The place of judgement in medicine

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This paper deplores the lack of emphasis on the importance of judgement and discusses the bases of sound judgement and its difficulties. It uses as a specific example the treatment of blood pressure and the danger of so-called guidelines.

The patient may well be safer with a physician who is naturally wise than one who is artificially learned.

Working to rule can do even more harm in medicine than it does in industry. The practice of medicine requires a fresh judgement for every patient.

These quotations come from THEODORE FOX's *«Purpose of Medicine»* which was published in 1965. Since this time there has been very little emphasis upon the need for wisdom or judgement.

Graduates from our medical schools seem to have been persuaded that medicine can be practised by some form of rule book. If the recommended procedures are followed right, diagnosis and appropriate treatment will almost automatically ensue, and there should be no room for uncertainty. As a result they find the inevitable uncertainties of hospital medicine and even more those of general practice hard to cope with.

The practice of medicine is risky and difficult. Risk taking is necessary because the price of being on the safe side is often intolerable. Being on the safe side leads to waste of resource and *iatrogenic* harm. When the prior probability of disease is low, investigations lead to large numbers of false positives which prompt further investigation and spurious diagnoses. Using drugs to lower blood pressure exposes the person, re-categorised as a patient, to their side-effects and to the consequences of perceiving himself to have a life-threatening disorder. While *prophylactic mastectomy* diminishes the possibility of death from breast cancer, it must usually be judged that the price of safety is too high.

The nature of judgement

Wisdom and judgement are close friends. Both rely on adding weight to the imponderable, value to that which cannot be quantified. Unfortunately, judgement has been mocked by the *tautologous* addition of «value» to the word. *Tautologous* because judgement is about adding values and weights to probable

consequences of action. Alas, it is easier to criticise folly than to extol wisdom. Wisdom and judgement seem to be hard-to-grasp, nebulous virtues which may appear to be the prerogative of the aged, if not the senile.

There is little or no obvious recognition of the value of wise judgement. Occasionally one reads in the obituary columns of somebody whose curriculum vitae was not outstanding but who was seen as a «doctors' doctor». It would not be a wild guess that such physicians were valued by their colleagues, not because of their learning or their skill, but because their actions were tempered by wise judgement.

Even the most apparently straightforward consultation requires the exercise of judgement in order to make wise decisions. How certain is the diagnosis? What information should the patient be given? Should uncertainty be shared? What are the consequences to the person of the disease label? What is the probability that investigation will clarify rather than confound? What are the risks of missing the diagnosis of a serious disorder at this stage of the illness? What are the costs, risks, potential benefits of treatment? What prompted the decision to consult? Pain, anxiety about the meaning of the symptoms, the need to take up the «sick role»? As a general rule reliable and proven answers to these questions do not exist, yet they cannot be ignored if doctors are to offer wise advice.

One of the few people who has addressed the problem of the neglect of judgement is ALVAN FEINSTEIN, particularly in his first contribution (see page 210 in this book), he really talks about the same sorts of things I'm trying to address. In a *Lancet* paper published in 1972, that is incidentally more than twenty years ago, he drew attention to the dangers of neglecting so-called «*soft* data». These are the data which can only be weighted by the exercise of judgement and whose neglect in favour of the measurable leads to *iatrogenic* harm and bad decisions.

The basis of judgement

The first requisite for wise judgement is appropriate knowledge. This extends beyond knowledge of those symptoms and signs which indicate disease, it must include knowledge of prior probabilities. Prior probabilities are very different in general practice from those in patients who are referred to hospital. Judgement requires the ability to distinguish between those things which are relatively certain and those things which are matters of opinion. It needs to be underpinned by that healthy scepticism which offers the possibility of setting a limit to error. Scepticism provides some protection against fashion, some protection against accepting the received wisdom of superiors, teachers, consensus and the written word.

Experience contributes to judgement and is of two kinds. Some experience is generic, that is it refers to patients in general rather than in particular. Such experience may be a fallacious guide and do little more than allow the repetition of the same mistakes with increasing confidence. It is certainly no substitute for the randomised controlled trial.

The other sort of experience is patient specific and relies on knowledge of the individual. It is much more characteristic of general practice than of hospital medicine as it is based upon continuity of care and observations made over a number of episodes of *dis-ease* and over time. A recent paper has demonstrated that such knowledge substantially improves the doctor's ability to predict the presence of urinary tract infection. IRWIN NAZARETH and MICHAEL KING showed that when practitioners knew their patients they were four times more likely to correctly predict the midstream urine result and twelve times less likely to prescribe antibiotics.

Knowledge of the people who may have disease is sometimes as important as knowledge of the disease which people have.

The dangers of judgement

«Doctors, like other people are 'hot for certainties in this our life'; and, like other people, they would welcome any commandment that could not be questioned and thus absolved them from painful decision».

That is another quotation from THEODORE FOX. The exercise of judgement, no matter how wise, is a risk-taking behaviour and discomfits those who are «hot for certainties». As consensus statements, guidelines, advice about accepted practice and statements about quality assurance multiply, those who do not follow not only feel that they may be in error but also that they may, in the event of a misadventure, be at risk of medico-legal proceedings.

