IMPACT OF IRRITABLE BOWEL SYNDROME UPON PSYCHOSOCIAL STATUS OF THE CLIENTS [+]

تأثير متلازمة القولون التهيجي على الحالة النفسية الاجتماعية للمريض

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Abstract:

Irritable bowel syndrome (IBS) is a highly prevalent gastrointestinal disorder characterized by abdominal pain with diarrhea and/or constipation. Chronic and recurring symptoms of IBS can disrupt personal and professional activities, upset emotional well-being and limit individual potential.

Design of the study: Descriptive analytical design of the study starting from July 8th 2008 to the April 29th 2009 in order to identify the impact of IBS upon psychosocial status of clients.

Setting of the Study: The present study was carried out in the Gastroenterology and Liver Disease Hospital (G&LDH) in Baghdad on150 adult's clients who have IBS.

The study Instrument: The questionnaire was composed of two parts and introductory page that invite the subjects to participate in the study.

Part I: Socio- Demographic Information Sheet

Part II: Used three domains from Short-form 36 Version II, which included: Role emotion, social functioning, and mental health domains.

Results: The findings of the present study Indicated that the majority (66%) of them were female (26.7%) at 28-37 years old, (62%). The Psychosocial factors which affected on clients with IBS presented that the 72% of them have a problem in accomplished their regular daily activities, 18.7% of them have quite a bit problems which interfered with their social activities

Conclusion: IBS client a negative impact on the psychosocial status for female and male groups, older clients with IBS have a problems in psychosocial status than younger, continuous married of IBS clients batter than widowed clients in psychosocial status.

المستخلص:

متلازمة القولون التهيجي من الاضطرابات المعوية السائدة بشكل كبير وتتصف بألم في البطن واسهال أو إمساك، وهذه الاعراض المزمنة المتكررة قد تؤدي الى تأخير او تراجع في إنجاز النشاطات اليومية للمريض والاضطراب الانفعالي وتحديد جهود المريض الكامنة.

خطة الدراسة: دراسة وصفية (غرضية) بدأت في ٨ تموز ٢٠٠٨ ولغاية ٢٩ نيسان ٢٠٠٩ لغرض التعرف على تأثير متلازمة القولون التهيجي على الحالة النفسية–الاجتماعية للمريض.

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موقع الدراسة: إجريت الدراسة الحالية في مستشفى أمراض الجهاز الهضمي والكبد في بغداد على ١٥٠ مراجع مصاب بمتلازمة القولون التهيجي.

أداة الدراسة: أستبانة الدراسة تكونت من جزئين وصفحة الترحيب بالمرضى المشاركين للاجابة على أسئلة الاستبانة.

الجزء الاول: تضمن المعلومات العامة عن المريض.

الجزء الثاني: تضمن ٣ محاور للاستمارة القياسية المتكونة من ٣٦ فقرة الصادرة من منظمة الصحة العالمية والخاصة بقياس نوعية الحياة للمرضى المصابين بالامراض المزمنة والمتكونة من (المحور العاطفي ومحور النشاطات الاجتماعية ومحور الصحة العقلية).

النتائج: أظهرت نتائج الدراسة الحالية أن معظم العينة كانوا من النساء بنسبة ٦٦% وان نسبة (٢٦,٧%) ضمن الفئة العمرية (٢٨-٣٧) سنة ونسبة (٦٢%) من العينة مستمري بالزواج ونسبة (٧٢%) من عينة الدراسة يعانون من عدم انهاء النشاطات اليومية بشكل منتظم مما أثر على الوضع النفسي للمريض وان نسبة ١٨,٧% من المشكلات الاجتماعية التي يعاني منها المريض هي تداخل المرض مع النشاطات والواجبات الاجتماعية للمريض.

الاستنتاجات: اظهرت الدراسة أن متلازمة القولون التهيجي له تأثير سلبي على الحالة النفسية – الاجتماعية على النساء والرجال الى حد سواء وكان التأثير النفسي – الاجتماعي الناتج عن المرض على المسنين أكبر منه على الشباب وتأثير المرض على الحالة النفسية – الاجتماعية على النساء الارامل أكبر مما هو عليه عند النساء المستمرات في الزواج.

