Intentions to use illicit tobacco and harm perceptions under a hypothetical nicotine reduction policy: a pilot randomised controlled trial of very low nicotine content cigarettes and package insert messages

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Introduction: New Zealand approved a low-nicotine tobacco policy in 2023, but the National-led coalition repealed it before implementation, citing illicit trade concerns despite limited evidence. If reintroduced, research is needed on how people who smoke might respond, including whether they would seek illicit full-strength tobacco.

Methods: We conducted an open-label, three-arm pilot randomised controlled trial in Auckland with 31 adult smokers. Participants were assigned to: (1) smoke a very-low nicotine content (VLNC) cigarette + read VLNC health messages as insert; (2) smoke a usual cigarette + VLNC messages as insert; or (3) smoke a usual cigarette only. Outcomes included feasibility (recruitment of priority groups: ages 18–30, no formal education, mental health concerns, cannabis use, heavy alcohol history), behavioural intentions, harm perceptions (cigarettes, VLNC, e-cigarettes), and willingness to use or pay for VLNC or illicit cigarettes under a hypothetical low-nicotine policy.

Results: Recruitment and randomisation were feasible; 80.6% (n=25) were from priority groups. Illicit tobacco intent varied (G1 median 3 [IQR 0.5–4]; G2 3.5 [0.25–4]; G3 1 [0–3.75]). Median willingness to pay for illicit packs was NZD20 (IQR 20–36.3; mean 26.5). Mean travel willingness was 32.5 minutes (median 20; IQR 10–45). More in G1 (6/11) and G2 (8/10) rated cigarettes highly harmful Vs G3 (5/10). VLNC harm perceptions were mixed (Group 1: 5/11; Group 2: 4/10; Group 3: 6/10 reporting moderate harm). E-cigarettes were more often seen as highly harmful in G1 (9/11) than in G2 (4/10) or G3 (3/10).

Conclusions: Risks of illicit tobacco use under denicotinisation could be mitigated through clear harm messaging, tailored cessation support, and equity-focused strategies.

Implications on communities, practice, policy and/or First Nations communities: The research highlights the importance of incorporating equity into assessments of the illicit tobacco trade and use to address health inequities among communities, including Māori.

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