

long natural history: late recurrences do occur and can be successfully treated.

The intention is that the guidelines should be adopted by regional cancer networks and that they should be an essential reference for all involved in treating patients with thyroid cancer, whether managers, hospital doctors, specialist nurses, primary care physicians, or professional organisations. We hope that implementation of the guidelines through local protocols will lead to the delivery of high quality care across the United Kingdom and improved survival for patients with thyroid cancer.

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Lithium in bipolar mood disorder

Evidence suggests that lithium should still be first choice for prophylactic treatment

Bipolar affective disorder, also called manic depression, is a common condition associated with multiple relapses often leading to unemployment, marital problems, alcohol abuse, and suicide. The lifetime prevalence is more than 1%, and 10-20% of patients commit suicide. Cade was the first to report the anti-manic effect of lithium, and by the late 1960s its role in the prophylaxis of bipolar disorder was established.¹ In the next decade it became widely used on both sides of the Atlantic as the first line of treatment for the condition. Recent prescribing patterns indicate that the use of lithium in the United States is declining relative to its use in European and other countries such as Australia. The evidence, however, suggests that lithium should be the first choice in the prophylactic treatment of most patients with bipolar disorder.

Some American clinicians no longer prescribe lithium because it is too toxic and alternatives are available. Marketing strategies for mood stabilisers such as valproate and a more hostile medicolegal environment than in European countries have also played a role. A recent multicentre study examined prescribing patterns of psychiatrists in the United States treating a large cohort of adult and older psychiatric inpatients with a primary diagnosis of bipolar disorder (WS Edell et al, Third International Conference on Bipolar Disorder, Pittsburgh, 1999). At discharge 60% of adult and 50% of older patients were taking valproate, carbamazepine, or lithium. This shows that in the United States over half of all patients are discharged without a licensed mood stabiliser and only in a minority of patients is lithium the chosen mood stabiliser.

Despite the recent trends in prescribing in the United States, lithium has the largest data set available for any mood stabiliser. Placebo controlled studies show efficacy in both the manic and depressive phases of illness and in the long term prophylaxis. To date there are 12 placebo controlled trials examining the prophylactic value of lithium. When these studies are combined the relapse rate on placebo and lithium is 80% and 35% respectively.²

The study by Bowden et al has undoubtedly had an impact on the use of lithium in the United States.³ It compared the efficacy of valproic acid (semisodium valproate, divalproex), lithium, and placebo as prophylactic treatment in 372 patients over 52 weeks after a manic episode. Valproate was found to be better than lithium in terms of a longer duration of successful prophylaxis and less deterioration in depressive symptoms. However, a recent Cochrane review of this and related valproate studies concludes that the shift of prescribing practice to valproate is not justified by the evidence, which provides equivocal support for the efficacy of valproate.⁴ In contrast, expert consensus guidelines from the United States support the view that either valproate or lithium is the cornerstone choice for both the acute treatment and prevention of mania.⁵ Both are viewed as equivalent and it is suggested that if monotherapy fails a combination of these agents should be used. In the United Kingdom valproate (as the semisodium salt) has recently been licensed for the treatment of manic episodes, but for most clinicians it remains a second choice for long term treatment. However, it may be of particular benefit in the subgroup of patients who present with a mixed state or as rapid cyclers.

Side effects of lithium are a major factor in non-compliance and contribute to its decreased usage in the United States. Most patients who are prescribed lithium experience some adverse effects, though mainly of a minor nature.⁶ However, even within the therapeutic range the impact on thyroid function can be profound. Overt hypothyroidism occurs in 5-10% of patients and 5% develop a goitre. Such effects are related to the dose and duration of therapy. Whether or not lithium results in memory disturbances is unclear, with a few studies reporting an effect but most failing to find any. Surveys show that many patients rightly or wrongly associate lithium with deterioration in their memory.² Significant gain in weight on lithium is often a source of concern for women. Approximately one in four patients prescribed lithium put on weight of 5 kg or more. However, alternatives to lithium have significant side effects for many patients.

Despite declining use, especially in the United States, the evidence base supports the view that lithium should be the first choice prophylactic drug for most patients with bipolar disorder. To date the alternative mood stabilisers have not been as extensively investigated. Valproate or carbamazepine should be

confined to second line use in those who do not respond to lithium, or who have significant and unacceptable side effects due to lithium, and in patients with a history of rapid cycling.

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Confronting the small arms pandemic

Unrestricted access should be viewed as a public health disaster

Physicians throughout the world bear witness to the terrible consequences of small arms. But do we truly understand the impact and the epidemiology of the small arms pandemic, and can we devise effective strategies for prevention as we have for other major public health issues? The capacity for collecting consistent, reliable, and relevant data is limited by various cultural, economic, infrastructural, and logistic factors even in developed countries not at war. Nevertheless, we have some solid data on the size of the problem and indicators suggestive of possible solutions.

The United States, for instance, has over 28 000 deaths a year from small arms—accidents, suicides, and homicides—the highest rate in the developed world.¹ In that country firearms are the leading cause of death among 15-24 year olds, slightly ahead of vehicle crashes, and the third leading cause of death in those aged under 15.² While the US murder rate without guns is roughly equivalent to that of Canada (1.3 times), its murder rate with handguns is 15 times the Canadian rate.³ Countries with similar cultural, economic, and ethnic make up but with different gun possession rates also have widely differing firearm death rates, roughly correlating with the percentage of households with guns.⁴ For example, Britain's firearm death rate is about 0.3 in 100 000 while the US rate is 10.6.⁵ Households with firearms are three times more likely to have murders and five times more likely to have suicides (due to all causes) than similar households without firearms.^{6,7} These data suggest that firearm deaths may be preventable by controlling the supply and possession of guns.

Data from the developing world are less clear, especially in conflict situations. In many post-conflict countries in Central America and Africa only a tiny percentage of guns are registered, estimates of the total in circulation vary widely, and reporting of casualties may be affected by fear of the authorities. Nevertheless, small arms were unarguably the primary cause of death in wars in the 1990s, accounting for about 300 000 deaths a year.⁸ Together with the estimated 200 000 people who die each year from firearms in non-conflict situations these deaths represent about a quarter of the 1.8-2.3 million deaths due to violence in a typical year in the 1990s.^{9,10} The victims are often the youngest and healthiest members of society. Male combatants are the major perpetrators and direct victims of small arms violence, but in many conflicts non-combatants—disproportionately women and children—account for a large proportion of direct casualties and may also suffer the psychological and social burdens of increased domestic violence.

Impacts have also been evaluated in economic terms. Small arms purchases account for perhaps US\$10bn (£6.9bn; €11bn) each year, a relatively small proportion of the roughly \$850bn spent on military forces annually worldwide.¹¹ Yet the economic consequences can be far greater. In Colombia violence primarily related to small arms has been calculated as costing up to 25% of the country's gross domestic product (OV Vieira, Workshop on International Small Arms/Firearms Injury Surveillance and Research, Toronto, 1998).

Unless weapons are removed when hostilities end, casualties may not be substantially reduced. In the

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