ELSEVIER

Patient Education and Counseling 35 (1998) 149–156

patient education and counseling

Managing patients with irritable bowel syndrome in general practiceHow to promote and reinforce self-care activities

Henriëtte E. van der Horst[a,*], Francois G. Schellevis[a], Jacques Th.M. van Eijk[a], Gijs Bleijenberg[b]

[a]*Department of General Practice, Nursing Home and Social Medicine. Institute for Research in Extramural Medicine, Vrije Universiteit, Van der Boechorststraat 7, 1081 BT Amsterdam, Netherlands*
[b]*Department of Medical Psychology, University Hospital, Nijmegen, Netherlands*

Received 6 October 1997; received in revised form 23 January 1998; accepted 16 February 1998

Abstract

In this paper the development and implementation of a set of guidelines for the management of irritable bowel syndrome (IBS) patients in primary care is presented. The guidelines are based on the knowledge that has emerged from research in the past decade on factors that influence the course and prognosis of IBS. These include lifestyle factors, avoidance behaviour and reaction patterns from family and friends. The guidelines contain elements of psychotherapeutic techniques that have been found to be successful in outpatients with IBS. They comprise instructions to promote and reinforce self-care activities. The guidelines have been applied in daily practice by a group of Dutch general practitioners and various aspects of the feasibility of the guidelines are discussed.

Keywords: Irritable bowel syndrome; Management; Feasibility; Primary care; Self-care

1. Introduction

General practitioners (GPs) encounter one or two patients with irritable bowel syndrome (IBS) each week in their surgery. Approximately 40% of IBS patients consult their GP more or less regularly for a number of years because of their IBS symptoms [1–3]. GPs are often frustrated by these patients who have refractory complaints and repeatedly request tests or a referral to a specialist [4,5]. The question of how to develop a successful strategy for the management of IBS (i.e. acceptable and profitable for both doctor and patient) has been addressed by several authors who concentrated mainly on outpatients with IBS [5–9] In this paper we present a set of guidelines for GP management of IBS patients. First, we briefly review the knowledge of the pathophysiology and management of IBS that has emerged from studies carried out in the last decade including systematic reviews. Next, we extensively describe our guidelines which, taking into account this knowl-

*Corresponding author. Tel.: + 31 20 4448195; fax: + 31 20 4448361.

0738-3991/98/$19.00
PII: S0738-3991(98)00053-6

edge, were developed in dialogue with two experts in the field of IBS[1]. We also comment on certain aspects of the feasibility of the guidelines which have been applied in daily practice by a number of GPs.

2. IBS: definition, pathophysiology and therapeutic considerations

According to the definition developed by an international working panel, IBS is 'a functional gastrointestinal disorder attributed to the intestines and associated with symptoms of pain and disturbed defecation and/or symptoms of bloatedness and distension' [7]. The pathophysiological mechanism of IBS is still unclear [5,7]. However, many authors have reported on factors that can possibly influence the course of the complaints and/or the health-care-seeking behaviour in patients with IBS. The role of lifestyle factors such as eating habits, diet and physical activity is controversial but, at least in some patients, these factors do seem to cause or affect the complaints [10–12]. Concern about the possibly serious nature of their complaints can cause patients to consult a physician [13]. If they are not adequately reassured (e.g. because of repeated examinations made by a physician who feels frustrated because he has nothing else to offer) their constant worrying can become a factor that prolongs and intensifies the complaints [5,14]. Psychosocial factors influence the health-care-seeking behaviour and the course of the complaints. Therefore, these must be taken into account when treatment is being planned [5,15–19]. Drossman proposes a conceptual model for the interaction of psychosocial factors with IBS. Early in life susceptibility to IBS symptoms can be affected by genetic, demographic and environmental factors (e.g. family attitudes towards bowel training). Psychosocial factors in later life such as life events, stress and coping, influence the illness behaviour. The attitude of family or friends can also influence the illness behaviour of a patient. If family or friends ignore the complaints or, on the other hand accentuate them by showing excessive concern, the patient can be tempted to emphasize his complaints [5]. The consequences of avoidance behaviour by IBS patients should also be considered. Some patients avoid eating certain food or refrain from certain activities for no medical reason. This avoidance behaviour has been shown to have an unfavourable influence on the complaints [6,18,20].

