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Use of Restraint and Physical Force by First Responders: Duty to Investigate and Educate?

Background

The term epilepsy, sometimes referred to as seizure disorder, refers to a tendency to have recurrent seizures. A seizure is a temporary disturbance in brain function in which groups of nerve cells in the brain signal abnormally and excessively. During a seizure, symptoms vary depending on the type of epilepsy. Changes in awareness or sensation, involuntary movements, or other changes in behavior may occur.

Epilepsy affects about 2.3 million adults (1) and 479,341 children (0-17 years of age) (2) in the United States. Nearly 150,000 Americans develop the condition each year (3, 4). A national study by CDC indicated that about one out of two adults with active epilepsy might not be receiving the best available medical care (1).

Some people have seizures that are hardly noticeable to others. For example, the only clue that a person is having an *absence* seizure is rapid blinking or staring into space. In contrast, a person having a *generalized tonic-clonic* seizure may lose consciousness, collapse, and have rigidity and muscle jerking, with an extended period of confusion and fatigue afterward. Finally, a person having a *complex partial seizure* (now referred to as a *dyscognitive seizure*) (5) may appear confused or dazed, engage in repetitive movements (such as tugging at clothing), mumble words that don't make sense, and respond inappropriately to others. Delayed recognition of seizures and subsequent inadequate treatment increases the risk for additional seizures, disability, decreased health-related quality of life, and, in rare instances, death (6-8). Seizures may occur because a person has epilepsy, a chronic disease such as diabetes, or as a consequence of drug or alcohol use or another medical problem.

While most state and local law enforcement and emergency response personnel are able to recognize the classic signs of a seizure and respond appropriately, occasionally they may be faced with the challenge of recognizing seizures in which persons exhibit confusion, are unable to communicate, act irrationally, or are perceived to be threatening to themselves or others. First responders may not always properly assess the situation or know how to respond when abnormal behavior is caused by seizures. For example, some officers may not recognize *complex partial* seizures in persons they encounter who exhibit involuntary and unconscious behaviors that are inappropriate to time and place. Such signs may include vocalizations, running, unnatural looking movements of the arms or legs, spitting, and abusive language. After these seizures, fatigue is common and normal brain function may be slow to return. During this period, a person may exhibit fright or distress when confronted, appearing hostile, have difficulty communicating, and may not obey directives.

Applying restraint at such a time may trigger or exacerbate resistance and combativeness, thus worsening the situation. Inappropriate arrest, possible injury, and, in some cases, death may result (9, 10). A study on the lethal hazards of prone restraint noted that there is a serious risk of causing respiratory compromise during the process of subduing or restraining an uncooperative individual because agitation or an aggressive struggle may further increase the body's demand

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for oxygen. Restraining a person face-down might cause positional asphyxia leading to cardiac arrhythmia (11).

Regulations and Recommendations related to Restraint Use

The use of restraint by first responders is not regulated at the national level, nor is there national data on injuries or deaths associated with the restraint of people experiencing seizures.

The appropriate use of restraints for patients has been addressed at state and national levels. In 2013, the Massachusetts Department of Public Health, Office of Emergency Medical Services issued an administrative requirement addressing the appropriate use of restraints for patients who present an immediate and serious threat of bodily harm to themselves or others (12). The U.S. Centers for Medicare and Medicaid Services has issued standards and reporting requirements focusing on patient safety and the protection of patients from abuse. These support and protect patients' rights in the hospital setting, including the right to be free from the inappropriate use of restraint. They also include patient protections when use of restraint is necessary. The legitimate use of restraint for acute medical and surgical care is recognized as a measure to prevent patient injury, as well as the use of restraint to manage violent or self-destructive behavior that jeopardizes the immediate physical safety of the patient, a staff member, or others (13).

The National Association of EMS Physicians has published a position paper entitled, "Patient Restraint in Emergency Medical Services Systems." The paper recommends that all EMS systems adopt specific protocols for dealing with the violent or combative patient and assure that all personnel are knowledgeable about the medical conditions that are associated with agitated or combative behavior and are trained to apply the principles of the EMS system's pre-hospital patient restraint protocol (14).

