LETTERS

Social class and health status

Sir,

We were interested to read your euphoric review[1] of Dr Crombie's McConaghy Memorial Lecture[2] because we had concluded that while a large amount of interesting data had been well presented (some for the first time), the broad argument could not be substantiated from it.

As you succinctly pointed out the essence of Dr Crombie's case rests on two new findings; the first that general practitioners *do* compensate for the social deprivation of their patients in the amount of care provided and the second that the variation in practice style is much greater between general practitioners than it is between patients of different age, social class or sex. Taking these as demonstrated, Crombie then puts the provision of health care in the context of McKeown,[3] but particularly the more recent Black report[4] and calls into question the argument that substantial social class differences in mortality could be partly attributable to differences in health care provision between social classes. He does this partly by using various slightly 'ex cathedra' statements about the nature of social stratification.

Clearly this is a most important item on the health care research agenda of the developed world but particularly in this country where all high quality health care provision is, in principle, available equitably. It is actually most important to know whether, in spite of all that the NHS has achieved, it does remain the case that some of the systematic differences in mortality are attributable to residual inequalities in access to effective medical care. Therefore we are disappointed that your *Journal* appears to have provisionally accepted the above arguments of Dr Crombie as if, at least as far as general practice is concerned, they went a long way to refuting one of the main conclusions of the Black report. As you yourself suggest, however, there is an urgent need for further analysis of the data presented by Dr Crombie in order to get closer to a useful answer. Could we therefore suggest possible shortcomings in Dr Crombie's analysis and possible further analyses of his and other data sources.

Firstly, the data Dr Crombie presents on referral rates and consultation rates based on an analysis of the Second Morbidity Study[5] do, at first sight, represent powerful evidence for general practitioner compensation for social deprivation among their patients by showing higher consultation rates which are doctor-initiated among the poorer social classes. Table 14 shows this phenomenon for all illnesses and Table 15 for all neoplasms. We are perturbed by the imprecise definitions in Dr Crombie's presentation and, even if totally explicit, by the possibility of coding or labelling biases. Moreover, we are anxious that adequate adjustment be made for differing illness rates between social classes; this is certainly a problem in Table 14 but may not be in Table 15. The question we would like much more information about, and this cannot be derived from the main publication, is precisely what a doctor-initiated consultation is and whether, for instance, a consultation is plausibly more likely to be coded as such when the expectation of compliance is low, which in turn is probably determined to some degree by social class. For while such consultation rates seem to show a two-fold excess in social class V compared to social class I such a gradient could be entirely explained by differences in morbidity and perhaps labelling practices.

The second main part of Crombie's argument rests on the finding that variations in aspects of practice style between general practitioners is greater than between social class, age or sex. This is methodologically a most difficult feature to prove and Dr Crombie has not succeeded. If one assumes that a large part of the decision about what to do in an individual doctor-patient contact is decided by the doctor then the following will be expected. Firstly, what happens in aggregate to people in a given social class will be averaged over many doctors. Moreover, people in a given social class are by no means homogeneous and therefore what happens to them will be averaged over many potentially important attributes in a single social class. So expressing some summary of general practitioner utilization between social classes is necessarily averaging over many doctors and many types of patients. Averaging itself clearly lowers variability. However, expressing some summary of general practitioner utilization between general practitioners is averaging over patients, but if the general practitioner largely (but, of course, not exclusively) calls the tune by his or her reputation, practice style, education, preference or whatever, then the amount of variation between general practitioners will generally appear to be larger than between, for example, social classes. Since a large part of Dr Crombie's argument recognized the importance of doctor-initiated consultations it would seem likely that his general argument could not deny that general practitioners do play an important part in individual decisions.

Thus the fact that Dr Crombie can point apparently to more variation between general practitioners than between measurable attributes of patients may merely reflect our inability to measure attributes between which

health care utilization does vary importantly. For while social class (as measured by the Registrar General) measures an attribute between which mortality rates are very different it might simply be too crude a measure to pick up whatever differences in utilization may in part be responsible for those mortality differences.

