Reasons for consultation in irritable bowel syndrome: symptoms and patient characteristics

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SUMMARY. This study compared the characteristics of patients with symptoms of irritable bowel syndrome who had either consulted or not consulted a general practitioner in the preceding two years. The subjects were identified by questionnaire in a community survey of irritable bowel syndrome symptoms and samples of 24 consulting and 24 non-consulting patients were interviewed. The groups were well matched for demographic characteristics, although those who consulted for irritable bowel syndrome also consulted more frequently for other problems. The only significant differences in the pattern, frequency and severity of a range of symptoms, which included the Manning criteria, were that more of the consulting patients experienced visible abdominal distension and had a higher mean score for severity of pain than the non-consulters. Mean negative life event scores and anxiety and depression scores were higher in the group who consulted and more of these patients were concerned about the possible serious nature of their symptoms, including fear of cancer, emphasizing the importance of eliciting patients' beliefs and anxieties about the meaning of their symptoms.

Keywords: irritable bowel syndrome, consultation reason; consultation rates; patient concerns.

Introduction

IRRITABLE bowel syndrome is a common condition among people in the community, in general practitioners' surgeries and in hospital outpatient departments. Survey evidence suggests that symptoms consistent with a clinical diagnosis of irritable bowel syndrome are experienced by between 12% and 26% of the general population.[1-3] However, only about one third of these people are likely to seek medical advice about their symptoms and controversy has arisen about factors which are associated with continued self care of functional bowel symptoms and with the decision to seek medical advice.[3]

Over recent years, research into the irritable bowel syndrome has focused principally on the importance of making a positive diagnosis of the condition, so that unnecessary investigation can be avoided. The work of Manning and colleagues in generating a key list of cardinal clinical features associated with a diagnosis of irritable bowel syndrome has greatly enhanced doctors' ability to arrive at a confident clinical diagnosis, rather than one of exclusion.[4]

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The six Manning criteria are as follows:

- Pain relieved by defecation.
- Frequent stools with the onset of pain.
- Looser stools with the onset of pain.
- Visible abdominal distension.
- Passage of mucus from the rectum.
- Sensation of incomplete evacuation.

The reliability and discriminatory value of these criteria have been reviewed recently by Talley and colleagues.[5] Using a self-report questionnaire, their study showed that the Manning criteria discriminated irritable bowel syndrome from organic gastrointestinal disease and from all gastrointestinal disease other than irritable bowel syndrome with a sensitivity of 58% and 42%, respectively, and a specificity of 74% and 85%, respectively. All six of the individual Manning criteria were found to be reliable, with a median kappa score of 0.79. A logistic regression analysis of the discriminatory values of the Manning criteria showed that as the number of positive criteria increased, so did the predictive probability of irritable bowel syndrome. The predictive value was highest in younger patients (aged 20–40 years) and in women.

The distinction between patients who make the decision to consult and those who do not, however, is less clear. The original notion that irritable bowel syndrome was invariably associated with a psychological or frank psychiatric disorder has been largely abandoned, but there is no doubt that psychological and social factors play some part in consultation behaviour. In two studies from North America,[6,7] for example, it has been shown that psychological disorder is a feature of consulting patients rather than of irritable bowel syndrome itself, with the implication that there is no difference in symptomatology between patients identified in the community and those seen in gastroenterology clinics except in their response to stress and their prevalence of psychological dysfunction. A recent study from Bristol, however, has presented an opposite view, namely that patients with irritable bowel syndrome who have sought medical advice, particularly women, have more severe and disruptive symptoms than those who do not.[8]

There are problems with the methodology in all three of these studies,[6-8] both in terms of non-random sampling in the North American studies, which were performed in selected populations, and in terms of 'referral filter' bias in all three studies, in which the consulting patients constituted those seen in specialist gastroenterology clinics. Thus, the diagnostic criteria within and between these studies were inconsistent, so their results are not strictly comparable.

In this paper the results of an interview study of patients with symptoms compatible with a diagnosis of irritable bowel syndrome are reported. The patients were part of a random community sample, from which smaller samples of those who had sought medical advice and those who had not were selected for further study. The aim of the inquiry was to determine whether differences in symptomatology, in health beliefs or in psychological measurements were associated with differences in consultation behaviour.