As the pathophysiological mechanism of IBS remains unclear, there is no unequivocal therapy. Many drugs which are regularly prescribed for patients with IBS have no greater effect than a placebo [21]. However, psychotherapeutic techniques have proved to be successful in the treatment of long-standing complaints [9,17]. In particular, cognitive-behavioural therapies seem to be effective [20,22–24]. GPs can be taught reattribution techniques and other elements of cognitive-behavioural therapy which can be applied in their management of 'difficult' patients [14,25–28]. Physicians could try to increase the patient's own control over the symptoms by promoting self-care activities and reinforcing health-promoting behaviour [5,6,29].

Drossman proposes a so-called graduated multicomponent treatment approach for three categories of IBS patients: those with mild symptoms, those with moderate symptoms and those with severe or intractable symptoms [5]. He stresses the importance of establishing a strong physician–patient relationship and of confidence in the diagnosis. The basis of the approach is formed by (a) appropriate reassurance after having elicited the patient's fears and beliefs regarding the complaints, (b) education concerning the nature and prognosis of the complaints and (c) advice on lifestyle factors. In addition to this approach, we think it is important that the physician should give attention to above-mentioned factors, i.e. anxiety, avoidance behaviour, inadequate coping mechanisms and the attitude of family and friends. Elements of the psychotherapeutic techniques mentioned above can be useful in increasing a patient's control over the symptoms and in reinforcing health-promoting behaviour.

3. Guidelines for the management of IBS patients in general practice

The guidelines we propose for the management of IBS patients in primary care combine the Drossman

[1]G. Bleijenberg, Department of Medical Psychology and JFM Fennis, Department of Internal Medicine, University Hospital in Nijmegen.

approach with elements of health-promoting behaviour and self-care: after exploration of the patient's worries and beliefs about the symptoms, and enquiring about the self-care activities and limitations resulting from the complaints, the GP should reassure the patient and provide adequate information regarding the complaints. Subsequently, the GP turns to seven so-called self-care activities that might help the patient. The GP should discuss the importance of a particular activity, depending on the relevance for this patient. He should discuss the way in which it can be implemented in daily life. Problems that patients expect to encounter in carrying out these activities should also be explored and patients should be encouraged to find their own solutions for these problems.

3.1. Initial consultation

In the initial consultation, which lasts for 15–20 min, the GP should follow the guidelines for therapy. These are divided into four sections. The GP should also give the patient a booklet containing information about the complaints and self-care activities. The booklet has been revised by two experts in the field of patient education of the former Institute O&O.

(1) The first part of the consultation consists of an explorative phase, in which the GP should ask the following questions:

- Are you worried about your complaints? If so, what exactly worries you?
- Do you have any ideas about the origin of your complaints? If so, what do you think is the cause of your complaints?
- Are your activities (physical, social or otherwise) limited, or is there anything you cannot do as a consequence of the complaints? If so, which activities are limited or avoided?
- What actions or remedies did you try in order to alleviate the complaints?

(2) Next comes the informative phase of the consultation, in which the GP should

- reassure the patient, taking into account the patient's fears and worries, and make it explicitly clear to the patient that there is no reason for any fear about any serious health problem the patient has mentioned;
- mention the variable pattern of the various complaints that can occur in IBS over time;
- inform the patient that the origin of the complaints is not yet known and explain that it is not likely that an organic explanation will be found in time. He should add that many factors can contribute to the complaints: e.g. a history of gastrointestinal infection, stress, life events, dietary problems, too little physical exercise, constant anxiety about the complaints;
- provide information about the prognosis: IBS can last for years with long symptom-free periods;
- tell the patient that a thorough medical history-taking, a physical examination, and (in older patients) some additional laboratory testing, is sufficient to make a confident diagnosis of IBS if no abnormalities are found;
- inform the patient that there is no universal therapy and that the effectiveness of drugs is very limited. However, he should also tell the patient that the best option is to learn to identify factors that might influence the complaints and to learn how to cope with these factors and the complaints themselves.

(3) The GP should then give information on self-care activities, after having ascertained in the explorative phase which activities could be relevant for the patient. There are seven self-care activities the GP can choose from. If, as is only seldom the case, all seven activities seem to be relevant for the patient, he should discuss them all. After giving a short explanation, the GP should discuss concrete recommendations. He should also ask the patient if he expects any problems in following this advice and discuss possible solutions for those problems.