However, even if, as seems quite likely, the variation between general practitioners (adjusting for patient differences) is a large component of total variation in the way services are used the inference that Dr Crombie draws seems to us to be dubious. He seems to take this variation as evidence of equal (or roughly equal) effectiveness, and we wonder how he can do this. To us it represents prima-facie evidence of clinical uncertainty, to which the proper, if tedious, response would be to advocate and design practical clinical trials to test hypotheses about relative effectiveness.

Therefore, because Dr Crombie's two basic findings remain unproven much of what follows in his argument does not have the coherence that he assumes. In particular the idea that ability to cope is a strong discriminator between social classes, while convenient to his thesis, is largely a matter of faith. Such assertions beg the question, 'cope with what'? Moreover, they beg the basic question of what social class differences there actually are in the circumstances that have to be coped with. Wealth, job security and satisfaction, leisure opportunities, physical environment and many other important facets of life vary systematically by social class, and of course, have varying effects on the day-to-day lives of people. The idea that people in social class V are in the predicament because they cope less well than others really does require proof and, again, Dr Crombie has not provided it. In fact his social analysis is somewhat naïve and appears to pay no heed to the changing occupational status of women and the differential effect of unemployment on health status and occupational structure.

Finally, it must also be said that his review of the literature is extremely selective. Firstly, while citing Collins and Klein[6] he neglects to tell us about its serious methodological critique by Scott-Samuel[7] which casts considerable doubt on the validity of their conclusion that general practitioners do compensate for social deprivation. Much of Scott-Samuel's critique stands as valid criticism of Dr Crombie's analysis for, in essence, use of general practitioner services is taken as serving equal needs and, of course, there is no reason to suppose that such an assumption is remotely justified. Moreover, Dr Crombie fails to utilize the data, for instance, of Cartwright and O'Brien[8] which suggests that general practitioners consult much more effectively with middle class patients. He also ignores the analysis of le Grand[9] which suggests that even leaving this consideration aside, per capita health expenditure adjusting for illness rates is lower among the lower social classes.

This is a truly difficult question to address adequately but answers will not do. Could we recommend a more thorough analysis of this unique data base as, for instance, has just been published by Blaxter.[10]

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References

1. Pereira Gray D. Social class and health status: inequality or difference. *J Roy Coll Gen Pract* 1984; **34:** 241-245.
2. Crombie DL. *Social class and health status. Occasional paper 25* Exeter: RCGP, 1984.
3. McKeown T. The role of medicine. Dream, mirage or nemesis? Rock Carling Lecture. London Nuffield Provincial Hospital Trust, 1976.
4. Black Report. *Inequalities in health.* Townsend P, Davidson N. (Eds). Harmondsworth: Penguin, 1982.
5. RCGP OPCS DHSS. *Morbidity statistics from general practice, 1970-71. Socio-economic analysis. Studies on medical and population subjects.* No 46, London: HMSO, 1982.
6. Collins E, Klein R. Equity and the National Health Service. Self reported morbidity access and primary care. *Br Med J* 1980; **281:** 1111-1115.
7. Scott-Samuel A. Social class inequality in access to primary care: a critique of recent research. *Br Med J* 1981; **283:** 510-511.
8. Cartwright A, O'Brien M. Social class variations in health care and in the nature of general practitioner consultations. In: *The sociology of the National Health Service.* Pp 77-98. Stacey M (Ed). Keele: University of Keele, 1976.
9. le Grand J. The distribution of public expenditure: the case of health care. *Economica* 1978; **45:** 125-42.
10. Blaxter M. Equity and consultation rates in general practice. *Br Med J* 1984; **288:** 1963-1967.

Fluoridation update

Sir,

This well written article (June p. 350) with plenty of factual information, in which Mr Smith has pointed out that the ingestion of free fluoride ions via other sources than water may well have resulted in an almost universal decline in the incidence of dental caries. The point that he seems to have failed to have picked up is that if fluoride ions are maintained at a controlled level in the water supply and removed from 'cosmetic' and 'toilet' preparations etc. then the daily dose will be more accurately adjusted to the requirement of the individual.