

Applying economic incentives to increase the effectiveness of an outpatient weight loss program (TRIO) - A randomized controlled trial*

Summary by Teresa Nah

The prevalence of overweight and obesity has more than doubled over the past three decades, leading to rising rates of non-communicable diseases, such as diabetes. The paper being summarised investigates whether adding an economics-based rewards programme to an existing evidence-based weight loss programme increases weight loss and weight loss maintenance.

A total of 161 overweight and obese participants, aged 21 to 65 years, were recruited between October 2012 and October 2014 for the study. The participants were randomly allocated to the control and reward groups in a ratio of 1:2. All the participants were asked to pay a sum of \$234 for the participation in the programme. However, those who were allocated to the reward group needed to pay an additional \$165 in order to have access to the reward scheme. They were also asked to choose either to have a guaranteed cash payment which would be paid out when the goals were met or a lottery reward which would enable them to have a 1 in 10 chance to win 10 times the reward.

Participant weight loss was assessed at the 4th, 8th and 12th months of the programme. The participants earned \$20 if they achieved weight loss of at least 1kg during the weekly weighing, from week 1 to week 4, and monthly weighing from

month 3 to month 8. They earned an additional \$220 if their pedometers reached 10,000 steps per day on at least 20 days of the calendar month. Participants who achieved at least 5% weight loss at month 4 received a bonus payment of \$100 and participants who achieved at least 8% weight loss at month 8 receives a final bonus payment of \$200.

The findings reveal that the average weight loss was more than double in the reward group compared to the control group during the assessed period at the 4th (3.4kg vs 1.4kg), 8th (3.3kg vs 1.8kg) and 12th (2.3kg vs 0.8kg) months. The study showed that more than three times the number of participants in the reward group (40%) had achieved 5% or more weight loss at the 4th month when compared to the participants in the control group (12%). Generally, 42% of the participants earned more than the deposit, with the participants in the reward group earning an average of \$225.

The study demonstrates that an economics-based rewards program coupled with an evidence based weight loss programme can improve weight loss and weight loss maintenance.

* E.A. Finkelstein et al. (2017) Applying economic incentives to increase effectiveness of an outpatient weight loss program (TRIO)- A randomized controlled trial. *Social Science and Medicine* 185, 63-70