



## Understanding barriers and facilitators to diet and physical activity modification in people with polycystic ovary syndrome: a mixed method systematic review

M. McGowan<sup>1</sup>, R. Garad<sup>1</sup>, G. Wadhvani<sup>2</sup>, S. Torkel<sup>1</sup>, V. Rao<sup>3</sup>, A. Maunder<sup>3</sup>, E. Osei-Safo<sup>1</sup>, S. Cowan<sup>1</sup> and L.J. Moran<sup>1</sup>

<sup>1</sup>Monash Centre Health Research and Implementation (MCHRI), Clayton 3168, Australia

<sup>2</sup>Faculty of Health, Deakin University, Burwood VIC 3125, Australia

<sup>3</sup>NICM Health Research Institute, Western Sydney University, Westmead, New South Wales, 2145, Australia

Polycystic Ovary Syndrome PCOS is an endocrine disorder affecting 8 to 13% of reproductive aged women<sup>(1)</sup>. Dietary and physical activity changes are the first-line therapy to assist with symptom and weight management and to reduce the risk of reproductive, metabolic and psychological comorbidities<sup>(2)</sup>. However, women with PCOS have a higher weight, experience weight gain, and a higher prevalence of living in a larger body. Health care professionals (HCPs) play a crucial role in delivering diet and physical activity advice for people with PCOS. Thus, the aim of this systematic review is to understand the barriers, facilitators, experiences, and perceptions of engagement and compliance with diet and physical activity modifications in people with PCOS and in HCPs providing or referring people with PCOS to diet and physical activity modifications. A mixed-method systematic review was conducted with quantitative studies narratively synthesised and all studies thematically analysed. There were 68 eligible papers, including n = 59 (n = 5198) people with PCOS and n = 17 (n = 2,622) HCPs. Several themes were identified as impacting people with PCOS' ability to make diet and physical activity changes. HCP education on PCOS management through diet and physical activity was viewed by HCPs and people with PCOS to be inadequate, further impacting the quality of care and health outcomes. Dietary and physical activity advice delivered by a multidisciplinary team, including dietitians, was identified as a key component for change. Both people with PCOS and HCPs agreed that there was a need for individualised and PCOS-specific diet and physical activity advice. However, HCPs viewed that there was limited evidence supporting these recommendations and a lack of time to deliver this care. Weight stigma was identified as impacting both those in larger and smaller bodies with PCOS, reducing the quality of care and affecting self-perception and mental health. People with PCOS perceived that diet and physical activity are overly focused on weight loss and fertility, independent of their own personal motivations and goals. Systemic changes, including receiving diet and physical activity advice that meet the individual's needs, are necessary for leading to long-term sustainable changes and improvements in health outcomes. A multidisciplinary team approach and an overhaul of HCPs' perceptions and mentality of weight and weight-centric care for those with PCOS are essential in delivering effective diet and physical activity advice.

**Keywords:** polycystic ovary syndrome; weight; physical activity; diet

### Ethics Declaration

No

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### References

1. Lim SS, Hutchison SK, Van Ryswyk E *et al.* (2019) *Cochrane Database Syst Rev* 3.
2. Teede HJ, Misso ML, Boyle JA *et al.* (2018) *Med J Aust* **209**, S3–s8.