The Americans with Disabilities Act (ADA) prohibits discrimination against people with disabilities including those with epilepsy and seizure disorders. This prohibition applies to state and local law enforcement agency duties, including making arrests and holding suspects. Arresting or detaining a person with epilepsy based solely on behaviors caused by the condition may violate the ADA or general guidance on the ADA and law enforcement activities (15).

Case Description

You work in a state health department in the chronic disease program, and provide subject matter expertise to the state emergency operations center (EOC) regarding the needs of people with chronic or disabling conditions in times of emergency. Your health department does not have an Epilepsy Program, but you handle the occasional public or news inquiry regarding epilepsy.

Your region has been affected by devastating flooding and landslides. Red Cross has set up shelters to house people who have been displaced. In the course of your duties, you are notified by the EOC that one of the Red Cross shelter residents was taken to the hospital to be treated for shortness of breath and fractures to his ribcage. It was later found that the man had epilepsy, and

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the Red Cross is worried about how the off-duty police officers providing shelter security handled the situation.

Here are the facts they give you:

John Smith is a 22 year-old male who attempted to force his way into a closet at the shelter. According to witnesses, John, who was known to his neighbors as having a seizure disorder, appeared confused, was walking in a wandering, unsteady manner and started to repetitively push on the door of the storage closet. Shelter staff alerted the security officers. When they arrived, John slowly approached them. When ordered to stop, he looked dazed, was uncommunicative, and kept walking forward. In an effort to subdue John, police officers grabbed him around the throat and attempted to pull him down to the ground. When these efforts were unsuccessful, pepper spray was used. John then fell to the ground, face-down; police handcuffed him behind the back, applying pressure to his back with their bodies. A short time later, he lost consciousness and his breathing became somewhat labored. He was taken to the hospital where he regained consciousness and his breathing improved. On further medical evaluation, it was discovered that four of John's ribs were fractured. Hospital staff noted that he was wearing a seizure medical alert bracelet that the police had not noted. Tests showed that John had no illicit drugs or alcohol in his system at the time of the incident.

The family has contacted the Red Cross and the police department because they are concerned that John's injuries and breathing difficulties were caused by inappropriate restraint and response by the police. They are also concerned that neither the police nor the shelter personnel recognized or knew how to respond to John's condition. The family is very angry and is considering legal action.

You learn that both the Red Cross staff and police department have had no formal seizure awareness training. After some quick searching online, you see that the Epilepsy Foundation (EF) does have seizure awareness training for first responders — law enforcement personnel, emergency medical services (EMS) personnel and other healthcare professionals who may attend to the health and safety of persons with seizures. You also notice your state does not have an EF affiliate chapter.

The local health department values its relationship with the Red Cross and local law enforcement, and sees that there is a need for multiple levels of training, but determines this is too big of an issue for them to address. They request assistance from the state health department. Your supervisor has asked you to chair a workgroup to decide how best to address this training need, given the very limited budget flexibility in your division. You get representation from your Office of General Counsel, emergency preparedness program, injury program, and mental health program for the workgroup.

Discussion Questions

Your workgroup convenes to tackle the following questions:

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1. What assumptions did the shelter staff and security make about John? What clues did they miss?
2. What unique risks do people with epilepsy face during interactions with first responders?
3. Could this event have been avoided?
4. Given that epilepsy is a relatively low-prevalence, but high burden condition, does the health department have a role to play in ensuring the safety of people with epilepsy in the community?
5. If resources are spent on this, will it affect other public health programs' missions? Who are the stakeholders who should be considered?
6. What role should the health department play in providing training on epilepsy to law enforcement officials and other first responders?

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Additional Resources

CDC Epilepsy Program Web site: www.cdc.gov/epilepsy

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Epilepsy Foundation Web site: www.epilepsy.com

Epilepsy Foundation First Responders Training: <http://www.epilepsy.com/get-help/services-and-support/training-programs/first-responder-training>

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