

## LIVER

## Size matters: effects of reduced paracetamol pack sizes in England and Wales

Overdosing with paracetamol is a common method of suicide in many countries, and this drug is also responsible for many accidental deaths as well as causing hepatotoxicity. In 1998, legislation was introduced in the UK to reduce pack sizes of paracetamol (to a maximum of 32 tablets in pharmacies and 16 for non-pharmacy sales) in an effort to reduce the number of deaths caused by overdosing.

Some controversy exists, however, as to whether this legislation has made any difference in terms of paracetamol-related deaths and liver transplants. Keith Hawton and colleagues have been involved in research on the problem of self-poisoning with paracetamol for many years. “We decided to do our latest study to examine the long-term impact of the legislation”, he explains. “We obtained data from the UK Office for National Statistics on deaths from paracetamol overdose in which paracetamol had been the only drug consumed (although the overdose could have included



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alcohol), and data from the NHS Blood and Transplant on registrations at liver units and actual transplants related to paracetamol overdose.” The researchers then performed interrupted time series analyses to assess changes in these parameters since the legislation.

The most important finding is an average reduction of 17 deaths in England and Wales from paracetamol poisoning

per quarter since the legislation—which equates to a 43% reduction in deaths. In addition, registrations for liver transplantation because of paracetamol-induced hepatotoxicity have reduced by 61%. Importantly, there is no evidence for a decline in hospital presentations in England for non-fatal overdoses of paracetamol, which means that the findings cannot be explained by fewer paracetamol overdoses in general.

“One recommendation we have made, which was indeed the recommendation we made prior to the legislation, was that the number of tablets in packs of paracetamol should be set at an even lower level (in keeping with the pattern in France and Ireland),” concludes Hawton.

*Isobel Leake*

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