Reviewer’s report

Title: Reduced peak oxygen uptake and implications for cardiovascular health and quality of life in patients with schizophrenia

Version: 1 Date: 5 July 2011

Reviewer: Inger-Lise Aamot

Reviewer’s report:

Major compulsory revisions

Methods:
Subjects
Paragraph 1: “We included 33 in-patients….. Patients were in and out-patients…” What is correct?
Paragraph 1, Exclusion criteria: How did you diagnose coronary artery disease? From medical records? From treadmill test with ECG? Did you do spirometry to assess lung function?
Could you describe your subjects more specific? Medication, smoking status and physical activity level affect cardiovascular health and VO2peak.

Assessments
Paragraph 4: Did you measure from plasma or serum? Which device did you use? How did you measure blood pressure?
Paragraph 5: SF-36 is a generic questionnaire. Is it validated for patients with schizophrenia? Why is it used instead of a disease specific questionnaire? Can you say something about score- what indicates better/worse QoL?
Paragraph 6: Can you say something about scale and score in PANSS?

Analyses
1 paragraph: Paired sample T-test can not be used to compare differences between groups!
If you do statistics between different samples, you should present 95% confidence intervals (CI) for the means. Odds ratios should also be presented with CI.
In the HUNT Fitness study there are adjustments for age, smoking, physical activity, mean arterial pressure, cholesterol and glucose. If you haven’t done this, how does it affect your analysis? A multivariate analysis should be performed in proportion to the other risk factors.

Results
Peak oxygen uptake
Are you using VO2peak mean values for women and men, or is it for each age group you have compared your patients’ VO2peak with HUNT inactive and HUNT general? Age predicted VO2peak- is there a formula for age prediction or are you referring to measured values, mean or for each age group? This is a little hard to get written like this.

Conclusion
The conclusion should be based on revised analysis and what is found statistical significant.

Minor essential revisions
The word “stratifies” is used incorrectly in the manuscript– correct form is strata

Results
Before paragraph 1: should be a sub title “Demographics”

Table 1
This may be more readable with means (SD) only for men and women.

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:
Yes, I am at the moment also employed at NTNU, Faculty of medicine, as well as St.Olav's Hospital. This is the same employer as four of the authors. It is a question of competence that has to be considered by the editorials.