PRACTICE OBSERVED

Practice Research

Referring children to an ENT department and prescribing psychotropic drugs to their mothers

D J G BAIN, C M SALES

Respiratory illness is responsible for one-third of new consultations and nearly a quarter of all consultations in general practice. About 60% of the consultations for respiratory disorders are in children under 15 years of age.¹⁻³ The most common outpatient referral in children under the age of 15 is to the ear, nose, and throat department.⁴ In Scotland patients with hypertrophy of the tonsils and adenoids—almost all of which are removed—account for the greatest number of discharges each year from hospital—about 25% in children and 5-6% in all ages.⁵ The admission of children to ENT departments has increased, and a large proportion of ENT operations performed in children are in the middle ear.

The physical characteristics of ENT disorders are well documented, but it is less clear why children are referred to ENT departments. A study of the trends in prescribing psychotropic and antibiotic drugs to families by general practitioners showed that children who receive more than the average number of prescriptions for antibiotics for episodes of acute respiratory illness have mothers who receive more than their share of psychotropic drugs.⁶ This important finding helps to explain how decisions on the treatment of children in general practice are linked to the continual care of their parents.

We investigated this further. Our hypothesis was that the referral of children to ENT departments is associated with the consulting patterns of their mothers, and by the response of general practitioners to the problems of these mothers.

University Department of General Practice, Forresterhill Health Centre, Aberdeen AB9 8AY
D J G BAIN, MD, PRINCIPAL, senior lecturer
C M SALES, medical student

Method

We studied six practices in Aberdeen with a total of 26 163 patients and 24 doctors. Using the age sex registers we identified 1998 children who were born between 1973 and 1976 and had been registered with the same practice since birth. From the records we found 112 children who had had an ENT referral and whose mothers had been registered in the same practice for a minimum of five years before the child was referred.

A matched control group of children was chosen by taking the next child in the age sex register born in the same year as the index child, who had no record of an ENT referral, who had been registered with the practice since birth, and whose mother had been registered with the practice for a minimum of five years before the ENT referral date of the index child. In addition, the index and control groups were matched for family size. Social class was identified by checking the details of employment given in the medical records of both groups, and when unavailable the general practitioners and receptionists provided information about the occupation of the head of the household.

A record was made for each child of all contacts with the practice during the two years before the date of the ENT referral: for each mother a note was made of all recorded consultations with the practice during the five years before her child's referral to the ENT department. For the matched controls the records of the children and mothers were examined from the date of the index child's referral to the ENT department. For both sets of mothers recorded prescriptions for analgesics, hypnotics, and antidepressants were noted for the same five years.

Results

There were differences between the six practices in referral rates and in prescribing rates. Two practices, which were known to have the largest numbers of patients in social classes IV and V, had higher percentages of ENT referrals and prescriptions for psychotropic drugs. Because of the relatively small numbers of patients in the practices we made no attempt to analyse statistically the differences between the general practitioners and between the practices.

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Social class was known for 94 of the index cases and 89 controls, and there were no major differences between the two groups (table 1). There were 65 boys and 47 girls in both the index and control groups. The mean consultation rate for each child for the two years before referral to an ENT department was 10.7, and for a similar two-year period for the control group 6.5 (table 1). This difference in the consultation rate is highly significant ($p < 0.001$). Because the records of the consulting behaviour of three of the mothers in the study group were unsatisfactory we compared only 109 mothers in the study and control groups. The mean number of consultations by the mothers for the five years before their children's referral was 23.2 for the study group and 17.3 for the control group—again a highly significant difference ($p < 0.005$).

Table 1 shows that a significantly higher number ($p < 0.01$) of mothers with children who were referred to the ENT department received psychotropic drugs over the five years compared to mothers whose children were not referred. The mothers in the study group

TABLE 1—Social class distribution of referred children and their mothers and controls

Social class	Referred children and their mothers		Controls	
	No.	%	No.	%
I	1	0.8	1	1.1
II	13	13.8	12	13.5
III	11	11.6	10	11.2
IV	15	15.6	14	15.7
V	9	9.4	10	11.1
Total	64	100	64	100

TABLE 2—Referral of children to the ENT department: consultation rates of children and mothers

	Children referred to ENT		Children not referred to ENT	
	No.	%	No.	%
Children	112	11.2	112	11.2
Mothers	109	10.7	109	10.7
Mean age (years)	11.2	6.1	11.2	6.1
Mean consultation rate over 2 years	10.7	10.7	6.5	6.5
Mothers	109	10.9	109	10.9
Mean age (years)	35.2	23.2	35.2	17.3
Mean consultation rate over 5 years	23.2	23.2	17.3	17.3

