Reviewer’s report

Title: Compliance with referrals to medical specialist care: patient and general practice determinants: a cross-sectional study

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Reviewer: Pieter van den Hombergh

Reviewer's report:

1. The research question?

This a clear cut paper with a narrow clear research question. This question concerns the important question about compliance after referral. It has not been researched properly in The Netherlands in such a large study and the 13% non-compliance is an important finding. It is a benchmark for other countries health care functioning of referral.

The fact that in the US similar studies gave only slightly lower rates could indicate that referral non-compliance is hardly influenced by organisational or GP-actors, but other factors. The lower compliance in people with SES and the important role of patient factors is no surprise. The other finding in relation to compliance are a bit more unexpected (distance, differences between specialisms), but their importance is limited. So yes the subject is original, but I miss qualitative research in the non-compliance group and in compliance to referrals, that would truly assess the problem.

These data give some crude information but require a lot of interpretation and guessing about the true causes of (non)-compliance.

So the conclusion is a bit narrow, yet clear and new, but not surprising. We are still left with lots of question about referral compliance.

The introduction is a proper description of the state of the art on this aspect of referrals.

2. The data

One could be suspicious about these data from such large databases, which have few possibilities to check the data. The database Vektis however is owned by the insurers and is known to be accurate (needed for accountancy) and the authors seem to have checked and cleaned the practice data. The data are sound and their reliability is confirmed by the results.
3. Discussion and conclusion

The interpretation is unbiased and the interpretation of the data is not speculative and based on assumption known from previous research. They do not mention an exhaustive literature search, but the relevant literature seems to be properly consulted. References are OK.

A weakness is that they have only literature from the US and nothing from the UK or any other European country. It may not have been researched there and it is good to mention more upfront that the subject is a bit of an orphan subject.

They start the conclusion stating that compliance to the referral is vital. Yet, they do not know how harmful non-compliance is in The Netherlands. In the US with non-insured patients it may be different. That is their reference. In the Netherlands often patients are referred for diagnostic reasons with no underlying disease. They may decide that referral is not worst while after all. Others may go abroad (often in Holland) or try alternative medicine. A more qualitative approach could have shed light on what is really going on. So I would start the discussion with the main results and be a bit less suggestive of the possible damage by non-compliance.

4. Methods

The methods is straightforward and the logistic regression is adequately done. The only hesitation is that the introduction and research question would be better addressed with a more profound method including qualitative data. That would have yielded a deeper insight in the problem.

The statistical analyses are sound and do not need additional scrutiny.

5. Strengths and weaknesses of the methods

The weakness is the opportunistic use of the available data to give insight in a problem, that with a different study design could have been addressed more adequately. Yet, the authors don't pretend more than what they have found and this is important enough to be published.

6. Writing, organization and tables

The English is pleasant to read and seems OK to me. Page 12, 5 link should be linked.

The paper reads easily and the structure is clear and adequate. The same is true for the tables.
7. Ethical or competing interests

No competing interests. The government sponsored the study, but this is not relevant.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

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I am able to assess the statistics

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