Reviewer's report


Version: 2  Date: 15 July 2014

Reviewer: Christoph Fusch

Reviewer's report:

Major Compulsory Revisions

Title:
What does “HIP” stand for? Not sure whether it is appropriate/useful to have an unexplained abbreviation in the title.

Authors:
Not clear what the role of Ralf Rauch is. Please clarify

Introduction:
Line 99-107: A clear formulation of a hypothesis is missing

Methods
Line 124: counseling by whom? Who participated in these sessions? As this part is the backbone of the interventions more details need to be given
Line 120-141: Obesity is usually a condition/disease of more than one family member, not infrequently the whole family/parents are affected as well. How did the authors involve parents/other family members? This is very often the hardest part, as they also have to change life style. How was attendance monitored? How was compliance of parents/caregivers monitored/assessed?
Line 120-141: It remains unclear how the subjects/families were recruited? Please give more details. Please comment on whether the actual recruitment model could have introduced a bias how representative the population studied is?
Line 155: was there a variation in ethnicity? If yes, how was this reflected in the growth charts used?
Line 156-158: a reference describing the validation of the BIA analyser in this age population should be quoted
Line 166 -174: How was time point/date for assessment of dietary intake and Physical Activity Questionaire standardized/defined?
Line 184: Sample size calculation is missing

Results
Line 191 – 193: How does the reaction on staff changes impact the validity of the data?

Line 206 -214: the study subjects are growing during the study period. This might change their body composition/BMI z-score. How do the authors account for the changes in BMI z-scores due to natural growth?

Tables
Too many significant digits. Rounding to three digits would be fully sufficient
Table 2 and 3 could be combined. Also give fat mass in absolute values, not only in percent

Discussion
Five pages of discussion is quite lengthy, should be shortened
Lines 231 – 240: the paragraph should be omitted. No new aspects, all information has been given in introduction. The discussion may start with a modified line 241.

A decrease in fat mass paralleled by an increase in muscle mass (a typical effect of such intervention programs) would not necessarily result in a change of BMI or its z-scores – despite the fact that it leads to a more appropriate body composition.

Lines 257-269: Similar findings also in:


Line 274-275: Self reporting is often charged with underreporting. However, this effect should be equally present during all assessment periods.

Line 279: as a consequence this would mean that the authors have applied an inappropriate tool?please comment.

Line 285: was the study powered to detect a difference?

Line 301: the two papers above report a positive effect on self esteem, comparable to what this study shows,
Minor Essential Revisions
Title:
Two colons in a row is quite unusual. Replace the second one by a dash:
“…adolescents – a longitudinal pilot intervention study”

Abstract
Line 36 and 43: abstract should contain minimum information about QoL method used
Line 41: “…21 girls, mean age….” Is misleading. Reads like mean age given only for girls. Please revise.
Line 43: give z-score as “…+ 2.19….”
Line 44: four significant digits is too much as there is no 1% precision of this measurement; giving two or three would be by far sufficient: “74.45”, better “74.5” or “74”. This applies to all sections of the abstract and text body where figures are given.
Line 44: the figures make only sense of a normal range is given. Not all readers will be familiar with these test tools.

Introduction:
Line 104: “hospital-based” and “outpatient intervention” sounds somewhat contradictory. Please clarify and revise.

Methods:
Line 118: give reference for charts used
Line 163 and line 201: definition of hypertriglyceridemia
Line 165: give reference for HOMA

Results:
Line 206: “15” for SD

Discretionary Revisions
Line 34: “intervention” instead of “program”
Line 35: “fifteen 90- minute educational …” instead of 15 19-minute educational…”
Line 152: “…were calculated using the U.S. Centers…”
Line 166: “Three-day food…”

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.
Declaration of competing interests:
I declare that I have no competing interests