

Psychosomatic Aspects of Children's Consultations in Primary Care

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Summary. Family doctors identified psychological factors associated with the presenting complaint in 17% of children aged 7 to 12 years attending their care. When compared with other children attending within the same age group, children said by their doctors to show associated psychological factors tended to present with psychosomatic-type symptoms (bed-wetting, asthma, skin rashes, abdominal pains, blackouts and headaches) and to make more use of medical services (both hospital and primary care). Our findings suggest that the families from which these children came had relatively high surgery attendance rates and more mothers with health problems. More of these families were regarded by the doctors as being under stress, and there were indications that concern about the children and their schooling was particularly common amongst the parents. Exploration of parental concerns about their children's health and about educational expectations would appear specially indicated in these cases.

Key words: Primary care – Psychosomatic problems – Educational expectations

Introduction

The General Practitioner (family doctor) is the first line of assessment for a majority of children's health problems in the United Kingdom and it has been estimated that work with children takes up between a fourth to a third of their time (Court 1976; Hart 1982; Jackson 1980). It is generally assumed that general practitioners will undertake the total responsibility for the promotion of health, the prevention of disease as well as the diagnosis and treatment of established disease (Royal College of General Practitioners 1981). The physical and psychological health of children are intimately related and this is recognized in the recommendations made for the paediatric training required by general practitioners, which state the need for expertise in dealing with emotional and developmental problems (Joint Working Party 1976).

However, little work has been done to study psychological aspects of children's consultations in primary care. In an American survey, Starfield et al. (1980) found psychosomatic conditions to be present in 5%–10% of presentations to paediatric primary care facilities. When a broader concept of psychological-somatic relationships not based simply on the presence of certain symptoms presumed to be psychosomatic is used, higher rates are obtained. Thus, Bailey et al. (1978)

asked doctors about any presentations for which there was a possible psychological contribution and this was reported in about a quarter of the children.

In this study, we were interested in investigating the characteristics of children identified by family doctors as having psychological factors contributing to the consultation by examining information derived, not just from the doctors but confirming and complementing it with detailed information from the parents. We describe the presenting complaints in the children, the pattern of use of medical services and possible associated stresses or concerns in their families.

Method

The study reported here is part of a broader survey of psychological aspects of children's consultations in primary care (Garralda and Bailey 1986a, b). It was carried out in two stages in eight general practices in the Manchester area during 1982–1983. In the United Kingdom, the general practice health system provides free primary care services for the whole population. General practitioners are generalists or family doctors who see both adults and children. To be eligible for assessment and treatment by them, prospective patients simply need to have registered with them. It is common for several doctors to work as partners in the same general practice (also called surgery).

The first stage of the study used parental and doctor questionnaires to examine psychological problems in the children. The doctors were asked to complete short questionnaires for every child between 7 to 12 years of age attending the surgery, noting the reasons for consultation (classified according to the International Classification of Health Problems in Primary Care of ICHPPC-2; WONCA 1983), whether there were associated psychological factors to the presenting complaint (e.g. wheezing possibly due to stress) and whether the child had a psychiatric disorder (i.e. a handicapping abnormality of behaviour/emotions). They were also asked whether they were aware of any current stresses (psychological/social) in the child's family and whether it was their impression that the family attended the practice more than average.

The parents completed a child behaviour questionnaire (Rutter Scale A; Rutter et al. 1970). This scale has been widely used to assess psychological disturbance in children and has acceptable reliability and validity. Children scoring 13 or more are deemed likely to have psychological problems. The parents also completed a child life events inventory (Coddington 1972; Monaghan et al. 1979). Because of possible language

difficulties in completing the forms, children of immigrant families were excluded. Only first attendances during the period of the study were assessed. Of the total 276 questionnaires given out (147 girls and 129 boys), 271 were returned by the doctors. The parents returned 234 (84%) questionnaires (125 girls and 109 boys).

For the second stage of the study we were specially interested in the issue of psychiatric disturbance (Garraalda and Bailey 1986b) and selected all children identified by parental and doctor questionnaires as likely to be psychologically disturbed (scoring 13 or more on the parental questionnaires and/or thought by the doctors likely to have a psychiatric disorder). But we also selected a group of children not so identified as controls for comparison purposes, chosen as being consecutive in attendance to identified disturbed children. A total of 116 subjects were selected (64 likely to be disturbed from parental and doctor information and 52 non-disturbed controls): amongst these, 102 parents agreed to co-operate, for the second stage of the study.

