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Exploring psychiatric patient restraints: Balancing safety, ethics, and patient rights in mental healthcare

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ABSTRACT

Restraint, often linked with limiting an individual's freedom of movement, has become a focal point of extensive discussion and evaluation within the realm of mental healthcare. Striking a delicate balance between ensuring individual safety and minimizing reliance on restraint methods poses a significant challenge. In mental health inpatient settings, the prevalent forms of restraint encompass physical, chemical, environmental, and psychological methods. Paradoxically, the consequences of employing restraint can be severe, ranging from injuries and cognitive decline to sedation and, in extreme cases, fatalities. This paper seeks to offer a nuanced exploration of the landscape surrounding psychiatric patient restraints, considering both global perspectives and specific insights from the Indian context. The guidelines outlined in India's Mental Healthcare Act of 2017, which governs the use of restraint on individuals suffering with mental illnesses, are also examined in detail.

1. Introduction

Aggressive, self-harming, and violent behavior is a common phenomenon in psychiatric wards (James et al., 2012; Iozzino et al., 2015) and brings the safety of patients and staff in danger. Restraint is frequently used as a primary approach to treatments in clinical settings to manage aggressive behaviours (Sailas et al., 2012). Restraint has negative consequences that don't just affect the patient. It can cause psychological distress and physical harm in the form of guilt, worry, and anger among nurses and other staff workers (Sequeira and Halstead, 2004). In psychiatric settings, restraint has frequently been viewed as a "necessary evil." The most frequently cited justification for restraint is that it prevents harm to oneself or others (Shah and Basu, 2010). It is observed as a critical component of treatment for the benefit of the patient due to the lack of insight and poor judgment (Sokol, 2010). However, restraint has been questioned as a potential violation of the ethical concept of autonomy (Jun-Fang et al., 2020).

The idea of using restraints in psychiatric settings has a long history and has, as one might anticipate, generated a lot of debate, controversy, and investigation (Mohr, 2010). In health and social care settings, aggressiveness and violence are rather frequent and significant occurrences (Eltaliawi et al., 2017). In recent years, controversially there has been increased debate in medicine, ethics, and politics regarding the use of restraints in hospitals and whether their benefits outweigh any potential drawbacks (Heinze et al., 2012). There are disadvantages to using restraints, despite the argument that they are necessary to protect the safety of both patients and staff personnel. Restrictions undermine the therapeutic alliance, the patient-provider interaction, and the values of compassion (Chuang and Huang, 2007).

National and local government guidelines and policies for restraint reduction have arisen globally (LeBel, 2008; Britain, 2014), placing pressures and extra responsibilities on healthcare professionals to check the restraint. However, the disagreement in psychiatric settings between a demand to decrease restraint and the need to create and nourish a safe

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milieu, which is acknowledged as crucial to the therapeutic environment of psychiatric inpatient wards (Muir-Cochrane et al., 2013; Gerace et al., 2018).

2. Epidemiology & Pathophysiology of Restraint

Our society is prevalent with violence. The National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control and Prevention (CDC) estimates that 8.3 out of every 10,000 healthcare workers experience a nonfatal assault each year, compared to two out of every ten thousand workers in the private sector (Ulutasdemir and Tanir, 2017). The stressful, disorganized, lengthy waiting periods, overcrowding, staff personnel shortages, and financially precarious environment of emergency and psychiatric wards/rooms can incite violence in those who are susceptible to it. It's surprising to learn that 50 % of healthcare employees will experience physical abuse at some point in their careers (Wolf et al., 2020).

In emergency rooms and mental hospitals, violent behavior and agitating conduct are associated with psychiatric illnesses (specifically schizophrenia, personality disorders, mania, and psychotic depression) (Coburn and Mycyk, 2009). Personality disorders, such as antisocial and borderline, are vulnerable to incite violence since the apathy in such patients shows little guilt for their aggressive behaviors toward clinical staff. Intoxication or withdrawal from alcohol or other recreational drugs can result in uncontrollable behavior (De Benedictis et al., 2011). Certain patients may experience an unexpected increase in impulsivity, anxiety, and outrage (or paradoxical disinhibition) brought on by a decreased frontal self-regulatory function, nevertheless consuming sedatives (for example benzodiazepines, alcohol, etc.) (Angland, Dowling, and Casey, 2014).

