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Which therapies will provide the best results in IBS?

Maryam Akbarzadeh[1], Fathola Mohamadian[2] and Ashraf Direkvand-Moghadam*[3]

[1]*M.A, Clinical Psychology, Psychosocial Injuries Research Center, Ilam University of Medical Sciences, Ilam, Iran*
[2]*Psychosocial Injuries Research Center, Ilam University of Medical Sciences, Ilam, Iran*
[3]*Ph.D. by Research, Psychosocial Injuries Research Center, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran*

ABSTRACT

Irritable Bowel Syndrome (IBS) is a chronic abdominal pain with the change of defecation. The present study aimed to compare the effects of standard medical treatment plus stress management treatment and standard medical treatment alone in IBS symptoms and quality of life. An experimental study has been carried out among participants with Rome-III diagnostic criteria. Participants randomly assigned into two groups. The case group received the standard medical treatment plus stress management treatment, n= 15, while, the control group received the standard medical treatment alone, n= 15. The training programs were contain 8 domains of relaxation, cognation reproduce, contrast skills training, express trains and problem solving, anger management training and social supports. Data were collected using demographic, ROME III, Bowel Syndrome Symptom Severity Score and Quality of Life- IBS. Overall, 30 male participants were evaluated. The age range of participants was 25-55 years. The stress management training could decrease the ROME-II scores. Also the stress management training has a significant effect on quality of life and the HSE.Therefore, it is necessary that IBS suffering referred to psychologists for psychotherapy while they are under medical treatment.

Keywords: Irritable Bowel Syndrome, ROME III, Stress management treatment

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INTRODUCTION

Irritable Bowel Syndrome [IBS] as a common disorder dominate a main portion of digestive complication. Usually, IBS appears with chronic abdominal pain and change of defecation [1]. However, this disease to be reckoned as chronic disorders,but also, IBS patients referred with various symptoms of gastrointestinal and non-gastrointestinal. The main gastrointestinal symptoms include chronic abdominal pain, diarrhea, constipation, and blowing [2,3]. In fact, the certain reason of IBS is unknown, but the role of psychological factors isn't connivance. On the other hand, psychological factors are introduced as an important risk factor to create, worse and forewarning of IBS [4]. In addition, 80-90% of the sufferings of IBS have experienced some types of psychological complication such as anxiety and depression [5]. Important note, exhaustion, pain and depression can affect on IBS progress and worsen the situation of sufferings. Therefore, omissions of psychological complication can improvement of IBS. In this line, some theories, including cognitional and emotional theories have been introduced [6]. Actually, in cognitional theory, the existence of a regulator in relationship between cognitional and emotional centers with the Central Neurotic System [CNS], Neurotic Hormonal System and Neurotic Intestinal System is assumed. Although, various medical and psychotherapy treatments exist for reducing the symptoms of IBS, the hypothesis of using a combination of medical and psychotherapeutic treatment are growing. This idea has been created because of recognized the higher prevalence of physical and psychological symptoms among patient with IBS. Therefore, applied to psychotherapy, especially cognitional – behavioral treatment has been noted for treatment of suffering. In fact the strongest effects of palpation treatment in IBS have been approved. Stress management is a new treatment for IBS and recently has been concerned [7]. However, evidence about the effects of cognitional – behavioral

treatment in IBS is strong, but also, this finding about stress management treatment are slightly and designs studies for evaluated the effects of stress management for treatment of this disorder is needed. Therefore, the present study aimed to comparson the medical treatment plus stress management treatment and the medical treatment alone in IBS symptoms and quality of life among suffering patient employments in industrial companies in Ilam, Iran during 2016.

MATERIALS AND METHODS

Study Subjects

Because of the side effects of IBS in various physical and psychological aspects of life, the present experimental study has been carried to comparison the medical treatment plus stress management treatment and the medical treatment alone in IBS symptoms and quality of life among suffering patient employed in industrial companies Ilam, Iran during 2016.

The study population consisted of all employments in industrial companies and the study sample size was determined based on statistical advice. All participants with Rome-III diagnostic criteria by a gastroenterologist per the interview and clinical examination were enrolled the study. Overall, 30 participants were selected.

Study Methods

The protocol was approved by the Ethics Committees of Islamic Azad University branch of Ilam, and all patients gave full written informed consent. Participants randomly assigned into two groups as we mentioned in our previous studies (8-10). The case group received the medical treatment plus stress management treatment, n= 15, while, the control group received the medical treatment alone, n= 15. Given the extent of symptoms in patients, symptom discount was the purpose of medical treatment in patients. Actually, type and duration of medications were differed according to each patient's symptoms. All medical intervention was carried out by gastroenterologists. The stress management training programs were contain 8 domains of relaxation, cognation reproduce, contrast skills training, express trains and problem solving, anger management training and social supports that carried out during eight sessions, each session 90 minutes.The training programs offered by trained psychologists during two months. All participants were followed up weekly until the end of the study by the researcher.

The severity of symptom of IBS was identified and recognized among all participants before any intervention. We considered the stress management training as in depended variable while the IBS severity symptom, occupational stress and quality of life were considered as dependent variables. After interventions the IBS severity symptom, occupational stress and quality of life were measured among participants in both groups.

In the present study, data were collected using demographic ROME III, Bowel Syndrome Symptom Severity Score (IBS_SSS) and Quality of Life- IBS (QOL_IBS).

