

needs. However, greater involvement of stakeholders and the application of clear method have a cost. We estimate that the whole process of organising, running, and analysing the nominal group cost about £10 000 (including about £5000 for the time of all the clinical participants). We believe that the clear benefits of the approach make this highly cost effective.

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- 1 Black NA, Murphy M, Lamping D, McKee M, Sanderson C, Askham J, et al. Consensus development methods: a review of best practice in creating clinical guidelines. *J Health Serv Res Policy* 1999;4:236-48.
- 2 Van der Beek AJ, Frings-Dresen MH, van Dijk FJ, Houtman IL. Priorities in occupational health research: a Delphi study in the Netherlands. *Occup Environ Med* 1997;54:504-10.
- 3 Harrington JM, Calvert IA. Research priorities in occupational medicine: a survey of United Kingdom personnel managers. *Occup Environ Med* 1996;53:642-4.
- 4 Brittenham GM, Franks AL, Rickles FR. Research priorities in hereditary hemochromatosis. *Ann Intern Med* 1998;129:993-6.
- 5 Lindeman CA. Delphi survey of priorities in clinical nursing research. *Nursing Res* 1975;24:434-41.
- 6 Bond S, Bond J. A Delphi survey of clinical nursing research priorities. *J Adv Nursing* 1982;7:565-75.
- 7 Schmidt K, Montgomery LA, Bruene D, Kennedy M. Determining research priorities in pediatric nursing: a Delphi study. *J Pediatr Nurs* 1997;12:201-7.
- 8 Thomas B. Using nominal group technique to identify researchable problems. *J Nurs Educ* 1983;22:335-7.
- 9 Sedlak C, Ross D, Arslanian C, Taggart H. Orthopaedic nursing research priorities: a replication and extension. *Orthop Nurs* 1998;17:51-8.
- 10 Rudy SF. A review of Delphi surveys conducted to establish research priorities by speciality nursing organisations from 1985-1995. *Otolaryngol Head Neck Nurs* 1996;14:16-24.
- 11 Mootz RD, Coulter ID, Hansen DT. Health services research related to chiropractic: review and recommendations for research prioritisation by the chiropractic profession. *J Manipulative Physiol Ther* 1997;20:201-17.
- 12 Ayanian JZ, Landrum MB, Normand S-LT, Guadagnoli E, McNeil BJ. Rating the appropriateness of coronary angiography—do practising physicians agree with an expert panel and with each other? *N Engl J Med* 1998;338:1896-904.

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Ethnicity and prescription of analgesia in an accident and emergency department: cross sectional study

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Ethnicity can be a risk factor for inadequate administration of analgesia in accident and emergency departments.¹ In an emergency department in Los Angeles, United States, Hispanic patients were twice as likely as non-Hispanic white patients to receive no analgesia.

Around the Royal London Hospital, over 25% of the population is Bangladeshi, and about 60% of the population is white (East London and City Health Authority, unpublished estimates for 1997). We studied prescription of analgesia for patients presenting with isolated long bone fractures to investigate whether Bangladeshi patients are as likely to receive analgesia as white patients. The local ethics committee approved the study.

Patients and methods

We reviewed the notes of patients aged 15-55 years in whom an isolated long bone fracture had been diagnosed between 1 July 1997 and 30 June 1998. Patients were excluded if the injury had occurred more than six hours before the time of presentation, or if any intoxication with alcohol or drugs or alteration in mental status was observed. Administration of analgesics (dichotomised as any or none), ethnicity, age, sex, mechanism of injury, specific bone fractured, need for reduction of the fracture, and admission to hospital were recorded. Reception staff in the accident and emergency department recorded ethnic category at registration in accordance with categories used in the census. Analysis of variance and the independent samples *t* test were used for age comparisons and the χ^2 test was used for associations between categorical variables.

Results

Of 307 subjects, 224 (73%) patients were white and 42 (14%) were Bangladeshi. Eighteen patients (6%) were of other ethnic background. The ethnicity of 23 (7%) patients was not recorded. The table shows age, sex, characteristics of injury, and prescription of analgesics for each ethnic group. Overall, 243 (79.1%) patients received analgesia for long bone fractures. Of the white patients, 175 (78.5%) received analgesia, compared with 34 (81%) of the Bangladeshi patients, a difference of 2.5 percentage points (95% confidence interval -10.5 to 15.5).

The groups were similar in the mechanism of the injury, the fractured bone, admission to hospital, or proportion of patients needing reduction. Although the proportion of male patients was slightly higher in the Bangladeshi group, the difference was not significant, and within each ethnic subgroup male and female patients had similar rates of analgesia (table). The Bangladeshi patients were on average eight years younger than the white patients ($P < 0.05$). But mean age did not differ between patients who received analgesia and those who did not, neither overall nor within each ethnic subgroup.

