Evaluating Staff Key to Curbing Use of Restraints

By Patrice Wending Chicago Bureau

The use of physical and chemical restraints is an ongoing problem in many hospitals, despite great strides that are being made to improve, reduce, and eliminate the practice.

A continuing series by the Hartford Courant in 1998 prompted a federal investigation and report confirming that the use of seclusion and restraint was largely unregulated, erratically monitored, and underreported, and had caused injury and death to both children and adults.

That same report from the U.S. General Accounting Office (now known as the Government Accountability Office) went on to say that some states had been able to reduce—to—and even eliminate—seclusion and restraint use. Just how state administrators were expected to accomplish that is the topic of much debate and little scientific research.

Eliminating the use of restraints in the emergency department, for example, isn’t possible because, by its very nature, the ED isn’t as controlled as settings such as the pediatric unit. It is precisely because of this environment that many expert witnesses have stated that pediatric patients are not a “high-risk” group for restraint use.

Although there are deaths in patients who have been restrained, the restraint frequency has nothing to do with the cause of death. We must always work to improve our training and to use best practices when restraining patients, but many emergency medical services systems and EDs do an excellent job in restraining these very difficult patients,” he said.

Patients should be restrained in a way that maintains their dignity and permits evaluation of underlying medical conditions, said the study. Staff needs both to be educated on the verbal deescalation and physical and chemical restraint and to be prepared to use the appropriate techniques.

To point to a single practice as hazardous oversimplifies the issue, Dr. Kopas said.

In particular, critics posit that restraining patients in the prone position predisposes them to suffocation. Although his practice is to avoid the prone position, Dr. Kopas said it is often the only available method for a veryf that “take-down” of a patient.

“The key is that [restraint] is multifaceted,” he said. “There isn’t a silver bullet answer, but there are many best practices that EDs should incorporate into their policies and procedures.”

Educating staff about the appropriate time to administer and remove restraints is essential, agrees David H. Dorfman, M.D., a pediatrician with the division of pediatric emergency medicine at Boston Children’s Hospital and the department of pediatrics at Boston University.

A study led by Dr. Dorfman found that a large percentage of emergency medicine residency programs (42% of 48 respondents) and pediatric emergency medicine fellowships (82% of 33 respondents) do not teach their trainees about the application of restraints, and 35% of responding emergency medicine residents and 46% of pediatric emergency medicine fellows did not teach appropriate situations in which to use restraints (Pediatr. Emerg. Care. 20:151-1).

Chemical restraints were used in pediatric psychiatric patients in the emergency department by almost three-fifths of the respondents, but few reported having formal policies on chemical restraint.

Benadonzeides and butyrophenones were the most commonly used agents. But both responding groups often misclassified butyrophenones as phenothiazines.

Cascading to Arrhythmia

A situation ripe for improvement is the management of the cascade of events leading to fatal arrhythmias, particularly when patients are restrained in the prone position, said Tracy G. Ryan, M.D., assistant professor of emergency medicine at Boston Children’s Hospital. In a typical scenario, a patient may be brought to the ED handcuffed to a bed after being chased for 10 blocks for selling cocaine, and administered a second intramuscular injection under restraints because nothing else is working, he said. Staff police may increase the pressure of their hold until the patient stops resisting, at which point they assume either that...

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the patient is “playing possum” or that the medication has taken effect. “Essentially that is the [moment]—if you would recognize it—that if you flipped them over, defibrillated them, [and] gave them bicarb and fluids, you could get them back,” Dr. Sanson said.

The actual causes of cocaine-associated sudden death and excited delirium are unknown. But studies have suggested that the vast majority of such patients die after a struggle, which may increase the level of circulating epinephrine and may result in metabolic acidosis.

In the ED, chemical restraint should be used more aggressively, Dr. Sanson said. It must be accompanied by ongoing monitoring because of the risk of respiratory arrest and because of the cumulative effect of drugs that may have been used by the patient prior to arrival and/or those administered by ED staff.

A prospective study found that chemical restraint was added to only 28% of 298 consecutive patients restrained in an inner-city teaching hospital ED over a 1-year period (J. Emerg. Med. 2003;24:119-24). Patients were most frequently restrained on a cart with two physical restraints (59%), in the supine position (86%), with a low rate of minor complications (7%).

The federal requirement for face-to-face physician evaluation of an individual in restraints within 1 hour of the event has strengthened the focus on the safer use of seclusion and restraint. But there is no evidence that the “1-hour rule” has made restraint a safer intervention or changed practice since it was established in 1999, said Kevin Ann Huckshorn, R.N., director of the office of technical assistance for the National Association of State Mental Health Program Directors (NASMHPD).

Promoting Prevention
NASMHPD has joined with others in calling for the application of the public health prevention model of primary, secondary, and tertiary prevention interventions to the practice of seclusion and restraint.

Primary prevention works to create an administrative and clinical treatment environment that minimizes the development of conflict. Secondary interventions—such as comfort rooms and staff training on attitudes and behaviors in conflict settings—are focused on mitigating conflict or aggression once it occurs. Tertiary prevention address the most effective ways to mitigate damage done to patients, staff, and others who witness a seclusion and restraint event. An example is an event debriefing of all witnesses and the patient, with rigorous problem-solving activities.

Although participation by the private sector has been slow, public health care providers from all but two states have gone through NASMHPD’s 2½-day training sessions since they began in 2003. The sessions highlight six core strategies: leadership training, use of data, workforce development, prevention tools, consumer roles, and debriefing tools.

"Some states have really taken it on board," Ms. Huckshorn said. "It’s one thing to get an ‘oh, ha moment,’ but this was brilliant.”

The large-scale evaluation of the training will take place this year in an attempt to build an evidence-based practice, because “that is how you change clinical practice standards,” Ms. Huckshorn said.

The adoption of the Oregon model program, which also has prevention at its core, has virtually eliminated the use of seclusion and restraint in the psychiatric in-patient unit at Salem (Ore.) Hospital, said Maggie Bennington-Davis, M.D., medical director of the 24-bed, adult locked unit.

The model uses the basic tenets of the neurobiology of trauma and the development of community as set forth by author Sandra L. Bloom. The Salem team eliminated any rule that was based on staff convenience or that created a power struggle, and adopted an attitude based on patient satisfaction.

They created a social structure in which everyone is assumed to be respectful of the physical surroundings and of each other. The pressure to conform in this kind of culture is significant, and is passed on through a variety of verbal and behavioral cues that reach even those patients who have broken with reality, Dr. Bennington-Davis said.

Even when they are most ill, “people with schizophrenia… respond to the environment and the culture in ways I would never have predicted but have come to see repeated over and over again,” Dr. Bennington-Davis said.

“My theory is that we are tapping into the neurolinguistic part of our brain, our humanness.”