

# Communicating Risk to Patients



## Summary

- Patients want and need to know the benefits and risks of investigations and treatments
- The way in which health professionals communicate risk affects patients' perception of that risk
- Patients should be provided with a balanced and dispassionate assessment of the pros and cons of the various options based on well founded data
- Use of simple visual aids and everyday analogies can help to increase understanding and ensure that consent is properly informed

## Introduction

Communicating risk, for example of a diagnostic procedure or whether or not to undertake a prophylactic or therapeutic treatment, has become an increasingly important part of the medical consultation. In the past, doctors were entrusted to make decisions on behalf of their patients. Today, patients interact with a variety of health professionals and are encouraged to be involved in decisions that will affect their lives, or the lives of their children. An appropriate decision can only be made if the facts are communicated in a manner that is appropriate for the patient concerned.

Establishing a relationship involves both time and skills, but early discussion can ultimately save time. Appropriate communication skills can help build relationships.

### What influences decision-making?

Patients' perceptions of the risks associated with medical interventions are often very different from those of the health professionals responsible for their care. Uncertainty is possibly the most difficult aspect for any patient to deal with and fear and ignorance frequently lead to the wrong conclusion being reached. To communicate risk effectively the health professional must gain the trust of the patient. This is best achieved when discussion on the balance between risk and benefit is based on reliable information. Fortunately, for most procedures and treatments in cardiovascular disease there is good data available to guide the consultation.

### Helping decision-making

Patients differ in their desire to be involved in decision-making. Some would prefer the health professional to make the decision for them, whilst most want to make the decision themselves following informed guidance.

Improving communication about risk involves:

- Building trust
- Being aware of the multiple and conflicting sources of information to which patients have access
- Being sensitive to the psychological and social influences on the way patients respond to information.

Thornton et al found that health professionals who had been trained in using decision aids sharpened the focus of their consultation and changed its content.

Supporting decision-making can involve several stages:

1. Clarifying the decision – by explaining the problem
2. Discussing the evidence-base
3. Acknowledging the patient's role in decision-making
4. Describing benefit and harm
5. Understanding the patient's attitude to the benefits described
6. Considering how important the treatment is to the patient and how confident he/she is in making the decision.

### Presenting Statistics

Nearly all tests and treatments are associated with some risk. Rather than using vague terms such as low and high risk, it is better to give a numeric estimate wherever possible. When doing so, use absolute numbers and consistent denominators, e.g. 40 out of 1,000 and 5 out of 1,000, rather than 1 in 25 compared with 1 in 200. Be sure you understand the difference between relative risk and absolute risk. For example, a treatment may have been reported to produce a relative risk reduction of 50%, which sounds impressive. However, if the event concerned only occurs in 2 in 1000 patients, then the treatment will only prevent one event in 1000 patients treated, giving a very

low absolute risk reduction. This is an important consideration when advising patients on primary prevention.

Probabilities of events, relative risks and conditional probabilities are alien concepts to most patients yet they frequently form the basis of medical decision-making. The evidence cited in the literature needs to be communicated in language that can be readily understood by the patient. For example, instead of quoting the probability of developing a condition as 0.8%, it would be better to say that 8 out of every 1,000 people will be affected. Also, instead of saying that there is a 3% chance of dying from an operation, it would be better to say that there is a 97% chance of surviving, or better still, that 97 out of every 100 patients survive. This positive framing is helpful when encouraging people to consider treatment options involving some risk.

### Visual Aids

Visual aids, such as pie charts, are excellent for conveying numeric data. A number of visual tools have been developed specifically to assist the communication of risk including the One Thousand People, the Paling Perspective Scale and the revised Paling Perspective Scale. Visual aids are particularly useful when dealing with patients who, for whatever reason, have difficulty understanding numeric data.

An example of such a visual aid is shown in figure 1. Alternatively, Edwards et al proposes the use of easily envisaged analogies to compare risk. Thus compared with a healthy person leaving a house through the door they

suggest that a diabetic would be running the same risk as someone jumping from a first floor window, and a hypertensive diabetic as equivalent to jumping from the second floor. Add smoking and the risk is like jumping from a five storey building.

Clearly not all patients will respond equally to the same method of communication. However, if used appropriately these communication tools can ensure that patients are in a position to participate in the important decision process about their future.



**Figure 1:** Portrayal of risks and benefits of treatment with antibiotics for otitis media designed with Visual Rx, a program that calculates numbers needed to treat from the pooled results of a meta-analysis and produce a graphical display of the result. *British Medical Journal* 2002; 324: 827-830. Reproduced with permission from the BMJ Publishing Group.

### Sources and further reading:

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