Home interviews were carried out with the parents (usually mothers) of these 102 selected children. The interviews inquired about general demographic factors, social conditions, the children's early development, health and psychiatric status (Rutter et al. 1970) and social stresses and supports for the

parents (Jenkins et al. 1981; Bailey and Garraalda 1987). Parents also completed questionnaires on their own mental health (General Health Questionnaire – 28; Goldberg 1978).

Results

The doctors reported a psychological contribution to the consultation as being definitely present in 21 (7%) and as possible in 29 (10%) of the subjects. The psychological factors noted most commonly included the child's behaviour itself, and family stress or instability. Parental anxiety, school difficulties and parental pressure were noted less frequently.

In the following analyses, we compare subjects for whom the doctors considered there were definite or possible associated psychological issues with the rest of the children attending. The data on doctor information is derived from 269 cases for whom information on contributory psychological features was available from the first stage of the study. Data on parental information are based on the total of 100 such cases interviewed for the second stage of the study.

Doctor information

Since it is possible that some physical symptoms are particularly likely to be influenced by psychological factors, we examined the presenting complaints in the two groups of children. Table 1 shows the conditions which were more common in the group with associated psychological factors. Half their presentations as opposed to 11% in the rest of the children were for bed-wetting, asthma, skin rashes, abdominal pains, blackouts or headaches. The other half were for the variety of diverse conditions characteristic of primary care presentations of children.

Table 2 outlines additional features from the doctor's questionnaires which differentiated between the groups at statistical levels of significance. It was noticeable that more of the children with associated psychological factors were given further appointments to come back to the surgery and were refer-

Table 1. Most common presenting complaints in children with associated psychological factors

Condition	Psychological factors	
	Present (<i>n</i> = 50)	Absent (<i>n</i> = 219)
Bed-wetting	6 (12%)	0
Asthma	6 (12%)	9 (4%)
Skin rash	4 (8%)	0
Abdominal pains	6 (12%)	11 (5%)
Blackouts	2 (4%)	2 (<1%)
Headaches	2 (4%)	4 (1%)
Total	26 (52%)	26 (11%)

Table 2. Information from doctors' questionnaires: action taken and family features

	Psychological factors		Statistics
	Present	Absent	
<i>Action taken by the doctor</i>	(<i>n</i> = 50)	(<i>n</i> = 219)	
Further appointment at the surgery	14 (28%)	13 (5%)	$\chi^2 = 19.43$ 1 <i>df</i> <i>P</i> < 0.001
Referral:			
Nil	40 (80%)	200 (91%)	$\chi^2 = 14.30$ 4 <i>df</i> <i>P</i> < 0.01
Paediatric	3 (6%)	1 (<1%)	
Psychology	1 (2%)	–	
Psychiatry	1 (2%)	2 (<1%)	
Other	5 (10%)	15 (6%)	
Not known	–	1 (<1%)	
<i>Family features^a</i>	(<i>n</i> = 45)	(<i>n</i> = 175)	
High practice attendance rate in the family	21 (46%)	35 (20%)	$\chi^2 = 12.04$ 1 <i>df</i> <i>P</i> < 0.001
Family stress	29 (64%)	31 (17%)	$\chi^2 = 37.08$ 1 <i>df</i> <i>P</i> < 0.001

^a The total numbers for these features vary because we did not attempt to obtain the information for initial subjects in the study

Table 3. Parental information

	Psychological factors		
	Present (<i>n</i> = 25)	Absent (<i>n</i> = 75)	Statistics
High parental stress about the children	11 (44%)	14 (18%)	$\chi^2 = 5.74$ 1 <i>df</i> <i>P</i> = 0.01
School problems	6 (24%)	5 (6%)	$\chi^2 = 4.11$ 1 <i>df</i> <i>P</i> = 0.04
Dissatisfaction with school	6 (24%)	5 (6%)	$\chi^2 = 4.11$ 1 <i>df</i> <i>P</i> = 0.04
<i>Relationship problems:</i>			
With peers in school:			
Marked	4 (16%)	6 (8%)	$\chi^2 = 7.77$ 2 <i>df</i> <i>P</i> = 0.02
Mild	4 (16%)	2 (2%)	
With teachers:			
Marked	3 (12%)	2 (2%)	$\chi^2 = 5.10$ 2 <i>df</i> <i>P</i> = 0.07
Mild	0	5 (6%)	
With father:			
Marked	5 (20%)	3 (4%)	$\chi^2 = 7.68$ 2 <i>df</i> <i>P</i> = 0.02
Mild	3 (12%)	7 (9%)	
<i>Child's position:</i>			
Oldest	3 (12%)	32 (43%)	$\chi^2 = 18$ 3 <i>df</i> <i>P</i> = 0.006
Middle	7 (28%)	10 (13%)	
Youngest	13 (52%)	25 (33%)	
Only child	2 (8%)	8 (11%)	