Research indicates that violence prevalence among psychiatric patients varies between 5.0 % and 20.0 % (Raja and Azzoni, 2005), but comparing rates is challenging due to differences in definitions, demographics, and data collection methods (Mahmood, 2021). Varshney et al. (2016) found that 7.0 % of individuals without mental illness and 16.0 % of those with mental illness experienced serious violent behavior in their lifetime. In India, especially in rural areas, families often resort to restraining mentally ill relatives due to lack of access to psychiatric treatment, which is costly and ineffective (Khandelwal et al., 2015). Restraints commonly involve immobilization with devices like seat belts or sedation with benzodiazepines like lorazepam and midazolam (Jayaprakash et al., 2023). Reasons for restraint include restlessness (53.7 %), aggression (17 %), and safeguarding medical devices (John and Fernandes, 2019). Around 28.0 % of patients experience physical restraints, 44.0 % chemical restraints, and 28.0 % mixed restraints (Jayaprakash et al., 2023).

3. Classifications of restraints in mental health

3.1. Physical restraints

In the context of mental healthcare, physical restraint refers to the interventions to impede, restrict, or suppress any patient by staff members in reaction to hostile behavior or treatment resistance (Carr, 2012). Physical restraints should only be used as a last resort to maintain safety, but ordering them can be challenging since problems might arise, and their usage can be seen as coercion or punishment (Guerrero and Mycyk, 2020). According to Katayama et al. (2012) there are four reasons to restrict a patient: 1) to avoid hurting oneself, 2) to avoid hurting other patients, 3) to avoid hurting caregivers and other employees, and 4) to avoid major disturbance or environmental damage.

3.2. Chemical restraints

Using haloperidol and lorazepam is the most typical pharmacological approach in mental emergencies. This method is frequently used before an assessment has been completed to reduce the agitated behavior to a level that allows for a secure evaluation (Stetson and Osser, 2022; Zun, 2018). Numerous studies from a medical point of view have concentrated on the notion of 'as required' emergency pharmacological treatments as a therapeutic approach to regulate patients' aggression in a less intrusive manner (Currier, 2003; Zeller, 2017). Various healthcare practitioners have diverse views on the use of emergency psychiatric medication to address behavioral emergencies, Currier (2003) found that "chemical restraint" has a lot of negative implications. Although there may be a therapeutic clinical impact for people with mental health conditions, negative attitudes still exist (Currier, 2003; Zeller, 2017). To avoid using the "chemical restraint," the term "rapid tranquilization" was created. This term focuses on using quick-acting medications to address specific behaviors in behavioral crises and emergencies (Allison and Moncrieff, 2014).

3.3. Psychological restraint

It may include denying someone their freedom of choice in lifestyle decisions, including instructing them when to go to sleep or get up. Depriving people of items they believe are required for them to carry out their objectives, such as taking away their walking assistance, spectacles, or outside attire, or keeping them in their nightwear to prevent them from leaving, may also constitute this (Coburn and Mycyk, 2009).

3.4. Seclusion

Seclusion can provide some freedom of movement for some patients, making it an option for restraints (Steinert et al., 2010). But even a relatively small extent of liberty in movement can be dangerous, particularly for adults and teenagers who are more likely to injure others and themselves due to their agitation and strength (Steinert et al., 2010).

4. Recognizing and de-escalating the violent patient

A situation of emergency can be alleviated before it escalates and turns out of control if such indicators are identified. It is significant to understand the three phases of violence in order to start de-escalation before damage happens or restraint techniques are applied (Opgenhaffen and Put, 2022).

