

# General practice registrar responses to the use of different risk communication tools in simulated consultations: a focus group study

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## Abstract

**Objectives** To pilot the use of a range of complementary risk communication tools in simulated general practice consultations; to gauge the responses of general practitioners in training to these new consultation aids.

**Design** Qualitative study based on focus group discussions.

**Setting** General practice vocational training schemes in South Wales.

**Participants** 39 general practice registrars and eight course organisers attended four sessions; three simulated patients attended each time.

**Method** Registrars consulting with simulated patients used verbal or "qualitative" descriptions of risks, then numerical data, and finally graphical presentations of the same data. Responses of doctors and patients were explored by semistructured discussions that had been audiotaped for transcription and analysis.

**Results** The process of using risk communication tools in simulated consultations was acceptable to general practitioner registrars. Providing doctors with information about risks and benefits of treatment options was generally well received. Both doctors and patients found it helped communication. There were concerns about the lack of available, unbiased, and applicable evidence and a shortage of time in the consultation to discuss treatment options adequately. Graphical presentation of information was often favoured—an approach that also has the potential to save consultation time.

**Conclusions** A range of risk communication "tools" with which to discuss treatment options is likely to be more applicable than a single new strategy. These tools should include both absolute and relative risk information formats, presented in an unbiased way. Using risk communication tools in simulated consultations provides a model for training in risk communication for professional groups.

## Introduction

If healthcare professionals are to intervene to reduce risk of disease they need to discuss the risks effectively with patients. A systematic review concluded that clinical risk communication is most effective if individualised calculations of risks and benefits are used, or if it addresses situations where choices about treatment are being made.<sup>1</sup>

Different ways of "framing" information have also been shown to influence the perceptions of risk and decisions of patients.<sup>2-4</sup> For example, relative risk formats are more persuasive than absolute risk information,<sup>5,6</sup> although in isolation either method may mislead. Presentation formats also strongly influence the decision making of doctors.<sup>7-9</sup> A range of

complementary formats for presenting information should be available,<sup>5,10</sup> including information on both relative and absolute risk and using descriptive, numerical, or graphical formats.

Most attempts to improve risk communication have involved introducing single new approaches,<sup>1</sup> but these may be too narrow for routine practice. In practice, professionals must be able to tailor the "sharing of information" to the needs of the individual patient.<sup>11</sup> We developed risk communication tools and tested them in focus groups of general practice registrars. The aim of this study was to explore the registrars' responses to these innovations.

## Subjects and methods

### Method

Four interviews were held in Wales between January and May 1998 within the half day release sessions of vocational training schemes for general practice registrars. Focus group methodology was used to identify group norms or a range of views<sup>12</sup> and to capitalise on the interaction within the group to elicit rich experiential data.<sup>13</sup>

### Study sample

All general practice registrars attending the vocational training sessions were invited to take part in the study. The registrars were either starting their training or approaching its completion and had a range of clinical experience to bring to the workshops and discussions.

### The interview structure

Participants were introduced to the principles of patient centred medicine and involving patients in decision making and were given an outline of the focus group study. The discussions also addressed the registrars' responses to issues around "shared decision making,"<sup>14</sup> and these data are reported in the accompanying paper.<sup>15</sup>

Three small groups were formed in which one doctor agreed to consult, using the first of the risk tools (box), with a simulated patient briefed to play one of three roles: wanting to know about risk of breast cancer with hormone replacement therapy, the options for treating "prostatism," or the pros and cons of warfarin and aspirin for preventing stroke.<sup>15</sup> The simulated patients were not medically trained but had experience as simulated patients in undergraduates' training in communication skills. They were briefed on the clinical scenarios but not on the risk information likely to be discussed. They were asked to contribute and respond to the discourse as if they themselves were experiencing the content in a consultation in practice. The consultations were conducted with the doctors first using verbal descriptions of risk information regarding the

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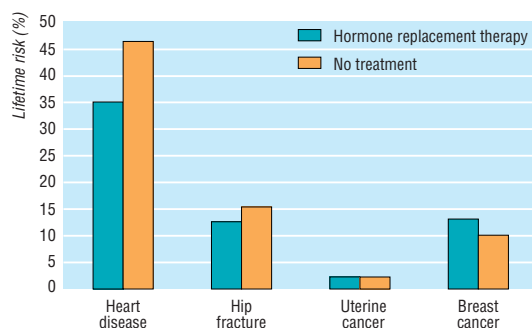
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### Risk communication tools used, based on data from relevant systematic reviews<sup>19-21</sup>

- First consultation: verbal or “qualitative” explanations—for example, “frequently,” “sometimes,” “rarely” as described by doctor, based on evidence about benefits and risks with treatments or without
- Second consultation: numerical risk information—absolute and relative risk data (percentage formats provided to doctors; other formats such as numbers needed to treat could be derived) for the same benefits and risks
- Third consultation: graphical presentation of risk information—histogram presentation of same data, showing outcomes for treatment and non-treatment options (see figure)



Example of graphical presentation of data

treatment options available. These “qualitative” or general descriptive terms include terms such as “frequently,” “sometimes,” “rarely” to portray the relevant risk and benefit information.<sup>16-18</sup> The doctor was free to introduce any previous knowledge into the discourse, thus mimicking “usual practice.”

