CAN CLINICIANS COMMUNICATE ABOUT RISKS?

Saar Hommes – Reading Group 26-10-2021
Why do clinicians need to talk about risks?

- Shared decision making (SDM)
  - Discussing the harms and benefits of treatments, taking into account patient’ preferences
- Evidence-based practice
SDM not always implemented:

- Insufficient knowledge
- Believing they already undertake SDM
- Lack of learning opportunities
Specialist nurse in colorectal cancer, 40+ experience:

Nurse: "To be honest, I'm not really a fan of numbers. Because well, like you said, you don’t know if it is going to happen. [...]"

Interviewer: “Yes, but, I’m curious, if you don’t give numbers how do you communicate about side effects for example? Do you simply say “you could get these side effects”? How do you explain that?"

Nurse: “I think, and that depends on who is sitting in front of you, I think a part of the patients really likes working with numbers. And part does not. And a number gives certainty on paper, but it’s still 50 percent, right? You either get it or you don’t get it.”
Teaching clinicians shared decision making and risk communication online: an evaluation study

Tammy C Hoffmann, Chris Del Mar, Ramai Santhirapala, Alexandra Freeman

Abstract
Objectives To describe the development and initial evaluation of a brief e-learning course as a means of teaching shared decision making and risk communication skills to clinicians of all specialties.
Design Comparison pre-course and post-course of scores in subjective confidence and objective knowledge about shared decision making and risk communication.
Setting Online and open to all specialties and levels of clinical experience, including students.
Participants The course is freely available online and all who started the course from September 2018 to May 2020 were invited to participate in the evaluation study.

Key messages

What is already known about this subject?
- Most training opportunities for clinicians in shared decision making and risk communication are face-to-face workshops or not accessible for most clinicians.

What are the new findings?
- A brief online e-learning course can improve clinicians' knowledge and confidence in shared decision making, but in this study, little improvement in numerical tasks was demonstrated.
Method

- **Pre-post** design

- Evaluation of an **online course** (2 hrs, four modules, freely available)

- Main outcomes (pre and post):
  - *Confidence in performing shared decision making*
    - OPTION → “Rate your confidence in the following ...”
  - *Objective knowledge about shared decision making and risk communication*
    - 4 knowledge questions + 3 calculations
  - *Numeracy (only pre)*
    - 1 item Berlin Numeracy Test → Out of a 1000 people in a small town, 500 are members of a choir. Out of these 500 members in the choir, 100 are men. Out of the 500 inhabitants that are not in the choir, 300 are men. What is the probability that a randomly drawn man is a member or the choir?”
    - Subjective Numeracy Scale (8 items) → “how good are you with numbers?”

- **Participants:** 210 clinicians and medical students (mean age = 38.1, 69% current clinical practice, 10.5 year in clinical practice, 2018-2020)
Helping patients make informed decisions: communicating potential harms and benefits – Part 1

Welcome to the Helping patients make informed decisions: communicating potential harms and benefits course.

This course is designed for clinicians to help them develop skills for communicating effectively with patients about the potential harms and benefits of treatment options. The course consists of four parts and will take approximately 2-hours to complete. This part will take approximately 30 minutes to complete.

Health decisions often have no single ‘best choice’ and require choosing from multiple options, each with potential benefits, harms, trade offs and uncertainties. For patients (and carers) to understand and have the opportunity to be actively involved in sharing decisions, clinicians need to provide relevant and clear information about the options, and the potential benefits and harms of each. This information should reflect the best available evidence and also take into account the patient's personal opinions, preferences, values and priorities [1–5].

On a daily basis, clinicians need to communicate information about risk to patients. This often requires analysis and being able to convey quite complex numerical information. Yet few clinicians have any training in how to do this [1,2].