3.1.1. Eat regularly

Explain that the complaints are sometimes influenced by irregular eating habits, e.g. skipping a meal, eating too many snacks between meals, eating at irregular times. If people only skip a meal occasionally it is not a problem but if they do it often their body can 'complain'. Concrete recommendations are the following:

- do not skip a meal

- take your meals daily at approximately the same time
- do not eat too many snacks between meals.

3.1.2. Mind your food

Explain that in some patients the complaints can be related to dietary factors. This is especially the case with complaints such as diarrhoea and constipation. Keeping a diary gives the patient information on which type of food or drink seems to aggravate the complaints and, subsequently, whether elimination of the offending food or drink reduces the complaints. Discuss the following recommendations:

- eat at least two slices of wholemeal bread daily
- eat some type of fruit daily
- eat salad at least three times a week
- eat fresh vegetables daily
- drink enough, at least one and a half litres of liquid a day.

3.1.3. Get enough physical exercise

Stress the importance of physical exercise. Too little exercise can lead to all kinds of problems, with these abdominal complaints. Constipation can be a result of too little physical exercise. Discuss the following recommendations:

- take some type of physical exercise daily: e.g. half an hour walking or cycling
- use the stairs instead of a lift, or use your bicycle instead of your car or public transport
- consider becoming a member of a sports club.

3.1.4. Avoid unnecessary worries

Explain to the patient that worry and anxiety about complaints that are not in themselves serious, can sustain the complaints. Having abdominal complaints for a long time can evoke worry about a possibly serious cause or increasing limitations as a consequence of the complaints. Anxiety or worry can be increased by talk on the TV or in the newspapers about harmless symptoms being a signal of serious disease. Family or friends can also induce anxiety by their worries about a patient's complaints. If a thorough examination has shown that there is no serious organic cause for the complaints, it will be the first step in breaking through the vicious circle. Furthermore, the following recommendations should be discussed:

- examine your own anxiety: try to formulate this anxiety as explicitly as possible
- consider whether you have enough information to stop worrying; if necessary, read the general information in the booklet
- if you are still worried, think of the specific questions you would like to ask me, and ask them.

3.1.5. Reduce stress and strains

Explain that stress can aggravate complaints and that people are not always conscious of experiencing stress when, in fact, it is occurring (e.g. moving house, starting a new job, etc.) If stress evokes or aggravates physical complaints people tend to pay more attention to the complaints than to the stress itself. A vicious circle can be the result, as is the case with anxiety. Make the following recommendations:

- consider whether the increasing complaints could be a sign of some strain you are experiencing
- concentrate your efforts on the stress and not on the complaints
- try to find out what has caused the stress, what can be done to reduce the stress and who can help you to cope with the stress.

3.1.6. Do not let the complaints determine your life

Explain that sometimes people unnecessarily avoid or restrain from all kinds of activities because of their complaints. This so-called avoidance behaviour can aggravate the complaints by causing stress and another vicious circle develops. People with these abdominal complaints need not avoid any activities for medical reasons. Make the following recommendations:

- think about the activities you avoid or refrain from as a consequence of the complaints
- consider whether you want to avoid or refrain from each particular activity
- make arrangements (if necessary, together with other people) to start a certain activity, specify what and when.

3.1.7. What is the influence of your friends and relations?

Discuss the influence that family and friends can have on the complaints of a patient. Both neglect and worry can aggravate the complaints. On the other hand, family and friends can also help a patient to cope with the complaints. Mention the following recommendations:

- think about how your family and close friends react to your complaints. Consider whether their reaction could possibly aggravate your complaints
- think of the reaction you would like your family and friends to have in connection with your complaints and discuss this with them
- consider whether and how someone can help you to cope with your complaints
- give your partner the booklet and ask him or her to read it.

(4) Next, after having discussed the self-care activities the GP should explain whether and when the patient should return.

- mention that it cannot be expected that the complaints will be gone in a few weeks; it is much more likely that they will occur every now and then
- explain that the patient should return if any of the following situations occur
- unwanted loss of weight (more than 3 kg in 1 month)
- repeated fecal incontinence
- repeated blood on stools without having to strain on the stools
- diarrhoea for longer than 1 week (watery faeces three or more times a day)
- no production of any stools for more than 10 days
- acute serious abdominal pain, worsened by all movements, in combination with nausea (in this last case the GP should be contacted immediately).

At the end of the consultation the GP should hand over the above-mentioned booklet, in which he has marked the recommendations that are relevant to the patient.

