Reviewer's report

Title: Impact of metabolic comorbidity on the association between body mass index and health-related quality of life: a Scotland-wide cross-sectional study of 5,608 participants

Version: 1 Date: 12 December 2011

Reviewer: Nana Kragh

Reviewer's report:

Major,
Need to make the objective stronger and state what you compare against. Furthermore the results section should be much more focussed on the objective and if your hypothesis get rejected or not.
Your background should also be more focussed so you start with what is prevalence in the world and in Scotland, what is obesity and how does affect people but physical but also in relation to HRqoL. From there discuss the phenomenon ‘healthy obese’ and make our objective from that.

Minor
General: You write about quality of life all the time, it should be health-related quality of life as that is what SF-12 measures.
Please define SF-12 and what it measures.

Sections:
Abstract: line 2: increased morbidity and....
Background: line 6: delete other
Methods: data source: Who collect the data and is weight and height self-reported?
Results: How is the HRQol/utility for the whole group. If it is 0.8 it is very low for the general population.
Discussion line 9: define adverse events

Descretionary
It could be interesting to look at the group BMI>35 - 40 as well to see if it makes a different also compared to BMI> 30.
To make it a stronger article it could be interesting to look at the healthy obese and which domains of SF-12 that drives the decline in hrqol compared to lean people.
Level of interest: An article whose findings are important to those with closely related research interests

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'