4.1. Phase 1: anxiety

At this stage, patients frequently have loud, pressured speech, are very noisy, and move in ways that seem to be motivated only by the need to release energy, such as pacing, clenching fists, and constantly changing positions on the stretcher. Because such undifferentiated characteristics are consistently observed in fearful and anxious emergencies, if unnoticed by staff personnel, and patients prone to aggressive behaviors, unfortunately, surpass this phase. According to Bowers et al. (2012), many of these individuals may be calmed down just by having staff members interact to them.

4.2. Phase 2: defensiveness

Patients show aggression and extreme profanity verbally during the second stage. Their conduct and behavior are illogical and unreasonable. Patients could show annoyance, irritation, and troublesome behaviors toward the staff members. If aggression persists or worsens in a patient, isolation can be advisable (Katayama et al., 2012). When a patient is experiencing hallucinations, paranoia, or agitation, external stimulus might exacerbate their psychosis (Angland et al., 2014). For this reason, seclusion can be beneficial.

4.3. Phase 3: physical aggression

Treatment stage three involves individuals acting utterly illogical and unmanageable, using foul talks, roughness, and vulgarity or doing physically violent acts directed at other patients, the staff members, or themselves. Physical and chemical constraints are necessary since verbal management methods with patients during this time are unsuccessful (Ober et al., 2009).

5. Possible consequences of restraints in psychiatry

5.1. Asphyxia

Asphyxiation is the most prevalent cause of restraint related to mortality, and it is referred to as "restraint asphyxia" (Sathyavagiswaran et al., 2007). When the body's posture interferes with breathing, this is referred to as positional asphyxia. Death from positional asphyxia was observed in the forensic literature when victims were placed in a posture that did not enable proper breathing, most commonly in a prone position (Byard et al., 2008).

5.2. Thrombosis

Fatal pulmonary embolism and thrombophlebitis have suggested in the previous literature that individuals in severe catatonic states in which they remain immobile for extended periods (Ignatowski et al., 2007). This implies that immobile may increase the probability of an accident or death (Hem et al., 2001). It has been suggested that prolonged physical constraint is the primary cause of thrombosis.

5.3. Catecholamine rush

Patients who engage in increasing agitation, fights with staff personnel, "takedowns" to the ground, or who are moved and restrained may have massive releases of adrenal catecholamines. This release of catecholamines has been linked to sensitization of the heart and rhythm abnormalities (La Rovere et al., 2022). According to Montagnana et al. (2008), ventricular arrhythmias and sudden death are both reportedly risk factors for variables related to the nervous system and the mind.

5.4. Rhabdomyolysis

Rhabdomyolysis most frequently affects healthy people. A person's muscles can break down as a result of trauma, extended immobility, infections, alcoholism, deficient conditions, or severe exercise (Holchin, 2020). Neuroleptic and dopamine-related medicines are linked to rhabdomyolysis, which is also a crucial component of the neuroleptic malignant syndrome (Muller, 2012). Hyponatremia, benzodiazepines, chlorpromazine, and full-sheet restraint all lead to the development of rhabdomyolysis (Packard et al., 2014).

5.5. Psychological Effects

According to research on physical restraint's psychological and cognitive impacts, physical restraint may be seen as punitive and disagreeable, with the possibility of traumatic repercussions (Benbenbishty et al., 2010). They also mentioned having unpleasant recollections, being afraid when they saw or heard someone else being restrained, and having a low opinion and mistrust of mental health experts (Benbenbishty, Adam, and Endacott, 2010).

6. Use of restraints in psychiatry and hospital policy

6.1. Mental Health Care Act-2017 guidelines for Indian state

The Mental Health Care Act (MHCA), which was passed in India in 2017, established guidelines for restraint, focusing on "providing treatment in the least restrictive setting," which only calls for its use when the subject or others are in immediate danger. The medical officer or mental health professional in charge should also keep an eye on the documentation of the type, extent, and length of restraint that is applied. The Mental Health Care Act (MHCA) also suggests updating the nominated representative every 24 hours on any instances involving restraint (Kumar, 2018). Recent legislation emphasizes the value of patient rights, informed consent, autonomy, privacy, and dignity, which must be assessed against underlying dangers and advantages in the context of restraints.

