



Impact of COVID-19 restriction on weight, physical activity, diet and psychological distress on people with polycystic ovary syndrome

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People with polycystic ovary syndrome (PCOS) have higher weight gain and psychological distress compared to those without PCOS⁽¹⁾. While COVID-19 restrictions led to population level adverse changes in lifestyle, weight gain and psychological distress⁽²⁾, their impact on people with PCOS is unclear. The aim of this study was to investigate the impact the 2020 COVID-19 restrictions had on weight, physical activity, diet and psychological distress for Australians with PCOS. Australian reproductive-aged women participated in an online survey with assessment of weight, physical activity, diet and psychological distress. Multivariable logistic and linear regression were used to examine associations between PCOS and residential location with health outcomes. On adjusted analysis, those with PCOS gained more weight (2.9%; 95% CI; 0.027–3.020; $p = 0.046$), were less likely to meet physical activity recommendations (OR 0.50; 95% CI; 0.32–0.79; $p = 0.003$) and had higher sugar-sweetened beverage intake (OR 1.74; 95% CI 1.10–2.75; $p = 0.019$) but no differences in psychological distress compared to women without PCOS. People with PCOS were more adversely affected by COVID-19 restrictions, which may worsen their clinical features and disease burden. Additional health care support may be necessary to assist people with PCOS to meet dietary and physical activity recommendations.

Keywords: polycystic ovary syndrome; COVID-19; weight; physical activity

Ethics Declaration

Yes

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References

1. Lim SS, Hutchison SK, Van Ryswyk E *et al.* (2019) *Cochrane Database Syst Rev* 3.
2. Stanton R, To QG, Khalesi S *et al.* (2020) *Int J Environ Res Public Health* 17, 4065.