TABLE 3—Referral of children to ENT department and prescribing of psychotropic drugs to mothers

Social class of mothers	No. of children referred to ENT		No. of children not referred to ENT		Total
	No.	%	No.	%	
No. of mothers prescribed psychotropic drugs	43	24	67	67	
No. of mothers not prescribed psychotropic drugs	66	85	151	151	
Total	109	100	218	218	

TABLE 4—Social class of mothers of referred children and prescribing of psychotropic drugs

Social class of mothers	History of prescribed psychotropic drugs		No history of prescribed psychotropic drugs		Total	
	No	%	No	%	No	%
I + II	6	16.7	16	27.6	22	23.4
III	17	52.8	27	46.6	44	48.9
IV + V	11	30.5	15	25.8	26	27.7
Total	34	100	58	100	94	100

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received an average of 3.9 prescriptions whereas the mothers in the control group received an average of 2.5 prescriptions.

Information about social class was available for 94 of the referred children. Table 4 shows the social class distribution for (a) the mothers who received psychotropic drugs and (b) the mothers who did not receive these drugs. A higher proportion of the mothers in (a) were from social classes IV and V than in the control group, whereas a higher proportion of the mothers in (b) were from social classes I and II. These differences in social class distribution were not statistically significant.

The children who were referred to the ENT department fell into three categories:

- (1) Children who had no operation.
- (2) Children who had a tonsillectomy or an adenoidectomy, or both.
- (3) Children who had a middle-ear operation with or without a tonsillectomy/adenoidectomy.

Table 5 shows that there were notable differences between these three groups: a significantly higher ($p < 0.01$) percentage of mothers whose children did not have surgery received prescriptions for psychotropic drugs than those whose children had surgery.

TABLE 5—Relation between outcome of ENT referral for children and psychotropic prescribing to their mothers

	ENT outcome for children		No. of mothers prescribed psychotropic drugs		Total
	No.	%	No.	%	
No surgery	16	14	32	32	
Tonsillectomy or adenoidectomy, or both	10	20	30	30	
Middle ear and other operations	43	34	67	67	
Total	69	100	129	129	

Specialist opinion, taken from letters about 103 children, included recommendations from a total of nine ENT surgeons—four consultants, four senior registrars or registrars, and one medical assistant—that is, an average of 11 letters or recommendations per surgeon. The small numbers of patients seen by individual surgeons were insufficient to make statistical comparisons between ENT specialists.

Discussion

The general practitioner deals with the patient's presenting problems in the context of the physical, emotional, and social attributes, which cannot easily be separated from each other. Furthermore, the behaviour and attitudes of the general practitioner may be an important factor in the outcome for his patients. In this study there were differences between six practices in terms of the referral and prescribing behaviour of doctors. Two of the practices which had a larger proportion of families in social classes IV and V than the other practices had higher referral and prescribing rates. The numbers, however, were too small to make conclusions about the reasons for the differences in referral and prescribing behaviour between general practitioners and between practices.

Decisions about children's health are largely outside their own control, and the behaviour of parents often has a considerable influence on the management of their children. General practitioners are frequently confronted with the mothers who present their children with recurrent respiratory infections. Other reports have shown that there is a link between emotional illness in mothers, the prescribing of psychotropic drugs to mothers, and the management of common childhood disorders.⁷⁻⁹ This study confirms these trends: the children who were referred to an ENT department were presented to the general practitioner more frequently than the children in the control group, and they had mothers with higher consulting rates and a larger number of mothers who received prescriptions for psychotropic drugs than the controls. The excess prescribing of

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psychotropic drugs to one group of mothers may be related to the mothers expressing anxiety to doctors when they know well about the frequent illness in their children.

