Reviewer's report

Title: High workload and job stress were associated with lower practice performance in general practice: an observational study in 249 general practices in the Netherlands

Version: 1 Date: 11 November 2008

Reviewer: Gerard Gill

Reviewer's report:

I must declare a conflict of interest. I have known the Chief Investigator since 1996. We have mutually presented a conference symposium together. We have spent some time staying in each others homes.

1. Is the question posed by the authors well defined?

The question posed is an important question across the world. The medical primary health care workforce is not being replaced or expanding rapidly enough to meet consumer demand in most societies. In Australia it has reached a point where significant numbers of GPs consider they should consider leaving general practice 1. As general practice/ medical primary medical care is seen as the key to high quality, appropriate, affordable health it is important to see if general practice can provide high quality care until the workforce requirements can be met. If not other mechanisms of health care require development. The question is clearly defined.

Discretionary Revisions None
Minor Essential Revisions None
Major Compulsory Revisions None

2. Are the methods appropriate and well described?

The methods appear appropriate. The instruments utilised are appropriate and well suited to the data collection. I assume you have sought information on the appropriateness of the statistical methodology. While the description of the process and analytical techniques appear reasonable, I am not skilled in this style of analysis. Sample size calculations and sampling errors have been attended to.

Discretionary Revisions

Confirm that the sampling number of patients per GP and per practice is appropriate. Michel Wensing’s work on this area is used to define the numbers of patients needed to be surveyed for accreditation in Australia. A reference to this work would strengthen the argument. Some comments on whether practice sampling is representative would also be helpful.

Minor Essential Revisions None
Major Compulsory Revisions None
3. Are the data sound?
The sample appears representative of Dutch general practice apart from the oversampling of rural GPs. The Australian impression is that rural GPs are more stressed, work longer and have greater patient demands made on them compared to urban GPs. No comment has been made about this group in the results. Is another paper planned on this matter?

Is there any evidence that the sample is an overperforming group? In Australia we would look for specific training for general practice in the GPs, fellowship of the RACGP, that the practice trains medical students or GP vocational trainees as evidence of a quality practice. Patient satisfaction with aspects of GPs appears to be around the reported average internationally of 80-90%.

Discretionary Revisions Patient perception of GP care was low. While there is some evidence that patients are not good judges of the quality of GP technical care, is there any literature from the Netherlands about Dutch patients' ability to comment appropriately on this?

Minor Essential Revisions The distribution of each measure of practice performance is not given. Is it normally distributed or is it skewed to the left or right.

Major Compulsory Revisions None

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Table 3 appears to be incomplete with a number of columns missing data. I assume that these correlations not to have reached statistical significance. This needs stating in the table.

Discretionary Revisions None

Minor Essential Revisions See above

Major Compulsory Revisions None

5. Are the discussion and conclusions well balanced and adequately supported by the data?
I am a little concerned about the conclusion implied in Figure 1. We know from Australian consultation analyses and the BEACH study that women GPs who work less hours are more likely to provide longer consultations, more prevention, and address psychological issues. One of the worries patients express in Australia is GP availability after hours but does that translate into hard health outcomes. Australia has the second highest reported health adjusted life expectancy in the world. Meeting patient preferences may not result in better patient outcomes!

Discretionary Revisions More could be made of the need for non patient contact work such as teaching, CME and I assume practice audit reflecting and instituting practice management techniques as prerequisites for good practice performance. No comment was made of the fact that this survey covered a period in Holland
where governmental policies created some stress for GPs with a proposal to claw back some of the payments to GPs.

Minor Essential Revisions None
Major Compulsory Revisions None

6. Are limitations of the work clearly stated?
Yes, comment was made on the cross-sectional nature of the survey and capitation nature of Dutch general practice funding. A factor neglected by the authors which has generalisability impact is that of practice size. Internationally the trend has been to larger sized practices with more practice manager and some aspects of care being delivered by other health professionals. The Dutch model of a general practice workforce of only GPs and practice attendants working in 1-3 GP practices is radically different to Australian, New Zealand, British or North American general/family practice.

Discretionary Revisions See above
Minor Essential Revisions None
Major Compulsory Revisions None

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?
No difficulties.

Discretionary Revisions A better references for Australian and NZ GP contact times is 2. The contact time includes not only the individual consultation time but the number of GP contact hours per year.

Minor Essential Revisions None
Major Compulsory Revisions None

8. Do the title and abstract accurately convey what has been found?
I have some reservations about the use of practice performance to describe what has been used as indicators of quality care. Four of the five measures are derived from patient surveys. I consider the markers utilised indicate quality care as such markers are used in Australia in the RACGP practice accreditation standards. To my view practice performance is a wider concept and is much more clinically based on markers such as disease management for example diabetic control using glycosated haemoglobin and BP levels or prevention.

Discretionary Revisions None
Minor Essential Revisions None
Major Compulsory Revisions None

9. Is the writing acceptable?
Some paragraphs were a little stilted for a native English speaker.

For example, “Lowering only the hours of direct care provided by GPs may not help and may
proving counter productive. Providing feedback, coaching and supervision are also recommended solutions.” might be better written as

Lowering only the hours of direct care provided by GPs may not help burn out and stress and may prove counter productive. What experts recommend to deal with these problems are feedback, coaching and supervision.

Discretionary Revisions None
Minor Essential Revisions None
Major Compulsory Revisions None


Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I must declare a conflict of interest. I have known the Chief Investigator since 1996. We have mutually presented a conference symposium together. We have spent some time staying in each others homes.

I have also met Richard Grol on several occasions.