hazard among heavy drinkers. At higher levels of consumption there is a clear and consistent increase in all cause mortality, which is likely to comprise increased risks of liver disease, certain cancers, and some types of cardiovascular disease, such as cardiomyopathy and haemorrhagic stroke.

The balance of risks and benefits seems to shift dramatically at more modest drinking levels such that drinkers of small to moderate amounts of alcohol tend to have lower total mortality than non-drinkers. The J shape may well be the result of the weighted average of cause specific effects. The reduction in mortality among drinkers of small to moderate amounts of alcohol is likely to be due to a fall in deaths from coronary heart disease without substantial increases in other causes of death. The fall in the risk of coronary heart disease seems to be mediated largely by alcohol induced increases in high density lipoprotein cholesterol concentrations,⁵ though other antiatherogenic and antithrombotic mechanisms certainly remain plausible.

Comparisons of types of beverages suggest that alcohol itself is the major factor responsible for the apparent protective effect. While most data are derived from studies of men, the benefits seem to extend to women; the ratio of risk to benefit may, however, be different given, the lower absolute risks of heart disease in women than men and the far higher risks of breast cancer, which alcohol may increase.

While the benefits of small amounts of alcohol on the risk of coronary heart disease and total mortality seem to be real, any individual or public health recommendations must consider the complexity of alcohol's metabolic, physiological, and psychological effects. The differences between daily intakes of small to moderate and larger quantities may be the difference between preventing and causing premature deaths.

The authors of this comprehensive review recommend no change from the prior recommendations of 21 units (168 g of ethanol) a week for men and 14 units (112 g ethanol) a week for women. A recent meta-analysis raises the possibility of an L shaped threshold effect for non-fatal coronary heart disease, with reduced risks beginning at three American drinks (about 5 units) a week and no additional benefit for more than one drink (about 1.5 units) a day.⁶ If maximal benefit with regards to coronary heart disease begins at one drink (about 1.5 units) a day and does not increase substantially with increasing consumption no firm basis exists for increasing the limits of "sensible" drinking.

The recommendations emphasise weekly limits for alcohol consumption because most studies tend to consider only average daily intake and disregard the specifics about how or when the beverage was consumed. Southern Europeans may tend to drink wine with meals while northern Europeans may tend to drink distilled spirits at times other than mealtimes. Furthermore, the risks and benefits of alcohol consumption may be different for someone who consumes seven beers on a weekend night compared with one who consumes a glass of wine with dinner every day—despite an almost identical average weekly alcohol consumption. Setting a weekly limit permits those who binge drink at weekends to regard their drinking habits as "sensible." For this reason, it may be more prudent to emphasise daily limits of 3 units a day for men and 2 units a day for women.

Finally, we also agree that any recommendations should be made individually by the person providing primary health care. A discussion of alcohol intake should be a part of routine preventive counselling. Additional considerations should include coronary risk factors (particularly hypertension, for which alcohol increases risk), liver disease, tendency to excess, family history of alcoholism, and breast cancer. Alcohol consumption can be viewed neither as a target for primary prevention nor necessarily as an unhealthy behaviour. On the basis of the totality of evidence the current recommendations by the royal colleges seem prudent and justified. Increasing these limits would probably have no added net health benefit and might even have an adverse effect.

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New directions in information for patients

More attention should be given to finding out what works

See p 34

Providing information for patients is currently a growth industry. Traditionally, health professionals have created their own fact sheets for local use, with consumer organisations, self help groups, and commercial publishers plugging the gaps. But now commercial companies are competing to relieve providers of services of their responsibilities by selling computer disks containing information about hundreds of conditions and procedures. This format allows purchasers to customise this information for their patients.¹

Commercially produced videos on diseases and treatments that permit viewers to experience passively what they may encounter are also becoming available. Interactive video disks take this medium one stage further by inviting patients themselves to exert some control over the flow of information.

