Synthetic cannabinoid use in New Zealand: a brief evaluation of inquiries to the New Zealand National Poisons Centre

Synthetic designer cannabinoid analogues have, until August 2011, been available in New Zealand and sold as legal substitutes for cannabis. They describe a range of chemicals that bind to the cannabinoid receptors CB1 and CB2, mimicking the effects of ∆9-tetrahydrocannabinol, though with greater efficacy. Apart from a number of case reports and case series, little is still known on the toxicology of these analogues, particularly after chronic use.

In the months from October 2010 to October 2011, the New Zealand National Poisons Centre (NPC) received a total of 72 calls related to synthetic cannabinoids. The number of calls per month, represented in Figure 1, includes both human exposure inquiries and requests for general poison information in the absence of actual exposure. The most commonly reported symptoms following exposure to these analogues were, in rank order, tachycardia, vomiting, drowsiness, anxiety and agitation, tight chest, psychosis, hallucinations and chest pain. Less frequently unconsciousness was reported while a seizure was documented on one occasion. This spectrum of clinical effects is consistent with other published case reports and series where tachycardia, for example, has been reported in excess of 50% of presenting patients.

The profile of calls received by the NPC over this time interval (figure 1) provides a window on public concern and human toxicity following exposure to these synthetic cannabinoids. Despite these analogues being legally available in New Zealand for a number of years, increased interest in them only began in October 2010 following national press attention, both in the print and television media. The NPC first received calls late in this month.

Increasing media attention over the successive months, including the Law Commissions Report, released in April, and the discovery of phenazepam as a contaminant in July, correlated with an increasing numbers of calls received.

In August 2011, the Government moved to prohibit all analogues available in New Zealand and subsequent to this there was a dramatic fall in calls to the NPC, with no inquiries for October 2011. Although the interpretation of this profile is limited, it does reflect an outline of public attention on and recreational use of synthetic cannabinoids in New Zealand.
Figure 1. Calls received by the National Poisons Centre on synthetic cannabinoid analogues, from October 2010 to October 2011

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