



Office of the Ombudsman for Mental Health and Mental Retardation



Restraint Alert

This Medical Alert is based on the work of the Medical Review Subcommittee and should be posted prominently. The Office of the Ombudsman for Mental Health and Mental Retardation works to improve the services provided to people with disabilities by communicating important information found in the Medical Review Subcommittee's reviews of deaths and serious injuries. Thank you for promptly reporting deaths and serious injuries. You are helping us to meet our mission.

Introduction

Nationally and in Minnesota, renewed attention has been paid to issues surrounding the use of restraint and seclusion. New federal regulations have been developed that affect inpatient programs. It is anticipated that these, or similar, regulations will eventually also affect group homes and other community based programs. This Restraint Alert is intended to share the knowledge gained from the reviews of deaths and serious injuries by the Office of the Ombudsman for Mental Health and Mental Retardation as well as some of the key information now being discussed on the topic of future trends and safety issues in the use of restraint and seclusion.

“It is now the professional consensus that the best way to reduce restraint deaths and injuries is to reduce restraint use to the greatest extent possible. Pennsylvania reduced restraint use by 90% in six years; staff and patient injury rates dropped by 74%.”¹

Background

Changes in the regulation and use of seclusion and restraint are based on the philosophical beliefs that

“People have the right to be free from restraint or seclusion as a means of coercion, discipline, convenience, or retaliation”² and that

“Restraint and seclusion are not treatment, but rather represent an emergency response to a treatment failure that resulted in an individual’s loss of control.”³

A report from the US Government Accounting Office (GAO) identifies that restraint and seclusion can be dangerous not only for clients, but for staff. In one state, facilities with higher restraint and seclusion rates had higher rates of staff injury and lost staff time.⁴ This report also identifies key elements in reducing the use of restraint and seclusion:

- A management philosophy that identifies restraint and seclusion as a last resort measure rather than a routine practice.
- A clear set of policies and procedures governing their use.
- Requirements to report the use of restraint and seclusion as well as any deaths or injuries.
- Adequate staffing and staff training on alternative techniques and techniques of de-escalation.

Specific training recommendations for the safe use of restraints from the JCAHO Sentinel Event Alert⁵, the 2001 HCFA (now CMS) regulations, and the GAO report include the following:

Staff should be trained to

- consider the age and gender of clients when setting therapeutic hold policies.
- properly apply and remove restraints.
- continuously observe any client who is restrained.
- know what to do when a client tells you they can't breathe.
- know how and when to perform cardiopulmonary resuscitation (CPR).
- be aware of client risk factors for injury: obesity, respiratory conditions (like asthma, chronic obstructive pulmonary disease, pneumonia, and upper respiratory infection), and sedation (which may reduce the gag reflex and contribute to aspiration).
- prevent asphyxiation by not putting excessive weight on the back of a patient in the prone position, by not placing a towel or sheet over the patient's head to protect against spitting or biting, and by not obstructing the patient's airway by pulling the patient's arms across the neck area.
- ensure that the client's head is free to turn to the side and the head of the bed is elevated to reduce the risk the aspiration when the client is restrained in a supine position (face up).
- ensure that the airway is unobstructed at all times – do not cover or “bury” the client's face – and ensure that the expansion of the client's lungs is not restricted by excessive pressure on the client's back when the client must be restrained in the prone position (face down).
- watch for physical signs that a client is in distress: skin color changes (especially lips or nail beds turning blue – late signs), breathing that is irregular, gasping or gurgling, or bulging neck veins.
- offer food, drink, and an opportunity to use the bathroom at appropriate intervals.

Further information on factors identified and the resulting recommendations from these reports can be found on the website of the Office of the Ombudsman for Mental Health and Mental Retardation in a document entitled **Current Issues in Seclusion and Restraint**.

Special Considerations

Other considerations are important for clients of the Office of the Ombudsman for Mental Health and Mental Retardation. Studies of restraint deaths point to asphyxiation during the restraint process as a leading cause of death related to restraints. “Deaths that are not caused by asphyxia most often appear to be caused by a toxic interaction between restraint and medication in a variety of ways. Some psychotropic medications impair an individual's gag reflex, making aspiration more likely...although the face down position makes asphyxiation more likely, the face-up position makes aspiration more likely. Other restraint deaths appear to be related to cardiac arrest. Psychotropic medications in general and many antidepressants in particular, have been associated with fast or uneven heartbeats leading to cardiac arrhythmias. Other drugs, such as clozapine, have been associated with cardiac arrhythmias during struggles and exertion, which frequently accompanies the use of restraints. The interaction of restraint and medications that are already in a patient's system is dangerous enough; the addition of PRNs at the time of restraint can be even more dangerous, and literature has cautioned against it for almost 20 years...some anti-depressants, such as imipramine can cause metabolic problems if a person's movement is restricted, which may lead to life-threatening hyperthermia.”⁶

Clinicians have also postulated that potentially fatal cardiac arrhythmias can result from the combination of certain drugs and the adrenaline produced during an individual's stress response or “fight or flight” response.

Many women who are hospitalized because of psychiatric disabilities “...have histories of abuse in childhood. For these women, being surrounded by a group of people (often primarily men), having their limbs seized and lowered to the floor, and then being carried to a room where they are restrained with legs apart – often after their clothing is taken from them – can be extraordinarily retraumatizing.”⁷

The Office of the Ombudsman for MH and MR offers the following issues for consideration:

1) The process of being escorted to a time out or seclusion is a vulnerable time for clients and staff. A number of injuries have been reported during the process of being escorted. Strategies to deal with this vulnerable time need to be included in staff training.

