The benefit of robust research
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This edition of the *New Zealand Medical Journal* has a focus on trauma. Previously this journal has published articles forecasting that we are now on the brink of having a high-quality trauma care.\(^1\) One benefit of a robust trauma reporting system is the research and audit it produces. An important part of the audit cycle is the review of data with a plan for improvement, then further audit/research in the future with, hopefully, an improved result.

An article by Mair et al\(^2\) reviews dog bite injuries in New Zealand. They have found that the incidence of dog bites are continuing to rise, especially in the vulnerable populations of children under 10, Māori and those with a higher deprivation score. To use the audit cycle it would be wonderful to see a future study reviewing some public health strategy that was put in place following the results of the Mair article, which would hopefully lead to a decrease in rates of dog bites. Mair et al suggest that a comprehensive review of dog control is needed along with a public health prevention strategy.

A similar article with a public health strategy is from the Midland Trauma System. Singh et al\(^3\) reviewed cycle-related injury in the Midland region. They found that cycle-related injuries are rising with increased admission volumes. They feel that the current policy of trying to grow cycle participation is ahead of implementation of safety programmes for cyclists.

Two other articles then focus on the outcomes of trauma for the patients. The first by Czuba et al\(^4\) reviewed 112 patients admitted in the Auckland region with major trauma over an 18-month period. They found most had made a good recovery but there is still a large proportion of patients suffering disability, pain and who are unable to return to paid employment at 12 months. They conclude that we must use our trauma registries to follow patients and monitor long-term outcomes. As suggested by the authors, further studies need to look at a return of normal or modified ADLs and a return to work.

The second article looking at outcomes by Beaton et al\(^5\) comes from the Midland region and is a qualitative study which used a semi-structured interview process to review perceived outcomes following trauma. We now are achieving world-class mortality rates for our major trauma patients, but for all admitted trauma patients what are our outcomes? This paper shows that there are perceived issues occurring for patients, with limited access to psychological services being a prime example. Beaton et al propose that a dedicated trauma service may be able to address some of these issues better than sub specialities which focus on the one injured body system. This may work in the hospitals with an established trauma system such as Waikato, but most other hospitals do not have such an established and resourced system. Good-quality research which shows a benefit for an established trauma service may be useful to push other hospitals to get the funding they require to better staff and resource trauma services in their regions.

The other article of interest is a review of the epidemiology of mass fatality in New Zealand. Wilson and Thomson\(^6\) point out that the 15 March terror attack is the single worst mass shooting event in New Zealand’s history. They however report this quite prematurely, being less than a month down the line with severely injured patients still in hospital, many looking towards a long recovery and no account of the indirectly injured. The Christchurch community and hospital system are still in the process of reviewing the events of that day and the subsequent and ongoing care needs of the patients, their families and the wider community. The editorial from Baddock last month\(^7\) nicely outlined...
the feeling of the whole community. There is still a lot more work ahead as inpatients and outpatients are needed. In particular the mental health stress will be very high for some time for patients, health professionals and the whole community.

The New Zealand trauma system as a whole has made vast improvements in the last few years. We need to continue to report trauma outcomes as these papers have outlined, and then make changes to improve outcomes.

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Nil.

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