

Knowledge of 2-1-1 PrEP and lower HIV prevention-effective adherence among non-daily PrEP users: a cross-sectional study of gay, bisexual and other men who have sex with men in Australia 2025

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Background:

Event-driven PrEP (ED-PrEP) is an effective method of preventing HIV when using the 2-1-1 method for cisgender gay, bisexual and other men who have sex with men (GBMSM). Health promotion messaging in Australia in recent years has incorporated ED-PrEP into PrEP campaigns. Yet, it is currently unknown whether ED-PrEP users are effectively using the 2-1-1 method.

Method:

Survey data were collected in 2025 among GBMSM and non-binary people in Australia. ED-PrEP awareness and '2-1-1' knowledge were assessed. PrEP users were assessed for prevention-effective adherence through asking whether they had condomless sex in the last six months while not on PrEP or when they missed doses. Analyses were restricted to cisgender men not living with HIV. Factors associated with knowledge were assessed with multivariable logistic regression.

Results:

Among 1,888 participants, 673 (35.6%) were daily PrEP users, 430 (22.8%) were ED-PrEP users, 60 (3.1%) took PrEP another way and 725 (38.4%) were not taking PrEP. 1,732 (91.7%) had heard of ED-PrEP. Among the 1,732 ED-PrEP aware participants, 925 (53.4%) correctly recalled all components of the 2-1-1 method, and knowledge was higher among ED-PrEP users (84.9%) compared to daily PrEP users (53.5%) or non-PrEP users (21.8%). A higher proportion of ED-PrEP users reported having condomless sex without being protected by PrEP compared to daily PrEP users (43.9% vs 17.9%). Correct knowledge was associated with university education (aOR=1.56, 95%CI=1.56-1.06), higher income (\geq AUD\$80,000; aOR=1.63, 95%CI=1.03-2.58), lifetime PrEP use (aOR=8.50, 95%CI=5.50-13.1), and having condomless sex with casual partners in the last six months (aOR=1.74, 95%CI=1.14-2.64).

Conclusion:

While ED-PrEP awareness was high, knowledge of the 2-1-1 method was suboptimal. There were gaps in overall ED-PrEP use and prevention-effective adherence to ED-PrEP compared to daily PrEP. Addressing these gaps should be a priority in community-led health promotion and PrEP implementation.

Disclosure of Interest Statement

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