Communication about risk: the responses of primary care professionals to standardizing the 'language of risk' and communication tools

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**Objective.** We aimed to gauge responses of primary care professionals to standardization of the 'language of risk' and risk communication tools.

**Methods.** We carried out a qualitative study using six semi-structured focus group discussions. The subjects were 36 primary care professionals from general practice, practice nurse, district nurse, community psychiatric nurse and health visitor disciplines.

**Results.** Between professionals, the standardization of the language of risk was felt to have potential benefit in making professionals consistent in their appreciation of risks and communication with each other. Between professionals and patients, standardized language was thought inappropriate or insufficient because of contextual variation in communication and interpretation of risk information by patients. The use of more-detailed comparisons of risks was felt to be a potentially effective development in risk communication in practice.

**Conclusions.** A standard language of risk communication was perceived as being potentially helpful for communication between professionals, but many respondents were sceptical about its usefulness in communication with patients.

**Keywords.** Primary care, qualitative research, risk communication.

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**Introduction**

Risk is of increasing concern to the public, but our understanding of how to present and discuss risks and the benefits of interventions with patients is still limited. The interpretation of risks by patients and doctors varies, for both linguistic and numerical representations of probability. There is evidence that the way in which information is presented produces different management decisions by doctors or treatment acceptance by patients. Different methods of communicating risk also have different psychological effects on patients. Further research into risk communication may improve our quality of care, but to achieve this it must look beyond the problems to potential solutions.

Sir Kenneth Calman proposed a standardized “language of risk” as a tool to help professionals communicate with patients. Another ‘standard’ method, has been proposed (from the United States) for risk communication across a variety of fields including environmental or toxicological perspectives and more familiar medical ones. This Paling Scale has both language and numerical elements with which to compare risks, and is proposed for both agency mass communication and individual communication. Other risk communication tools include visual aids promoted by pharmaceutical companies such as Schering for specific products. (The scales and visual aid are shown in the Appendix.)

General practice-based primary care covers several clinical areas such as antenatal screening, cancer screening, primary prevention and genetic counselling.
in which communication about risk is important. We therefore sought to investigate the responses of primary care professionals to these communication tools and whether they could be helpful in clinical practice.

Subjects and methods

Method
We undertook a series of focus group discussions in order to explore the consistency or diversity of views about standardized risk communication tools among primary care professionals. The focus group methodology is useful in identifying group norms or a range of views,\(^{18}\) and capitalizes on the interaction within a group to elicit rich experiential data.\(^{19}\) Within and between group comparisons are then possible. When interpreting, data from the latter parts of discussions may be given more weight as the group moves towards establishing its view.

Study sample
Thirty-six subjects participated in six separate groups covering the practice nurse, district nurse, community psychiatric nurse, GP and health visitor disciplines. The sample formation was designed to enable comparison of whether professional attitudes to the risk communication approaches being studied are consistent or vary for different professional groups (and the patient groups they represent). The characteristics of the sample are described in the accompanying paper.\(^{20}\)

Focus group discussions
The setting-up and process of the discussions is described in the accompanying paper.\(^{20}\) The discussions explored general risk communication issues, ‘routine’ practice and modifying influences on communication with patients. Participants were then introduced, with explanation by the facilitator (AE), to the two standardized communication tools proposed by Calman\(^{11-13}\) and a simplified version of the one by Paling.\(^{14,21}\) Finally, participants were introduced to a visual aid, promoted by Schering, depicting the relative risks of the contraceptive pill, compared with ‘everyday’ risks. Participants were asked to comment on the principles employed in these tools and to give their views on potential applicability in practice. This section of the exercise occurred on average 45 minutes into discussions, and took place in the context of the preceding discussion about dilemmas of risk communication and current practice. The researchers made their impartiality with regard these subject materials clear to participants.