Comment

We found no difference between the proportions of Bangladeshi and white patients who received analgesia. Seventy nine per cent of patients with isolated long bone fractures received analgesia, which is consistent with a previous report.¹ We did not directly assess whether the injuries in each ethnic group were equally painful, but

Age, sex, characteristics of injury, and whether analgesia was given to patients in hospital. Values are numbers (%) of ethnic group unless stated otherwise

	White (n=224)	Bangladeshi (n=42)	Other ethnicity (n=18)	Ethnicity not recorded (n=23)
Mean (range) age (years)	33.8 (15-55)	25.9 (15-50)	35.1 (16-55)	33.5 (15-52)
No of male patients	146 (66)	34 (81)	10 (59)	12 (52)
Mechanism of injury:				
Fall	148 (67)	31 (76)	11 (69)	16 (70)
Road traffic accident	40 (18)	4 (10)	5 (31)	4 (17)
Assault	5 (2)	4 (10)	0 (0)	1 (4)
Occupational	27 (12)	1 (3)	0 (0)	2 (9)
Bone fractured:				
Femur	5 (2)	2 (5)	2 (11)	1 (4)
Humerus	21 (9)	3 (7)	1 (6)	2 (9)
Radius or ulna	113 (50)	25 (60)	5 (28)	12 (52)
Tibia or fibula	85 (38)	12 (29)	10 (56)	8 (35)
Reduction needed	44 (20)	9 (22)	3 (17)	5 (23)
Admitted	81 (36)	13 (31)	7 (39)	8 (35)
Analgesia given	175 (78)	34.0 (81)	14 (78)	20 (87)

factors such as the bone affected, the need for reduction, and rates of admission were broadly similar among the groups. The study was retrospective because we did not want to affect current practice, and we did not measure potential confounding factors. What factors determine prescription of analgesia? Ethnicity could influence pain threshold, communication of pain to healthcare staff, and relationships between patients and staff. A recent review concluded that no ethnic differences were detected in the neurophysiological detection of pain, but there are reports of interethnic variation in the interpretation and expression of pain.^{2,3} In contrast to Todd et al, however, we found that ethnicity was not a risk factor for underuse of analgesia in isolated long bone fractures in our hospital.

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- 1 Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia. *JAMA* 1993;269:1537-9.
- 2 Zatzick DF, Dimsdale JE. Cultural variations in response to painful stimuli. *Psychosom Med* 1990;52:544-57.
- 3 Greenwald HP. Interethnic differences in pain perception. *Pain* 1991;44:157-63.

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An unexpected present

The young woman was clearly visible from the consulting room window, her emaciated frame draped in the tattered remnants of a sari, with a marasmic toddler balanced on her hip. She begged for food and alms, reaching wordlessly through the open windows of the buses parked at the bus stand.

She frequently pointed to the toddler, her eyes eloquent and beseeching. Few could hold out against this poignant appeal, and she made a good living. I watched her every day and noticed her abdomen getting bigger. On my home from work one day, I inquired, "Pregnant?"

"Yes."

"You must go to the municipal hospital. They will give you the tetanus toxoid injections and folic acid supplements. Your child will get free immunisations."

"The municipal hospital is not for people like me."

It was a futile argument. I found myself collecting haematinics and calcium tablets from medical representatives for her. I administered the tetanus toxoid injections, but could not persuade her to undergo any blood tests. So her blood group and HIV status remained unknown.

Six months later, hearing a commotion in the waiting room, I peered out. She was in labour, on the floor, watched in horror by the rest of the patients.

"Can you go somewhere else? This is only a consultation practice. I do not deal with childbirth."

Her only answer was a groan, after which she started to push. Frantic, I cleared the waiting room, and, after the lapse of 10 years, I conducted an amateur delivery, with no implements and no assistance. It was a healthy baby girl.

"Where will you go?"

"You know I have nowhere to go."

This was more than I had bargained for.

"Okay. You can spend the night on the verandah. Do you have a family?"

"No."

That was not possible. Had she sprung up like a weed?

"This birth has to be registered."

"Tomorrow doctor. I cannot move today."

The next morning she had disappeared. The verandah was wiped clean, and she had left me a present. It was caterwauling behind a stone bench, wrapped in a dirty piece of cloth.

There has been no trace of the mother in 15 years. The little present has, in the meantime, grown into a sister for my other children.

Gita Mathai *paediatrician in family practice, Vellore, Tamil Nadu, India*

We welcome articles of up to 600 words on topics such as *A memorable patient, A paper that changed my practice, My most unfortunate mistake*, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for "Endpieces," consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.