3.2. Follow-up consultations:

If a patient returns with abdominal complaints the GP should

- explore the reason for consultation: if necessary, expand his diagnostic procedures
- find out whether the general information in the booklet is clear. If not, give additional information and explanations to the patient
- find out whether there is any remaining anxiety: if so, ask the patient to explain his worries. He should reassure the patient that his worries are unnecessary and explain again the vicious circle that can exist between anxiety and complaints
- ask the patient whether he experiences any difficulty in carrying out the recommendations made during the previous consultation and in the booklet. He should find out which activities have been successful and use this success to reinforce the patient's confidence in continuing to cope. He should also discuss with the patient possible solutions for the existing problems
- end by repeating the directives for follow-up consultations.

4. Training GPs in the application of the guidelines

In order to assess the feasibility of the guidelines, 19 GPs were trained during a 3-h session in the application of the guidelines. They were asked to read the booklet for patients before attending the meeting. The training was given by the first author, and the programme of the session consisted of:

- explanation and theoretical justification of the guidelines
- role-playing to practise the application of the guidelines
- discussion of the problems the GPs anticipated in applying the guidelines

During the training the importance of a patient-centered attitude was emphasized as a major prerequisite for the effectiveness of the guidelines. Each GP was contacted, after having applied the guide-

lines in one or two consultations, to discuss any problems that might have been encountered. GPs who returned an audiotape of a consultation (see further) received feedback on this tape in person or by telephone. Of the 19 participating GPs five did not apply the guidelines at all in any consultation. In three cases this was because of lack of time and interest, and in two cases it was due to maternity leave and prolonged illness, respectively. We asked the GPs to complete a checklist after each consultation with an IBS patient. This checklist contained 20 items, corresponding with the elements of the guidelines, and the GP had to indicate whether or not he had discussed these elements. The guidelines were applied in approximately 100 consultations, and for about half of these a checklist was returned. The proportion of items applied ranged from 75% to 100% per patient. The four items included in the explorative phase were almost always applied. The three items from the other phases which were least applied (in roughly three-quarters of the consultations), were 'information about the diagnostic procedures', 'information about danger signs' and 'information about specific symptoms that should incite the patient to make an appointment for a follow-up consultation'. All other items were applied in 90% or more of the consultations.

We also asked the GPs to audiotape at least three consultations in which they applied the guidelines. These audiotapes were used to provide feedback for the GPs and to estimate the reliability of the checklists returned. Half of the GPs complied with our request, and returned a total of 17 audiotaped consultations which could be used for feedback and analysis. Three GPs refused to make an audiotape because they were afraid it would have a negative influence on the consultation. Other reasons GPs gave for not making an audiotape were: patient did not consent, failure of the tape-recorder, did not think about it. In almost all cases some discrepancy was found when the checklists returned by the GPs were compared with the checklists completed by an observer (i.e. the first author) after listening to the audiotapes. In most cases the GP had indicated that he had discussed a certain element, whereas the observer found that this particular element was not discussed during the consultation. The disagreement was mainly found in the explorative phase and the informative phase. An explanation for this discrepancy could be that the GP had discussed some items from the first two phases in a previous consultation, and had therefore reported these items as 'discussed' in the checklist. Another, less favourable, explanation could be a socially desirable answer. The observer also rated the audiotapes on three qualitative measures, all scored on three-point scales:

- The guidelines were applied very systematically in nine consultations, moderately systematically in five consultations and rather unsystematically in three consultations
- The degree to which the GP explored whether the given recommendations were applicable and discussed the difficulties in application anticipated by the patient, was low in two consultations, moderate in ten, and high in five consultations
- The specificity of the given information and recommendations (i.e. specific for this patient, using the information from the explorative phase) was high in nine consultations and moderate in the other eight consultations.

These qualitative scores tended to improve after feedback had been given. In all audiotaped consultations the GPs showed an open, facilitating attitude, and patients were given ample opportunity to contribute to the consultation, as measured by the method described by Henbest [30]. The mean duration of the consultations, measured by timing the audiotapes, was 18 min (range 10–25).

