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Research Article

Coping Strategies in Patients with Irritable Bowel Syndrome

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Abstract

Introduction

Irritable Bowel Syndrome (IBS) is the most frequent diagnosis of digestive disorders in primary care services and may be one of the most difficult diseases to manage. According to the criteria of ROMA it's an abdominal discomfort or pain that yields to defecation, change in the frequency of bowel movements or in the form of feces for 12 weeks. The prevalence in our country varies between 9 and 18%, more frequent in women, in the third and fourth decade of life, with an increase during adolescence.

The IBS is associated with work absenteeism, decreased quality of life and high costs in medical care. Among the factors besides stress is the coping style, and refers to the ability to estimate and respond to a stressful event. It has been found that an effective coping strategy plays a significant role in mitigating anxiety, depression and somatic problems.

Objective

To determine if patients with Irritable Bowel Syndrome seen in a Primary Care Clinic, present an active coping focused on problems as a predominant coping strategy.

Methods

Comparative, observational study, with patients with IBS diagnosed by the criteria of ROMA and healthy, women between 25 and 50 years of age, seen in primary care visits and healthy controls recruited in a shopping center of the same age range. We used the BRIEF COPE questionnaire from Carver, modified, Likert-type scale with 41 items that value Life's Vision, Ways to Manage Stress and the List of Emotions.

The SPSS version 20 for Windows was used. Descriptive statistics for frequencies and percentages and chi2 for the crossing of demographic data with the Brief Cope questionnaire with statistical significance of $p < 0.05$.

Results

There were no differences in the sociodemographic characteristics of the populations studied, except for suffering from the disease. There were no differences in Vision of life. In Ways to cope with stress, self-management, active coping and denial were strategies most frequently used in patients with IBS. In the list of emotions, patients with IBS present emotions such as tension and anger in relation to the control group that presented emotions such as joy, feeling of being active and energy.

Conclusions

The patients with IBS studied have an active coping style, focused on problems. They do not show a pessimistic view of life when evaluating the degree of optimism-pessimism.

Keywords

Coping strategies; Irritable Bowel Syndrome; Stress

Introduction

The Irritable Bowel Syndrome (IBS) is the most frequent diagnosis of digestive disorders in primary care services and may be one of the most difficult diseases for the treating physician [1].

IBS is defined by the criteria of ROMA, such as the presence for at least 12 weeks (not necessarily consecutive) in the preceding 12 months of abdominal discomfort or pain that cannot be explained by another structural or biochemical abnormality; with at least 2 of the following characteristics: pain relieved at defecation, change in the frequency of bowel movements or change in the shape of the stool. The syndrome can be divided into four subcategories according to the predominant symptom [2].

The prevalence is high, ranging from 1 to 20% worldwide, 10% to 15% in North America, and 4.4% to 35% in Mexico [1,3,4]. The age of onset of IBS varies, but the incidence seems increase during adolescence reaching the peak during the 3rd and 4th decade of life. A start after 50 years is unusual. Women have a higher prevalence than men, with a 2: 1.4 ratio.

Like other functional digestive disorders, IBS is associated with significant job absenteeism, decreased quality of life and high medical costs [2].

The cause of IBS is unknown, although the associated pathophysiology includes impaired intestinal motility, visceral hypersensitivity, imbalance of neurotransmitters, such as serotonin, intestinal infections and inflammation, as well as psychosocial factors1. Among the psychosocial factors are the stressful life events, which can precipitate the onset of the clinical picture and subsequent exacerbations because they have an influence on the modulation of the symptom experienced

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and the behavior of the disease on recovery and the opportunity for therapeutic advances. It has also been found that a chronic stress can increase the severity and extension of gastrointestinal symptoms, observing that the symptoms disappear after the resolution of stressful events [5].

Mental health is a critical part of overall wellness in patients with functional digestive disorders. Only 17% of United States adults are in a state of optimal mental health [6].

Another important psychosocial factor, closely related to stressful events is the coping style. The term Coping refers to the ability to estimate and respond to a stressful event or illness and can be defined as the actions-oriented and intrapsychic efforts to manage (e.g. dominate, tolerate, minimize) environmental and internal demands and conflicts which exceed the resources of people can be adaptive or maladaptive [7].

Many investigations have found that an effective coping strategy plays a significant role in mitigating anxiety, depression and somatic problems [8,9]. According to measurement scales developed by Lazarus and Folkman, a coping classification focused on problems and coping focused on emotions. Problem-focused coping involves trying to deal directly with the stressful situation by changing the stressor itself; confrontation focused on emotions involves managing the stressful emotion evoked by the situation or condition. It has been found that subjects with IBS mostly use problem-focused coping rather than emotion-focused coping, and they have been reported to be more anxious and depressed [6]. It has been reported also that a poorly adaptive coping style affects the recovery of patients with gastrointestinal diseases of functional type [7].