Introduction:

Irritable Bowel Syndrome (IBS) is a highly prevalent gastrointestinal disorder characterized by abdominal pain with diarrhea and/or constipation. The etiology of IBS has not been definitively established. It was originally thought to be a psychosomatic disorder [1]. But more recent studies have identified chronic immune activation in IBS patients. The prevalence of IBS in some developing countries is in the 35-43 % [2]. Its about 15-20% in women and 5-20% in men [3].

A more comprehensive definition of IBS according to the International Foundation for Functional Gastrointestinal Disorders sometimes referred to as spastic colon, mucous colitis, spastic colitis, nervous stomach or irritable colon, IBS is
a disturbance of colonic function characterized by abdominal pain or discomfort, bloating and abnormal bowel function, resulting in episodes of chronic diarrhea, chronic constipation, or both in alternation. Discomfort and bloating are often relieved by defecation [4].

[5] discuss that these disorder interferes with normal functions of the colon. People with IBS have colons that are more sensitive and reactive to things that might not bother other people, such as stress, large meals, medicines, certain foods, caffeine, or alcohol.

Half of people with IBS date the start of their symptoms to a major life event such as change of house or job, or bereavement. This suggests that there may be a psychological trigger for IBS [6].

"The human impact of IBS is tremendous. Chronic and recurring symptoms of IBS can disrupt personal and professional activities, upset emotional well-being and limit individual potential. It is imperative that the best ways to manage and treat this syndrome are made available to patients so they can enjoy a normal, healthy life [7].

IBS is an important public health problem, owing both to the high prevalence. It is a chronic condition that causes a significant effect on the individual (reduced quality of life), society (time lost off work) and health services. So the researcher Tray to identify the impact of psychosocial status upon patients with IBS.

The study aims to assess the psychosocial problems of patients and to find out the relationship between psychosocial status and their socio-demographic characteristics of patients with IBS.

Methodology:

Descriptive analytical design of the study starting from July 8th 2008 to the April 29th 2009 in order to identify the impact of psychosocial status on patients with IBS.

The present study was carried out in the Gastroenterology and Liver Disease Hospital (G&LDH) in Baghdad, one of Medical City Directorate. This Hospital specialized in Gastrointestinal and Liver Diseases (Tertiary Hospital).

A non- probability (purposive) sample of 150 adults patients who have IBS who were attending to the G&LDH in Baghdad.

The questionnaire was composed of two parts and introductory page that invite the subjects to participate in the study.

Part I: Socio- Demographic Information Sheet.

It was consisted of 30 items which included: age, gender, marital status, level of education, employments, socio-economic status.

Part II: Used three domains from Short-form 36 Version II, which included:

- Three items of role emotion domain.
- Two items of social function domain.
- Five items of mental health domain.

The face validity of the instrument was established through a panel of (11) expert. They were (5) faculty members from the College of Nursing University of Baghdad (5) faculty members from gastroenterology, and 1 faculty member from medical-Technical College in Baghdad. These experts had more than 10 years of experience in their Job with They were asked to review the questionnaire whether they mean (20.72) year, and (SD=7.9). agree or disagree with its content (items)

Determination of reliability of the items scale was based upon the internal consistency of the questionnaire was assessed by calculating Cronbach s' Coefficient alpha for the pilot study sample. The Cronbach s' Coefficient alpha score for 10 items of psychosocial status are reported = (0.73).

The researcher used the appropriate statistical methods in the data analysis which include the following:

1- Descriptive data analysis: this approach was performed through the determination of:

a. Frequencies (F), Percentage (%), Mean, Standard Deviation (S.D).

2. Inferential data analysis: Independent sample t tests and Analysis of Variance test

Results:

Table (1): Demographic characteristics of IBS Patients.