It is difficult to ignore the guidelines recently promulgated by the *British Hypertension Society* which suggest a more aggressive approach to drug treatment in the elderly than in the relatively young. I believe these guidelines to be based on a false premise but should I choose to ignore them and my patient suffer a stroke I can imagine being arraigned in court. On the other hand if I treat and the person has a stroke it will be ascribed to an act of God.

Yet such guidelines are based upon evidence which overvalues improvements in the prevention of morbidity and undervalues the consequences of labelling and the side effects of treatment. They oversimplify the complex and suggest that data derived from populations are applicable to every individual who seeks help.

The guidelines to which I have referred, those promulgated by the *British Hypertension Society*, will serve as an example. It is immediately surprising that the recommended levels for intervention are lower in the elderly, those 65 and over, than in younger people, systolic >160 mm Hg and/or diastolic >90 mm Hg in the elderly, as compared with diastolic >100 mm Hg in the relatively young. In relation to the elderly the *Society* has relied on the results of the *Medical Research Council Trial*, the *Swedish STOP trial* and the *SHEP Cooperative Research Group Trial of isolated systolic hypertension*. In all these studies the mean levels of blood pressure were appreciably higher than those in the guidelines. The most convincing evidence of benefit comes from the *STOP trial*.

In the *STOP trial*, the one that has shown the most benefit, 1,627 patients were recruited from 116 health centres. I think the number of people who were screened for entry to the study was of the order of 80,000 to 90,000. So this is a very small subset of the population of the elderly. In this instance the entry criteria were a systolic pressure between 180 and 230 mm Hg with a diastolic pressure of a least 90 mm Hg, or a diastolic pressure between 105 and 120 mm Hg. The study demonstrated highly significant benefit in primary endpoints (stroke, myocardial infarction, cardiovascular death), stroke morbidity and mortality and in a reduction in total mortality. The mean levels of blood pressure were 195 systolic and 102 diastolic, very different from the guidelines. Side-effects were dismissed as «no unexpected, serious, or previously unknown side-effects were evident during the study.»

At entry to the *SHEP trial* mean systolic pressure was 170 with a standard deviation of 9 which indicates that many of the subjects had appreciably higher pressures. While there was a statistically significant benefit in reduction of stroke and myocardial infarction the effect on total deaths was modest. 213 in the treatment group by comparison with 242 in the placebo group.

At entry to the *MRC trial* mean systolic pressure was 183 in men and 186 in women, mean diastolic 91-92 in men and 90-91 in women. That is, the level of systolic pressure was also higher than that recommended for intervention by the *British Hypertension Society*. Nonetheless there was no difference in total death rates between treatment and placebo groups, 301 in 12,620 patient years versus 315 in 12,735 patient years.

Side-effects were closely monitored in the *MRC trial*: the diuretic group had 160 withdrawals for major side-effects out of 1,081 subjects and the placebo group 82 withdrawals out of 1,287 subjects. Such a burden of side-effects is by no means trivial.

In addition to their recommendations regarding drug therapy the *Society* also

recommends reduction in total energy intake to achieve ideal body weight, avoidance of foods with high animal (saturated) fat and cholesterol content and regular physical exercise. There is no evidence that such dietary modification is of value at any age and certainly none that applies to elderly women. The only result of such advice is to reduce still further the enjoyment of food.

The ethical problem

Doctors, by a person's decision to seek advice, are given a mandate to exercise judgement on that person's behalf. This, at least to some extent, flies against the popular movement to grant patients full autonomy and the right to share. If the doctor decides that it is inappropriate to mention the distant possibility that these symptoms might betoken multiple sclerosis he is guilty of a degree of paternalism. He cannot say to those who have cancer, «Shall I tell you the truth?"; he must exercise judgement as to the gains and benefits of such disclosure and face the possibility that his judgement will be wrong.

The exercise of judgement in medicine is analogous to the exercise of judgement in the courts of law. Having heard or collected the evidence, the physician reaches a decision which is a probability statement which, in the absence of certainty, carries the possibility of error.

The place of rules

There is a place for rules in medicine, rules which can only be broken in exceptional circumstances and which if ignored carry the possibility of grave harm. Such rules can only properly exist when there is good evidence of their value. For the most part good rules are concerned with potentially life threatening situations, in which failure to make an appropriate response may have serious consequences. In a sense these are simple situations in which there can be no difference of opinion about the immediate necessities.

Such simple situations are the exception and the notion that rules can be devised for medicine as a whole carries the danger of great harm. As knowledge grows rules become more appropriate. Because the nature of a car engine is well understood it is easy to devise rules for detecting faults. Because of our ignorance it is impossible to devise rules which will always apply to the individual who seeks our help.

Conclusion

There is a growing tendency, prompted by a desire to improve standards in

medicine, to promulgate guidelines and consensus statements. This is potentially dangerous as it attempts to simplify situations which are inherently complex and not amenable to managment by rule. As a result physicians may be forced to act in ways which will harm their patients in order to protect themselves from possible action in the courts.

Most decisions in medicine are not simple and straightforward but require the exercise of judgement to advise the best option for each individual patient. Attempts to oversimplify, even from the best of motives, carry the danger of widespread *iatrogenic* harm. We must take care that guidelines remain just that, and are not taken to describe accepted and desirable practice. We need to cultivate judgement and come to accept that its inherent risks are in the best interests of our patients.

Further reading

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