



GPs' views of absolute cardiovascular risk and its role in primary prevention



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BACKGROUND

Clinical guidelines recommend using absolute risk to inform clinical decisions in cardiovascular disease prevention. Absolute risk assessment tools have been disseminated to general practitioners, however current use and knowledge of this is approach among GPs is unknown.

METHOD

Transcribed audiotapes of focus groups with 36 GPs, analysed for key themes.

RESULTS

The GPs said absolute cardiovascular risk assessment tools were used largely as an aid to patient education rather than an influence on management, for which the concept was poorly understood. Barriers to their use included poor computer software, inconsistency with regulations over the use of lipid lowering agents, and fears patients would not understand the concepts.

DISCUSSION

To encourage the implementation of absolute risk tools in cardiovascular disease prevention, and GP education. Attitudes and systematic barriers to their use by GPs need to be addressed.

Heat Foundation guidelines on the management of hypertension and cholesterol, as well as The Royal Australian College of General Practitioners (RACGP) preventive guidelines, recommend assessment of patients' absolute cardiovascular risk.¹⁻³ This is the risk of an individual experiencing a cardiovascular event over a predefined period of time (eg. 5 or 10 years). This approach encourages a shift to considering all risk factors together rather than individually.^{4,5}

The National Vascular Disease Prevention Alliance (a collaborative between the Heart Foundation, Diabetes Australia, National Stroke Foundation and Australian Kidney Foundation) is implementing an absolute cardiovascular risk assessment tool for Australia.⁶ Many such tools are available.⁷⁻⁹ The Heart Foundation currently recommends the New Zealand Cardiovascular Risk Calculator, where the result is presented as a 5 year risk of cardiovascular disease.⁷ To what extent Australian GPs have embraced this new approach is unknown, although they have not in the United Kingdom or Italy.^{10,11}

Method

We sent invitations to all GPs within the Fairfield and Southern Highlands Divisions of General Practice in southwestern Sydney (New

South Wales). Fairfield has 241 GPs serving a community where nearly 50% are from non-English speaking countries, while the 51 GPs in the Southern Highlands serve a population in which only 5.4% are from non-English speaking countries.

Semi-structured questions were asked in order to promote discussion. Topics covered included GPs' current methods of assessing cardiovascular risk, influences on treatment decision in primary prevention of cardiovascular disease, understanding of absolute and relative risk and conveying risk to patients.

General practitioners were reimbursed \$100 for participating and received continuing professional development points by the RACGP for the educational component of the meeting. Audiotapes and field notes of focus groups were transcribed and analysed for themes. The extracted themes were checked and verified, and any differences resolved by discussion.

Results

A total of 36 GPs participated (more attended than confirmed coming): 20 from Fairfield and 16 from Southern Highlands, with a mean age of 47 years (range 31-76), 41% with more than 20 years experience in general practice, 52% from a non-English speaking background, and 83% male.

Current methods of cardiovascular risk assessment

Few formally assessed cardiovascular risk. Instead they assessed individual risks such as blood pressure, weight, smoking and family history, estimating the cardiovascular risk informally with 'clinical judgment'.

'...You have to rely on your clinical gut feeling about that patient. Taking all the information that you have gathered to date, put it all together and compute it in your mind and then decide how hard you are going to chase each of these risk factors...'

Current use risk of assessment tools

Some used cardiovascular risk assessment tools such as the New Zealand calculator,⁷ Medical Director (relative risk calculator in commercial medical record software), an absolute risk assessment tool,⁸ and the Joint British Coronary Risk Prediction charts.⁹ Only a few used absolute cardiovascular risk as a tool to aid management in routine clinical practice. Instead they prescribed and managed under guidance of risk threshold levels. Mostly the tools were used for patient education.

'...I've got one program where you can show the patient how the risk changes as you run the blood pressure down, or change the cholesterol. It's quite a powerful tool...'

They emphasised the importance of motivation.

'I think I would make sure I get the cooperation of the patient. Do what they want to do first, otherwise you won't get anywhere'.

Problems with cardiovascular risk assessment tools

General practitioners thought that cardiovascular risk calculators did not include enough factors, including weight, exercise, family history and stress. This meant that it is more difficult to show patients rewards for lifestyle change and weight loss. They also noted inconsistencies between calculator conclusions and prescribing guidelines from the Pharmaceutical Benefit Scheme for lipid lowering drugs.

'Is the New Zealand cardiovascular calculator of risk condoned by the government?... you find that you have to treat a person with cholesterol

lowering drugs when he's not entitled to it by the guidelines (PBS)'.

Another problem was the inability to record patients' data on computer versions of the risk calculator. An efficient improvement would be cardiovascular risk calculators that extracted the data from patients' electronic files.

General practitioners had difficulty with the concept of age increasing absolute risk, which led to treating older patients more intensively than younger patients for equal other risk factors. They felt that treating the younger more intensively, despite their lower absolute risk, was more important because they had more years of life ahead of them.

'Instead of going in hard to the 80 year olds... we should be going in for longer for the 40 year olds who would not die younger'.

General practitioners also considered that in younger patients giving the result in the form of a 5 year risk of cardiovascular disease was inappropriate. They felt that communicating such complicated issues, including numerical risks (notwithstanding the benefits of useful graphical presentations of risk reduction) in just one consultation was optimistic.

'We are the top 70% of the population and sometimes we have trouble grappling with the numbers and the concepts and trying to transfer that across to the patient'.

An item number rebate for assessment of a patient's absolute cardiovascular risk would encourage its use.

Absolute vs. relative risk

Most GPs did not understand the difference between absolute and relative risk.

'I don't know what's the importance of the two. As far as I am concerned a risk is a risk, regardless if it's absolute or relative'.

Those who were aware of the differences felt that presenting patients with relative risk was more effective than absolute risk in changing behaviour.

Discussion

The study was limited to two focus groups in one area of Australia without formal triangulation or saturation process, which raises the possibility of our inadequately discovering

the full range of issues, or imposing our own prejudices. Nevertheless, we confirmed many barriers to the failure of guidelines uptake including lack of familiarity and materials, and lack of outcome expectancy (when there is no belief that an effort will lead to improved outcome).¹²⁻¹⁴ Many were not familiar with the difference between the terms absolute and relative risk and its importance. They often felt clinical judgment to be as accurate as risk assessment tools and in their opinion the tools did not lead to an improved outcome (although clinical judgment is not accurate).¹⁵

General practitioners, although aware of cardiovascular risk tools, were not skilled with their use. For example, the GPs commented on the lack of inclusion of risk factors such as weight and family history (even though instructions accompanying the tools might note that risk is increased in obesity and positive family history). We confirm barriers to use include lack of incorporation into GP computer programs, and inconsistencies with current PBS guidelines.¹⁶

The few GPs who did use cardiovascular risk assessment tools to discuss risk with patient's commented on difficulties in conveying risk to patients. Therefore education of GPs about absolute and relative risk, as well as how to communicate them to patients, is required.^{17,18} The National Vascular Disease Prevention Alliance is studying the visual displays that best convey risk to patients. We now need to determine the frequency with which such knowledge, attitudes and practices are held by GPs throughout Australia.

Conflict of interest: none declared.

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