Association of anxiety and depression symptoms with perceived health risk of nicotine vaping products

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Introduction: Health of people with mental health conditions is a priority of Australia's National Preventive Health Strategy, with higher smoking prevalence (20.2%) than the wider population (9.9%). As 21% of Australians report a mental health condition in the past year, this suggests high risk of tobacco-related illnesses and need for cessation support. This study aimed to explore the association of anxiety and depression with perceived health risk of prescription versus non-prescription access nicotine vaping products (NVP) for smoking cessation.

Methods: South Australians aged ≥15 years completed the SA Health Population Health Survey in 2022, which recorded smoking and vaping status, PHQ-4 anxiety and depression symptoms, risk of nicotine addiction from NVPs, and perceived health risk of prescription access versus non-prescription access NVPs for smoking cessation. Weighted linear regression models were fitted for influence of demographics, general addiction risk perception and anxiety and depression symptoms on perceived health risk of prescription versus non-prescription access NVPs for smoking cessation.

Results: General concern about nicotine addiction risk of NVP-facilitated smoking cessation was related to greater heath concerns of NVP use, irrespective of device source. Anxiety and depression did not directly influence perceived health risks of NVP-facilitated smoking cessation, however interaction of vaping and depression symptoms was associated with higher perceived health risk ratings for prescription sourced NVPs (b=0.700, 95%CI=0.212, 1.118).

Conclusion: Findings suggest that people with depression who vape might be less likely to engage with the prescription access system for quitting, highlighting the importance of integrating mental health considerations into this system.

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