

Exploring Recreational Nitrous Oxide Consumption Patterns, Attitudes and Perceptions in Aotearoa New Zealand

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Introduction / Issues: Despite the increasing visibility of recreational nitrous oxide (N₂O) use, little qualitative research has explored its consumption patterns, motivations, harms, and perceptions in Aotearoa. Media portrayals often frame N₂O use as inherently dangerous, yet real-world experiences remain under-examined, particularly in the Aotearoa context where regulation is rapidly evolving.

Method / Approach: Semi-structured interviews and focus groups were conducted with 19 participants aged 18–65 across the Wairarapa and Pōneke/Wellington regions. Reflexive thematic analysis was used to inductively generate themes, allowing participants' subjective experiences to shape findings. Both individuals with and without N₂O experience were included to gain a holistic perspective.

Results: Four main themes were generated: (1) The Social Experience of N₂O, highlighting use in peer-driven, social contexts; (2) Cherry on Top: Other Substance Use and N₂O, exploring N₂O consumption alongside other substances to enhance altered states; (3) The Sensory Experience of N₂O Facilitates Change in Preparation and Consumption Patterns, showing how sensory effects influence rituals and harm reduction behaviours; and (4) Negative Media Portrayal and How This Shapes N₂O Perceptions and Stigma, examining the impact of media on stigma, misinformation and public perceptions. Consumption was typically infrequent and low-dose, with reported harms rare and often associated with polydrug use. Peer-led harm reduction practices were common.

Discussions and Conclusions: Findings challenge dominant narratives framing N₂O consumption as inherently harmful. Rather than widespread, high-risk behaviour, participants described deliberate, socially embedded, and harm-reduction-focused practices. Peer networks functioned as primary sources of information and risk mitigation. Stigma driven by sensationalist media coverage was seen to disconnect public discourse from lived realities, potentially undermining effective harm reduction messaging. Overregulation and fear-mongering risk driving use underground, increasing harm by disrupting access to peer-based education and support.

Implications for Practice or Policy: Policy responses must prioritise balanced, evidence-based research and education over prohibition. Integrating consumer voices into harm-reduction strategies can support pragmatic, community-led approaches that more accurately reflect the realities of N₂O use.

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