The focus group, including simulated patients, discussed the consultations. The consultations were then repeated, but with different doctors and using a different risk tool. In this second consultation the doctor was provided with risk information regarding the treatment choices available, taken from systematic reviews of the topic in question.<sup>19-21</sup> Where specific information was available to assess the risk to the individual patient this was provided (for example, personal or family history of ischaemic heart disease or breast cancer affecting risks and benefits of hormone replacement therapy). After a further group discussion a third consultation was undertaken using graphical (histogram) presentation of the same data (see figure for example). This process thus allowed each small group to witness individuals consulting with different risk tools for the same disease topic using the same simulated patient.

Participants gave their reactions to the process in a semistructured format, which explored their views on the extent to which information was helpful, how much data was perceived to be helpful, how different data formats seemed to have influenced the consultation, and the feasibility of implementing such approaches across the diverse range of clinical conditions that are encountered in general practice.

The focus groups were audiotaped for subsequent transcription (60-80 minutes for each session). The

simulated patients were asked to contribute their views about the consultations, the risk communication process, and their perceived involvement in the decision making process. Where inconsistencies (of views but not of factual information) were noted among participants these were fed back for clarification.

### Analysis and validation

The transcripts of discussions were examined by all three authors to identify emergent themes,<sup>12</sup> which were then agreed by discussion. All data were then categorised independently by two researchers (AE and GJE), again with agreement over classification achieved by discussion. The results were checked with the simulated patients and three of the course organisers, and interpretation or emphasis was modified where required.

### Results

Forty seven clinicians were involved in the discussions. Thirty nine registrars attended one of four vocational training sessions (one registrar attended twice), together with two course organisers for each group. The focus groups discussed the context of the consultation, problems with finding and using data, comparing different risk tools, application in practice, and the outcomes of risk communication. These themes are amplified and illustrated below with data from the focus groups.

### Context of consultation

Participants highlighted the importance of the existing doctor-patient relationship to effective risk communication. They considered that a doctor who had known the patient well and for some time would be in a strong position to understand their information requirements or preferences and would be able to tailor the communication accordingly.

Participants noted the great range of patients encountered in primary care and the implications of such diversity for presentation of information:

It depends ... on the type of patient ... and their background ... unless you've got a steady scientific upbringing in school, it doesn't mean anything to them and certainly I think I know a lot of people who would be confused .... I think you've got to choose your approach.

### Problems with data

The registrars said that data are often not available in a “digestible” or relevant form for the practising doctor, or that doctors do not have sufficient time to access them. This may be compounded by patients accessing information from the internet or elsewhere and then presenting the doctor with unfamiliar information.

Doctors perceived that many data were not impartial (especially if data originated from pharmaceutical companies), and were suspicious about bias in the charts or tables that they were given. They viewed many (group) data as being inapplicable or unhelpful for an individual patient, and the common presentation of relative risks as potentially misleading:

It's very dangerous to use relative risk at all, I don't think that it should be used. There are lots of mistakes that have happened from lots of literature because the people are using

relative risks and they shouldn't have, and it's just very misleading ... as in 25% of what?

Related to this there were concerns about the use of data to channel patients' decisions, prompting ethical dilemmas about whether risk data may enhance or compromise patient autonomy and perceived beneficence.

### Comparing different risk tools

Doctors mostly found it helpful to have some "hard" numerical data available to introduce into a consultation where patients have a genuine choice about the treatment options:

As a doctor I felt very protected by these [data] ... if this is what everybody is telling then even though I didn't know it off the top of my head, you know if I did have it written down then we are all sharing a united front and any GP would be saying it.

This was not always the case, however, and it was noted that poor explanation of risk information may be counterproductive. Even with good explanation, information overload can occur, and some doctors preferred to discuss risks "qualitatively" rather than to become snared in detail.

When considering numerical information formats some doctors found it easiest to convey information about relative risk in a (simulated) consultation but recognised that this may be persuasive or alarmist when not put in correct perspective. Most doctors noted that using graphical presentations of the same data allows information on both relative and absolute risk to be portrayed, but in a simple format that does not seem excessively statistical or "scientific":

It is easier because you don't have to be saying the actual absolute risk is this, with HRT or without HRT.

Graphs allow key information and the range of options to be made explicit but not necessarily mentioned in the consultation, and therefore were noted to be useful as time saving measures:

I think that our consultation proved that a picture speaks a thousand words; the graph was remarkably useful—that was my impression. The patient was much better being able to see the graph.

Graphical presentations allowed the two participants to work through the consultation task together and brought them closer together physically to look at the data. Participants recognised that some patients may not find graphical information very helpful and that the risks would need to be conveyed in alternative formats, such as chances or betting odds.