Data analysis
The process of analysis is described in the accompanying paper.\(^{20}\) We sought to identify the level of support or otherwise for the risk communication tools, analysing the consistency of support within and between groups of professionals. Data will be presented indicating their professional group (GP1, Tutor GPs; GP2, new principal GPs; HV, health visitors; CPN, community psychiatric nurses; PN, practice nurses; DN, district nurses) and page numbers from the transcripts for reference.

Results

Standardized risk communication tools and the ‘language of risk’

Communication with patients. There was only muted support for the prospect of standardizing communication, despite general support for the words in the Calman scale (‘I think I would use ‘high’ ‘low’, PN, p7) compared with the Paling scale. One GP commented: ‘This stratifies it for our use . . . we’d start having a standardized meaning for ‘moderate’, what we mean by ‘low’ or ‘very low’—but that still doesn’t get over the problem of making it communicable easily to Joe Public’ (GP1, p14).

Initial impressions were that standardized risk communication tools were potentially helpful, but as discussions progressed reservations became evident in all groups. Most reservations were expressed about the simplified Paling Scale, perhaps because participants did not relate to North American language such as ‘homebase’, from which to compare risks, although some individuals preferred this to the Calman scale. The numerical part of the Paling Scale was felt to be arbitrary and most unlikely to be meaningful to either professionals or patients, although the visual aspect of the scale was appreciated.

Many groups viewed standardized risk language as insufficiently flexible for individuals and the contextual influences on discourse: ‘standardised jargon wouldn’t necessarily work, because we’ve all got our different ways of conveying the information that a patient will accept’ (PN, p10). Other comments included:

‘What does ‘high’ mean to them and what does ‘moderate’?’ (DN, p8)

‘Everyone interprets things differently, even the colour red, you know—one person sees it one way and one the other.’ (DN, p8)

‘. . . when you talk to different people, you talk at different levels’ (CPN, p10)

‘if we are talking about scales—I think they would have to be specifically designed for the client group we are dealing with. I’m not sure that you can have a scale that covers across the board for every person that walked into the surgery or into the ‘m3’ health centre.’ (CPN, p11)
“I think the actual terms used would mean different things to different people. Whereas if you have a figure—1:x—then that is a definite thing to hang your hat on.” (GP1, p14)

“The difficulty with words is that patients have their own way of interpreting what you are saying. If you said to somebody they have a ‘moderate’ risk and it’s something they are not particularly worried about, then they are going to find that very acceptable... whereas somebody else has got something they are very anxious about.” (GP1, p14)

“In our profession we recognise it is very difficult to standardise any information that you give out because of the diversity in the groups of families that we work with.” (HV, p16)

Two specific reservations concerned the potential for mismatch with patients’ needs and oversimplification for some patients. The clinicians thought communication about ‘high’ risks potentially detrimental in circumstances in which clinical objectives are to maintain patient motivation or to impart reassurance following progress. Similarly, ‘low’ risk could give false reassurance and diminish patient enthusiasm for procedures such as cervical smears. This standard risk language was felt too simple for some highly educated patients who may appreciate a more “statistical” approach.

Schering chart
Some reservations were expressed about the credibility of data promoted by a company with a vested interest, but most groups, except the Health Visitors, responded positively to the communication tool in principle:

“Again, it’s visual communication isn’t it? And particularly if this is backed up by verbal communication. There’s more chance of you taking it on board... it relates it to common events in life which the patients are easily able to identify with and I think they will—I quite like it.” (GP1, p16)

“I think that’s fine. This is the sort of thing that I would rather use as an example.” (GP2, p20)

“The visual impact is good and then as you try and explain you can use the figures...” (GP2, p20)

“I think comparing it to having a baby is quite a good thing to do because people don’t think of having a baby as being risky. They think of that as normal... that’s quite a good thing to get the message across.” (DN, p11)

“The thing about this is that it is visually represented. Not so much the bar chart there but you can equate with those, anyone can, and you can use it across the board. No matter what your social class, your education or—everyone—it doesn’t demean people...” (CPN, p12)