The ROME III scale has been developed as a standard tool for detection of IBS in 2006 after the reform by a gastroenterologist. The ROME III has 10 items in a likert scorings and confirmed for a evaluated of Iranian population. A higher scoring represents the worst disease. All recognized cases were confirmed by gastroenterologists (11).

IBS_SSS

The severity of symptom was investigated by IBS_SSS. This tool evaluated the symptoms in 5 groups, including the severity of abdominal pain, frequency of abdominal pain, severity of bloating, satisfaction of defecation and its effect on the quality of life. Total scores have rang 0-500 and higher score presented the sever disease. This tool has been approved as a standard tool for evaluated the severity of IBS and its validity and reliability has been confirmed. All participants completed the questionnaires before and after intervention. We selected all participants who had an IBS-SSS ≥ 100 - ≤ 300 points, an abdominal pain / discomfort ≥ 30 and ≤ 70 based on a100 mm VAS for at least 3 days in the 10 days preceding the enrollment, and at least one of the following symptoms: abdominal distension and dissatisfaction with bowel habits.

Quality of Life IBS-34

The QOL_IBS has been developed by Drossman and Patrick in 1998 (12) and consists of 34 items and 8 sub-scales following; Diaspora, interference with activity, body image, health worry, food avoidance, social relation, sexual problems and relationship. The QOL_IBS was approved as a standard tool for evaluating the quality of life in patient with IBS and its validity and reliability has been confirmed. The overall reliability of the research in America, Europe and Asia has been reported 0.95, 0.96 and 0.96 respectively.

HSE
HSE has 35 questions on a 5-point Likert scale, including never, rarely, sometimes, often and always. An expert panel was used to assess the questioner validity and reliability.

Statistics
The SPSS version 20 was used to analyze the data. Data were analyzed using descriptive and inferential statistics.

RESULTS

General Characteristics of the Participants
Overall, 30 male participants were evaluated. The age range of participants was 25-55 years to Mean ± SD, 37.2 ± 2.8. Studied participants have associated to master educational level.

Effect of intervention type of outcome variables
The results show that the stress management training could decrease the Mean ± SD of ROME-II scores in the case group. So that the case group experience Mean ± SD of ROME-II scores before and after stress management training. While, the Mean ± SD of ROME-II scores has not differences in the control group in pretest and post-test. The t Test results for ROME-II scores in both groups at pre-test and post-test and their differences are presented in table 1.

Table 1. t Test results for ROME-II scores in both groups at pre-test and post-test and their differences

Variable	Group		Levene's Test		t	P-Value
	Case*	Control*	F	P-Value		
Pre test	41.01± 4.37	43.65 ± 4.9	0.539	0.469	-0.384	0.704
Post test	22.28± 3.66	32.98± 5.38	0.363	0.552	-5.336	0.001

Our results informed the significant effects of stress management training in quality of life between case and control groups at pre-test and post-test (table 2).

Table 2. Comparison of statistical indices of quality of life between case and control groups at pre-test and post-test and their differences

Variable	Group		Levene's Test		t	P-Value
	Case*	Control*	F	P-Value		
Pre test	34.35 ± 3.74	33.65 ± 4.9	0.172	0.681	-0.444	0. 661
Post test	49.56 ± 3.58	42.98 ± 5.38	2.410	0.132	-3.941	0.001

**Mean ±SD*

The Mean ± SD of HSE has been reduced in case croup after of stress management training, while the Mean ± SD of HSE was not differ in pretest and post test in the control group.

Table 3. Comparison of statistical indices of HSE between case and control groups at pre-test and post-test and their differences

Variable	Group		Levene's Test		t	P-Value
	Case*	Control*	F	P-Value		
Pre test	57.52 ± 4.82	50.71 ± 6.55	0.091	0.765	-1.875	0.074
Post test	25.79 ± 4.53	40.7 ± 4.58	0.268	0.609	-3.245	0. 003

**Mean ±SD*

DISCUSSION

The present study evaluated the effect of stress management training on IBS symptom, quality of life and occupation stress among participants who suffering from IBS. We found that the case group experiences a better situation in all demission after training.
A previous study has proven the link between anxiety and depression, (13)therefore, in addition, using of digestive (7), anti-depression drug (14) and cognitive-behavioral therapy (6) has been used for treatment of IBS patients.

In a randomized comparator-controlled compared the effect of cognitive-behavioral therapy versus education and desipramine versus placebo for treatment of moderate to severe functional bowel disorders. The study participants consisted of 431 adults with moderate to severe symptoms of functional bowel disorders. Participants were divided into two groups. The first group received cognitive-behavioral therapy against educational therapy. While, the second group received the desipramine against placebo for 12 weeks. The results showed that cognitive-behavioral therapy is significantly more effective than educational therapy (P = 0.0001). While, desipramine has not significant benefit than placebo (P = 0.16) (15).

Because mental disorders and neural stimulation presented as pathogenesis IBS. It is therefore logical to expect that reducing the symptoms of IBS by stress management skills.

Medical treatment plus stress management treatment can decrease the IBS symptoms, occupational stress and improve patients' quality of life. Therefore, it is necessary that IBS suffering referred to psychologists for psychotherapy while they are under medical treatment.

Conflict of interest

No potential conflict of interest relevant to this article was reported.

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