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# Feasibility of utilising an all-volunteer workforce as a disruptive innovation for the US obesity epidemic



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## KEYWORDS

Obesity;  
Weight control  
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## Summary

**Objectives:** As the prevalence of obesity in US adults continues to increase, addressing weight control will require an effective, lower-cost intervention. A model for delivering free peer-to-peer counselling has the potential to create a paradigm shift in the way weight and other chronic illnesses are addressed in the US. The objective of this study is to understand the potential for utilising successful peer volunteers as counsellors in weight control programmes and as a possible intervention strategy to address the global obesity epidemic in a cost-effective manner.

**Study design:** This cross-sectional study surveyed a nationwide panel of US adults ( $n = 806$ ) in 2010.

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*Methods:* We created survey items to identify participant interest in three specific types of weight control programmes: a free programme led by successful peers, a paid programme led by successful peers and a programme led by trained paid professionals. Statistical analysis was conducted in 2011. Logistic regression was used to adjust for the effect of potential confounders on participant interest in different weight control programmes and willingness to volunteer.

*Results:* More than three times as many subjects (27.4% vs. 8.3%) were interested in the free peer-led programme versus the expert-led paid option. Of participants who had ever had successful weight loss, 15% were interested in volunteering to help others lose weight.

*Conclusions:* Individuals appear to be willing to both attend and conduct peer volunteer-led weight control groups. Further research is necessary to develop and test interventions to assess the effectiveness of such interventions.

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## Introduction

If current trends continue, the prevalence of obesity in US adults will rise from 32% in 2008 to 50% in 2030 [1]. Although it would be preferable to develop more effective weight control interventions, identifying a lower-cost intervention that is of similar efficacy has the potential to be a disruptive innovation in health care [2]. Given that the majority of US adults are overweight or obese [3], a model for delivering free peer-to-peer counselling interventions has the potential to create a paradigm shift in the way weight and other chronic illnesses are addressed in the US.

Programme cost remains an important barrier to participating in weight control programmes. Although counselling interventions are effective and recommended by the United States Preventive Services Task Force (USPSTF) [4], physicians are often unable to provide such counselling even if covered by insurers, because physicians lack the time, training, and supportive infrastructure [5–8]. Further, commercially available weight control programmes are associated with high costs, high attrition rates, and a high probability of weight regain [9]. Additionally, costs are a barrier to both physician referral to external weight control programmes as well as patient participation. Krist and colleagues, for example, observed that when a health behaviour counselling programme that was previously free to patients began requiring patients to pay, physician referrals decreased by 97% and patient interest in being referred decreased by 62% [10].

Peer volunteers may represent an untapped workforce for conducting weight control interventions. A strong positive link between peer support and weight loss has been demonstrated in

traditional [11–16] as well as online [17–20] weight loss programmes. Paid experts from varying professional backgrounds (e.g., nutritionists, dietitians, cooperative extension workers, psychologists) have previously been trained to deliver weight control interventions and have all demonstrated successful outcomes [21,22]. In contrast to expert-led interventions, Weight Watchers is led by successful peers, yet these persons are still paid [9]. While peer volunteers have not yet been trained to deliver weight control interventions, this source of support has been utilised extensively in Alcoholics Anonymous (AA), and has been found to be equally effective when compared to doctoral-level counsellors in the NIH-funded MATCH [23,24]. Developing an effective peer volunteer-led weight control programme could be a disruptive innovation, a term used in the business literature defined as one that is open to a whole new population because it is less expensive and more readily available [25].

We conducted this study to understand the potential for utilising successful peer volunteers as counsellors in weight control programmes and as a possible intervention strategy to address the global obesity epidemic in a cost-effective manner.

## Methods

This cross-sectional study surveyed a nationwide panel of US adults (Knowledge Networks, Inc.) in 2010. Details about the panel's nationally representative sampling approach and recruitment process are available elsewhere [26]. In brief, panel members are recruited using random digit dialling, sampled from the entire US population. Potential panel members are offered free Internet access and a web appliance (e.g., WebTV) in addition to

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