


Helping the Professional Communicate Risk



Jane Chiodini
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Outline of presentation

- Establish what risk communication is and the challenges it presents
- Identify the more effective methods from the risk communication literature
- Apply this concept to the travel medicine consultation
- Demonstrate personal tools used to communicate risks to my travellers

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What is Risk Communication?

- Risk communication is an open two way exchange of information and opinion about harms and benefits, with the aim of improving the understanding of risk and of promoting better decisions about clinical management
- Risk communication should therefore cover
 - The probability of the risk occurring
 - The importance of the adverse event being described
 - The effect of the event on the patient

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Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

Why is risk communication important?

- Where there is good evidence of the benefits of an intervention, risk communication should aim to go beyond simply sharing information and endeavour to change beliefs or promote behavioural change (*e.g. wearing of a seat belt when in a car*)
- Many healthcare decisions have no single 'best treatment' and require trade-offs between harms and benefits – risk information in this scenario should therefore promote patient involvement, informed decision making and shared management plans (*e.g. malaria chemoprophylaxis discussion*)
- However, final decisions depend on the patient's own values as much as they do on the risk information presented

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Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

How should risk information be presented?


- Method is important and influences the degree to which perceived risk will affect behavioural change
- As clinicians we are communicating risk in our day to day work but we will only change behaviour if our communication is effective

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Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

A good example of risk communication

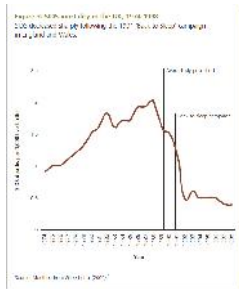
- Avon study of SIDS in 1989 identified sleeping position as a risk factor
- The 'Back to Sleep' public health campaign communicated the risk of prone sleeping position to parents



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BMA. Risk: what's your perspective? A guide for healthcare professionals. January 2012
<http://bma.org.uk/about-the-bma/how-we-work/professional-activities-and-special-interests/board-of-science/board-of-science-publications>

A good example of risk communication



Campaign was very successful and by 2004 annual deaths from SIDS had decreased by up to 70% in some countries and by over 50% in the UK



BMA. Risk: what's your perspective? A guide for healthcare professionals. January 2012
<http://bma.org.uk/about-the-bma/how-we-work/professional-activities-and-special-interest/board-of-science/board-of-science-publications>

Official publications provide guidance



<http://www.documents.hps.scot.nhs.uk/about-hps/hpn/risk-communication.pdf>
<http://emergency.ecdc.europa.eu/doc/CEC/2012edition.pdf>
<http://bma.org.uk/about-the-bma/how-we-work/professional-activities-and-special-interest/board-of-science/board-of-science-publications>
http://ecdc.europa.eu/en/publications/publications/1008_ted_conducting_health_communication_activities_on_mmr_vaccination.pdf

Impact of negative communication



<http://www.cryshame.co.uk/>
<http://www.bbc.co.uk/news/magazine-22354895>
<http://www.guardian.co.uk/society/2013/may/02/measles-epidemic-wansea-teenagers-targeted-vaccinations>

Barriers to effective risk communication

- Most commonly reported reason was of patients and doctors understanding numbers
 - Collective statistical illiteracy
 - Basic numeracy
 - e.g. one in 1000 = 0.1%
- Clinicians need to be adept at understanding numbers and explaining them in a way that patients will understand

Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

Making statistics relevant to patients



Immunity against infectious disease: the Green Book. Public Health England
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147832/Green-Book-updated-140313.pdf

Explaining numeracy for risk communication



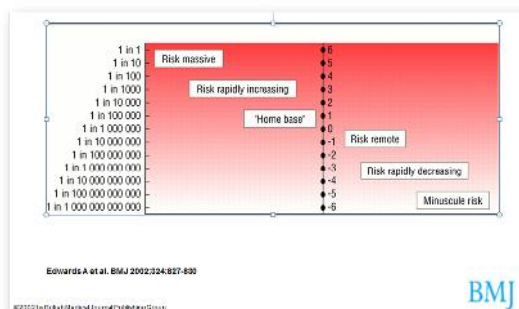
Difference between relevant and absolute risk Gigerenzer <http://www.youtube.com/watch?v=1j0BRr3f1Y>

Problems re language of risk

- Risk **perception** of an individual is a challenge for communication
- Terms such as probable, unlikely, rare etc. have been shown to convey “elastic concepts”
 - Interpretation and understanding of terms can vary from person to person
- Proposals to standardise risk language have been made

Edwards et al. Explaining risks: turning numerical data into meaningful pictures *BMJ* 2002;324:827-830
Health Protection Network. Communicating with the Public about Health Risks. Health Protection Network Guidance 1. Health Protection Scotland, Glasgow 2008.