red on to specialist services, particularly to paediatricians and other medical units. As regards family factors, the doctors thought that more of these families had definite or likely high practice attendance rates (half) or were under some stress (two-thirds).

Parental information

The information obtained from the doctors was based on a short questionnaire which required succinct answers, and it was of interest to confirm and complement the above findings from parental information derived from detailed interviews. These interviews had been carried out with a subsample of 102 subjects selected for the second stage of the study; for 2 of these children the general practitioners had failed to note whether psychological factors were associated with the presentation. The remaining 100 subjects were subdivided into those for whom the doctors noted psychological factors to be present (25) and the rest (75).

The findings from parental information were consistent with those derived from doctor's reports. Parents of children whom the doctors had identified during the consultations as having associated psychological factors reported more recent use of specialist services for the children and were likely to have more health problems themselves than parents of children without psychological factors. Children with associated psychological factors had had significantly more hospital admissions in the 3 month prior to the assessment: the mean number of admissions in this group was 0.1, with a standard deviation of 0.4; the rest of the children had had a mean number of admissions of 0.01 with a standard deviation of 0.1: the difference between the two groups was significant on the Mann Whitney non-parametric test at $P < 0.05$. There was also a trend for more hospital casualty or emergency depart-

ment attendances in the group with associated psychological factors. In addition, more of the mothers in this group reported being on medication themselves for a variety of health problems (e.g. anti-histamines, medication for gastrointestinal symptoms, anti-depressants) (43% as opposed to 16% in the rest of the children $\chi^2 = 3.9$; 1 *df*; $P = 0.04$).

Few psychosocial differences emerged between the two groups. They were comparable for sex distribution, social class, broken homes, child psychiatric disturbance, maternal psychological distress scores on the General Health Questionnaires and recent life stresses for the child.

However, there were differences in stress experienced by the parents about their children and in the difficulties of the children in relation to schooling (Table 3). Significantly more of the mothers of children with associated psychological factors reported feeling stressed about their children. They identified an excess of school problems, more dissatisfaction with the school the children were attending and a wish for increased school standards. Not surprisingly in view of these findings, more of these children were reported to be having difficulties in their relationship with peers at school and somewhat more problems with teachers. In addition, there were more problems in the relationship with fathers in this group and we found an excess of middle or youngest children amongst them.

Discussion

General practitioners clearly thought that psychological factors were important for a substantial minority of children's presentations. Our figure of 17% is close to that found in a London survey by Bailey et al. (1978) and confirms the relevance of psychological issues in the primary health care of children.

The presenting complaints of half the children with associated psychological factors were for ailments which have traditionally been regarded as having a psychosomatic component. Our findings give some confirmatory support to the notion that bed-wetting, asthma, skin rashes, abdominal pains, black-outs and headaches may be particularly likely to be related to psychological events in primary care presentations of pre-adolescent school age children, though to some extent this finding may reflect prevailing medical attitudes and prior expectations from the doctors that these conditions have an important psychological contribution.

However, it must be noted that half the presentations of children with associated psychological issues were for a variety of diverse conditions. This indicates that over and above the special affinity between somatic and psychological issues in these "traditional" psychosomatic complaints, doctors were tacitly accepting as a clinical reality that attendance for virtually any somatic complaint may have a psychosomatic aspect.

The information from doctors and parents showed two main areas – health and education – as being particularly relevant in these "psychosomatic" presentations in the broad sense of the term.

