The process of screening flexible sigmoidoscopy: the patient's perspective

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SUMMARY
Flexible sigmoidoscopy has been advocated as a screening procedure for colorectal cancer; however, it is uncertain how acceptable this is to patients. This study aimed to explore patients' perceptions of the process of screening sigmoidoscopy. The effect on patients is not limited to those who take up the test but begins with receipt of the initial invitation. The test experience is divided into five areas: the invitation, response to the invitation, preparation for the test, the test, and consequences. Patients who had the test found it acceptable; however, the test's image is a problem and awareness of colorectal cancer may be low. Important factors affecting acceptability are the influence of peers and professionals and symptoms relating to the bowel.

Keywords: flexible sigmoidoscopy; colorectal cancer; screening; patient attitude.

Introduction

COLORECTAL cancer (CRC) is a common cancer in the United Kingdom. The long premalignant phase suggests that secondary prevention, in the form of screening for adenomatous colorectal polyps, might reduce mortality from CRC. Flexible sigmoidoscopy has been advocated as a screening procedure;[1] however, low uptake rates,[2] even under trial conditions, raise questions of acceptability. Attention has also focused on adverse effects of screening[3] and the need for further research in this area.[4] This study focused on patients' perceptions of the test.

Method

Qualitative methods were used. Patients were recruited from a parallel study that examined the effect of invitation style on sigmoidoscopy screening uptake rates. In this study screening was offered to those aged 50 to 60 years in an urban practice. Sigmoidoscopy was carried out in a local teaching hospital.

Purposeful sampling was employed to include diverse viewpoints from those offered screening. Interviews were recorded with consent and then transcribed verbatim for analysis. Using the principles of Grounded Theory[5] the transcripts were coded; these were then developed into categories and themes by repeated immersion in the data. The themes and concepts emerging from them represent the main findings of the study. Emergent concepts were validated against data from subsequent interviews. Patients from another practice who had been offered screening were interviewed to widen the viewpoint and to take account of bias. Data were analysed by MG and DS and further triangulated with analysis by an independent investigator (BW).

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Submitted: 24 July 1998; final acceptance: 22 February 1999.

© *British Journal of General Practice,* 1999, **49,** 639-640.

Results

Fourteen informants were interviewed, of whom five had screening sigmoidoscopy performed on them. Analysis focused on emergent themes as described Figure 1.

Initial invitation

Style and content were important areas of the invitation. Tailoring these to individual patients was suggested. The source of the invitation was important, as invitations from national bodies or institutions were treated with suspicion, whereas those sent from local doctors' surgeries were seen as reassuring. Invitations from national bodies may be seen as impersonal and not wholly for the patient's benefit.

Response to the invitation

This varied from mild surprise to severe alarm.

> *'The first thing that goes through your mind is what's wrong with bits of your bowel ... you're thinking about cancer.'* (Responder 2.)

> *'It was horror the thought of having to go through.'* (Responder 8.)

Some responders felt the invitation was an indication from their doctor that they had cancer, and so were alarmed from the moment of receipt. Factors affecting acceptance of the test were split into two areas: internal and external.

Internal factors

Informants stated that the test would be justifiable in the presence of symptoms.

> *'If you've got, ken symptoms ... well you would go wouldn't you?'* (Responder 9.)

Perceived susceptibility was important.

> *'I know that I dinnae have cancer ... so I dinnae see the reason why anybody should put pressure on me to go.'* (Responder 5.)

Personal and family history, non-specific apprehension, cancerophobia, fear of pain and embarrassment, fear of colostomy, and altruism were all expressed.

External factors

Peer pressure can have a negative influence as well as a positive one.

> *'She said, "Well I wouldnae get that, its torture you ken", although she's never had it.'* (Responder 9.)

Other factors identified included test image, disease image, publicity, GP advice, and practical problems such as transport and employment. Factors had differing significance for different informants; for example, family history was a motivating factor

