replicate (b) (Journal, March 1991, 158, 358–361). Dr McDonald is critical of our recent study. In reply:

We did not assume that parietal disturbance caused by an infarct carries the same prognosis as parietal disturbance caused by other forms of cortical pathology, rather we studied a mixed diagnostic group together with an Alzheimer sub-group as we wished to shed some light on the discrepant prognostic findings previously reported for parietal signs in mixed diagnostic groups (Whitehead, 1976; Whitehead & Hunt, 1982).

We did not omit patients on the basis of age. All psychogeriatric day hospital attenders who fulfilled our recruitment criteria at our initial sampling point were accepted. This left us with a sample whose ages ranged from 65 to 86 years.

Dr McDonald suggests that our sample was unrepresentative in view of the relatively low mortality figures (one-third of our Alzheimer sample died within a four-year period). Our sample was presumably early on in the course of the disease as they were day hospital attenders living at home. (Lishman (1987) states that death usually occurs within two to eight years of onset, with some cases living over 20 years.) Prognostic signs are surely more valuable early rather than late in the course of disease progression. Dr McDonald hypothesises that studying a sample with a higher age range would maximise the chance of obtaining differential prognoses on the basis of parietal test scores. This is a hypothesis which awaits independent empirical testing.

RONAN O'CARROLL

Royal Edinburgh Hospital Edinburgh EH10 5HF

## References

LISHMAN, W. (1987) Organic Psychiatry. 2nd edition. Oxford: Blackwell Scientific Publications.

McDonald, C. (1969) Clinical heterogeneity in senile dementia. British Journal of Psychiatry, 115, 267-271.

WHITEHEAD, A. (1976) The prediction of outcome in elderly psychiatric patients. *Psychological Medicine*, **6**, 469–479. WHITEHEAD, A. & HUNT, A. (1982) Elderly psychiatric patients: a

five year prospective study. Psychological Medicine, 12, 149-157.

## **Eating disorders in Asians**

SIR: There is a growing trend among authors and researchers to 'blame' culture for any difference found between samples which originated in geographically different areas. The latest evidence of this is depicted in Mumford et al's report on "Sociocultural correlates of eating disorders among Asian schoolgirls" (Journal, February 1991, 158, 222-228).

The authors surmised that the high prevalence of eating disorders among Asian girls is probably due to their "adopting Western patterns of reacting to personal conflicts and stressful life circumstances" despite noting high eating attitudes test (EAT) and body shape questionnaire (BSQ) scores to be associated with a more traditional cultural orientation and not with greater Westernisation.

Their comprehensive efforts and methods in carrying out this interesting study are indeed commendable, although a number of important aspects have not been taken into consideration. For example, social and economic class differences are known to influence eating attitudes (Eisler & Szmukler, 1985), and body shape preference (Ford et al, 1990); crosscultural limitations of EAT 26 (Lee, Journal, January 1991, **158**, 131–132) and its reliability and validity are being questioned (Coker & Roger, 1990); and further still the cut-offs (and normative data) of EAT and BSQ for Asian populations are unknown. This last point has been acknowledged by the authors, but they have still opted to use similar cut-offs for subjects who have quite different life styles, eating habits, dietary content, norms and attitudes. Furthermore, the samples had significant morphological differences, which could confound eating attitudes; the relationship between eating attitudes and body weight has been reported to be complex (Chandrana et al, 1988). I think these flaws in method severely limit the interpretation of the data. There are other problems in using EAT in such a study (Lee, 1991). Replicating the factor structure in two populations may be evidence for cross-cultural conceptual equivalence and comprehension of questionnaire items, but that still overlooks and ignores attitudinal items specific to one culture in preference to another.

Later, the authors have suggested "internal conflicts and anxieties" and "intergenerational conflicts" – issues which can neither be easily confirmed nor discarded. The authors present fragile and untenable evidence in support of these explanations. Perhaps, the concomitant psychopathology should have been included as a useful variable. Individuals with distorted eating attitudes have been found to have additional psychological disturbances, such as low self-esteem, high concern for health, anxiety, depression and deviant behaviour (Chandrana et al, 1988). In Mumford et al's study also, eating attitude differences could have resulted from psychological differences rather than cultural differences (or both).

Low prevalence of eating disorders in the Indian sub-continent may be a misleading inference. Conversations with psychiatrists would be of little help to Mumford and colleagues since eating disorders can hardly be considered to be a 'psychiatric' problem in this part of the world (where even frank psychosis and other mental disorders are perceived as psychological problems with a great reluctance!). Eating disorders perhaps land up in the medical, surgical and gynaecological clinics for the coexisting physical symptoms and complications, as was also pointed out by Lee (1991).

SANTOSH K. CHATURVEDI

NIMHANS Bangalore 560 029 India

## References

CHANDRANA, P., HELMES, E. & BENSON, N. (1988) Eating attitudes as related to demographic and personality characteristics: a high school survey. Canadian Journal of Psychiatry, 33, 834–837.

COKER, S. & ROGER, D. (1990) The construction and preliminary validation of a scale for measuring eating disorders. *Journal of Psychosomatic Research*, 34, 223-231.

EISLER, I. & SZMUKLER, G. I. (1985) Social class as a confounding variable in the Eating Attitudes Test. *Journal of Psychiatric Research*, 19, 171-176.

FORD, K. A., DOLAN, B. M. & EVANS, C. (1990) Cultural factors in the eating disorders: a study of body shape preferences of Arab students. *Journal of Psychosomatic Research*, 34, 501-507.

AUTHOR'S REPLY: Dr Chaturvedi raises a number of points about our study, which boil down to two issues: (a) the robustness of our finding of a high prevalence of eating disorders among Asian schoolgirls in Bradford, and (b) the plausibility of our explanation and interpretation of these results.

The use of western questionnaires in non-western ethnic groups is certainly a risky business. It is incumbent on any researcher to demonstrate that this is justified in the population being studied. The Asian schoolgirls in Bradford were not of course a 'Third World' sample. Most had been born in Britain and all had been educated here, mixing daily in the classroom with indigenous English schoolgirls.

Lee (Journal, January 1991, 158, 131-132) raised pertinent questions about the transcultural validity of the EAT. Our confidence in the EAT and BSQ as screening tests in this population is based firstly on the factor analyses, and secondly on the consistency between the results of questionnaires and of the semi-structured interviews. Our findings do not rest on the EAT and BSQ alone since we interviewed a broad sample of girls who scored highly on the questionnaires.

Socio-economic factors undoubtedly influence eating attitudes and EAT scores (Eisler & Szmukler, 1985), and represent a confounding variable in any cross-cultural study. We considered including measures of social class in our survey. However, social class is a culturally specific construct. There is

no classification which is equally applicable to both Asian and indigenous British communities to allow valid comparisons to be made. Moreover, migrants frequently undergo an apparent fall in social status as a result of migration.

The second issue concerns the tentative explanation and interpretation which we offered for our results. To suppose that we are in the business of 'blaming culture' for any difference found between samples seems perverse. The notion of culture is an abstraction, for which there are many definitions. I favour Tyler's (1874) definition: "that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society". Few would deny that there are significant differences between south Asia and Britain in these aspects of human social life.

It is certainly superficial to speak in such vague terms as 'cultural conflict'. It is important to specify hypotheses about the effect of cultural beliefs, attitudes and behaviour on the development of particular psychiatric disorders. Further carefully designed studies will be needed to test these hypotheses; these studies could usefully include measures of anxiety and depression, and disturbed behaviour.

Concerning the prevalence of eating disorders in the Indo-Pakistan subcontinent, there is a need for well-conducted epidemiological studies. We have surveyed three English-medium schools in the city of Lahore, using the same methods as in Bradford (Mumford et al, 1991). In a further study in rural Pakistan (Choudry & Mumford, 1991) we used our own Urdu version of the EAT; here factor analysis has highlighted problems in the conceptual validity of some EAT items, which we are currently attempting to address.

DAVID B. MUMFORD

University of Leeds Department of Psychiatry Leeds LS2 9LT

## References

CHOUDRY, I. Y. & MUMPORD, D. B. (1991) A pilot study of eating disorders in Mirpur (Pakistan) using an Urdu version of the Eating Attitudes Test. *International Journal of Eating Disorders* (in press).

EISLER, I. & SZMUKLER, G. I. (1985) Social class as a confounding variable in the Eating Attitudes Test. *Journal of Psychiatric Research*, 19, 171-176.

MUMFORD, D. B., WHITEHOUSE, A. M. & CHOUDRY, I. Y. (1991) A survey of eating disorders in English-medium schools in Lahore (Pakistan). *International Journal of Eating Disorders* (in press).

TYLER, E. B. (1874) Primitive Culture: Researches into the Development of Mythology, Psychology, Religion, Language, Art and Custom. Reprinted 1958 as The Origins of Culture. New York: Harper and Row.