A few participants were less positive, viewing it as potentially misleading—the standard risk quoted may not be relevant to individuals as the ‘average’ patient is a rarity in practice (DN, p11). Some comments suggested that the comparison with dissimilar risks was inappropriate: “it would be nice to compare it with other forms of contraception rather than car driving” (DN, p11). The Health Visitors were most sceptical about being able to use this type of tool in their work:

“Again it’s figures isn’t it? Quantitative information.” (HV, p16)

“I think there must be a client group that this would be useful to. But I can’t think of one myself.” (HV, p16)

“I think this is where, in our profession we recognise it is very, very difficult to standardise any information that you give out because of the diversity in the groups of families we work with.” (HV, p16)

Discussion
Clinicians must explain risks effectively to patients or may “run the risk” of being misunderstood. All of
the primary care participants in this qualitative study recognized problems in risk communication, but they have reservations about whether these tools will be helpful with patients. This probably reflects the many aspects of the communication process—non-verbal elements, mental images, past experience and discussion about the meaning of the risk to the individual—and the many influences on it which make generic solutions difficult.

The methodology used capitalizes on the interaction within a group to elicit data and to gauge the views of individuals when amongst their peers. When commenting on these risk communication tools, consistency within and between groups is not generalizable from this sample, but where differences are identified this shows that professionals in practice are not consistent. Differences are thus interpretable as generalizable evidence of a range of views in wider practice. Where participants responded positively to the tools this must be interpreted with caution until they have been tried in practice. Negative comments also require caution, but are perhaps more likely to be reflected in practice—if the clinician does not have confidence in the tool it is unlikely to be effective. This research (from the professional’s perspective) should clearly be complemented by similar data from patients about what would be found helpful or unhelpful before using it to inform efforts to improve risk communication in practice.

In routine practice, most professionals report tailoring their advice to the patient, and often defer the communication about risks until other ‘more important’ issues have been addressed such as establishing rapport or treatment concordance. Once moving onto risk communication, however, most professionals were sceptical about standardized risk language helping them in practice.

Some professionals (especially the senior GPs) did report giving standard advice to many patients, and using numerical representations of risks if the figures were available. Thus moving to a verbal representation of risks was thought potentially unhelpful, consistent with other research which shows that most patients prefer numerical risk information, or that terms such as ‘usually’, ‘infrequent’, ‘rare’ or ‘some’ are not helpful in providing risk information. The nature of the risk itself influences the probability people associate with a standard term such as ‘rare’, according to lower frequency for more serious outcomes. Like Calman, others have suggested, however, that clinicians should use a limited number of words with clearly identified ranges of meanings, and that patients could be educated as to the language being used.

At best, most primary care professionals in this sample regarded this as possible but some way off. More immediately, they were pessimistic about patients finding this helpful, or about whether a consistent message would be received. Most clinicians thought more flexibility would be required for the range of patient characteristics: age, social class, intellectual ability, linguistic ability and ethnic background.

Many professionals suggested that they would prefer to relate risks to others with which the patient is already familiar, especially ‘everyday’ risks. This is in keeping with the Paling Scale philosophy, although participants requested much more detail. The aggregation of numerically different risks into broad bands under terms such as ‘high’, ‘low’, etc. was felt to hinder this process. Participants also thought a detailed list of risks should differ not only in size of absolute risk, but also in their seriousness, avoidability and acceptability, features recognized in the Calman proposal. They could convey absolute and relative risk of a clinical ‘event’ by comparing it with a risk which is meaningful and familiar to the patient, chosen from the list. The potential difficulty of this is that people’s assessments of everyday risks such as driving a car are frequently inaccurate. In this context, many participants viewed the chart produced by Schering as potentially helpful. In particular the visual representation of these risks was positively received, but again thought too simplistic or inflexible by some participants.