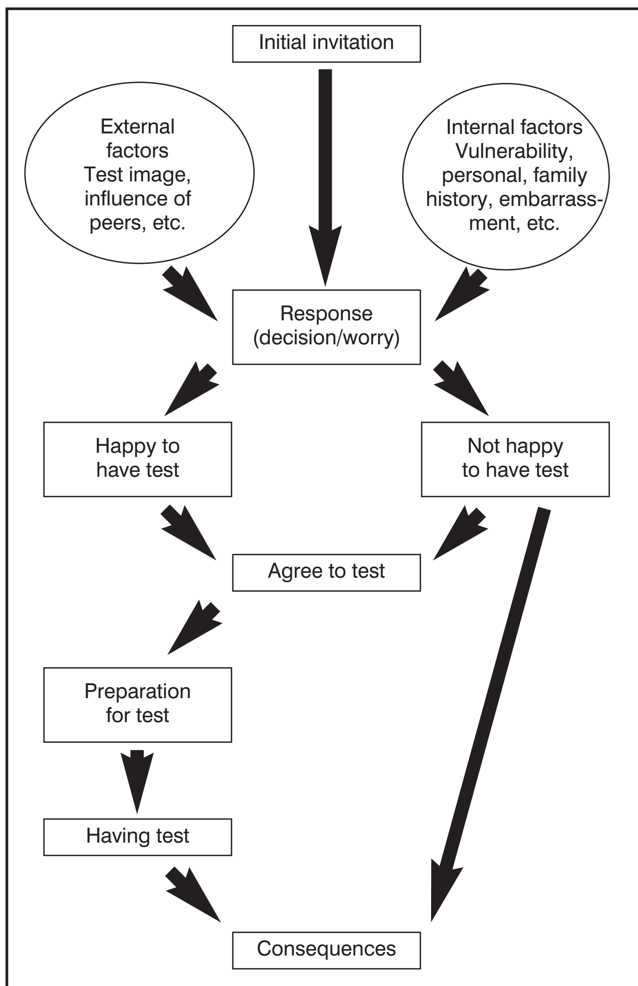

Figure 1. The screening process.

for some but demotivating for others because of fear of the consequences.

Preparation for the test

Lack of information, preparation requiring a fluid diet, and an enema were problems.

> *'I had grave difficulty with the enema.'* (Responder 1.)

The test

There is 'high-tech' appeal. Seeing the colon on the videoscreen is interesting, although the visualization of polyps can be frightening. Some informants experienced discomfort and difficulty with flatulence after the test but, generally, responders found the test acceptable.

> *'I think you can virtually say, categorically, "It's not a problem".'* (Responder 1.)

Consequences

Some informants described positive benefits of finding disease early. Others felt reassurance; receiving a negative result was the main benefit. Delayed biopsy results caused anxiety and there was concern at the prospect of a false result.

> *'I'd have you up in court, ...'cause of all the anxiety that you would be causing me and my family, ... well if I could get away wee it like ... it's bound to play on your mind.'* (Responder 5.)

Discussion

This study supports the concept that a screening programme carries consequences for all those invited. Although awareness of CRC may be low, cancer generally is unambiguous as a health threat to most people. This may influence the individual's response to screening,[6] and the mere receipt of an invitation is enough to make some think they have cancer.[7] The decision to undergo screening is complex and dependent on numerous factors that may have differing significance for each individual. What motivates one individual will demotivate another; for example, family history.

Responders who had the test generally found it less unpleasant than expected. Renneker *et al*[8] found that 99% of patients who had the test were agreeable to having it repeated. However, the test has 'image' problems.

Although small, this study suggests that CRC screening programmes should address issues of test impact, invitation source and content, and public perceptions of the test; it also highlights the importance of health beliefs. These areas require further investigation if screening for CRC is to achieve reasonable uptake rates.

References

1. Austoker J. Cancer prevention in primary care: Screening for colorectal cancer. *BMJ* 1994; **309:** 382-386.
2. Robinson MH, Berry DP, Vellacott KD, *et al*. Screening for colorectal cancer. [Letter.] *Lancet* 1993; **342:** 241.
3. Stewart-Brown S, Farmer A. Screening could seriously damage your health. *BMJ* 1997; **314:** 533-534.
4. Mayou R. Screening in primary care: pointers for further research. *Br J Gen Pract* 1996; **46:** 567-568.
5. Strauss A, Corbin J. *Basics of qualitative research*. 1st edition. London: Sage Publications, 1990.
6. Marteau TM. Toward an understanding of the psychological consequences of screening. In: Croyle RT (ed). *Psychosocial effects of screening for disease prevention and detection*. New York: Oxford University Press, 1995: 185-199.
7. Nathoo V. Investigation of non-responders at a cervical screening clinic in Manchester. *BMJ* 1988; **296:** 1041-1042.
8. Renneker M, Saner H. Low-cost flexible sigmoidoscopy screening: a community demonstration and education project. *J Cancer Educ* 1995; **10(1):** 25-30.

Acknowledgements

We would like to thank Dr B Williams for his help with 'external' analysis of the data. This study was supported by a grant from the Scientific Foundation Board of the Royal College of General Practitioners.

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