2) The Medical Review Subcommittee has reviewed deaths that occurred suddenly and unexpectedly after the client had been restrained. Most often there had been a struggle between the client and multiple staff persons, and no physical cause of death was determined after autopsy. Death is possible in such circumstances from positional asphyxia when the movement of air is blocked, respiratory muscle fatigue/failure due to prolonged struggling, cardiac failure secondary to stress, or medication-induced cardiac arrhythmias.

3) This Office also suggests caution when using PRN medications to control agitated behavior. Two commonly used medications for this purpose are Ativan (lorazepam) and Haldol (haloperidol). Ativan has potential side effects of ECG changes, tachycardia, low blood pressure, and apnea. Haldol can cause laryngospasm, respiratory depression, hypertension, ECG changes, tachycardia, and akathisia, which may make the client appear more agitated. Minnesota Rule 9525.3050, Subp. 3. B. (1) defines akathisia as “the inability to sit still, restlessness, pacing, walking in place, or complaints of jitteriness, jumpiness, or feeling like jumping out of one’s skin.” If the client’s “agitation” is in fact due to akathisia, then the administration of a PRN medication like Haldol is likely to make the client appear even more agitated.

4) The use of aversive and deprivation procedures for clients with mental retardation or a related condition is subject to specific requirements in Minnesota Rules⁸:

- The interdisciplinary team decides when a Rule 40 program must be initiated.
- Rule 40 provides for the use of restraint in emergency situations. Beware of the “perpetual emergency.” If frequent emergency restraints are being used, then a Rule 40 program should be initiated.
- A common guideline to use to determine when the “emergency” use of a controlled procedure should be an approved portion of a person’s program is when there are at least 3 to 4 uses of a controlled procedure on an emergency basis during a 3 month period (one quarter), and this happens more often than a single or occasional quarter.
- There is a specific requirement for review of each individual Rule 40 Program.
- Programs automatically expire every 90 days. Consent must be renewed on this schedule.

Case Study #1

A 20-year-old man, with moderate mental retardation, pervasive developmental disorder, psychotic disorder NOS, and impulse control disorder, sustained a cardiac arrest while being restrained. The night before the incident, he was upset and ran away from the ICF-MR where he lived. It was suspected that he may have taken some drugs while away from the facility. Upon return to the facility by the police, he was still agitated and was given Haldol and Ativan. He then slept approximately 10 hours. When he awoke, he followed a female staff member into the snack room, closed the door, and started “throwing her around the room.” He was then restrained, face down, by 13 people for more than one hour. During the restraint he went limp, so the staff stopped restraining him. He became agitated again, so the restraint was resumed. He again went limp and was discovered to not be breathing. CPR was started and he was transferred to a hospital where he recovered.

Since this incident, the facility has consulted with a Pharm D about the client’s medications, increased the number of male staff, sought consultation regarding this incident, and modified the client’s behavior plan so that he is not restrained again.

Risk factors for injury during restraint in this client include: the face down (prone) position, moderate obesity, and the risk of CNS depression resulting from the possible drug use the night before combined with the administration of Haldol and Ativan in a patient who routinely received Trazodone, Seroquel, and Depakote. (The client received doses of Seroquel at 600 mg/day and Depakote at 2000 mg/day.)

Case Study #2

A 28-year-old man, with chronic paranoid schizophrenia, a history of polysubstance abuse, borderline intellectual functioning, chronic renal failure secondary to lithium, hypertension, hyperlipidemia, hypercholesterolemia, benign tachycardia, chronic back pain, and obesity, died while being carried to a seclusion room. On the day after an IM injection of Haldol decanoate 200 mg, the client began to appear agitated. In the past, his state-operated hospital staff had placed him in seclusion during these “spells.” The client was approached by staff and was asked to walk to the seclusion area. At first, the client appeared to comply, but then he began struggling with staff and bit one staff member. Many staff members responded to the emergency call for assistance, placed a towel over the client’s face, placed him in a carrying blanket, and carried him to the seclusion room. Upon arrival at the seclusion room, the client was discovered to be not breathing. Resuscitation was attempted, but the client was pronounced dead. An autopsy was performed. The manner of death was an accident, and the immediate cause of death was positional asphyxia during restraint.

Following the death of the client, the facility made multiple changes including assessing all clients for risk and vulnerability factors that may affect therapeutic intervention, moving clients to the side (off the stomach) as soon as possible during a takedown and restraint procedures, assigning one staff person to monitor the client’s breathing, inserting a mesh insert into the carrying blankets/emergency transport stretchers to facilitate breathing, and creating a seclusion room on the treatment unit.

Risk factors for injury or death in this client include: the face down (prone) position, obesity, hypertension, hyperlipidemia, history of benign tachycardia, and neuroleptic use (Haldol decanoate).

Additional information about restraint and seclusion, resources, and a suggested reading list is available at the website of the Office of the Ombudsman for Mental Health and Mental Retardation.

www.ombudmhdd.state.mn.us

Notes

¹ Stefan, Susan, “Legal and Regulatory Aspects of Seclusion and Restraint in Mental Health Settings,” NETWORK, National Technical Assistance Center, Summer/Fall 2002.

² HCFA (now CMS) Interim Final Rule on Seclusion and Restraint, January and May 2001.

³ “Improper Restraint or Seclusion Use Places People at Risk,” United States General Accounting Office Report to Congressional Requesters, September 1999.

⁴ *ibid.*

⁵ Sentinel Event Alert, “Preventing Restraint Deaths,” Joint Commission on Accreditation of Healthcare Organizations, Issue Eight: November 18, 1998.

⁶ Stefan, *op. cit.*

⁷ Stefan, *op. cit.*

⁸ Minnesota Rule 9525.2700, “...standards that govern the use of aversive and deprivation procedures with persons who have mental retardation or a related condition...”

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