Although respiratory illness is more common in lower socioeconomic groups,¹⁰ there were no significant differences in social class between children referred to the ENT department and those not referred, indicating that the general practitioner responds to a family pattern of behaviour rather than to family patterns of disease. In the group referred to the ENT department the prescribing of psychotropic drugs to mothers was more directly linked to social class. A higher proportion of mothers of referred children in the lower social classes received psychotropic drugs, and mothers of referred children not prescribed psychotropics included a larger proportion from social classes I and II. While these variations in prescribing to mothers from different socioeconomic groups were not statistically significant, the trend was in keeping with a previous finding that showed an association between social class and depression in mothers of young children.¹¹

It would be reasonable to suggest that a number of children are referred to hospital and undergo operations when the underlying problems are a combination of the mothers' difficulties as parents, and their inability to cope with recurrent respiratory infections in their children. These matters must be borne in mind when doubts are expressed about the value of tonsillectomy and adenoidectomy.¹²⁻¹⁴ A recent evidence shows that a more conservative approach to the insertion of grommets may be warranted.¹⁵

In one respect it was reassuring to find that mothers who had received more than their share of psychotropic drugs had children who did not undergo operations but it may be argued that many of these children were "inappropriate referrals." The variation between ENT surgeons in accepting cases for operation is certainly a recognised determinant of outcome for referred children,¹⁶ but there were too few cases in this study to compare the surgeons. The referral behaviour of the general practitioners might also have been influenced by their knowledge of the differences in operating policies adopted by ENT surgeons. While "referrals for reassurance" cannot entirely be avoided, there are circumstances when the general practitioner's action should be directed more towards helping mothers understand their own behaviour in relation to their children's respiratory disorders.

In contrast to hospital paediatric care managing the child in

Clinical Curio: bohemian birth on a boat

Margaret was a pleasant girl, quiet but a little bohemian; in fact she lived in a boat permanently moored in our local harbour. She came to our antenatal clinic to book at 12 weeks in her first pregnancy, and duly attended the hospital booking clinic where the consultant agreed that she was suitable for the GP unit.

The next we heard of her, was five months later. I returned home at seven one evening to find a midwifery student on the telephone from the hospital, where she had returned to collect her baby. She had been telephoned an hour before by Margaret's "husband," who said that he had delivered the baby at nine o'clock that morning, on her boat. After half an hour in the boat and found that mother and baby were well, the placenta was complete, and the cord tied with the routine number of knots, but her perineum needed some stitches. I was quickly and drove to her boat, where I found her sitting on a bouncing and waving gangplank across deep dark water. I found the cabin cozy and well warmed by a stove fed with unlimited free driftwood. Mother and baby lay quietly together under a blanket, both as nature. I was introduced and allowed to examine Margaret and confirmed the gaping perineum, but I did not feel my brief acquaintance with her to disturb and examine the baby. Luckily Margaret's mother arrived and was allowed to hold her new grandchild, who promptly demonstrated the potency of various orifices to the delight of a beaming sick blouse. Sister and I went down Margaret down on her bunk, and I set to work in the light of a swinging oil

general practice is more directly linked to the continual assessment of the child's parents, and in particular the child's mother. The mother's needs cannot be ignored at the expense of focusing too narrowly on the child's presenting problems. The evidence from this retrospective analysis of prescribing and referral patterns in general practice shows that features of emotional and family behaviour, in addition to physical findings, often influence the outcome for children with respiratory disorders.

We thank the general practitioners in Aberdeen who co-operated in this study and allowed us access to their patients' records.

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lamp and a torch held over my shoulder by Sister. Meanwhile, the ship's cat picked its way delicately across my tray of sterile instruments. The next day I returned with some discarded baby clothes and a dozen terry-towelling nappies for use when the supply of banana leaves ran out. Unfortunately Margaret's diastolic blood pressure was now 90 mm Hg, so I expressed my concern and prescribed some Valium to prevent an ectopic fit. I then coupled these up their hands in horror at the name of the drug and delivered through their herbal. The next day the prescription lay where I had left it and she and the baby stank to high heaven of garlic, but her blood pressure remained as high as before. After 48 hours the chance of a fit had receded so I stopped worrying. On the seventh day the baby was a little more yellow than I liked, and with a weekend ahead I took the precaution of briefing a local paediatrician, a periparturient pathologist, and a friend who was a magistrate. Luckily the jaundice also receded spontaneously, and I discharged Margaret and her baby.

She never came for her postnatal examination, but Sister has since met the couple happily pushing their pram through the market place. Whenever I drive past the boatyard I remember Margaret and her baby and wonder whether the baby had a better or worse start in life than all those born with the benefits of modern technology in the hospital up the road. Only time will tell—A. J. Vinters, general practitioner, Surbiton, Surrey.

We will be pleased to consider for publication other interesting clinical observations made in general practice—Ed, BMJ.