To supplement the data concerning the compliance of the GPs with the guidelines, we also asked the GPs for their opinion on the applicability of the guidelines. The 14 GPs who had applied the guidelines found that they provided a more secure basis for the management of their IBS patients. They especially appreciated the systematic structure of the guidelines and the booklet. Exploring and discussing avoidance behaviour and the influence of family and friends were 'new' elements for all GPs. However, two GPs mentioned having difficulty in integrating the guidelines in their daily practice. One found the guidelines too extensive and the other said his workload and inexperience caused the problems with the application. Even though the initial consultation takes more time (15–20 min) than most GPs usually

spend on a consultation, the GPs generally felt that this extra time was worthwhile, and probably resulted in less follow-up consultations.

5. Discussion

Starting from some basic principles of a good therapeutic relationship — namely the exploration of a patient's problems, feelings and beliefs, and appropriate reassurance — we have combined knowledge of factors that have proved to be of influence on the course and prognosis of IBS with elements of successful psychotherapeutic techniques used in IBS, to develop a comprehensive set of guidelines for the management of IBS patients in primary care. Our aim was to simplify some elements of useful psychotherapeutic techniques in order to make them applicable in daily practice. We also included specific instructions to promote and reinforce self-care activities by giving the patients recommendations and discussing the necessary steps for and problems encountered in implementing a certain activity.

One could argue that a Delphi procedure might have been a more appropriate method of developing the guidelines. However, on the basis of the existing evidence of other studies we have chosen to process the guidelines in a small focus group as described in the introduction of this paper in order to save time.

The GPs who applied our guidelines found them to be applicable, acceptable and useful in daily practice. The effectiveness of the guidelines has been studied in a randomised clinical trial, which has been reported elsewhere. The results of this study indicate that application of the guidelines in daily practice results in less anxiety, less avoidance behaviour and a decreased medical consumption in IBS patients [31].

On the whole, the GPs reported little difficulty in integrating the guidelines in daily practice. However, their compliance with the guidelines, as measured by scoring the audiotapes, could be better. Exploration of the lay explanation, of anxieties and self-care activities was fairly extensive. The specificity of the information and recommendations given to patients was also quite high. Yet, the degree to which the GPs explored and discussed the difficulties that patients might expect to encounter in carrying out the recommendations was, disappointingly, rather low, although an improvement could be detected after feedback had been given. The explanation for this somewhat meagre performance might lie in the fact that, although in the recent decades most doctors have developed skills in exploring the beliefs and expectations of patients, they have not learned to discuss their coping strategies and how these could be improved. We conclude that in the initial training more attention should be paid to this aspect of the implementation of the guidelines. Feedback sessions can be used for further improvement in GP performance with regard to this aspect of the guidelines. We also think that 'booster' training sessions, e.g. after 1 year, could improve the compliance of GPs with the guidelines and provide them with the opportunity to exchange and discuss experiences. The amount of time spent on initial training and feedback (approximately 4–5 h per GP) seems to be reasonable, considering the fact that GPs encounter patients with IBS once or twice a week in their practice. We also conclude that the extra time spent on the initial consultation does not hinder the application of the guidelines. The participating GPs were in full agreement.

As only part of the guidelines is symptom-specific, it would be an interesting question to know if, mutatis mutandis, the guidelines are also applicable in the case of other long-standing, nonorganic complaints, such as low back pain or headache.

References

[1] Lamberts H, Brouwer HJ, Groen ASM, Huisman H Het transitiemodel in de huisartspraktijk. Huisarts en Wet 1987; 30: 105–13. Supplement, March 1989 on ICPC rubric D93, Irritable Bowel Syndrome.

[2] Drossman DA, Li Z, Andruzzi E, Temple RD, Talley NJ, Thompson WG, Whitehead WE, Janssens J, Funch-Jensen P, Corazziari E, Richter JE, Koch GG. US householder survey of functional gastrointestinal disorders. Prevalence, sociodemography, and health impact. Dig Dis Sci 1993;38:1569–80.

[3] Everhart JE, Renault PF. Irritable bowel syndrome in office-based practice in the US. Gastroenterology 1991;100:998–1005.

[4] Guthrie EA, Creed FH, Whorwell PJ, Tomenson B. Outpatients with irritable bowel syndrome: a comparison of first time and chronic attenders. Gut 1992;33:361–3.