The MHCA-2017 must be followed while treating patients who need restraints as part of their clinical treatment, according to the policy, to safeguard the patient's safety, rights, and dignity as well as their therapeutic efficacy. After a face-to-face evaluation or assessment of the patient's physical, psychological, and mental condition, the patient is informed of the reason(s) for utilizing restraint and the criteria and actions that would allow the restriction to be removed. hospitalization is required. The patient is placed under one-to-one constant observation and is monitored every fifteen minutes, blood pressure, respiration, pulse, hygiene, elimination, hydration, nutrition, skin integrity, and any other needed comfort measure, (Khadivi et al., 2004).

The use of restraints must adhere to Section 97's subsections (1) through (9) since seclusion is prohibited under the Act. The (MHCA 2017) act mandates that all mental health facilities (care providers) document all incidents of restraint in a report that is forwarded each month to the concerned review boards. Restraint should only be employed when less intrusive or restrictive measures have proven unsuccessful or unsuitable (Danivas et al., 2016).

6.2. General guiding principles of restraints use

The general guidelines for the application of restraints are as follows and shown in Table 1 as well. Taking care of the patient's safety and dignity is necessary. Top attention is given to the security and well-being of the staff. Violence must be avoided at all costs. Before applying restraint, de-escalation should always be attempted. For the shortest time possible, restraint is applied. Staff always takes necessary measures that are proportionate to the patient's conduct. To assure safety, every restraint utilized must be the least limiting. It's important to keep a careful eye on the patient so that any decline in their physical health may be identified and treated as soon as possible. 1:1 observation is necessary for mechanical restraints. Only properly qualified personnel should perform restricted interventions to protect the safety of patients and staff (Raveesh and Lepping, 2019).

7. Preventive strategies of restraints in psychiatry

Restraints should be implemented as the last resort when other options have failed. It may be verbal, chemical, or physical restraint. There were a few methods through which we could prevent the patients from restraints which are mentioned below.

7.1. De-escalation techniques ('Defusing' or 'Talking Down')

It involves applying a range of short-term psychosocial approaches meant to control disruptive conduct behavior and avert the occurrence of disturbed or aggressive behavior. Employing verbal and non-verbal cues of empathy, alliance, and non-aggressive curbs and checks in consideration of courtesy, it becomes possible to resolve a situation that may turn violent or hostile gradually. Every attempt is taken to prevent conflict.

7.2. Rapid tranquilization

These drugs are used to regulate a patient's behavior in an

Table 1
Restraint methods (devices & types) and their usage.

Restraint Methods	Usage and application
Manual Restraint	A skilled, hands-on method of physical restraint used to prevent patients from harming themselves or others. Physical body pressure from another person, is used in limiting patients range of motion.
Leather, Nylon, or Vinyl waist belt and Wrist Cuff	It is a less restrictive alternative to the use of a four- or five-point restraint. If mental health professionals want to achieve the same number of conditions without using a waist belt and wrist cuff, mental health professionals may use a canvas camisole.
Leg Restraint	A cuff made of leather, nylon, or vinyl with a connecting strap that permits ambulation but prevents running or violent kicking by the patient.
Protective Helmet	A protective helmet is worn by a patient who's self-inflicted violence includes head banging to protect their head.
Five-Point Restraint	The patient is placed supine on a plastic-covered mattress with a waist belt to prevent any movement, and the patient wrists and ankles are fastened to four locations on the bed using leather, nylon, or vinyl cuffs and straps. It may be considered a seven-point restraint if head restraints are also applied.
Restraint Chair	During a severe episode of agitation, a patient may be in danger of harming himself or others. A restraint chair is mainly made to confine such a patient.
Leather, Vinyl, or Plastic Cuffs	Instead of using metal handcuffs, leather, vinyl, or plastic cuffs are used to bind patients who are at risk of injuring themselves or others. Mental Health Care Act-2017 has abolished all forms of restraint devices made of metal.

emergency or to limit their freedom of movement, but they are not often used to address a patient's underlying medical or mental health issues. To prevent pharmaceutical overuse and abuse, careful diagnosis is essential.