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Point of View

The riots in my practice—Toxteth

PATRICIA A BRADLEY

Ironically, because few patients turned up at the surgery in the first days after the weekend of violence, the riots in Toxteth gave me time to chat to patients about their cause. Those I spoke to were unanimous that the cause was not racial. Opinion was evenly divided among the conventional theories of where to lay the blame. Unemployment in the local police harassment, lack of parental control, and poor environmental conditions all had their supporters, but there were two more novel theories.

One was from a man who spends periods of up to three months working away from home, leaving his wife and child behind. While he is away his wife often takes the child out and is frequently harassed by her crawlers. Annoyed and worried, the husband reports it to the police hoping for some measure of protection, only to be told that he could expect no better for his wife if he chose to live in that area. My patient's point is that he can and does expect better. The kerb crawlers are not from Liverpool 8, but come from surrounding middle-class areas. He felt that it was unfair that the kerb crawlers, financially successful as shown by their expensive cars and clothes and yet dissatisfied with life, should be allowed to come into the area without question, not only assuming the right to harass those trying to live decent lives, despite their poorer financial circumstances, but creating jealousy by their obvious affluence.

The second was from a young man who said that he supported the riots but felt that those involved, though ostensibly fighting for jobs, would not be happy even if they had them. He felt that they were expressing a basic dissatisfaction with society. It is ordered today, but unable to express it they would continue to be dissatisfied even if jobs miraculously materialised. If he

is right it could be the reason why the kerb crawlers come into Liverpool 8, showing a dissatisfaction with their own way of life, employed and affluent though they may be. A dissatisfaction they are both unable to express and satisfy.

There is no doubt that we live in a violent society, where those who shout loudest are most likely to get what they want. Whether the violence is expressed physically or verbally is largely governed by the power of the institution set up to channel it. Doctors have a powerful voice in the National Association and use it, as do the miners with the National Union of Miners. Mrs Thatcher is fairly successful at shouting others down in the House of Commons and yet lacks sufficient insight to see that the rioters are only following her example. Of course, the more damage they cause the more attention they will get. The real question is how else will they get attention? We have not yet heard of the National Union of the Unemployed.

Some years ago while working in Bangladesh I met the local leader of the Beggar's Union. At the time I found the idea of a Beggar's Union laughable. It has taken the Toxteth riots to make me appreciate its significance. In Bangladesh, when asked their occupation many men stated "beggar." Very rarely would anyone admit to being unemployed. I understand now that to be a beggar, though not an enviable position, earned you a certain status, a place in society, and a channel of communication with government officials. Whereas if you were unemployed you had neither status nor a voice—you were nothing.

It might be that the immediate problem is not to find jobs for everyone but to find a way to give the unemployed a voice—a place in society. At the same time we might be considering whether we want to perpetuate a society where a person's identity is forever more strongly linked with the job they happen to hold and not to what they are, leading to the dissatisfaction expressed not only by the rioters but by the kerb crawlers and my young patient in very different ways.

Princes Park Health Centre, Liverpool L8 6SY

PATRICIA A BRADLEY, MB, DCH, general practitioner

ONE HUNDRED YEARS AGO "The King and Queen's College of Physicians and the Council of the Royal College of Surgeons in Ireland, impressed with the necessity for inquiry into the causes of, and the remedies for, the excessive mortality in Dublin, have felt it their duty to consider a subject so intimately connected with the public health. Committees were, therefore, appointed by both Colleges to co-operate in forming a joint report. After a lengthy consideration, a report has been produced, and, having been adopted by both Colleges, has been issued as an expression of their opinion. As a concise and authoritative statement of previously well known and recognised causes of the established high mortality of Dublin, the report is valuable, and the 'suggestions' for sanitary reforms in the city, if not novel, should be viewed with respect as coming from such high authorities. The Colleges, after careful consideration of all facts, give expression to their collective opinion that 'the City of Dublin

is, and has been, unhealthy in an excessive degree; and its extraordinary death-rate is attributable, not to errors of computation or irredeemable circumstances, but to long-continued neglect of sanitation, and the omission to enforce the legal means provided for a remedy.' The Colleges are further of opinion that 'the excessive mortality within the city demands from the civic authority the most firm, energetic, and persevering execution of the powers entrusted to it, to secure even a partial amelioration of the existing evils; and the health of the city will be likely to deteriorate still further unless dealt with by a new and radical method more vigorous than that which has hitherto been adopted.' An appendix gives the sections of the Public Health Act (Ireland) 1876, which confer full legal powers on the sanitary authority for enforcing several of the various hygienic and sanitary measures referred to in the report. (*British Medical Journal*, 1881, 2: 1000.)