

Life: It's a risky business



Brian Karet

“Life is a sexually transmitted disease and the mortality rate is one hundred percent.”
RD Laing, Scottish psychiatrist

Risk is an integral part of the medical consultation and is the cornerstone of many of our actions. Traditionally, this risk was assessed by the doctor and the decision was communicated to the individual with minimal involvement on their part. Gradually, however, this paternalistic approach is giving way to shared decision-making (Charles et al, 1999).

For this to be worthwhile, however, effective strategies for communicating risk need to be learnt. This is not easy, and in other fields, such as nuclear power, food production or chemicals, specially trained risk communicators present information on behalf of their industry. All doctors are, however, expected to communicate risk that has significant cost and quality-of-life implications with usually no training whatsoever.

The concept of risk is particularly important for people living with a chronic disease. They have to make choices on a daily basis: what they eat, how much, whether to exercise, whether to test their blood glucose and, indeed, whether to take their medication. We know adherence to even relatively straightforward medication regimens is poor (Grant et al, 2003), and this applies just as much to people on insulin therapy (Morris et al, 1997).

It might be assumed that we are not communicating risk that well, but people make decisions based on a variety of factors, including emotions and experience. (Finucane, 2008). Every nurse and doctor in a smoking cessation consultation has had the riposte of uncle Jack who smoked 40 cigarettes a day and lived until he was 98 years old.

But there are some things that can help us to get the message across, and one of them is knowing that expounding on complex biomedical concepts does not work (Gigerenzer and Edwards, 2003). The most powerful tool in risk communication is the trust the individual has in their doctor, based on perceptions of caring and competence.

Most people have an understanding of risk from their everyday lives – crossing the road, getting on a train – but it is rarely quantified. There are a few tools to help doctors get the message across, and generally descriptive terms work better than numbers. There is an EU list of verbal descriptors (Box 1; European Commission, 1998) with numerical equivalents expressed as a fixed range, although studies have shown that people did not interpret these accurately either (Paling, 2003).

Most commonly, however, and most researched, is the Paling palette, but most GP computer systems use diagrams often now adapted as “smiley face charts” and studies show that most people understand them (Edwards et al, 2002)

Life is risky. The following article by Hermione Price evaluates alternative methods of risk communication. ■

- Charles C, Gafni A, Whelan T (1999) Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model. *Soc Sci Med* **49**: 651–61
- Edwards A, Elwyn G, Mulley A (2002) Explaining risks: turning numerical data into meaningful pictures. *BMJ* **324**: 827–30
- European Commission (1998) *A Guideline on the Readability of the Label and Package Leaflet of Medicinal Products for Human Use*. EC Pharmaceuticals Committee, Brussels
- Finucane ML (2008) Emotion, affect, and risk communication with older adults: challenges and opportunities. *J Risk Res* **11**: 983–97
- Gigerenzer G, Edwards A (2003) Simple tools for understanding risks: from innumeracy to insight. *BMJ* **327**: 741–4
- Grant RW, Devita NG, Singer DE, Meigs JB (2003) Polypharmacy and medication adherence in patients with type 2 diabetes. *Diabetes Care* **26**: 1408–12
- Morris AD, Boyle DI, McMahon AD et al (1997) Adherence to insulin treatment, glycaemic control, and ketoacidosis in insulin-dependent diabetes mellitus. The DARTS/MEMO Collaboration. Diabetes Audit and Research in Tayside Scotland. Medicines Monitoring Unit. *Lancet* **350**: 1505–10
- Paling J (2003) Strategies to help patients understand risks. *BMJ* **327**: 745–8

Brian Karet is a GPSI in Diabetes, Bradford, Chief Medical Adviser (Primary Care) Diabetes UK and RCGP Clinical Lead for Diabetes.

Box 1. List of verbal descriptors of different ranges of risk (European Commission, 1998).

Verbal	Frequency	Probability
Very common	>10%	>1 in 10
Common	1–10%	<1 in 10 – >1 in 100
Uncommon	0.1–1%	<1 in 100 – >1 in 1000
Rare	0.01–0.1%	<1 in 1000
Very rare	Up to 0.01%	<1 in 10000