The use and abuse of restraints

Dr. Michael S. Pollanen and colleagues[1] conclude that, whether the cases they report occurred in police custody or in community, restraints were possibly the main contributing factor in a series of unexpected deaths, and they recommend further study of the use and abuse of restraints and their potential for causing serious harm.

The use of restraints is not restricted to those with excited delirium and aggressive psychosis. Restraints are widely used throughout medicine, particularly in geriatrics and pediatrics.

Restraints are terrifying to any child, particularly those who are mentally or neuropsychologically handicapped. Restraint may also lead to death by preventing proper breathing or aspiration.[2,3]

I therefore strongly endorse the editorial recommendations of Dr. Donald Milliken and his call for national guidelines on the use of physical restraints.[4] These recommendations must be formulated sooner than later and should be circulated immediately to emergency departments, mental health institutions, nursing homes, law enforcement agencies and elsewhere.

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A century ago, people found "stupid in the street" were violently subdued and held in a police cell until sober. In 1895, Dr. L.D. Mason recognized that these people often died from traumatic injuries or underlying medical conditions, and he pleaded that they be brought to hospital rather than to jail.[1]

Dr. Michael S. Pollanen and colleagues have reported on 21 patients with agitated delirium who died while being restrained or soon after.[2] We found it disturbing that 18 of these patients died outside of hospital while in police custody.

Agitated delirium is a medical emergency. Causes include sympathomimetic overdose, anticholinergic poisoning, alcohol intoxication, alcohol and sedative-hypnotic withdrawal, hypoxia, hypoglycemia, infection involving the central nervous system, head trauma and psychiatric disturbances. Even when the cause is benign, severely agitated patients may experience hyperthermia, hypertension, rhabdomyolysis and renal failure.

Acute cocaine intoxication causes severe agitation and is associated with myocardial and visceral ischemia, ischemic stroke, intracranial hemorrhage and other problems. Animal studies have demonstrated that restraints augment the lethal effects of cocaine and suggest that sedation and minimization of stress may be important interventions.[3,4]

The authors' suggestion that the position of restraint plays a role in the death of severely agitated patients is intriguing but should not be used to condone alternative restraint positions. Highly agitated patients should receive prompt medical attention, and physical restraint should be used only until pharmacologic sedation is achieved. Parenteral benzodiazepines are the agents of choice for cocaine intoxication,[4] and we recommend them for undifferentiated agitation as well. Antipsychotic agents such as haloperidol cause less respiratory suppression and may be preferred for patients with head trauma, for "belligerent drunks" and for psychiatric patients. Underlying medical conditions should be evaluated and treated while the patients are sedated.

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[One of the authors responds:]

Dr. Lewin draws attention to the wider implications of unexpected death associated with restraint. In our study we limited investigation to those who died unexpectedly after being restrained because of violent agitation in public places. Most of these people were restrained by law enforcement personnel. However, Lewin points out that death may occur when restraints are used in hospital on patients both young and old. A

study to investigate unexpected death associated with restraint in inpatient populations seems indicated.

We agree with Drs. Sedran and Brubacher that excited delirium is a medical emergency, and medical management by emergency department personnel is preferable to physical restraint. Prompt medical intervention and the minimization of restraint will likely reduce the mortality rate among people with excited delirium.

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Africa's population problems not limited to Africa

Dr. Geoffrey Forbes says we should "[l]eave population control to the Africans."[1] Although his proposal may seem noble in Canada, a rich and underpopulated nation far from Africa, it sounds nearsighted in Italy, a densely populated country that is faced with the *emergenza immigrati* — a state of emergency due to the continuous invasion of numberless Africans who clandestinely immigrate to Italy. This country, where unemployment is rising, can offer neither enough jobs nor adequate lodgings to the new arrivals. It is patently clear that Africa's population explosion, besides leading to slaughter and starvation,[2] is responsible for unstoppable emigration from Africa. This movement will produce increasingly serious socio economic problems in both Italy and other European countries.

Population control in Africa, therefore, can no longer be viewed as a matter to be left entirely to the African countries, where substantial lobbies oppose contraception.[3] As a consequence, African mothers still bear 6 sons, on average, despite overpopulation.[2] If this level of reproduction is exported to the West, it will destroy economically and socially whatever affluent countries exist within a few decades.[4]

Contrary to Forbes's claim, vaccination without concurrent contraception will have catastrophic effects not only for Africans.[5] Sadly, as has recently been pointed out, "inadequate provision of contraception will result in . . . the deaths of up to 8.9 million infants and children by 2000."[6]

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Planning motherhood

Dr. André B. Lalonde, in his editorial on safe motherhood, cites figures for maternal and fetal deaths in developing countries that are truly appalling.[1] These data confirm what I observed while practising obstetrics overseas.

However, the solutions Lalonde envisions are not likely to come about in the near future — or even, for some, in our lifetime. To my mind, what is needed immediately is education about birth control to help women who otherwise may be pregnant for most of their reproductive years, whether they want to be or not. Such women must be empowered to control their own fertility through the provision of contraceptives at a cost the majority can afford.

Ideally, education about birth control and availability of the means of contraception should go hand in hand with some form of social care for elderly people. In view of high fetal and early childhood mortality rates, some families consider a large number of children desirable, to ensure that there are offspring to look after the parents as they age. But this attitude tends to increase poverty levels and in the end is counterproductive.

As Lalonde says, an obstetrician can "take overall responsibility to lead, train and retrain the health care team," but such training should surely address contraception, as well as appropriate care during pregnancy and labour.

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Informing women about folic acid

There is compelling evidence that periconceptional folic acid supplementation reduces the risk of neural tube defects. Dr. James McSherry suggests that folic acid be added to the 7 inert pills in a 28-day pack of oral contraceptive pills.[1]

Birth control pills could also be a means to inform women of the importance of periconceptional folic acid supplementation; such information could be included in the package inserts for the pill — some women do read these inserts. This information would also be appropriate for inclusion in provincial middle school curricula.