[5] Drossman DA, Thompson WG. The irritable bowel syndrome: review and a graduated multicomponent treatment approach. Ann Intern Med 1992;116:1009–16.
[6] Drossman DA. Illness behaviour in the irritable bowel syndrome. Gastroenterol Int 1991;4:77–81.
[7] Thompson WG, Creed F, Drossman DA, Heaton KW, Mazzacca G. Functional bowel disease and functional abdominal pain. Gastroenterol Int 1992;5:73–91.
[8] Thompson WG. Irritable bowel syndrome: pathogenesis and management. Lancet 1993;341:1569–72.
[9] Guthrie E, Creed F, Dawson D, Tomenson B. A randomised controlled clinical trial of psychotherapy in patients with refractory irritable bowel syndrome. Br J Psychiatry 1993;163:315–21.
[10] Johnsen R, Jacobsen BK, Forde OH. Associations between symptoms of irritable colon and psychological and social conditions and lifestyle. Br Med J 1986;292:1633–5.
[11] Kay L, Jorgensen T, Jensen KH. The epidemiology of irritable bowel syndrome in a random population: prevalence, incidence, natural history and risk factors. J Int Med 1994;236:23–30.
[12] Nanda R, James R, Smith H, Dudley CRK, Jewell DP. Food intolerance and the irritable bowel syndrome. Gut 1989;30:1099–104.
[13] Kettell J, Jones R, Lydeard S. Reasons for consultation in irritable bowel syndrome: symptoms and patient characteristics. Br J Gen Pract 1992;42:459–61.
[14] Dulmen van AM, Fennis JFM, Mokkink HGA, Bleijenberg G. The relationship between complaint-related cognitions in referred patients with irritable bowel syndrome and subsequent health care seeking behaviour in primary care. Fam Pract 1996;13:12–7.
[15] Ford MJ. Invited review. The irritable bowel syndrome. J Psychosom Res 1986;30:399–410.
[16] Smith RC, Greenbaum DS, Vancouver JB, Henry RC, Reinhart MA, Greenbaum RB, Dean HA, Mayle JE. Psychological factors are associated with health care seeking rather than diagnosis in irritable bowel syndrome. Gastroenterology 1990;98:293–301.
[17] Whitehead WE, Crowell MD. Psychological considerations in the irritable bowel syndrome. Gastroenterol Clin North Am 1991;20:249–67.
[18] Bleijenberg G, Fennis JFM. Anamnestic and psychological features in diagnosis and prognosis of functional abdominal complaints: a prospective study. Gut 1989;30:1076–81.
[19] Dulmen van AM, Fennis JFM, Mokkink HGA, Velden van der HGM, Bleijenberg G. Doctor-dependent changes in complaint-related cognitions and anxiety during medical consultations in functional abdominal complaints. Psychol Med 1995;25:1011–8.
[20] Fennis JFM, Bleijenberg G, Hermans-van Wordragen R. Psychologic factors in diagnosis, prognosis and treatment of functional abdominal complaints. Scand J Gastroenterol 1990;178(25 Suppl):13–6.
[21] Klein KB. Controlled treatment trials in the irritable bowel syndrome: a critique. Gastroenterology 1988;95:232–41.
[22] Blanchard EB, Schwarz SP, Radnitz CR. Psychological assessment and treatment of irritable bowel syndrome. Behav Modif 1987;11:348–72.
[23] Greene B, Blanchard EB. Cognitive therapy for irritable bowel syndrome. J Consult Clin Psychol 1994;62:576–82.
[24] Dulmen van AM, Fennis JFM, Bleijenberg G. Cognitive-behavioral group therapy for irritable bowel syndrome: Effects and longterm follow-up. Psychol Med 1996;58:501–14.
[25] Creed F, Guthrie E. Techniques for interviewing the somatising patient. Br J Psychiatry 1993;162:467–71.
[26] Corney RH, Strathdee G, Higgs R, King M, Williams P, Sharp D, Pelosi AJ. Managing the difficult patient: practical suggestions from a study day. J R Coll Gen Pract 1988;38:349–52.
[27] Mathers NJ, Gask L. Surviving the ‘heartsink’ experience. Fam Pract 1995;12:176–83.
[28] Wilkinson P, Mynors-Wallis L. Problem-solving therapy in the treatment of unexplained physical symptoms in primary care: a preliminary study. J Psychosom Res 1994;38:591–8.
[29] Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychol Rev 1977;84:191–215.
[30] Henbest RJ, Stewart M. Patient-centeredness in the consultation. 2: Does it really make a difference?. Family Practice 1990;7:28–33.
[31] Horst HE van der. Irritable bowel syndrome in general practice. How effective is patient education and counselling? [Dissertation] Amsterdam, Vrije Universiteit 1997.