The BRIEF COPE questionnaire was used, validated in 1997 by Carver, with a Likert type scale that originally consists of 67 items, modified for the purposes of this study, ending with 41 items [10].

Objective

To determine whether patients with Irritable Bowel Syndrome seen in a Primary Care setting present an active coping approach to problems as a predominant coping strategy.

Materials and Methods

It is an observational comparative study, including patients with irritable bowel syndrome and healthy people. Patients with irritable bowel syndrome had to be diagnosed through the ROMA criteria; being female between 25 and 50 years old, seen in the Consultation 26 of Family Medicine of the University Hospital. The control patients were healthy women recruited from a shopping center, of the same age range, who had to respond negatively when asked if they had any disease at the time of the questionnaire.

Those patients who had a diagnosis of intestinal pathology, with a history of diagnosing psychiatric disorders or those who did not give their informed consent were excluded. Those who did not answer the questionnaire completely were eliminated.

A non-probabilistic sampling was used for convenience. To determine the size of the sample we used the difference formula of proportions between two populations giving a value of n=40, 20 in each group.

The BRIEF COPE questionnaire was used for the purposes of this study, ending with 41 items. The items were divided into three sections; the first of them, called Vision of Life measures the degree of optimism-pessimism of the people surveyed. The second section called Ways to Manage Stress identifies the coping strategies used by the respondent when he/she presents a stressful event; these strategies can be Self-Management (items 1 and 17), Active Coping (items 2 and 16), Denial (items 3 and 7), Substance Abuse (items 4 and 9), Emotional Support (item 12), Lack of Commitment (items 5 and 13), Relief (items 8 and 19), Positive Re-Labeling (items 10, 14 and 15), Humor (items 16 and 24), Acceptance (items 18 and 21), Religion (items 20 and 23) and Planning (items 11 and 22). Finally, the section List of Emotions evaluates the emotions felt most frequently by the respondent during the week prior to the completion of the questionnaire.

For the statistical analysis of the data the SPSS version 20 for Windows was used. Descriptive statistics were used for the frequency and percentages and chi square tests for the crossing of categorical data variables with a statistical significance of $p < 0.05$.

Informed consent was requested prior to the completion of the questionnaire and the confidentiality of the data obtained was protected by the anonymity of the respondents.

Results

Table 1 shows the demographic characteristics of both study populations. There was no difference between the populations except for the presence or absence of the disease.

Variable	Controls		Irritable Bowels	
	f	%	f	%
Age:				
25-37 years	8	40	12	60
37 years and more	12	60	8	40
Marital status:				
Single	7	35	7	35
Married	12	60	10	50
Other	1	5	3	15
Occupation:				
Housewife	2	10	4	20
Employee	14	70	14	70
Merchant	1	5	0	0
Unemployed	3	15	2	10
Education level:				
Elementary/High School	6	30	3	15
Junior College	14	70	17	85
Religion:				
Catholic	17	85	16	80
Christian	3	15	3	15
Other	0	0	1	5
Family:				
Nuclear	16	80	13	65
Extensive	2	10	0	0
Others	2	10	7	35
n= 100				

Table 1: Demographic Characteristics of Control Patients and Patients with Irritable Colon Syndrome.

It was found that of the control population, 12 of them (60%) were over 37 years old, 12 of them were married (60%), 14 were employed (70%). The predominant schooling was preparatory / professional in 70% (14 respondents); 85% of them (17 women) practice the Catholic religion and 16 respondents belonged to nuclear families, which represents 80%.

Regarding the population with IBS, 60% (12 women) were in the age range of 25 to 37 years, 50% (10 respondents) of the population were married, 14 of them were employed (70%), 17 of them had higher and higher average education (85%). The professing religion was Catholic in 80% (16 women) and the type of family found in these patients was nuclear in 13 of the women surveyed, which corresponds to 65% of the population with IBS.

Regarding the Vision of Life section, no statistically significant difference was found between the two groups studied, since both obtained scores above the median (Table 2).

Vision of Life	Less than28		29 Above the median	
	f	%	f	%
Controls	8	40	8	40
Irritable Bowel Syndrome	12	60	12	60
n= 100				

Table 2: Vision of Life.

In the Ways to Cope with stress section, the coping strategies used in the patients studied were identified. In Table 3 it can be seen that the strategy classified as Self-management was presented more frequently in patients with IBS, with a mean of 5.8 versus 4.7. It was also found that the strategy known as active coping was more frequent in patients with IBS, with a mean of 6.3 versus 5.2. Negation was another strategy most frequently used in patients affected by IBS, presenting a mean of 4.5 versus 3.5.

Finally, in the section List of Emotions, shown in Table 4, it is observed that patients with IBS presented emotions such as tension and anger in 40%. The control group presented emotions such as joy (40%) feeling of being active (30%) and energy (35%) more frequently.

