Reviewer's report

Title: A survey of patient preference for colorectal cancer screening technique

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Reviewer: Andrew Renehan

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Reviewer’s summary

Colorectal cancer screening is an important and topical public health issue. Nelson and Schwartz correctly point out in their introduction that there is considerable debate about the optimal modality of screening. This debate includes issues such as effectiveness, costs, resources, compliance and preference among potential screened individuals within a population. The authors address the issue of “patient” preference using a questionnaire-based survey comparing different screening modalities, among a small number (n = 80) of highly selected participants, and FOB testing was consistently the most preferred. They call for the inclusion of “public perceptions of screening choices”.

Major concerns (compulsory revisions):

There are a number of major concerns that need to be addressed and stated as limitations within the discussion.

1. The authors state, on more than one occasion, that the strength of the study (compared with previous studies – table 2) is that they compared preferences across four different screening modalities. Paradoxically, herein lies the greatest weakness of the study as they are not comparing like with like – the endpoints for flexible sigmoidoscopy and colonoscopy in the screening setting are similar i.e. the detection and removal of cancer precursors, adenomas – the endpoint for FOB testing is downstaging of cancer. Put another way, FOBT screening reduces cancer-related mortality (not cancer incidence); endoscopic screening (at least in mathematical modelling) reduces cancer incidence and by consequence, mortality. By further example, one could compare individual’s preferences of self-examination versus mammography for breast cancer screening, but it would be a weak argument as their efficacies are completely different.

2. The assembly and presentation of data need to distinguish between interval and ordinal scales. Thus while ranking the screening modality in an order 1, 2, 3 and 4, the data are ordered but the size of the difference between the numbers does not have a meaning. Thus, it is appropriate to use the Friedman’s and Wilcoxon’s tests, but applying “means” to each domain as in table 1iot.

3. The participant group is both small and highly selected. There are well recognised differences in screening practices between whites versus blacks, urban versus rural, and male versus female. Colorectal cancer screening for average at-risk persons is aimed typically at age groups 50 to 65 years old – yet this surveyed group had a mean age of 38.3 years. Many participants were parents of children attending a general pediatric office – the issues in health education and cancer screening relate to populations in their late 40s and early 50s and encouraging them to re-focus on their own health as opposed to the health of their children (i.e. that which they have focused on for the preceding two decades).

Specific points (recommended revisions):

1. Title page. Potential attendees of screening programs are “individuals” not “patients”.


3. P3 first paragraph “Even if ...........” This statement only applies to FOB testing.

4. P3 third paragraph. The authors should recognise that there is now a wealth of data on quality of life (which is inexorably related to people’s preferences) emerging from the screening flexible
sigmoidoscopy trials in Europe (suggest MEDLINE: Julie Wardle and Wendy Atkin for papers).

5. P4 first paragraph in Methods. “An introductory letter .......... This was followed by a brief description .......”. Who wrote the letter? Who delivered the brief description? Could the descriptions of modalities bias subsequent preferences!!!!

6. P4 first paragraph in Methods. “The second asked .......... The relative danger of the exam”. The relative danger for FOBT screening is conditional i.e. a positive test and the danger becomes that of the subsequent colonoscopy. In the same manner as expressed above, the authors are not comparing like with like.

7. P6 first paragraph in Discussion. “However, from the perspective of those who should take part …”. See earlier comments – the mean age in this survey is low.

8. P6 last paragraph. “These studies ......., though again the these populations, ..........”. mis-spelling/ language.


10. P7 last paragraph. “But the public has to buy into this program .......”. Leave “buy into” for Wall Street.

11. P7 last paragraph. On the discussion about further tests, mention should be given to the rapidly evolving role of CT virtual colonography and its potential role in screening (see Pickhardt et al. NEJM 2003; 349:2191-200).