Views on provision of personalised cancer risk information: a qualitative interview study with members of the public

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Background

- Nearly 600,000 cancer cases in the UK could have been avoided in the past 5 years if people had healthier lifestyles.
- Many theoretical models of behaviour suggest that before people will change health behaviours they must accept a risk applies to them.
- Providing people with personalised information about their future risk of cancer may help promote behaviour change.

Aim

- To explore the views of members of the public on receiving personalised cancer risk information based on family history and lifestyle factors.

Methods

- Face-to-face semi-structured interviews with members of the public recruited from GP practices and a patient participation group in Cambridge.
- Risk questionnaire completed prior to interview.
- Risk of developing the most common cancers (10 for women and 8 for men) estimated using published risk models[1] adapted for the UK population for this study using risk factor prevalence data and age specific cancer incidence and all-cause mortality data[2].
- Risk presented during interview using web-based tool (Figure 1).
- Interview schedule covering views on:
  - Receiving risk of cancer generally
  - Potential for motivating behaviour change
  - Where, when and how such information should be provided.
- Analysed using thematic analysis.

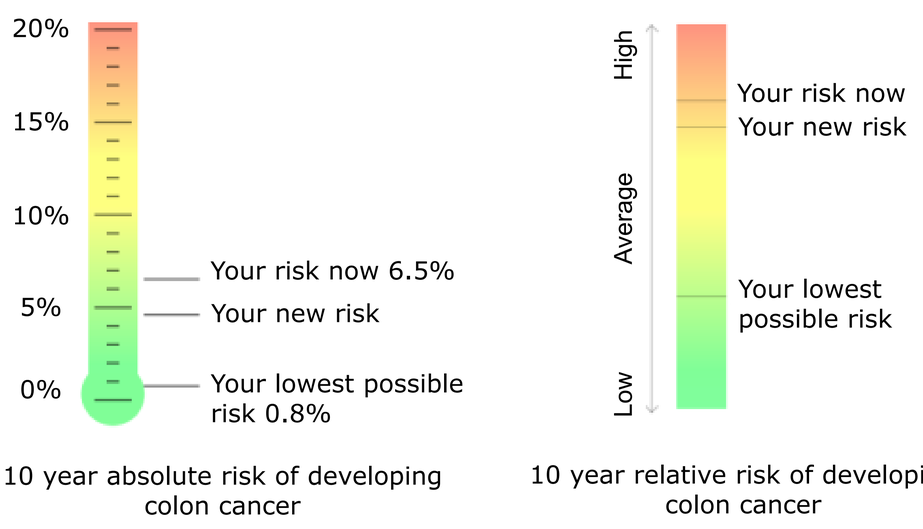

Figure 1. Examples of the formats of risk presentation

Results

- 27 members of the public took part

Sex	
Male	11
Age	
20-29	4
30-39	10
40-59	5
>60	8

Results

- Participants generally viewed the concept of personalised cancer risk positively and were keen that it be provided more widely.
- When presented with 10 year absolute risk on a grey scale almost all felt it was low and not concerning.

> *"I think it's very low. It's 1.32% compared with the 10% of cardiovascular, and considering the random effect of cancers, I think, it makes me feel good."*

- Views on what would be 'high' risk ranged from 0.5% to 60%. Over half were unclear why they had chosen a particular number.
- When presented in colour, the colour was often more important than the number and comparison to others was helpful.

> *"..it is more motivating to be able to say, "I want to be really low risk compared to everyone else", as opposed to, "I want my percentage number to be lower".."*

- All felt seeing the impact of change s in lifestyle on their risk was powerful. For some this led to intentions to change behaviour but it was not always motivating.

> *"I could get it down to absolutely zero if I lived as a hermit,..... if my risk factor was very high, I would probably do something about it, but because it's so low then I probably wouldn't. There, that's my balance."*

- There were mixed views about whether to provide the information face to-face or online but many felt that it needed to be endorsed by the GP to provide credibility.

Conclusions

- Provision of personalised cancer risk information was well received and may be a useful adjunct to other cancer prevention initiatives.
- Further work is needed in particular to address the disparity between typical risk estimates and the general perception of what constitutes a risk high enough to motivate change.

[1]Colditz *et al.* 2000 Cancer Causes and Control 11:477-488
[3]Sasieni *et al.* 2011 British Journal of Cancer 105:460-465

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