More of the children in this group had had recent hospital admissions, were given appointments to come back to the surgery and were referred on to specialists. Although in some cases this may have been due to the nature, severity or diagnostic uncertainty of the children's health problems, it is likely that other factors also played a role. Doctors reported higher family surgery attendance rates and more of the mothers in this group were themselves on medication for a variety of ailments. This suggests that a high concern about health issues may have been a family feature. In addition, doctors identified a number of these families as being under stress and the parents, usually the mothers, tended to report high levels of stress in relation to their children. It seems plausible that at least for some of these children, parental stress, whether a result or not of the child's symptoms, contributed to the relatively high use of medical services in the children. Our findings are consistent with Mechanic's work (Mechanic 1979) suggesting that mothers who report more acute physical illness in their children are more troubled persons who are experiencing more physical problems and more dissatisfaction and whose families tend to focus on bodily concerns.

For a number of children with presentations with associated psychological factors, parental interviews identified concerns particularly focused on school issues. The results from this study suggest that academic and behavioural expectations may have been high in these parents or ill-matched by the reality of their children's schooling. This could explain the relative excess of middle or youngest children as they tend to be lesser educationally endowed but better psychologically adjusted than the eldest in the sibship (Hinde 1980; Rutter et al. 1970). It seems reasonable to assume that this could induce a tendency for middle or youngest children to respond to relatively high parental educational expectations with somatic symptoms. It must be noted however that in some cases the children's condition itself may have affected school adjustment, as for example in asthma causing repeated absence from school, and leading to the parental concern in this area.

In conclusion our results support the notion that psychological factors are relevant for the consulting complaint of a

substantial minority of pre-adolescent school children, particularly but not exclusively, in children presenting with conditions regarded traditionally as "psychosomatic". The findings from both doctor and parental information are generally consistent and indicate that exploration at the surgery of excessive parental stress about the children, of a possible family over-emphasis on health issues or of relatively high schooling expectations, would seem appropriate and potentially beneficial for these children and their families.

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References

- Bailey D, Garralda ME (1987) The use of the social stress and support interview in families with deviant children: methodological issues. *Soc Psychiatry* (in press)
- Bailey V, Graham P, Boniface D (1978) How much child psychiatry does a general practitioner do? *J R Coll Gen Pract* 28:261–262
- Coddington RD (1972) The significance of life events as etiological factors in the diseases of children. II. A study of a normal population. *J Psychom Res* 16:205–213
- Court SDM (1976) Fit for the future. Report of the Committee on Child Health Services, vol 1. HMSO, London
- Garralda ME, Bailey D (1986a) Psychological deviance in children attending general practice. *Psychol Med* 16:423–429
- Garralda ME, Bailey D (1986b) Children with psychiatric disorders in primary care. *J Child Psychol Psychiatry* 27:611–624
- Goldberg DP (1978) Manual of the general health questionnaire. NFER Publishing Group, Windsor
- Hart CR (1982) The quality of child care. In: Hart CR (ed) *Child care in general practice*, 2nd edn. Churchill Livingstone, London, pp 3–22
- Hinde RA (1980) Family influences. In: Rutter M (ed) *Scientific foundations of developmental psychiatry*. Heinemann, London
- Jackson J (1980) Paediatric primary care in inner London. *J R Coll Gen Pract* 30:520–528
- Jenkins R, Mann HA, Belsey E (1981) The background, design and use of a short interview to assess social stress and support in research and clinical settings. *Soc Sci Med* 15:195–203
- Joint Working Party of the British Paediatric Association and the Royal College of General Practitioners (1976) The paediatric training required by the general practitioner. *J R Coll Gen Pract* 25:128–136
- Mechanic D (1979) Development of psychological distress among young adults. *Arch Gen Psychiatry* 36:1223–1239
- Monaghan JH, Robinson JD, Dodge JA (1979) The children's life events inventory. *J Psychom Res* 23:63–68
- Royal College of General Practitioners' Working Party on Prevention (1981) *Prevention of psychiatric disorders in general practice*. The Royal College of General Practitioners, London
- Rutter M, Tizard J, Whitmore K (eds) (1970) *Education, health and behaviour*. Longman, London
- Ryle A (1967) *Neurosis in the ordinary family*. Tavistock Publications, London
- Starfield B, Gross E, Wood M, Pantell R, Allen C, Gordon B, Moffatt P, Drachman R, Katz H (1980) Psychosocial and psychosomatic diagnoses in primary care of children. *Pediatrics* 66:159–167
- WONCA (1983) *ICHPPC-2-Defined (International classification of health problems in primary care)* 3rd edn. Oxford University Press, Oxford

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