Whether patients will be willing to make decisions about treatment on the basis of interaction with a machine rather than a doctor is not yet known. Given the pace of development in information technology, virtual reality systems may become available within the next decade, permitting patients to "experience" aspects of their treatment and potential outcomes in advance.

Patients are placing health professionals under greater pressure to provide information,² and both purchasers and providers of health care could benefit from investing in these new media. These media could be seen as an attractive and cheaper alternative to employing more counsellors. Surgeons and general practitioners may opt to provide such information at the expense of more structured and lengthy consultations.

As research continues to identify the quality of communication as a principal shortcoming of the health service,³ perhaps any new way of delivering information to patients should be welcomed. Yet changes in the way information for patients is presented are occurring with little evaluation of content or effectiveness.^{4,5} The emphasis on clinical symptoms and description persists because medical authors assume that patients seek the same kind of knowledge that they, as doctors, value.² Patients' anxieties about hospital treatment may, however, relate as much to problems of managing their own personal or family obligations as to pain or anxiety about outcome.⁶⁻⁹

Basic research into patients' needs for information that remain unfulfilled by interaction with doctors and nurses is urgently needed.¹⁰ Several forms of potentially invaluable information remain unexplored. "Insider" guides to getting the best from services and providers are one possibility. Some patients are more successful in making use of services and their providers than others. This insider knowledge that the most successful patients quickly acquire is well known to practitioners, though they would not think of codifying it as information for patients.¹¹ Another possibility is to encourage the use of lists. Many patients fail to get the best from their interactions with health professionals because they arrive unprepared and unequipped with the "right" questions. Historically, doctors have bemoaned patients' use of pre-written lists of questions instead of considering them seriously as aids to better communication (p 34).¹²

Leaflets—not a panacea

Despite the new high tech media the humble leaflet or fact sheet remains the most widely used medium in the health service. Yet we know that the public ignores much printed literature on health. Research by Budd and McCron has shown that, despite agencies' reliance on leaflets to give people information, the public does not use information provided in this way, nor particularly like doing so.¹³ General information on health is probably least used or understood: leaflets giving information on health for consumers may not be understood by over one third of those reading them.¹⁴ Literature that is specific to a condition probably finds a more willing readership, although its content needs to be reconsidered.¹⁵

How can we develop more effective information? Doctors may be more productive as advisers than as sole authors. Printed handouts produced by surgeons often display

inconsistencies in how procedures are discussed, can look off putting, and do not necessarily correspond with patients' declared needs for information.⁹ Some surgeons have produced fact sheets that require a signature affirming that the patient has read and understood the content, so taking advantage of the protective veneer that such literature might offer them against postoperative complaints about side effects. This increases suspicions that they may be using such literature to excuse them further from their responsibilities to communicate with their patients.

At the other extreme, it is necessary to guard against expensively produced, glossy literature that is little more than covert advertising for a particular product or an associated treatment regimen. Information given in support of oral communication must not be used to shield doctors from their patients. It should draw on the extensive efforts already made to improve the provision of information for patients and be developed independently of commercial interests.

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NHS-wide networking and patient confidentiality

Britain seems headed for a poor solution

The NHS is spending a nine figure sum on building a nationwide computer network, with the aim of making access to administrative and health records easier. For example, if a patient from another part of the country comes into a surgery complaining of abdominal pain, states that it is a recurrence of a chronic complaint, but is unable to say what, then online access to his or her records would be convenient and might occasionally save life.

But wider access brings with it a problem that the NHS has ignored—the threat of aggregation. At present, hospitals make do with relatively little security; after all, not many

people will walk into a ward and steal a file from the note trolley. But once the records are aggregated into a database covering tens of millions of patients, that database will be a major target for data thieves, blackmailers, and others with less than altruistic motives. Evidence for this comes from the military, the banking industry, and the American health care system.

Firstly, soldiers know that if you gather a lot of information together then the collection may be much more sensitive than the individual items. Thus the Pentagon may occasionally release a satellite photograph to make a point, but it would