

# VARIATION IN DATING APP USE AND SEXUAL BEHAVIOUR BETWEEN COVID-19 RESTRICTION PERIODS IN VICTORIA, AUSTRALIA DURING 2020: CROSS SECTIONAL ANALYSIS OF ONLINE SURVEY RESPONSES

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**Background:** During 2020, Victoria (Australia) experienced two waves of COVID-19 infection. with Wave 1 affecting mainly returned travellers and Wave 2 characterised by widespread community transmission and multiple outbreaks. Both resulted in community lockdowns. We investigated the impact of these restrictions on the sexual behaviour of Victorians during 2020.

**Methods:** We conducted a repeated online survey investigating the sexual health of Victorians at four timepoints during lockdowns and easing of restrictions. Participants aged 18+ were recruited via social media and asked to report on their sexual behaviour over the past four weeks. Multivariable logistic regression was used to investigate variation in sexual behaviour between surveys.

**Results:** 1828 surveys [Survey1 (Lockdown1) n=485, Survey2 (ReducedRestrictions1) n=521, Survey3 (Lockdown2) n=606, Survey4 (ReducedRestrictions2) n=216] were completed by Victorians; 72% identified as female, 69% were aged 18-29 years, 90% lived in metropolitan areas. Compared with Lockdown1, sexual activity in the last 4 weeks was reported most frequently during ReducedRestrictions1 (70.2%; AOR=1.7; 95%CI 1.3-2.2) and least during Lockdown2 (54.9%; AOR 0.9, 95%CI 0.8-1.0). Across all timepoints, the most common sexual partners were regular (81.5%), followed by occasional (13.6%) and casual (10.8%). Dating app use across all timepoints ranged from 25.4%-30.2%. Compared with Lockdown1, dating app-use for face-to-face activities was higher during periods of reduced restrictions (ReducedRestrictions1; AOR 4.4; 95%CI 3.0-6.4; ReducedRestrictions2; AOR=4.2; 95%CI 2.2-7.7) and lowest during Lockdown2 (AOR=0.7; 95%CI 0.7-0.9). Dating app-use for distanced activities (e.g. virtual dates) was highest (48.8%; AOR=3.2; 95%CI 1.3-7.5) during Lockdown1. More frequent solo sex-toy use and solo masturbation compared with pre-COVID-19 was more likely to be reported during Lockdown2 (19.9%; AOR=1.5; 95%CI 1.0-2.1) and (34.3%; AOR=1.5, 95%CI 1.1-2.0) respectively.

**Conclusion:** Lockdowns clearly impacted sexual behaviours. Availability of sexual and reproductive health products and services, regardless of restrictions, are therefore vital.

**Disclosure of interest statement:** JSH is supported by a National Health and Medical Research Council Fellowship (1136117). The other authors report no competing interests.