Discussion

The results obtained add to that found in the English-speaking literature when reporting that patients diagnosed with irritable bowel syndrome present a coping style focused on problems, finding that the most frequently used strategies were Self-management, Active coping and Denial, belonging to the aforementioned style [6-9]. The results suggest that this style of coping may not always be adaptive, since the patients participating in this study more frequently showed emotions such as tension and anger, as opposed to apparently healthy patients [8]. Foregoing reports have documented IBS and IBD patients having high levels of psychiatric distress, a poorer quality of life, and greater confidence on passive coping strategies [11]. It is striking that there would be no significance in the case of emotions such as sadness and anxiety in these patients, as reported in the literature, however, it is recognized that in order to measure degrees of depression and anxiety there are more specific scales than the List of Emotions used as part of the BRIEF COPE [8,9].

Ways	Mean±SD	P Value
Self-distraction		
Controls	4.7±1.6	
Irritable bowel syndrome	5.8±1.2	<0.05
Active coping		
Controls	5.2±1.2	
Irritable bowel syndrome	6.3±1.4	<0.05
Negation		
Controls	3.51±0.2	
Irritable bowel syndrome	4.51±0.7	<0.05
Substance use		
Controls	2.61±0.1	
Irritable bowel syndrome	2.4±0.8	NS
Emotional support		
Controls	3.1±1.0	
Irritable bowel syndrome	3.2±0.9	NS
No commitment		
Controls	3.21±0.6	
Irritable bowel syndrome	3.81±0.6	NS
Relief		
Controls	6.1±1.5	
Irritable bowel syndrome	5.4±1.8	NS
Positive Labeling		
Controls	9.1±2.0	
Irritable bowel syndrome	8.7±1.8	NS
Planning		
Controls	5.7±1.3	
Irritable bowel syndrome	5.5±1.5	NS
Mood		
Controls	4.8±1.9	
Irritable bowel syndrome	5.2±2.2	NS
Acceptance		
Controls	5.9±1.3	
Irritable bowel syndrome	5.7±0.9	NS
Religion		
Controls	4.9±1.9	
Irritable bowel syndrome	5.1±1.9	NS
n= 100		

Table 3: Ways to Face Stress.

Van Tilburg et al. suggest that the most beneficial approach to barrier negative effects of psychological and emotional factors on IBS is to reduce catastrophizing and somatization as ways to manage stimuli [12]. In addition, Cassar et al. argue that cognitive interventions for processes that exacerbate symptoms such as abdominal pain and stressful events have an important benefit to improve the quality of life in patients with IBS [9].

On the therapeutic and psychological note, Sibelli et al. found that difficulties in emotional processing appeared to alter the severity of IBS through the reduction of positive affect, and addressing the expression of emotions can improve existing IBS interventions[13]. While Kelsey Laird et al. compared CBT (cognitive behavioral therapy) and relaxation therapy in adults, concluding that CBT was a better intervention for improving patients' daily functions[14].

Variable	Controls		Irritable Bowel Syndrome		P Value
	f	%	f	%	
1. Tense	2	10	8	40	<0.05
2. Unable	2	10	5	25	NS
3. Angry	0	0	8	40	<0.05
4. Vivacious	2	10	5	25	NS
5. Focus difficult	0	0	3	15	NS
6. Nervous	1	5	1	5	NS
7. Spent	1	5	1	5	NS
8. Sadness	2	10	3	15	NS
9. Cheerful	8	40	4	20	<0.01
10. Resentful	1	5	5	25	NS
11. Active	6	30	3	10	<0.05
12. Anxious	1	5	3	15	NS
13. Exhausted	1	5	4	20	NS
14. Useless	0	0	1	5	NS
15. Grumpy	1	5	3	15	NS
16. With energy	7	35	4	20	<0.05
17. Forgetful	1	5	1	5	NS
18. Hopeless	0	0	0	0	NS
n= 100					

Table 4: Emotions List.

With respect to the other points measured, the Life View of these patients did not differ from that of the apparently healthy controls, since patients with IBS did not show a less optimistic view of life. This could be explained by the fact that they trust that they will solve their problems with the strategies used or, the fact of having been evaluated by a physician, makes them feel optimistic with respect to the evolution of their illness or the resolution of their stressful events.

Conclusions

In the case of patients with irritable bowel syndrome studied, the coping style is active, focused on problems.

The patients evaluated with irritable bowel syndrome do not show a pessimistic View of Life, when evaluating the degree of optimism-pessimism of the patients.

Recommendations

It is recommended to carry out further studies in which an intervention is made in the management of stress and emotions in these patients to corroborate that the style of coping affects the course of the disease. Likewise, physicians treating a patient with irritable bowel syndrome should bear in mind the approach towards psychosocial factors (including coping style) during the treatment of these patients, since these may even affect the patient's recovery.

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