

guide discussions. As the data suggest that the relative risk reductions achievable with particular therapies are generally independent of underlying cardiovascular risk levels, we base projections of absolute benefits of treatments on patients' individual risk profiles. Thus, patients at higher risk stand to gain more from treatment over the next 5-10 years than patients at lower risk, and the benefits of their treatments are less likely to be offset by other harms. We try to reach agreement with patients about what constitutes sufficient risk to warrant starting or adding additional treatment.

To help prioritise treatments for patients without known cardiovascular disease, we try to estimate the amount of risk associated with each of the patient's risk factors and accompanying conditions, using tools such as those described in *Evidence-Based Hypertension* and in the second article in this series.³ We tie our estimate of benefit from a particular therapy to our estimate of risk from a particular factor or condition. For example, we postulate that a patient with especially abnormal levels of a risk factor, such as severe hypertension, may benefit more from having his or her hypertension treated than by taking aspirin.

We also inform patients about the types of benefits and harms that they can expect from particular treatments. For example, primary prevention trials show that aspirin and lipid lowering statins reduce risk of coronary heart disease but probably not stroke. Aspirin is much less expensive than statins, but it has more potential adverse effects, such as gastrointestinal bleeding. Some patients' choices between using aspirin

or a statin may depend on cost as well as their perceived risks of adverse effects. Other patients' choices may depend more on their perceived benefits of treatments. For example, some patients may prefer to stop smoking rather than taking either aspirin or a statin, because of perceived multiple benefits of stopping smoking and fewer perceived benefits from the drug. Other patients may feel that they are not ready or able to quit smoking, but willing to take drugs.

Funding: None

Competing interests: MP has received funding from the Pfizer Foundation for research on treatment of heart failure in low literacy patients.

- 1 Pignone M, Mulrow CD. How do we best individualise treatment for patients based on their cardiovascular risk profile? In: *Evidence-based hypertension*. London: BMJ Publishing Group, 2001:117-29.
- 2 Mulrow CD, Pignone M. What are the elements of good treatment for hypertension? *BMJ* 2001;322:1107-9.
- 3 Padwal R, Straus SE, McAlister FA. Cardiovascular risk factors and their effects on the decision to treat hypertension: an evidence based review. *BMJ* 2001;322:977-80.

Correction

Bovine spongiform encephalopathy and variant Creutzfeldt-Jakob disease

Several errors occurred in this paper by Paul Brown (7 April, pp 841-4). In the sixth paragraph, the values given in lines 2 and 6 should read 10 LD₅₀/g [not 1 LD₅₀/g], and in lines 10 and 16 the values should read 4500 LD₅₀ [not 450 LD₅₀].



The book *Evidence-Based Hypertension*, edited by Cynthia D Mulrow, can be purchased through the BMJ Bookshop (www.bmjbookshop.com).

When I use a word ...

Re: re-

I have been asked why I used the word "reduplication" in a piece about dilatation (*BMJ* 2000;320:625), when "duplication" would have done just as well. Now it is true that the first definition of reduplication in the *Oxford English Dictionary* is "the action of doubling or folding," which is just what duplication means. However, "reduplication" has a distinct grammatical meaning, not shared by "duplication": "repetition of a syllable or letter, especially in the case of verbal forms." Typically this occurs in the perfect tense of Greek and Latin verbs. For example, the paradigm of the Latin word to touch is tango, tangere, tetigi, tactum, with reduplication in the perfect tense, mimicking the repetition of a past action.

A reduplication is also "a word form produced by repetition of a syllable." Examples include helter-skelter, gaga, hurdy-gurdy, tip-top. In some languages reduplication is simply used to indicate a plural, but there are other uses. For example, it can indicate intensity, as in beri-beri, which is probably from the Sinhalese word beri (debility)—that is, much debility. Or repetition, as in the onomatopoeic borborygmi (multiple rumbling of the guts). Or continuity, as in murmur and susurrus.

Japanese is rich in reduplications, and some medical examples have been imported into English. Itai-itai is painful osteomalacia secondary to cadmium induced nephropathy; it means ouch-ouch, an example of the onomatopoeic use of reduplication, as in ding-dong and bow-wow. Moya-moya disease, a cause of stroke in young people, is occlusion of the internal carotid

arteries or of arteries in the circle of Willis, causing a collateral circulation, responsible for the typical angiographic pattern, which resembles a puff of smoke (moya-moya in Japanese); the term has also been used to describe fuzzy echoes seen during echocardiography.

Reduplicated words, such as those above, are also called reiterative words. Reiterate also seems to contain a redundant re-. To iterate means to repeat or go over again; to reiterate means to go over again and again. But the latter has displaced the former in general use.

Another word for all this reduplication, palillogy, comes from the Greek word παλιν (palin), meaning back or again. But perhaps the best is frequentative (adjective and noun). Coming as it does from frequent, you might expect it to be frequentive, but the reduplication in the middle makes the point.

Jeff Aronson *clinical pharmacologist, Oxford*

We welcome articles of up to 600 words on topics such as *A memorable patient*, *A paper that changed my practice*, *My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for "Endpieces," consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.