

	Asian	Other	Difference in rates (95% confidence interval between Asians and others)	P value
<b>Barium meal examination</b>				
Total population:	41 604 (26)	119 460 (74)		
Referrals:				
Total No	312 (37)	522 (63)		
Rate (per 1000)	7.5	4.4	3.1 (2.2 to 4.0)	<0.001
Abnormal results:				
Total No	138/312 (44)	338/522 (65)	-21 (-27 to -14)	<0.001
Rate (per 1000)	3.3	2.8	0.5 (-0.1 to 1.1)	0.13
Type of abnormality:				
Suspected malignancies	3/312 (1)	28/522 (5)	-4 (-7 to -2)	0.002
≥ 1 Major abnormalities	70/312 (22)	163/522 (31)	-9 (-15 to -3)	0.006
≥ 1 Minor abnormalities	88/312 (28)	242/522 (46)	-18 (-25 to -12)	<0.001
Population aged < 45 years	35 490 (32)	75 229 (68)		
Referrals:				
Total No	198/312 (63)	188/522 (36)	37 (31 to 44)	<0.001
Rate (per 1000)	5.6	2.5	3.1 (2.2 to 3.9)	<0.001
Abnormal results:				
Total No	76/198 (38)	106/188 (56)	-18 (-28 to -8)	<0.001
<b>Endoscopy</b>				
Total population:	41 604 (26)	119 460 (74)		
Referrals:				
Total No	129 (31)	288 (69)		
Rate (per 1000)	3.1	2.4	0.7 (0.1 to 1.3)	0.02
Abnormal results:				
Macroscopic changes:				
Any abnormality	90/129 (70)	225/288 (78)	-8 (-18 to 1)	0.09
≥ 1 Major abnormalities	81/129 (63)	210/288 (73)	-10 (0 to -20)	0.05
≥ 1 Minor abnormalities	15/129 (12)	81/288 (28)	-16 (-9 to -24)	<0.001
Rate (per 1000)	2.2	1.9	0.3 (-0.2 to 0.8)	0.3
Positive for urease:				
Macroscopically normal	6/10 (60)	5/13 (38)	22 (-19 to 62)	0.4
Macroscopically abnormal	40/54 (74)	80/113 (71)	3 (-11 to 18)	0.8
Total No	46/64 (72)	85/126 (67)	4 (-9 to 18)	0.6
Age < 45 years	35 490 (32)	75 229 (68)		
Referrals:				
Total No	81/129 (63)	91/288 (32)		
Rate (per 1000)	2.3	1.2	1.1 (0.5 to 1.6)	<0.001

abnormal results, suspected malignancies, and major and minor abnormalities among them than might be expected from the size of the population. The proportion of patients with disease at barium examination per 1000 population was, however, similar in the two groups. Significantly more Asians under 45 than others under 45 were referred, but they had significantly fewer abnormal results.

The referral rate for endoscopy was significantly higher among Asians than the other group. The pattern of abnormalities was similar to that found in the barium studies, and the proportion of the population with abnormal results in the two groups was similar.

### Comment

Our findings suggest disproportionate referral for investigation in Asians that is not explained by the extent of dyspeptic disease. The proportion of abnormal results from barium studies in the whole population (57%) is similar to that in the study of Conry *et al* (58%),<sup>4</sup> suggesting that high referral is led by factors at presentation rather than by a low threshold for referral. The available evidence suggests that census underenumeration is unlikely to be an important factor.<sup>5</sup>

There was no evidence for different prevalence of *H pylori* in Asian and other populations from our study. The greater proportion of investigations in younger Asians—who generally speak more fluent

English—is evidence against language difficulties being an important factor.

Somatisation, or expression of psychological distress in somatic terms, seems to be commoner in Asians than other racial groups,<sup>2</sup> though further study is required to determine whether it is a factor. Our study does not control for greater socioeconomic deprivation as reflected in unemployment among Asian men,<sup>1</sup> which may also be relevant.

Our findings have practical implications, raising concerns about radiation dose in young Asians. They indicate that the reasons for presentation with dyspeptic symptoms in Asian patients may be more complex than in other patients and that this should influence investigation. In wider terms there is a need for caution in how quality of health care for ethnic minorities is compared. Greater use of hospital services such as radiology or endoscopy may not necessarily indicate improved health care.

We thank Mr N A Taub for help with the statistical analysis.

- Office of Population Censuses and Surveys. *Census county report: Inner London*. Part 1. Vol 1. London: HMSO, 1993: tables 6 and 9.
- Murray J, Williams P. Self-reported illness and general practice consultations in Asian-born and British-born residents of West London. *Soc Psychiatry* 1986;21:139-45.
- Balarajan R, Yuen P, Soni Raleigh V. Ethnic differences in general practitioner consultations. *BMJ* 1989;299:958-60.
- Conry BG, McLean AM, Farthing MJG. Diagnostic and therapeutic efficacy of barium meal examination: a prospective evaluation in general practice. *BMJ* 1989;299:1443-5.
- Office of Population Censuses and Surveys. *Census user guide 58: Undercoverage in Great Britain*. London: HMSO, 1994: table 7.

(Accepted 19 August 1994)

### Corrections

#### Relative mortality from overdose from antidepressants

A printer's error, an editorial error, and an authors' error occurred in this article by John A Henry and colleagues (28 January, pp 221-4). In table II the figure for deaths per million prescriptions for tricyclic drugs 1987-92 should have read 34.14 (32.47 to 35.86), and all groups of antidepressants were significant at  $P < 0.001$ . Table III should have appeared as follows.

TABLE III—Fatal poisonings and deaths per million defined daily doses for deaths from single antidepressants, by groups of drug. Values in parentheses are 95% confidence intervals

Antidepressant	Observed deaths 1987-92	Expected deaths 1987-92	No of defined daily doses (millions) 1987-92	$\chi^2$ value	Deaths per million defined daily doses 1987-92
Tricyclic drugs	1563	1384.5	1218.7	23.01	1.283 (1.219 to 1.347)*
Monoamine oxidase inhibitors	12	39.96	34.29	18.66	0.350 (0.152 to 0.548)*
Atypical drugs	26	89.10	78.43	44.69	0.332 (0.204 to 0.460)*
Selective serotonin reuptake inhibitors	5	93.41	82.22	83.68	0.061 (0.008 to 0.114)*
All antidepressants	1606	1606	1413.633		1.136

\* $P < 0.001$  (difference from all by  $\chi^2$  test).

#### Childhood leukaemia and non-Hodgkin's lymphoma near large rural construction sites, with a comparison with Sellafeld nuclear site

An editorial error occurred in this paper by L J Kinlen and colleagues (25 March, pp 763-8). In table VI the heading for the last four columns should be "% Of population resident in parishes [not families] with:".