

Tools and tables in cardiovascular risk management: doing more harm than good?

THE PATIENT'S PERSPECTIVE

Over the past two decades trials and cohort studies have provided us with a broad knowledge base on cardiovascular risk and we have incorporated this evidence into increasingly detailed guidelines. These guidelines provide a more personalised risk prediction for our patients. We now have sufficient knowledge about all the ingredients of our decisions: predicted probability of several related events, the effectiveness of interventions, and the costs of these interventions. To support decision making, a large number of information and communications technology-based tools are available. But what do we know about the patients' view on all this? Can they deal with these complicated matters?

FAILING TO COMMUNICATE RISK TO PATIENTS

In this issue of the *BJGP* a qualitative study by Polak and Green explores the patients' view of a rational, evidence-based approach to cardiovascular risk management.¹ The study highlights that patients have great difficulties understanding the numbers used to make a (shared) decision on starting statins.¹ Recently, Nolan and colleagues showed that patients often failed to understand the various display options of a web-based risk calculator. In addition, patients often demonstrated strong emotional and cognitive responses, mainly when the calculated predictions were not in line with their own expectations.²

The authors of both studies show us that numerical risk information should be discussed in the consultation room, and not delivered as stand-alone information on the internet. But how to best achieve this? According to Polak and Green, patients differ in their need for shared decision making.¹ Several patients in their study simply did not understand the principles of integrated risk management or couldn't interpret the numbers. These patients want the GP or practice nurse to give clear advice, not decision tool-supported shared decision making. Nolan and colleagues showed that participants differed in their views on the relevance of the outcomes compared to GPs or practice nurses.² For example, various patients considered a heart attack or a stroke as treatable, and feared losing their sight or developing painful leg ulcers much more. Consequently, the prioritisation of the

outcomes needs to be further personalised, or at least be further discussed and explained.

LACKING EVIDENCE ON DECISION MAKING

Do we have enough evidence on how to discuss cardiovascular risk? I don't think so. Large trials on decision aids do not provide the final answers yet.^{3,4} First, we don't know which patients really want to engage in shared decision making. Elwyn and colleagues⁵ recommend offering a choice about participation in decision making. It is helpful to have a patient profile on who is eligible for shared decision making.

Implementation of shared decision making is also sparsely supported by evidence. In a Cochrane Review, Légaré *et al*⁶ concluded that it is still uncertain whether interventions to improve adoption of shared decision making are effective, given the low quality of the evidence.

The discrepancy between the large amount of evidence on cardiovascular risk from trials and cohorts, and the lack of knowledge on how to use risk communication in practice is a clear illustration of the need for what Greenhalgh and colleagues called 'the real evidence based medicine'.⁷ In their recent article in the *BMJ*, the Evidence Based Medicine Renaissance Group advises that:

'The research agenda must become broader and more interdisciplinary, embracing the experience of illness, the psychology of evidence interpretation, the negotiation and sharing of evidence by clinicians and patients, and how to prevent harm from overdiagnosis.'

The articles by Polak and Green and Nolan *et al* clearly contribute to this. However, we still have a long way to go.

HOW TO PROCEED IN PRACTICE

What do we do in the meantime, in practice? GPs should be aware of overburdening

ADDRESS FOR CORRESPONDENCE

Willem JJ Assendelft

Department of Primary and Community Care, Radboud University Medical Centre, Huispost ELG 117, PO Box 9101, 6500 HB Nijmegen, the Netherlands.

E-mail: pim.assendelft@radboudumc.nl

patients who prefer not to be involved in decision making. They should ascertain just what information their patients want.⁸ And GPs and practice nurses may need more specific training to deliver shared decision making.⁹ What the present lack of 'shared' in the decision making means for compliance, for example, requires further study.

Web-based risk calculators should be applied with caution, as they are misunderstood and disregarded if they produce unexpected or contradictory results, as recently highlighted in an Australian study in general practice.¹⁰ Nolan and colleagues admitted that, based on their findings, they had even considered removing the calculator from their Healthy Living for People with Diabetes intervention. Based on what we now know, web-based cardiovascular risk calculators should be accompanied by a warning: 'Use of this tool can cause more harm than good to you; please discuss the results with your doctor'. And GPs should be aware of the negative side effects of the use of these calculators.

Willem JJ Assendelft,

Professor in General Practice, Department of Primary and Community Care, Radboud University Medical Centre, Nijmegen, the Netherlands.

Provenance

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"... patients often demonstrated strong emotional and cognitive responses, mainly when the calculated predictions were not in line with their own expectations."

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