Method

In 1989 a postal questionnaire was developed to measure the prevalence of functional bowel symptoms in the general popula-

tion.[3] It incorporated two instruments, derived from the Manning criteria, which had been used previously,[1] and was itself validated and shown to be repeatable.[3] In spring 1989 this questionnaire was sent to 2280 patients selected at random from the lists of eight general practitioners in Andover and Southampton, Hampshire: 1620 questionnaires were returned, a response rate of 71.1%. Of the 1620 patients 350 (21.6%) had symptoms compatible with a clinical diagnosis of irritable bowel syndrome made on the basis of a questionnaire response of more than six episodes of abdominal pain in the previous year plus fulfilling at least two of the Manning criteria. One third of these patients (117, 33%) had consulted their general practitioner with their abdominal problems, and the remaining two thirds (233, 67%) had not. A second questionnaire was sent to all the patients one year after the first. A random sample of the consulting patients who were still symptomatic was selected for study, and this was age and sex matched with a group of patients who also remained symptomatic one year after the initial survey but who had still not sought medical advice about their problems.

A sample size of 24 patients in each group was chosen as a result of power calculations based on the results of a similar, previous study of patients consulting and not consulting with dyspepsia.[9]

The patients selected for study were interviewed, either in their own home or in their health centre, by one of us (J K) using a semi-structured interview based on a schedule used previously.[9] As well as obtaining information about the frequency of abdominal symptoms, including the Manning criteria, and their severity (using a visual analogue scale scored from zero to 10), the patients were asked about associated gastrointestinal symptoms. Information about consultation with general practitioners, patients' knowledge and beliefs about the significance of their symptoms (including fear of serious illness and cancer) and childhood abdominal problems was also collected. In addition two other, established measures were administered by the interviewer: the hospital anxiety and depression scale,[10] consisting of a series of easily understood questions designed to assess emotional state using four-point response scales and the Paykel life event questionnaire,[11] a checklist of events related to employment, health, family, marital and legal issues.

The general practitioners' case notes for each patient were reviewed for events between 1988 and 1990, inclusive, to determine consultation rates for medical problems.

Non-parametric statistics were used for comparison between groups, with the help of *SPSS-PC* computer software, using chi square analysis and the Mann Whitney *U* test. Logistic regression analysis was used to rank the variables which discriminated between consulting and non-consulting patients.

Results

All 24 patients in each group agreed to be interviewed, and their consulting or non-consulting status was confirmed at interview. The mean ages of the consulting and non-consulting groups were comparable (49.3 and 51.1 years, respectively; age ranges 21–69 years and 24–73 years, respectively) and there was no significant difference between the social class distribution in the two groups. Review of the patients' notes revealed that in 1988–89 the mean of the mean consultation rate over the two year period for the consulters was 8.3 consultations per year, compared with 4.1 consultations per year for the non-consulters ($U=141.5$, $P<0.01$). In 1990 the mean consultation rates were 7.6 and 3.0 consultations per year, respectively ($U=125.0$, $P<0.001$). After irritable bowel syndrome, the commonest reasons for consultation were for musculoskeletal problems and respiratory symptoms.

Abdominal symptoms

There was a striking similarity between the pattern and severity of abdominal symptoms in the two groups, although significantly more of the consulting patients experienced visible abdominal distension than the non-consulters (Table 1) ($\chi^2 = 4.25$, $P<0.05$). Pain severity was also reported as being higher among the consulting patients than the non-consulters, with mean scores on the visual analogue scale of 7.8 and 5.0, out of a maximum of 10, respectively ($U=88.5$, $P<0.001$). There was no significant difference between the groups in the frequency of other symptoms either related to the Manning criteria or to the gastrointestinal tract generally (Table 1). The number of patients who remembered being troubled by abdominal pain in childhood was similar in both groups (eight consulters versus six non-consulters).

Table 1. Symptoms experienced by patients with irritable bowel syndrome.

Symptom	No. of patients experiencing symptom: Consulters ($n=24$)	Non-consulters ($n=24$)
Pain relieved by defecation	22	23
Visible abdominal distension	22	15
Flatulence	21	17
Dyspepsia	20	18
Nausea	19	13
Sensation of incomplete evacuation	19	19
Diarrhoea	18	15
Straining to pass stools	18	13
Urgency of defecation	18	15
Belching	17	16
Looser stools with onset of pain	16	17
Frequent stools with onset of pain	14	15
Passage of mucus from rectum	12	8
Constipation	11	13
Bleeding from rectum	10	7
Vomiting	10	16

n = total number of patients in group.

