Reviewer’s report

Title: Use of exercise tests in primary care: importance for referral decisions and possible bias in the decision process; a prospective observational study

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Reviewer: Staffan Nilsson

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Review of manuscript, Use of exercise tests in primary care: importance for referral decisions and possible bias in the decision process; a prospective observational study

The aim of the study is well described and can be followed through the ms. The title and abstract conveys what was found in the study in a relevant and humble way. The reference-list is detailed, relevant and up-to date.

Major Compulsory Revisions

1. Line 159-160. How were myocardial infarction STEMI and NSTEMI defined in the study? I can’t find any description of the definitions in this manuscript nor in reference number 5. This is of importance if anyone else attempts to repeat the study in a different population.

2. Section Results:
   Line 219. Since the mean age of the study population was 63.5 years, a substantial part of the study group must have been retired from their occupational work. The text and Tables does not demonstrate how many in the study group that were retired. This matter may be of importance for the interpretation of results when it comes to socio-economic interactions and has to be accounted for by the authors.

3. Line 316: The authors state that there was no blinding of outcome data. I think this matter has to be discussed. Was there any risk of bias? Could it have been performed in an alternative way with blinding of data?

Minor Essential Revisions

4. Section: Measurements and classifications
   Line 188-192. As detailed descriptions of the classification of ECGs and the performance of exercise tests are given in reference number 5 also this reference should be given here.

5. Table 3: In the heading under “Women” “p” is missing. In the foot-note the number of women and men out of 99 patients referred to cardiologist should be stated in order to help the reader.
Discretionary Revisions

6. Section: Recruitment and follow up

Line 152 and following. It would be interesting to know if there were any guidelines, to support GPs’ decision of referral for exercise testing and for referral to the cardiologist, for patients with suspected angina pectoris by the time of the study.

7. In general the data appears to be sound. However the sub-groups are often small making the interpretation of findings less valid. This demands more studies in the area, which is also meritoriously mentioned by the authors (Line 336-337).

8. How many patients returned with positive, inconclusive, negative or non-assessable exercise test results? This information is possible to find in Table 1. I think it should also be clearly stated in the text in order to make the reporting of results easier to follow.

9. In general the manuscript adhere to the relevant standards for reporting and data deposition. However, I think the authors should consider to reduce the number of tables e.g. Table 4 may be omitted.

Section: Interpretations of findings

10. Line: 358-362. Another interpretation of the finding that previous revascularization was associated with referral among women but not men, is that GPs may find it more difficult to evaluate symptoms, ECG-findings and results from exercise tests in women and therefore refer women more often when there is evidence of coronary heart disease in the history.

Level of interest: An article of importance in its field

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.