7.3. Physical interventions

It should only be used in an emergency if there appears to be a real risk of serious damage if not employed. It must be of the bare minimum required to prevent injury. (Brown, 2000). However, this method may be traumatic for both the patient and the staff, affecting the therapeutic relationship (which is critical in the mental health field), perceived as punishment for their actions, profoundly distressing, and may reduce patients' willingness to seek help once they are discharged (Stubbs and Dickens, 2008). Some of these interventions use methods like changing organizational policies, giving staff members specialized training, and teaching patients coping mechanisms like anger management, adaptive behaviors, interpersonal self-awareness, and symptom reduction (Jonikas et al., 2004).

8. Training-implementation, monitoring and documentation in psychiatric restraint

Studies show that intensive training programs focusing on de-escalation techniques, communication skills, and understanding of underlying mental health conditions significantly reduce the frequency and severity of restraint incidents. The effectiveness of simulation-based training in enhancing staff confidence and competence in managing aggressive behaviors, thereby reducing the need for physical restraint (Bowers et al., 2015; Frank et al., 2020). In addition to concurrent trainings, effective implementation of restraint protocols needs multidisciplinary approach and scientifically clear guidelines. Individualized care plans and regular review meetings to assess the appropriateness of restraint use and explore alternative interventions. Efforts must be taken by the professionals to ensure that restraint is used as a last resort and in accordance with best practices (Sailas and Fenton, 2000; Akello et al., 2020)

Continuous monitoring of patients in restraint is critical. Regular clinical assessments, including vital signs monitoring and neurological checks, to detect and address complications arising from prolonged restraint prevents adversity and ensures safety (Steinert et al., 2013). The monitoring process should be substantiated by the comprehensive documentation highlighting the need and rationale for restraint, interventions attempted prior restraint, duration and any adverse outcomes. Documenting such details are highly important for accountability, quality improvement and legal compliance (Muralidharan and Fenton, 2012). It is suggested that professionals should collect patient specific data using of evidence-based risk assessment tools such as Dynamic Appraisal of Situational Aggression-IP Version and Broset Violence Checklist rather than subjective clinical judgments alone (Raveesh and Lepping, 2019).

9. Conclusion

In conclusion, the use of restraints in psychiatric settings to manage aggressive behaviors is a complex issue, balancing the imperative to ensure safety with significant ethical concerns and potential negative consequences. While some view restraint as a necessary means, the emotional and relationship effects are acknowledged as never pleasant. The tension between reducing restraint, as advocated by guidelines, and maintaining a safe therapeutic environment is evident. To address this, further research is imperative to explore the experiences of patients and staff, seeking their suggestions and reservations about restraint. Identifying alternatives and promoting research for the reduction or elimination of restraint is crucial, aligning not only with political pressure but also with the overarching goal of creating safer and more humane mental healthcare environments

Ethical approval

This study was performed in line with the principles of the Declaration of Helsinki. Ethical approval was taken from Institute Ethics Committee (IEC) to conduct the study. No humans were directly contacted or interviewed during the course of study.

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CRediT authorship contribution statement

Indrajeet Banerjee: Writing – review & editing, Supervision, Conceptualization. **Priyanka Saikia:** Writing – review & editing, Resources. **Danishwar Rasool Dar:** Resources, Methodology, Conceptualization. **Aasim Ur Rehman Ganie:** Writing – review & editing, Writing – original draft, Supervision, Resources, Conceptualization. **Fayaz Ahmad Paul:** Writing – review & editing, Writing – original draft, Resources, Methodology, Conceptualization.

Declaration of Competing Interest

The authors declare no conflict of interest.

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