Health concerns

There was considerably greater concern about the possible serious nature of the symptoms in the consulting patients, with many more of the non-consulting patients seeing their symptoms as 'normal', 'trivial', or 'nothing to worry about' than consulters (50% versus 8%). Twelve of the consulting group were worried about the possible serious significance of their symptoms, compared with only two of the non-consulters ($\chi^2 = 10.55$, $P<0.001$), and 10 of the consulters were concerned about whether or not they might have cancer, compared with only one of the non-consulters ($\chi^2 = 7.55$, $P<0.01$).

Anxiety and depression

There were increased levels of anxiety and depression among the consulting patients compared with the non-consulters, using the hospital anxiety and depression scale on which a score of up to 10 is regarded as being within the normal range. Eleven of the consulting patients scored more than 10 for anxiety compared with five non-consulters ($U=169.0$, $P<0.05$) and six consulters scored more than 10 for depression, compared with none of the non-consulters ($U=155.0$, $P<0.01$).

Life events

Although there were no more negative life events among the consulting patients, their mean negative life events score, derived from the Paykel questionnaire, of 10.4 was significantly higher than the non-consulters' score of 6.2 ($U=179.0$, $P<0.05$).

Regression analysis

When logistic regression analysis was applied to the factors shown to be different between the two groups, the only two significantly discriminant factors were the severity of pain experienced by the consulting group ($P<0.01$) and their anxiety about the possible serious nature of their symptoms ($P<0.05$), which together explained 85% of the variance between the groups.

Discussion

This study has shown clearly that consulting behaviour in irritable bowel syndrome is related both to the perceived severity of the abdominal pain experienced by consulting patients and also to the patients' concerns about the possible serious significance, in terms of malignancy and other disorders, of their symptoms.

The methodology used in this study was rigorous. Careful sampling techniques were applied to obtain a representative selection of the general population resident in the study area, and identical criteria were employed to make the diagnosis of irritable bowel syndrome in both the community controls (the non-consulters) and the primary care study group (the consulting patients). This methodology avoids the bias inherent in studying hospital patients in gastroenterology clinics who, by definition, will have more severe or intractable symptoms, and also ensures that the consulting and non-consulting patients are comparable.

The only significant differences between symptoms experienced by the consulting and non-consulting subjects were in the number of consulters experiencing visible abdominal distension and in their reported severity of abdominal pain. This is, perhaps, not surprising; Brown has described such observations as 'effort after meaning',[12] the justification by patients of health-related behaviour on the basis of severity of symptoms, and this may well be the case here. The findings presented here accord precisely with a recent report from the Mayo clinic where, in a study of 1021 individuals, Talley and colleagues showed that only a minority of subjects with irritable bowel syndrome presented for medical evaluation and that the characteristics of the abdominal complaints did not explain the seeking of health care in most cases.[13]

The failure to find any difference in any of the other bowel symptoms enquired after in this study is at odds with Heaton's results,[8] in which he suggested there was significantly more bowel dysfunction in the patients seen in the gastroenterology clinic. This, of course, may be true in the hospital setting but may not be true for those seen in primary care.

The observation that the consulting patients were more concerned about the possible serious significance of their symptoms is in accordance with previously reported findings in dyspeptic patients, who are worried about both cancer and heart disease.[9] Not only were the non-consulting patients different in this respect, but many of them were positively dismissive of their symptoms, as anything more than 'trivial', or even 'normal'. These findings strongly support the notion that interpretation of and concern about symptoms is of prime importance in patients' decision-making in relation to seeking medical advice.

Finally, the higher anxiety, depression and life event scores in the consulting group are in keeping with other studies, both in the United Kingdom and in North America,[2,3] and suggest that psychological and social factors are important in health-seeking behaviour, but are not part of irritable bowel syndrome itself.

In summary this study has provided clear evidence that while psychosocial factors should be seen as triggers to consultation rather than an integral part of the irritable bowel syndrome, it is also possible that patients with the syndrome who seek medical advice have more severe symptoms than those who do not consult. The evidence now suggests that in addition to making a positive 'physical' diagnosis of irritable bowel syndrome in primary care, general practitioners need to recognize and deal with patients' health beliefs and concerns about the significance and seriousness of their symptoms.[14] An evaluation of the efficacy of taking this approach could well form the basis of further research in general practice.

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