Familiarity with standards, may promote a more accurate perception of risk



Proposal of standardised risk language by Paling

Edwards et al. Explaining risks: turning numerical data into meaningful pictures *BMJ* 2002;324:827-830

Other barriers to effective risk communication



Edwards et al. Explaining risks: turning numerical data into meaningful pictures *BMJ* 2002;324:827-830

Taylor SP et al. Cross-cultural communication barriers in health care. *Nursing standard*. 27, 31. 35-43.

Registration bodies state how we should communicate, but more training is needed!

- Communicate effectively
- 31 You must listen to patients, take account of their views, and respond honestly to their questions.
 - 32 You must give patients the information they want or need to know in a way they can understand. You should make sure that arrangements are made, wherever possible, to meet patients' language and communication needs.¹⁵
 - 33 You must be considerate to those close to the patient and be sensitive and responsive in giving them information and support.
 - 34 When you are on duty you must be readily accessible to patients and colleagues seeking information, advice or support.

Good Medical Practice. GMC 2013
http://www.gmc-uk.org/guidance/good_medical_practice.asp

General approach to risk communication

- Don't use medical jargon
- Be precise and specific
- Focus language on positive options
- Reinforce a message with repetition
- Create mechanisms to help people remember the message
- Simple bar charts may be preferred to other formats such as thermometer scales, survival curves, pie charts
- Comparison with everyday risks is invaluable
- Care not to overload information

Edwards et al. *BMJ* 2002;324:827-830
Health Protection Network. Communicating with the Public about Health Risks. 2008.

Methods to communicate risk



Personalising risk communication

<http://www.cancer.gov/bcrisktool/>

Skills needed for effective risk communication

- Clinical competence and expertise
- Caring and empathic approach
- Transparency and openness
- willingness to discuss the patient's own expectations and fears
- This can increase an environment for decision making based on trust

Edwards et al. *BMJ* 2002;324:827-830
Health Protection Network. Communicating with the Public about Health Risks. 2008.

Uncertainty

- Uncertainty is one of the most difficult elements of risk communication
- Uncertainty can arise out of incomplete information, sometimes because the science underpinning a topic is changing rapidly – acknowledging limitations is central to gaining trust
- Communicating uncertainty may also lead to lower decision satisfaction among patients

Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

Further education online

<http://understandinguncertainty.org/> and <http://www.youtube.com/watch?v=jhfmkmaNdu>

Natural frequencies

Growing evidence to support the use of pictographs to present natural frequencies with evidence suggesting that these are well understood

Ahmed et al. Communicating risk. *BMJ* 2012;344:e3996

<http://www.nntonline.net/>

Decision aids

Good practical support to risk communication

Using interactive technology

<http://sdm.rightcare.nhs.uk/>

When and how should risk communication be conducted in a travel consultation?

Given the importance of the topic and potential outcome from its impact it should:

- Take place during the risk assessment process and continue into counselling on the risk management advice
- Actively involve the traveller in treatment decisions – vaccines and malaria chemoprophylaxis

Wolfe Acosta R, Woolfe MS. Structure and organization of the pre-travel consultation and general advice for travelers. In: Keystone J et al, Eds. *Travel Medicine 2nd Edition*. Philadelphia: Mosby; 2008. p. 35-45

Travel clinic communication and non-adherence to malaria chemoprophylaxis

- Important to have a clear structure
- Take a proactive approach to eliciting and responding to concerns
- Highlighting key issues
- Managing the flow of information
- Facilitating shared decision making
- Being creative in problem solving

Farguherson L, Noble L, Behrens R. *Travel Medicine and Infectious Disease* 2011; 9, 278-283

Malaria Research providing strong risk communication message

- The highest numbers of malaria cases were seen in VFRs but they were far less likely to die
- Overall case fatality was 3.0% in tourists compared with 0.32% in VFRs
- Mortality increased with age, with the elderly almost ten times more likely to die than those aged 18-35 years
- Death rate among tourists is particularly high when returning from a 'winter sun' holiday in the Gambia

Checkley AM et al. *BMJ* 2012;344:bmj.e2116


Use of bar charts increase effectiveness e.g. malaria risk communication

1. Edwards et al. *BMJ* 2002;324:827-83
2. Checkley AM et al. *BMJ* 2012;344:bmj.e2116

Risk communication to VFRs

- Education in schools
- Engaging highly respected people within a community
 - Community leaders
 - Celebrities
- Targeting opportunistically for preparation of travel advice

Travel related risk communication tools?