In contrast to the other groups, the health visitors generally viewed qualitative risk communication as less relevant to them. Health visitors viewed their role as qualitatively different, getting parents simply to recognize risks at all, and to encourage attempts to reduce or eliminate them. They would only revert to a quantitative approach if ‘in the last resort’, and hence did not see the communication tools studied here as helpful. They viewed their approach as more empathic towards the needs and circumstances of clients, perhaps due to professional training and more of their work taking place in the home than, for instance, the GP or practice nurse. Studies which demonstrate that patients may tend to hold a categorical ‘all or nothing’ view of risks or risk status lend some support to the health visitors’ approach to dealing with risk, although the participants did not specifically describe this as a basis for their approach. The health visitors did observe that immunization might be amenable to quantitative risk communication, but these tools were too inflexible.

Despite scepticism about using a standard language of risk with patients, there was widespread support for standardizing risk language in communication between professionals, both within and between disciplines. Participants felt that this would enable us to be more consistent in our own appreciation of the risks of certain illnesses, complications, procedures, treatments, etc., and be more uniform in what we were trying to convey to patients rather than how.

Conclusion

Groups of primary care professionals have demonstrated a range of views towards these risk communication
tools. Risk communication is a complex process and participants identified potential problems in standardizing risk communication with patients which make this a difficult goal to attain. Participants were, however, supportive of standardizing communication between professionals, and of the Calman Scale as a means for achieving this.

Acknowledgements

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References

Appendix
Charts shown to participants in the study for comments.

The Paling Perspective Scale

<table>
<thead>
<tr>
<th>Risk range</th>
<th>Example</th>
<th>Risk estimate</th>
</tr>
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<tbody>
<tr>
<td>High</td>
<td>≥1:100</td>
<td>(A) Transmission to susceptible household contacts of measles and chickenpox⁶ &lt;br&gt; (A) Transmission of HIV from mother to child (Europe)⁷</td>
</tr>
<tr>
<td>Moderate</td>
<td>1:100-1:1000</td>
<td>(A) Gastrointestinal effects of antibiotics⁸</td>
</tr>
<tr>
<td>Low</td>
<td>1:1000-1:10 000</td>
<td>(D) Smoking 10 cigarettes a day⁹ &lt;br&gt; (D) All natural causes, age 40⁴</td>
</tr>
<tr>
<td>Very low</td>
<td>1:10 000-1:100 000</td>
<td>(D) All kinds of violence and poisoning⁹ &lt;br&gt; (D) Influenza¹⁰ &lt;br&gt; (D) Accident on road⁹ &lt;br&gt; (D) Leukaemia⁹</td>
</tr>
<tr>
<td>Minimal</td>
<td>1:100 000-1:1 000 000</td>
<td>(D) Playing soccer⁹ &lt;br&gt; (D) Accident at home⁹ &lt;br&gt; (D) Accident at work⁹ &lt;br&gt; (D) Homicide⁸ &lt;br&gt; (D) Accident on railway⁹</td>
</tr>
<tr>
<td>Negligible</td>
<td>≤1:1 000 000</td>
<td>(A) Vaccination associated polio¹⁰ &lt;br&gt; (D) Hit by lightning⁹ &lt;br&gt; (D) Release of radiation by nuclear power station⁹</td>
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Chart 1: The Paling Perspective Scale¹⁴

Chart 2: Calman’s Chart¹¹
Risks and benefits of ‘The Pill’

The Pill is probably the 20th Century’s most widely prescribed and researched drug.

Taking the Pill carries a very low risk:

- Car - driving (UK average mileage) 17
- Having a baby (in UK) 10
- Crossing the Road 6
- Taking the Pill in non-smokers under 35 1.3

*Annual no. of deaths per 100,000 people

Benefits of taking the Pill:

- Provided it is taken correctly and consistently the combined oral contraceptive pill is nearly 100% reliable
- Lighter, more regular, less painful periods
- Reduced risk of cancer of the womb or ovaries
- Reduced risk of anaemia, ovarian cysts and inflammation of internal sex organs

Chart 3: Schering Chart