

In the meantime, taking both the European cohort findings and the British doctors study together, the public health message is clear: at the population level there is no protective effect of smoking in dementia.

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## Assessing the risk of violence in patients

*Risks can be assessed, but the results still pose ethical and political dilemmas*

Is it possible to predict violence by patients in clinical practice? Politicians are all too ready to assume that it is and that healthcare professionals are at fault when a mentally ill person commits a violent act. Epidemiological approaches examining the inter-relationship between violence and mental illness have suggested that an association exists but that it is small.<sup>1-3</sup> Fifteen years ago research suggested that clinicians were more often wrong than right in their risk predictions<sup>4</sup> but more recent studies have shown that clinicians are getting better at predicting risk of violence, albeit in the short term.<sup>5</sup>

An influential longitudinal cohort study of psychiatric inpatients from the United States showed that the one year prevalence rate of violence was 18% for those with major mental disorder and 31% for patients with comorbid substance misuse disorder.<sup>6</sup> Actuarial and clinical research studies have identified risk factors associated with violence drawn from a variety of domains. Key risk factors include demographic factors (being male, young, and in the lowest socio-economic class),<sup>1</sup> a history of previous violence,<sup>7</sup> substance misuse,<sup>6</sup> the presence of acute psychotic symptoms,<sup>8</sup> and specifically certain types of delusions.<sup>9</sup> Risk assessments estimating the probability of violence take these risk factors into consideration.

A few specific factors have been shown to be valid in predicting the imminent risk of violence.<sup>10</sup> These include threats to identifiable victims, access to potential victims, and premeditation including the purchase of a weapon. An essential first step in assessing risk of imminent violence is an inquiry into violent thoughts. In this issue Sanders et al (p 1112) describe how a random sample of patients admitted to a medium secure unit were interviewed using a semistructured interview designed for the study.<sup>11</sup> The interview concentrated on thoughts of self harm and interpersonal violence in the previous week. Comparisons were then made between the number of patients who disclosed suicidal and violent thoughts to researchers and the number who had been asked

about such thoughts by the treating team. Almost half the patients told researchers that they had thoughts of self harm and almost a third had thoughts of violence towards others. Most patients had been asked about suicidal ideas by the treating team, but only 13% had been asked about thoughts of interpersonal violence.

Why is this important? The number of people who act on violent thoughts is unknown but undoubtedly some will. It is as important to inquire routinely into violent thoughts as it is into suicidal thoughts. Inquiry about violent thoughts is, however, only the start. Focused risk assessment must follow, including inquiry into the circumstances of any previous violence, intention to act on violent thoughts, availability of weapons, and potential victims. This further assessment is analogous to the questioning following the expression of suicidal thoughts.

Can this information be acted on? In 1968 in California, Prosenjit Poddar met a fellow student, Tatiana Tarasoff, at a school dance. Shortly afterwards Tarasoff rebuffed him. Poddar went to the university's health service for evaluation of worsening depression and disclosed to his therapist that he had thoughts of harming, perhaps even killing, a girl readily identifiable as Tarasoff. The therapist and his supervisor decided to commit Poddar to hospital and called the police to help. The police visited Poddar, found him rational and warned him to stay away from Tarasoff. The psychiatrist did not proceed with the commitment. Poddar failed to attend his next health service appointment. Two months later he shot and stabbed Tarasoff to death. He was charged with first degree murder and Tarasoff's parents filed a negligence suit against the campus police and university health service.

Following this, the Californian Supreme Court mandated that when a patient threatens violence the clinician has special responsibility to evaluate the patient's risk and take appropriate action to protect others from danger.<sup>12</sup> In other US states and Canada similar precedents have been set.<sup>13</sup> In the United King-

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dom the situation is less clear cut, with no specific legislation. Therapists are faced with the conflict between maintaining patient confidentiality on the one hand and protecting the public on the other.

Applebaum has developed guidelines to help clinicians when a patient describes thoughts of violence.<sup>14</sup> The first stage is good clinical assessment of the threat, including obtaining collateral information from various sources. If a third party is thought to be at risk, the second stage involves the duty to protect that third party.

Admission to hospital, transfer to a secure unit, or intensification of treatment may protect the victim without breaching confidentiality. If this is insufficient or inappropriate the clinician must consider informing the third party and the police. The third stage involves careful monitoring of the process of implementation of these measures and documentation of the clinicians' reasoning about the risk benefit analysis.<sup>14</sup>

Even without duty to protect legislation, the same steps should be followed. However, even with such guidelines, variation exists in healthcare workers' attitudes towards the relative importance of patient confidentiality and public safety. The extent and cause of this variation require further exploration and clarification. These are politically sensitive issues and politicians need to acknowledge clinicians' limitations in preventing violence in their patients. Clinicians also need to acknowledge that if they have shown common sense, sound clinical practice with careful documentation, and a genuine concern for their patients they will

have fulfilled their obligations to the patient and public.<sup>15</sup>

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## Fighting biological warfare

*The convention against biological weapons badly needs a verification protocol*

Humanity's battle against disease is a constantly evolving struggle. Throughout history bacteria and viruses have attacked people, animals, and plants, often with devastating effect. As if this were not challenge enough, we now face the prospect of disease being deliberately applied for military or terrorist purposes through biological warfare. The way of countering such threats is through international law and painstakingly negotiated treaties and verification mechanisms.<sup>1</sup> An important piece of protection in the battle against biological weapons is currently being negotiated in Geneva.

The widely held assumption that the use of agents such as anthrax, plague, and smallpox has only a limited utility in war is false: disease has already been turned into a weapon. The former Soviet Union, for example, undertook an extensive biological weapons programme, arming some of its ballistic missiles with anthrax and targeting them at Western cities. After the Gulf war United Nations inspectors uncovered a well advanced programme in Iraq, involving aircraft bombs and missile warheads filled with biological agent.<sup>2</sup> Another handful of states are believed to possess biological weapons,<sup>3</sup> and certain terrorist groups may be interested: the Japanese sect that released poison gas into the Tokyo subway in 1995 was also developing biological weapons. Further-

more, the present revolution in biotechnology could see new and more efficient biological weapons being developed, including perhaps genetic weapons, targeted at particular groups of people.<sup>4</sup>

Potentially capable of inflicting casualties on a scale akin to nuclear weapons, yet easier and cheaper to produce, biological weapons might become an attractive option, especially for states seeking a counter to Western nuclear and conventional military superiority. It is therefore easy to see why biological weapons are increasingly being identified as one of the key future challenges to international security.

A network of international treaties, agreements, and controls already exists to tackle the spread of weapons of mass destruction. Indeed, biological weapons are already prohibited under the Biological and Toxin Weapons Convention, which came into force 25 years ago. Unfortunately, the treaty contained no verification provisions to check that states were not cheating on their undertakings. We know that at least one party flagrantly contravened the treaty.<sup>5</sup>

Since chemical weapons were outlawed by the Chemical Weapons Convention in 1993, which did include extensive verification provisions, negotiators in Geneva have attempted to inject similar provisions into the Biological and Toxin Weapons Convention through