Travel Safe
Centers for Disease Control and Prevention (CDC)

Tools Ratings and Reviews Related

Description
Regular posting of health information for travellers from the Centers for Disease Control and Prevention's (CDC).

#	Name	Date Released	Description	Priority	View
1	Deep Vein Thrombosis	7/16/13	5 Apr 2013	The postcard...	View (0)
2	Alcohol and Air Travel	2/16/13	23 Dec 2012	The postcard...	View (0)
3	Get the most out of your trip	4/16/13	18 Aug 2013	The postcard...	View (0)
4	Reasons To Travel	4/16/13	4 Feb 2013	Each postcard...	View (0)
5	Malaria Prevention	4/16/13	22 Feb 2013	Informational...	View (0)
6	Safe and healthy travel to China	4/16/13	9 Oct 2013	4 Feb 2013...	View (0)
7	Malaria and Travel	7/16/13	26 May 2013	Malaria is...	View (0)
8	How to prepare for your trip	4/16/13	27 Feb 2013	For information...	View (0)
9	The Travel Kit for Air and Sea	4/16/13	14 Feb 2013	The postcard...	View (0)
10	Don't Let the Bugs Bite: Prevention	4/16/13	20 Dec 2012	The year 2012...	View (0)
11	Healthy Travel Fundamentals	4/16/13	24 Oct 2012	The Travel Kit...	View (0)
12	Rabies and Air to Travelers	7/16/13	1 Feb 2013	Each postcard...	View (0)

www.janechiodini.co.uk



Jane Chiodini
Travel Health Specialist Nurse

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Tools

Videos

Tools to help healthcare professionals communicate travel health issues



Malaria Prevention Advice for Travellers


Video relating the impact of malaria infection



INFECTION. Don't be the one to pass it on.

<http://www.janechiodini.co.uk/tools/videos/>

Designing a tool to communicate the risk of rabies



Journal of TRAVEL MEDICINE

ORIGINAL ARTICLE

The Reliability of Pre-travel History to Decide on Counseling and Vaccinations: A Prospective Study

Isabella A. Bessi, DTM, MPP and Bruce Gessman, MD, PhD, DTM

EDITORIAL

The Pre-travel Visit Should Start With a "Risk Conversation"

Ruby Zinner, MD, FCFP, FRCP

Additional information post CISTM13

The following two slides illustrate a communication tool the author has designed and created for the risk of rabies in a travel health context. The intention is for it to be used in consultation with a traveller, using the pictorial illustrations to discuss the issues. Text is added for information, but is not expected to replace verbal discussion.

PLEASE NOTE, the information written in this tool follows guidance provided in the United Kingdom on rabies management and may not necessarily be the same as that found in other country guidance.

The intellectual property of this tool has been copyrighted to Jane Chiodini. For further information or discussion please contact me at jane@janechiodini.co.uk

This tool is undergoing audit at present and when completed will be posted on www.janechiodini.co.uk for general use.

A rabies communication tool

Communicating the risk of rabies
A tool to use with travellers.

What is rabies and how do you get it?
Rabies is a viral, zoonotic disease that is transmitted by contact with the saliva of infected animals, usually dogs, cats, bats and wild animals.

What happens in rabies infection?
Once contracted, the rabies virus travels through the nervous system to the brain, where it causes inflammation and eventually death.

How common is rabies?
Rabies is a global health problem, with over 50,000 deaths reported each year.

What about rabies vaccine?
Rabies vaccine is available for dogs, cats, and humans. It is highly effective in preventing the disease.

Benefit of having rabies vaccine before you travel
NO traveller who has received rabies vaccine pre-exposure has ever died following a rabies exposure.

Booklet, podcast, presentation, app?

Risk management of rabies
To reduce the risk of rabies, travellers should avoid contact with animals, especially dogs and cats, and avoid contact with saliva and urine.

Further risk management of rabies
Travellers should avoid contact with animals, especially dogs and cats, and avoid contact with saliva and urine.

Prevention of rabies infection after contact with an animal
If you have contact with an animal, before the animal bites or scratches you, you should wash the area with soap and water.

Prevention of rabies infection after contact with an animal
If you have contact with an animal, before the animal bites or scratches you, you should wash the area with soap and water.

The challenges of rabies prevention
Rabies prevention is a complex task, involving many different stakeholders, including governments, health professionals, and the public.

In Summary when traveling to a rabies risk area
Vaccinate before travel
Avoid animal contact
Treat wound immediately

In summary

- Risk communication is fundamental to shared decision making with travellers
- As evidence increases of the risks travellers encounter, so research is needed to identify best ways of communicating these risks
- There is much work to do!

Thank you

www.janechiodini.co.uk jane@janechiodini.co.uk