiring both hands and feet to be restrained while in bed, and immediately implementing targeted measures to deal with aggressive behavior.

2.3.2. The observation group received a de-escalation intervention

Risk assessment: The BVC was used to assess patients for signs of violent behavior and to identify violence risks, promptly intervening with de-escalation techniques to avoid escalation of violence. The BVC consists of six sub-items (noise, chaos, destruction of property, injury, irritation, verbal threats, etc.). If any of these behaviors are present, 1 point is awarded; if not, 0 points are awarded. The BVC score ranges from 0–6, and the score is directly proportional to the risk of violent attacks in the next 24 hours.

Clinical communication: Healthcare workers should maintain a calm demeanor, communicate with patients from a distance of >1 m, use gentle movements, avoid direct eye contact but maintain appropriate eye contact, use a gentle and euphemistic tone to comfort patients, and listen carefully when patients talk. Based on the patient's family status and past medical history, deeply analyze the causes of violent behavior, guide patients to trust medical staff, analyze possible influencing factors of violent behavior with patients, and discuss solutions with them.

Self-regulation: Different mentally ill patients have different causes of violent behavior. It is necessary to analyze the causes of violent behavior from the patient's perspective, making patients feel respected and understood. Additionally, assign staff that patients trust or can maintain emotional stability to serve them, carry out self-supervision education, guide patients to master methods of venting negative emotions and relaxation techniques, such as guiding patients to accept their own illnesses and teaching them correct abdominal breathing, or meditation, imagining a better life after returning to society with improved health.

Maintaining the safety of both parties: Environmental safety: Enrich clinic facilities, maintain a quiet state in the consultation room, improve patient comfort, minimize agitation during patient visits, avoid potential hazards in the consultation room, such as flammable and explosive materials, sharp objects, etc., install anti-collision soft packs and anti-slip floors in the consultation room to reduce the harm of accidents, and scientifically plan the consultation space to reduce patient behavioral obstacles. Team atmosphere: Healthcare workers should support each other, take consistent action when patients exhibit violent behavior, and create a sense of awe in patients to reduce violent behavior in clinics. Additionally, the consultation room should be equipped with multiple staff members, such as nursing assistants and security guards, to facilitate emergency response. Level of violence: Based on the BVC score, analyze whether to take coercive measures against mentally ill patients, avoid excessive restraint, and if the patient's emotions are stable, the restraints can be removed, and their emotions can be appropriately comforted.

2.4. Observation indicators and statistical analysis of violence risk in patients with mental disorders

2.4.1. Observation indicators

Violent behavior: Record instances of patients with mental disorders engaging in unarmed confrontation with

individuals or objects.

Violence risk indicator: Document the BVC score, and categorize patients into low, medium, and high risk levels based on their scores.

2.4.2. Statistical analysis

Data was processed using SPSS 25.0. Enumeration data was tested using the x^2 test (% recorded), and measurement data was analyzed using the *t*-test (Mean ± SD recorded). Significant differences were observed at $P < 0.05$.

3. Results

3.1. Incidence of violent behavior

The incidence of violent behavior in the study group was lower than that in the control group, but there was no significant difference ($P > 0.05$). The details are shown in **Table 2**.

Table 2. Comparison of violent behavior incidence (n,%)

Group	Violent behavior occurrence	No violent behavior
Study group (*n*=107)	4 (3.74)	103 (96.26)
Control group (*n*=107)	10 (9.35)	97 (90.65)
x^2	2.7514	
P	0.0972	

3.2. Violence risk rate

There was no difference in BVC risk rates between the study group before intervention and the control group ($P > 0.05$). However, the BVC risk rate in the study group after intervention was lower than that in the control group ($P < 0.05$) and lower than that in the study group before intervention ($P < 0.05$). The details are shown in **Table 3**.

Table 3. Comparison of violence risk rates (n,%)

Group	Low risk (0)	Medium risk (1–2)	High risk (3–6)
Control group (*n*=107)	21 (19.63)	53 (49.53)	33 (30.84)
Study group pre-intervention (*n*=107)	27 (25.23)	48 (44.86)	32 (29.91)
Study group post-intervention (n=107)	51 (19.63)	56 (52.34)	0 (0.00)
x^2/P (Study group post-intervention)	0.9669/0.3255	0.4688/0.4936	0.0221/0.8818
x^2/P (Control vs. post-intervention)	18.8380/0.0000	0.1683/0.6816	39.0166/0.0000
x^2/P (Pre- vs. post-intervention)	11.6199/0.0007	1.1972/0.2739	37.6264/0.0000

4. Discussion

Patients with mental disorders are highly prone to violent behavior and often have poor physical and mental health status, making them a marginalized group among the healthy population [3–4]. During diagnosis and treatment, if

they receive coercive medical intervention, they are more likely to engage in impulsive destruction of property or violent harm to medical staff. Therefore, effective management measures should be implemented for these patients. Conventional interventions rely on the experience of medical staff and often yield unsatisfactory results in managing violent behavior. De-escalation techniques, as a modern and novel management strategy, include modules such as risk assessment, communication, self-regulation, and maintaining the safety of both parties. These techniques guide patients to reasonably vent their emotions and can reduce violent incidents [5–6].

The data presented in this paper suggest that the incidence of violent attacks in the study group was lower than that in the control group, although there was no significant difference ($P > 0.05$). This could be attributed to the effective implementation of de-escalation techniques, which include risk assessment using the BVC to assess patients' violence risk levels and implement appropriate management measures to contain violent incidents in their infancy stage. The communication module requires medical staff to maintain a distance of over 1 m from patients, avoiding resistance to medical treatment, and inquiring about patients' actual needs in a tactful manner. By analyzing the causes of violent incidents and exploring solutions from the patients' perspective, the communication module helps patients feel respected. The self-regulation module teaches patients relaxation and anger management techniques, and interventions such as meditation, education, and abdominal breathing enable patients to view their illnesses more positively, thereby reducing violent incidents. The module for maintaining the safety of both parties focuses on improving the comfort of the medical environment to prevent patients' excessive behavior and negative emotions, further reducing the risk of violent incidents [7–8]. Another set of data presented in this paper indicates that the BVC risk rate in the study group after intervention was lower than that before intervention ($P < 0.05$). This suggests that the BVC can predict the risk of violent incidents in patients with mental disorders within the next 24 hours. By identifying high-risk patients and promptly implementing protective isolation measures, coupled with de-escalation techniques to soothe patients' emotions, the BVC score can be reduced [9]. The standardized application of the BVC during de-escalation intervention effectively manages violent behavior and provides a basis for subsequent patient treatment [10].

5. Conclusion

In summary, the implementation of de-escalation techniques for patients with mental disorders can reduce the risk of violent behavior and decrease its incidence, making it worthy of promotion.

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Disclosure statement

The authors declare no conflict of interest.

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