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Obesity revisited, yet again

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Two papers in this issue of the *NZMJ* serve as reminders of the many complexities of managing the real and perceived problems of excess body fatness, and that an overarching strategy, including public health initiatives, is essential for the management of this global epidemic.

In October 2013, the *BMJ* published a systematic review and meta-analysis of the 11 randomised controlled trials of bariatric surgery with at least 6 months of follow-up, versus non-surgical treatment for obesity.[1] Those allocated to surgery lost more body weight (mean difference -25 [95% confidence interval -31, -21] kg) and had a higher remission rates of type 2 diabetes (relative risk 22.1 [3.2, 154.3]) and the metabolic syndrome (relative risk 2.4 [1.6, 3.6]) after a maximum of 2 years, compared with those receiving nonsurgical treatment.

Information regarding long-term outcomes is not available from randomised controlled trials and can only be derived from case series. Variable findings regarding remission and relapse rates for type 2 diabetes mellitus (T2DM) have emerged from such reports[2–4] so the findings of Lam and colleagues, in this issue of the *Journal*,[5] are of considerable interest. They report on their experience of 126 patients who had been followed for at least 4 years following gastric bypass surgery (GBP) at Waitemata District Health Board (WDHB), one of the few centres in New Zealand offering publically funded bariatric surgery.

After about 5 years average weight loss was around 45 kg having achieved a postoperative nadir around 55kg. Twenty-nine of the 33 subjects with preoperative T2DM fulfilled the criteria for complete remission at some stage postoperatively. At a mean follow-up of 63 months, 59% were regarded as *full remitters*. Short duration of diabetes and not being treated with insulin were the only predictors of full remission.

While the mechanism for the improvement in glucose metabolism is yet to be fully understood,[6] these results provide some reassurance that in the context of routine publically funded care, bariatric surgery offers clinically meaningful outcomes for these patients who fulfil the currently agreed stringent criteria for surgery.

Given the absence of pharmacotherapy of proven benefit,[7] lifestyle modification is the only other therapeutic option. While some individuals do manage to achieve and maintain weight loss and some dietary patterns and weight loss programmes appear to confer special benefit, the vast majority of patients tend to regain some or all of the weight lost after a few years.

Furthermore weight loss regimes or dietary patterns (e.g. the high fat, low carbohydrate diet) which have been shown in the short-term to promote more weight loss than other approaches, generally appear to have lost their advantage by 12 to 18 months after initiation.[8]

Against this background, the findings of Leong and colleagues[9] in the second *NZMJ* paper are of relevance. Nearly 40% of women participating in a cross-sectional mail survey reported that they were trying to control their weight—and among those who were not, almost 70% were trying to prevent weight gain. Fewer than half reported use of appropriate measures such as reduction of portion sizes and cutting down of fats and sugars.

However rather alarmingly nearly a quarter said they were using exercise in what was described as a compulsive or driven way and 14% were smoking as a method of assisting weight control. Smaller numbers were using intermittent fasting, laxatives, diuretics, self-induced vomiting and drugs.

Equally concerning findings were that nearly one-fifth of women who were underweight (BMI<18.5) and 9% of those in the lower healthy age range (BMI 18.5–<22) were attempting weight loss whereas 10–14% of those who were overweight or obese were not. Clearly these findings do not provide encouragement that 'dieting' as currently practised by women in New Zealand is an appropriate approach to weight management in the population at large.

Among adults aged 15 years and over, 27.7% of women and 27.8% of men are classified as obese[10] and excess body fatness is a major driver of rates of T2DM, an important risk determinant for cardiovascular disease, and some of our commonest cancers, colorectal cancer and postmenopausal breast cancer. Yet we still have no overarching national strategy in New Zealand for dealing with the epidemic proportions of obesity and its comorbidities.

Appropriate services for advising and supporting those appreciably overweight, especially those who have already developed comorbidities such as prediabetes and T2DM, are woefully inadequate or absent in some parts of the country. Indeed, national criteria for bariatric surgery need to be adopted and implemented by all District Health Boards.

Most important of all, we need a raft of public health measures to alter an environment which promotes unhealthy weight gain. Re-establishing a programme supporting healthy eating in schools may be a good place to start.

Competing interests: Nil.

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