

An obesity clinic model

Patricia Munnelly* and S. Feehan

Department of Nutrition and Dietetics, Adelaide and Meath Hospitals, Dublin, incorporating the National Children's Hospital, Tallaght, Dublin 24, Republic of Ireland

The high incidence of obesity in Ireland is of growing concern. The Irish Universities Nutrition Alliance North/South Food Consumption Survey found that 18 % of the population are obese and 39 % overweight. Obesity and overweight increase the risk of developing CHD, type 2 diabetes, hypertension and some forms of cancer. It is well accepted that the best treatment for obesity is a combination of energy intake reduction and regular exercise. Previously, dietary compliance has been shown to improve when monitored on a regular basis. The lengthy delay between clinic visits to the dietitian has been reported by those who failed to lose weight to be the main reason for poor compliance. A weight monitoring clinic was designed to offer those requiring regular support and encouragement the opportunity to monitor their weights on a more regular basis, while waiting for their return visit to the dietitian in the Outpatient Departments. As resources were limited, an efficient use of time was essential. The clinic design was: 1 h/week; eight to fourteen appointments per clinic; weekly or fortnightly visit; return patients only. The clinic was started on a trial basis in June 1999, and was evaluated in December 2000. Referrals were only taken from other dietitians, and each participant was informed in advance of the necessity of having a return Outpatient Department appointment for full dietary review. Forty-eight participants attended more than three times up to and including December 2000 (seven males, forty-one females). The number of clinic visits ranged from three to twenty-eight. Mean weight at start of clinic was 92.94 kg. Of the group attending, 67 % (thirty-two) successfully lost weight and maintained this weight loss. This ranged from 0.1 kg to 23.5 kg. While in total 31 % (fifteen) of attendees had gained weight at December 2000, all attendees, including this fifteen, had lost weight at some point during the clinic. Self-reported reasons given for weight regain included: (1) non-attendance at weight clinic (40 %); (2) Christmas or holidays (13 %); (3) stress related to family, work (13 %); (4) ill-health or medication (13 %). The remaining 20 % reported no reason. Other findings included better compliance with diet and improved overall balance. There was an overall improvement in other dietary-related problems, e.g. reduced cholesterol, improved glycaemic control, reduced blood pressure. The participants attending the clinic reported decreased clothes size and improved self-image and confidence. They were more enthusiastic about dietary compliance, and all attendees expressed their satisfaction with the clinic and the service.

Obesity: Dietary compliance: Weight monitoring clinic

The high incidence of obesity in Ireland is of growing concern. The Irish Universities Nutrition Alliance (2001) North/South food consumption survey found that 18 % of the population were obese and 39 % overweight. Obesity has important well-documented negative health consequences. Those individuals classified as obese are at greater risk of developing CHD, hyperlipidaemia, type 2 diabetes (Wannamethee & Shaper, 1999), hypertension and some forms of cancer (Ford, 1999), resulting in increased morbidity and mortality. Diet is of paramount importance in

the management of obesity and its associated complications. It is well accepted that a combination of dietary modification and increased exercise is the most effective way to promote weight loss. Dietary compliance has been shown to improve when monitored on a regular basis (Uusitupa *et al.* 2000). Whilst it is essential that obese individuals should be regularly assessed and advised by a dietitian, with limited hospital resources and lengthy waiting lists this approach is not always possible. Due to the length of time between consults and the lack of professional advice and support,

*Corresponding author: Patricia Munnelly, fax +353 1 4144837, email patricia.munnelly@amnch.ie

many obese clients become disheartened, fail to comply with dietary advice and, as a result, do not reach their desired weight. Having identified the need for a more flexible service for overweight and obese patients, yet working within current resource limitations, the Department of Nutrition and Dietetics established a weekly weight check clinic in June 1999. This weight clinic was designed to offer those requiring regular support and encouragement the opportunity to have their weight monitored on a more regular basis by a dietitian.

