Reviewer's report

Title: Body mass index, physical activity, and dietary behaviors among members of an urban community fitness center: A questionnaire survey

Version: Date: 22 March 2007

Reviewer: Antronette (Toni) Yancey

Reviewer's report:

General
Generally well-written manuscript with several strengths, including examination of weight-related lifestyle in context of removal of one major access barrier (safe and adequate facilities) and use of passive consent to increase representativeness of sample (decrease likelihood of inadvertent non-participation).

Major Compulsory Revisions
1. Missed opportunity to link environmental (economic, physical, organizational, sociocultural) to individual-level correlates:
   a. YMCA utilization related to PA level?
   b. Proximity of home or work residence related to PA level?
   c. What % of sample received free/reduced price memberships?
   d. How well did YMCA pay status correlate with self-reported SES measures, i.e. income, educational level?

2. Any observational (e.g., YMCA environmental audit) or other objective data (e.g., accelerometry on sub-sample) to corroborate self-reported PA? Perhaps one reason investigators failed to observe some of the significant associations (or direction of association was inconsistent) reported in the literature was that members may report total time spent in gym, rather than minutes spent in MVPA.
3. Multi-variate analyses were indicated in the Methods section, but not reported. For example, was the positive correlation between length of membership and BMI explained by the higher % males who were long-term members?
4. Authors assert that Y’s are more sociodemographically diverse than other health/fitness clubs. Should substantiate this assertion with data from the fitness industry (national data would suffice, but, even better, state or local fitness industry data).
5. Need to provide sample items for (a) interest in changing behaviors and weight loss, and (b) self-efficacy since apparently didn’t come from instruments with documented reliability/validity. Should justify use of non-validated items.
7. Consider separating out moderate-to-severe obesity in table displaying rates, and also compare distribution of overweight and mild and moderate-to-severe among Y vs. local (if available) or state representative sample—data looks as if it’s left-shifted, i.e. BMI levels lower than in general population. Most rapidly rising segments of obesity at the higher levels (Sturm R. Increases in clinically severe obesity in the US, 1986-2000. Arch Int Med 2003;163:2146-8.)

Minor Essential Revisions
1. In abstract, gender inversely correlated with BMI awkwardly phrased—just conveying that women have lower BMI than men.
2. In limitations section, should specifically mention sub-optimal response rate responsible for the responder/non-responder characteristics issue in first sentence.
3. Results are not presented in very straightforward or clear manner, e.g., was fruit and vegetable consumption associated with PA level?
Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests