

- 16 Hirayama T. A study of epidemiology of stomach cancer, with special reference to the effect of the diet factor. *Bull Inst Publ Health* 1963; **12**: 85–96.
- 17 Sato T, Fukuyama T, Suzuki T, *et al*. Studies of the causation of gastric cancer. 2. The relation between gastric cancer mortality rate and salted food intake in several places in Japan. *Bull Inst Publ Health* 1959; **8**: 187–98.
- 18 Whelton PK, Goldblatt P. An investigation of the relationship between stomach cancer and cerebrovascular disease. *Am J Epidemiol* 1982; **115**: 418–27.
- 19 Joossens JV. Dietary salt restriction – The case in favour. In: Robertson JIS, Pickering GW, Caldwell ADS, eds. *The therapeutics of hypertension*. Royal Society of Medicine Series No 26. London: Academic Press 1980: 243–50.
- 20 Joossens JV. Stroke, stomach cancer and salt. In: Kesteloot H, Joossens JV, eds. *Epidemiology of arterial blood pressure*. The Hague: Martinus Nijhoff Publishers, 1980: 489–508.
- 21 Tuomilehto J, Geboers J, Joossens JV, Salonen JT, Tanskanen T. Trends in stomach cancer and stroke in Finland. Comparison to Northwest Europe and USA. *Stroke* 1984; **15**: 823–8.
- 22 Public Health Service, Guralnick L. *Mortality by occupation level and cause of death among men 20 to 64 years of age: United States, 1950*. US Department of Health, Education, and Welfare. *Vital Statistics Special Reports*, vol 53, no. 5. Washington DC: US Government Printing Office, 1963.
- 23 The Registrar General. *The Registrar General's Decennial Supplement England and Wales 1961. Occupational Mortality Tables*. London: Her Majesty's Stationery Office, 1971.
- 24 Haenszel W, Kurihara M, Segi M, Lee RKC. Stomach cancer among Japanese in Hawaii. *J Natl Cancer Inst* 1972; **49**: 969–88.
- 25 Howson CP, Hiyama T, Wynder EL. The decline in gastric cancer: epidemiology of an unplanned triumph. *Epidemiol Rev* 1986; **8**: 1–27.
- 26 Stemmermann G, Haenszel W, Locke F. Epidemiologic pathology of gastric ulcer and gastric carcinoma among Japanese in Hawaii. *J Natl Cancer Inst* 1977; **58**: 13–9.
- 27 Sonnenberg A. Gastric cancer, gastric ulcer, and hypertensive diseases – A common epidemiologic risk factor? [Abstract] *Gastroenterology* 1987; **92**: 1649.

Psychological factors in the irritable bowel syndrome

SIR,—We were sorry to read in the Progress Report by Creed and Guthrie,¹ the statement that we had used the Beck Inventory wrongly for screening depression in surgical outpatients, taking a cut off point for depression of 5 instead of 14.²

In fact we used a simplified form of the Beck Depression Index, for which the range of normality is 0–4, 5–7 indicating mild, 8–15 moderate and over 15 severe depression. Had Creed and Guthrie read our article more carefully, they would have found that we correctly used the criteria of Beck and Beck,³ and our finding of a 50% incidence of depression in gastro-

intestinal outpatients, and 68% in the irritable bowel syndrome, remains valid. They would also have learnt that the majority of patients were medical, and not surgical, outpatients.

PAUL M SMITH AND JOHN S HARVEY

*Llandough Hospital,
Penarth,
South Glamorgan CF6 1XX*

References

- 1 Creed F, Guthrie E. Psychological factors in the irritable bowel syndrome. *Gut* 1987; **28**: 1307–18.
- 2 Rose JDR, Troughton AH, Harvey JS, Smith PM. Depression and functional bowel disorders in gastrointestinal outpatients. *Gut* 1986; **27**: 1025–8.
- 3 Beck AT, Beck RW. Screening depressed patients in family practice: a rapid technic. *Postgrad Med* 1972; **52**: 81–5.

Reply

SIR,—Smith and Harvey are right to draw attention to the fact that they had used a shortened form of the Di-Beck questionnaire so that our criticism of their specific cutoff point does not hold; but we would still reject their claim that they have accurately demonstrated rates of depression of 50% and 68% in gastrointestinal and IBS patients respectively.

In their paper Rose *et al*¹ aimed 'to establish the number of patients suffering from depression' among new referrals to a gastrointestinal clinic. There are several reasons why the shortened Di-Beck questionnaire did not allow them to do this accurately. First, it is not a diagnostic tool but a measure of severity of depression.² Second, any selfadministered questionnaire cannot be used as a substitute for clinical assessment and should therefore be validated by a use of standardised interview.³ We are not aware of any such validation of the shortened Di-Beck against clinical interviews among gastrointestinal outpatients, but there is evidence that 14 of the 21 items of the original questionnaire discriminated poorly between depressed and non-depressed patients in a general medical unit⁴ and many of these items have been included in the shortened form.

Selfadministered questionnaires tend to overestimate the prevalence of depression in general medical patients because somatic symptoms and social dysfunction score on the questionnaire even when these are not the result of depressive illness.⁵ In the case of the shortened Di-Beck, a score of 7 could be achieved by the patient who reports 'my appetite is much worse now' (2 points), 'I get too tired to do anything' (3 points), and 'I have to push myself hard to do anything' (2 points). Such complaints could be attributable to physical illness, and are common