Format of weight check clinic

As resources were limited, an efficient use of time was essential. The proposed clinic was scheduled for 1 h/week, plus administration time. Up to fourteen patient places were offered per clinic, giving patients the opportunity to attend weekly, fortnightly or monthly.

Referral criteria to the weight clinic

Only clients who had already been seen by the dietitian, either as an inpatient or outpatient, for full dietary assessment and education and were awaiting a review appointment with the dietitian in the Outpatient Department were facilitated in this clinic.

Patient data collection

For each patient, data on previous weights before attendance were documented. At each weight check data including morale, activity level and any reported changes in clothes size or body shape were recorded on individual flow sheets. Recent blood results were noted.

Clinic attendance

In the 18-month period commencing June 1999, a total of seventy-one clients were referred to the service. Forty-eight (68 %) attended a minimum of three times (seven male, forty-one female). The range of clinic attendances per person varied from three to twenty-eight visits. On the first visit, the average weight of clients was 92.94 (range 63.6–170) kg.

Results

Of the patients, 67 % successfully lost weight, 2 % had no weight change and 31 % gained weight. Table 1 indicates the number of patients and the extent of the weight change (either loss or gain) for all forty-eight attendees.

Discussion

Thirty-two (67 %) of those patients attending the clinic had successfully lost weight and maintained this weight loss at December 2000. Thirteen (27 %) of the total group attending lost 0.1–2.5 kg, while a further eleven (23 %) lost between 2.5 kg and 5.0 kg, eight (16.8 %) of the total group lost between 5 kg and 23.5 kg.

Table 1. Weight change for forty-eight attendees as recorded from first visit to the weight clinic to last visit at December 2000

Weight loss (kg)	Percentage of attendees	<i>n</i>	Weight gain (kg)	Percentage of attendees	<i>n</i>
0.1–2.5	27	13	0	2	1
2.5–5	23	11	0.1–0.5	16.7	8
5.0–10	8.4	4	0.5–2.0	8.3	4
> 10	8.4	4	2.0–3.5	6.2	3

While fifteen patients gained weight, all attendees, including these fifteen patients, had lost weight at some point during their attendance at the clinic. The weight gain by 50 % of this group was only 0.1–0.5 kg. Self-reported causes for this weight gain included: irregular attendances at the weight clinic (40 %); Christmas and holiday overeating (13 %); family or work stress (13 %); ill health or medication, such as steroids and oral hypoglycaemic agents (13 %); no apparent reason (20 %). Whilst one patient gained 3.5 kg, overall she had achieved a weight loss of 11.8 kg over the 2-year period since referral to the Nutrition and Dietetics service.

Other findings, as reported by the Outpatient Department dietitian on the patient's first return visit after starting the weight clinic, included better compliance with dietary guidelines and improved overall nutritional balance. There was an overall improvement in other dietary-related problems, e.g. reduced cholesterol, improved glycaemic control or reduced blood pressure. Many patients reported a decrease in clothes size, leading to improved self-image and self-esteem. The feedback received from patients was very positive. This overall improvement was accompanied by an obvious increase in their enthusiasm and motivation towards losing weight. All patients attending the weight clinic expressed their satisfaction with the service.

Conclusion

The clinic was a successful use of time and resources. Regular weight monitoring improved compliance to weight-reducing dietary advice. For many patients this approach resulted in weight loss, and for the majority led to improved self-esteem and morale.

References

- Ford ES (1999) Body mass index and colon cancer in a national sample of adult US men and women. *American Journal of Epidemiology* **150**, 390–398.
- Irish Universities Nutrition Alliance (2001) *Irish Universities Nutrition Alliance North/South Food Consumption Survey*. Dublin: Food Safety Promotion Board.
- Uusitupa M, Louheranta A, Lindstrom J, Valle T, Sundvall J & Tuomilehto J (2000) The Finnish diabetes prevention study. *British Journal of Nutrition* **83**, Suppl. 1, S137–S142.
- Wannamethee SG & Shaper AG (1999) Weight change and duration of overweight and obesity in the incidence of type 2 diabetes. *Diabetes Care* **22**, 1266–1272.