This course was originally developed by the Australian Commission on Safety and Quality in Health Care, and has been licensed to the Academy of Medical Royal Colleges and adapted by the Winton Centre for Risk and Evidence Communication for the UK.
Meet your patients – 1

As you work through this course, you will be asked to help patients and their families make informed decisions by engaging in the process of **shared decision making** (SDM).

These patients represent various **risk scenarios** (including patients with multimorbidity) and **types of decisions** (for example screening tests, medications, behaviours, procedures).

The purpose of this course is not to focus on any particular condition, but rather to illustrate the **principles of shared decision making** and **risk communication**, which can be adapted or directly applied with the patients and scenarios that you see every day.

You will not be asked questions about specific tests or treatments, however if you are interested in particular case scenarios, look out for the resource icon on the relevant screens.
Responding to Max

Max needs some clear, accurate information about his risk of dying from prostate cancer versus the risks of the potential treatment options. He’s had a PSA test and is worried by the result. But is it always ‘earlier is better’ with cancer?

Which of the following statements about screening **would provide evidence that screening reduces deaths from cancer if true?**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>More cancers are detected in screened populations than unscreened populations.</td>
</tr>
<tr>
<td>B</td>
<td>Screen detected cancers have better 5-year survival rates than cancers detected because of symptoms.</td>
</tr>
<tr>
<td>C</td>
<td>Mortality rates are lower among screened populations than unscreened populations in randomised trials.</td>
</tr>
<tr>
<td>D</td>
<td>The screening test has a post-test positive value of approximately 30%, making it highly accurate at detecting aggressive cancers.</td>
</tr>
</tbody>
</table>
Responding to Max – Survival rates and mortality rates

A - 'More cancers are detected in screened populations than unscreened populations' is the wrong answer because even if more cancers were detected in screened populations, this does not mean screening reduced deaths [1].

B - 'Screen detected cancers have better 5-year survival rates than cancers detected because of symptoms', although a tempting answer, is wrong because although it can be true that screen-detected cancers have a better 5-year survival rate, this can be because of lead-time bias, which advances the time of diagnosis, (as shown in the figure) rather than delaying the age of death [1].

C is correct: 'Finding lower prostate cancer mortality rates among screened populations than in unscreened populations in randomised trials.' Specific disease mortality in randomised controlled trials (RCTs) is the only kind of evidence for testing the

**RESULTS: Confidence**

- Greater experience > higher confidence
- Greater Berlin > higher confidence

1. I can draw a patient’s attention to an identified problem that requires a decision-making process
2. I can explain to patients that there is more than one way to deal with the identified problem
3. I can assess a patient’s preferred approach to receiving information to assist decision making (for example verbal, printed material, graphical data)
4. I can list options for identified problems, including the option of ‘no action’
5. I can clearly explain and quantify (from the evidence) the benefits and harms of each option to a patient
6. I can explore a patient’s expectations or ideas about how the problem is to be managed
7. I can explore a patient’s concerns or fears about how the problem is to be managed
8. I can check a patient understands the information given and offer patients explicit opportunities to ask questions during decision making
9. I can elicit a patient’s preferred level of involvement in decision making
10. Except where urgent, I can offer a patient deferral of decision making
Knowledge

- Questions with arithmetic > higher numeracy = higher performance
- No increase for knowledge about mortality versus 5-year survival (McNemar)
- Increase in documentation of shared decision making
- Increase in if verbal terms are a good alternative to numbers
- No increase in the proportion of correct responses for numerical questions (requiring calculation and understanding numbers), with about half responding correctly
Conclusions

- The course increases confidence in shared decision making and risk communication
  - Associations with experience and numeracy

- The course increased some basic principles of knowledge about shared decision making and risk communication (85% correct on all but two questions)

- The course did not increase the ability to better calculate or interpret statistics
  - Lead-time bias
  - Relative risks
  - Numbers needed to treat
Implications

- Poor numeracy skills is worrisome and clinicians need more training

- Decision support tools should communicate numbers clearly and simple for both patients and clinicians