### Application in practice

As well as exploring different phrases for presenting risks (for example, converting 20% into 1 in 5), doctors also found it useful to describe risks by comparing them to everyday risks with which the patient would be familiar, such as the risks of driving a car:

One of the pill companies sent everybody plastic cards and it just had diagrams, one with an ambulance and that was the risk of "RTA" and ... you can see your risk from going on the pill was that and your risk of getting RTA was that. And that kind of information was very handy.

Doctors felt it could be helpful to have a resource pack of risk information in a variety of formats about common problems in general practice, such as using

the contraceptive pill, the benefits and disadvantages of antibiotics for upper respiratory tract infections, lipid lowering treatment, hypertension, and the risks of common operative procedures. Participants also felt that wider use of patient held records and information leaflets for patients would be helpful.

### Outcomes of risk communication

Doctors said that communication of risk could reduce their uncertainty and increase their satisfaction with the consultation. Both doctors and patients thought that effective communication of risks should allow patients to perceive risks, lead to greater understanding of choice and of the risks and benefits of different options, decrease uncertainty about choice of treatment, and lower anxiety about the perceived risks of treatment. They warned, however, that there could be information overload, poorer overall communication between doctor and patient, or heightened anxiety for the patient.

### Discussion

These general practice registrars generally supported the use of different approaches to communicate risks, tailoring them to the information needs of individual patients. This work adds to previous attempts to develop risk communication, which have generally used single new strategies.<sup>1</sup> We used three specific clinical scenarios but the risk tools could be applicable in many others, especially where genuine choices of treatment need to be made.

The methodology used here capitalises on the interaction within a group to gauge the views of individuals when among their peers.<sup>13</sup> Caution is required in interpreting and generalising from this study, however, because these views on risk communication may be specific to this sample of mainly inexperienced general practitioners. Using simulated patients to develop skills in gathering information from patients can provide a useful way of examining new support materials for a consultation.<sup>22</sup> The process used in this study could provide a model for training in communicating risks.

Most participants noted that the lack of data and difficulty in keeping up with information on risk were major hindrances to communicating risks. When data are available their quality, impartiality, and relevance to everyday practice are not always clear. Convincing doctors of the validity and relevance of data seems therefore to be important.

The registrars said that graphical presentation of data was quick and probably the most useful method. It allows doctors to convey the concepts of absolute risk and relative risk without having to label them as such. It also avoids the need to explain the detail and the range of options available and avoids the problem of using relative risk in isolation.

Similar risk tools should be evaluated in clinical practice, offering practitioners a range of complementary formats for providing information about risk.<sup>5 10</sup> Few such studies have been conducted in primary care,<sup>1</sup> but the issues of communicating risks apply to many of the clinical situations encountered there.<sup>23</sup>



## Key messages

- Involving patients in decisions about their treatment or care improves health outcomes
- Successful involvement of patients requires effective communication of risks
- Having a range of risk communication tools from which to choose when discussing treatment options is likely to be more appropriate and flexible for clinical practice than single new strategies
- Different presentation formats include verbal descriptions of risks, numerical data, and graphical depiction of the information
- Graphical presentation of data on risk can be effective and save time in general practice consultations

## Conclusion

Providing doctors with information about risks and benefits of treatment options encountered in general practice is likely to help them communicate with patients. Tools for communicating risks should include information on both absolute and relative risk. Graphical presentation of information is one way of achieving this and has the potential to improve the efficiency of the primary care consultation.

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## One hundred years ago

## Multiple operations on a single patient

Sir,—The following case, reported by Mercanton, seems to throw into the shade even Mundé's remarkable performance.[1] I mention it here as an example for the prevention of the Continental *furor secandi* spreading among ourselves.

The patient was an unmarried peasant woman, aged 47, who had suffered from uterine prolapse for four years. For this the following operations were done—anterior colporrhaphy, with perineoplasty, Alexander's operation, excision of the portio vaginalis, and extirpation of the vaginal mucous membrane. Prolapse of the anus having supervened twelve months after the first of these operations, the actual cautery was applied to the recto-anal region. While this lesion was healing, fourteen months after admission, a hard nodule, the size of a nut, was noticed in the left breast, with enlarged axillary glands. For this the breast was extirpated and the axilla cleared sixteen months after her admission into hospital. The tumour proved to be acinous cancer.

The uterine prolapse having returned, a further operation—hysteropexy—was done for it. She soon recovered, and left the hospital in good health a month later. She returned three months afterwards with a left ovarian tumour. For this laparotomy was done, and both ovaries being affected with soft cystic cancer, they were removed. A few months afterwards she left the hospital convalescent. Two and a half years later she again came under treatment with an intra-abdominal tumour of the left sacro-iliac region. Laparotomy was again performed, when the sigmoid and rectum were found embedded in a hard mass of cancerous growth, and the peritoneum was infiltrated. Under these circumstances an artificial anus was established at the abdominal wound. From the operation this poor peasant woman again recovered, but subsequently she succumbed to the disease.—I am, etc.,

Clifton, Sept. 11th. W. Roger Williams. (*BMJ* 1899;ii:752)