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Behavioural interventions to treat and prevent overweight and obesity among women of childbearing age: a scoping review

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Women of childbearing age are at high risk of weight gain with overweight and obesity rates as much as 33.3% and 58.1% for 18–24-year-old and 35–44-year-old Australian women, respectively. Therefore, this scoping review aimed to examine the extent and range of research undertaken to evaluate behavioural interventions to treat and prevent overweight and obesity among women of childbearing age.

Eight electronic databases were searched for randomised controlled trials (RCT) or systematic reviews of RCTs published in English until 31st January 2018. Eligible studies included women of childbearing age (aged 15–44 years), evaluated interventions with a primary aim of promoting behaviour change related to diet, physical activity or sedentary behaviour to achieve weight gain prevention, weight loss or weight maintenance, and reported weight-related outcomes. Studies were assessed for inclusion and data extracted by two independent reviewers.

Of the 8543 articles identified, 88 met the inclusion criteria (85 RCTs and 3 systematic reviews). Preliminary findings suggest, the largest number of studies were conducted in the USA ($n = 16$), and Australia ($n = 14$). Studies were published from 1998 to 2018, with most published in 2014 ($n = 14$). Most studies were pregnancy-related ($n = 79$), recruiting women during the antenatal ($n = 61$) or postpartum period ($n = 18$). The interventions primarily focused on preventing excessive gestational weight gain ($n = 47$), postpartum weight loss ($n = 18$) or a combination of the two ($n = 14$). Of the remaining nine studies, five focused on weight gain prevention and four weight loss in women who were not pregnant or postpartum.

This scoping review identified a large and increasing volume of research undertaken to address the treatment and prevention of overweight and obesity among women of childbearing age over time. It highlights, however, that little research is being undertaken with women pre-conception, to help them reach and maintain a healthy weight prior to pregnancy.

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Be Healthe for your Heart Study Protocol: Preventing cardiovascular disease among women with a history of pre-eclampsia

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For women with a history of pre-eclampsia, the odds of cardiovascular disease (CVD) related morbidity later in life are doubled, and mortality almost tripled compared to other women. Clinical practice guidelines recommend that women with a history of pre-eclampsia have regular CVD risk factor assessment (e.g., blood pressure, serum lipids), and receive counselling about maintaining a healthy weight, healthy eating and adequate physical activity. However, there is currently a lack of health services or programs that address CVD prevention in this group. This project aims to address this gap by creating an eHealth intervention aimed at achieving a healthy lifestyle post pre-eclampsia for CVD prevention. This abstract describes the protocol for a feasibility study. In the 3-month randomised control trial, women, aged 18–45 years, with a recent (≤ 4 years) pregnancy complicated by pre-eclampsia will be randomly allocated to Be Healthe for your Heart or a control group. Be Healthe for your Heart supports participants to make changes to key lifestyle behaviours associated with CVD risk, using evidence-based behaviour change techniques (e.g. self-monitoring, goal setting). Be Healthefor your Heart program resources are tailored to women of childbearing age and delivered via website and email newsletters. Outcomes will be measured at baseline and 3-months, including 10-year cardiovascular risk score, CVD risk markers (BMI, waist circumference, blood pressure, plasma lipids), lifestyle risk factors (dietary intake, physical activity, stress) and general health and well-being. Intervention acceptability will be evaluated using objective usage data, and intervention participant feedback via a process evaluation questionnaire. This eHealth CVD prevention program aims to address the unmet needs of a high-risk group of women. Findings of the feasibility study will inform future efficacy trials, and translation of CVD prevention services for women with a history of pre-eclampsia.

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