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A primary care-led weight management intervention for adults with diabetes and obesity: qualitative results from a randomised controlled trial of total meal replacement (DiRECT)

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The UK Diabetes Remission Clinical Trial (DiRECT) demonstrated that a weight loss strategy consisting of: (1) 12 weeks total diet replacement; (2) 4 to 6 weeks food reintroduction; and (3) a longer period of weight loss maintenance, is effective in reducing body weight, improving glycaemic control, and facilitating type 2 diabetes remission[(1)]. The DiRECT protocol is now funded for type 2 diabetes management in the UK[(2)]. Type 2 diabetes is a growing problem in Aotearoa New Zealand[(3)], but the acceptability and feasibility of the DiRECT intervention in our diverse sociocultural context remains unclear. We conducted a randomised controlled trial of DiRECT within a Māori primary healthcare provider in Ōtepoti Dunedin. Forty participants with diabetes and obesity who wanted to lose weight were randomised to receive the DiRECT intervention or usual care. Both groups received the same level of individualised support from an in-house dietitian. We conducted individual, semi-structured interviews with 26 participants after 3 months. Questions explored perspectives and experiences, barriers and facilitators, and future expectations regarding dietary habits and weight loss. Interview transcripts were analysed using inductive thematic analysis[(4)]. Participants struggled with weight management prior to the study. Advice from doctors, friends and whānau, and the internet was prolific, yet often impractical or unclear. The DiRECT intervention was mentally and physically challenging, but rapid weight loss and an improved sense of health and wellbeing enhanced motivation. Participants identified strategies which supported adaptation and adherence. Food reintroduction beyond 3 months was an exciting milestone, but the risk of reverting to previous habits was daunting. Participants feared weight regain and felt ongoing guidance was required for a successful transition to a real-food diet. Conversely, usual care participants described a gradual and ongoing process of health-focused dietary modification. While this approach did support behaviour change, a perceived slow rate of weight loss was often frustrating. Across both interventions, self-motivation and whānau support contributed to perceived success, whereas busy lifestyles, social and cultural norms, and financial concerns presented additional challenges. The role of individualised and non-judgemental dietetic support was a central theme across both groups. In addition to nutrition education and practical guidance, the in-house dietitian offered encouragement and promoted self-acceptance among participants. At 3 months, positive shifts in perspectives surrounding food, health, and sense of self were identified, which participants largely attributed to the level of nutrition support received: a new experience for many. The DiRECT protocol appears an acceptable weight loss approach among New Zealanders with diabetes and obesity, but tailored dietetic and behavioural support must be prioritised in its implementation. Future research should examine the broader health benefits associated with providing greater dietetic support and the cost-effectiveness of employing nutrition-trained health professionals within the primary care workforce.

Keywords: type 2 diabetes; weight loss; total diet replacement; qualitative analysis

Ethics Declaration

Yes

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