No.	Variable	F.	%
1	**Gender**		
1.1	Male	51	34
1.2	Female	99	66
	Total	**150**	**100.0**
2	**Age (year)**		
2.1	18-27 years	22	14.7
2.2	28-37 years	40	26.7
2.3	38-47 years	38	25.2
2.4	48-57 years	34	22.7
2.5	58 years and over	16	10.7
	Total	**150**	**100.0**
3	**Marital status**		
3.1	Single	32	21.4
3.2	Continuous Married	93	62.0
3.3	Widowed	21	14.0
3.4	Divorced	2	1.3
3.5	Separated	2	1.3
	Total	**150**	**100.0**
4.	**Level of education**		
4.1	Unable to read & write	10	6.7
4.2	Read & Write	3	2.0
4.3	Primary	13	8.7
4.4	Intermediate	23	15.3
4.5	Secondary	23	15.3
4.6	Institute	23	15.3
4.7	College and above	55	36.7
	Total	**150**	**100.0**
5	**Employments**		
5.1	Free to study	8	5.3
5.2	Government employee	88	58.7
5.3	Non governmental employee	8	5.3
5.4	Retired has job	8	5.3
5.5	Retired not having job	3	2.0
5.6	Free jobs	8	5.3
5.7	Housewife	25	16.8
5.8	Unemployed	2	1.3
	Total	**150**	**100.0**
6	**Socio-economic status**		
6.1	Low income	28	18.7
6.2	Moderate income	47	31.3
6.3	High income	75	50.0
	Total	**150**	**100.0**

The demographic characteristics of (150) IBS clients (table 1) Indicated that the majority (66%) of study sample were female (26.7%) at 28-37 years old, (62%) continuous married , most of them (58.7%) were government employee, half of samples were high level income.

Table 2: Distribution of Patients Gender According to Types of IBS

IBS Types	Male		Female	
	F	%	F	%
- Diarrhea (IBS-D)	11	7.3	9	6.0
- Constipation (IBS-C)	21	14.0	44	29.3
- Alternate of both (IBS-A)	20	13.4	45	30.0
Total	52	34.7	98	65.3

The findings of table 2 revealed that the IBS-A were of 30% in females and in 13.4% of males, IBS-C were of 29.3% female and of 14% male while
IBS-D was of 7.3% male and of 6% female.

Table (3): Emotional Role Domain

	During *the* past 4 weeks, have you had any of the following problems with your work or other regular daily activities as a result of any emotional problems*?*	**yes**		**No**	
		F	%	F	%
1-	Cut down on the amount of time you spent on work or other activities	105	70	45	30
2-	Accomplished less than you would like	103	68.7	47	31.3
3-	Didn't do work or other activities as carefully as usual	103	**72**	42	28

The finding of table 3 indicated that the 72% of patient they do not work daily activities with carefully manner as a result of emotional problems.

Table (4): Social function Domain.

	During the past 4 weeks	**Not at all**		**Slightly**		**Moderately**		**Quite a bit**		**Extremely**	
		F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
1-	What extent has your emotional problems Interfered with your normal social activities with family, friends, neighbors, or groups?	58	38.6	40	26.7	33	**22**	12	8	7	4.7
2-	How much of the time has your emotional problems interfered with your social activities (like visiting friends, relatives)	38	25.3	41	27.3	30	20	28	18.7	13	8.7

The results of table 4 revealed that 20% of samples have moderate impact of IBS on patient's social activities.

Table (5): Mental health Domain

	How much of the time during the ***past 4 weeks***...	All of the time		Most of the time		A Good Bit of the Time		Some of the time		None of the time	
		F	%	F	%	F	%	F	%	F	%
1	Have you been a very nervous person?	23	15.3	40	26.7	53	**35.3**	14	9.3	20	13.3
2	Have you felt so down in the dumps that nothing could cheer you up?	24	16	41	27.3	52	34.7	19	12.7	14	9.3
3	Have you felt calm and peaceful?	23	15.3	47	31.3	46	30.7	23	15.3	11	7.3
4	Have you felt downhearted and blue?	30	20	27	18	34	22.7	37	24.7	22	14.7
5	Have you been a happy person	36	24	37	24.7	49	32.7	19	12.7	9	6.0

Table 5 presented that 35.3% of patients have a good bite of the time was very nervous as a results of impact of IBS.

Table (6): Statistical Differences Between Male and Female Regarding to Psychosocial Domains.

Psychosocial Domains	Mean		t-test	Sig.	C.S. P≤0.05
	Male	Female			
Emotional Status	4.098	3.787	1.584	0.007	H.S.
Social Status	4.549	4.798	-0.678	0.798	N.S.
Mental Health	14.215	13.383	1.335	0.827	N.S.

Tabulated t- test: 1.645
df = 148

The findings indicated that there were significant differences between male and female concerning to emotional status domain at P≤ 0.05 levels.

Table (7): Comparison of Psychosocial Domains regarding to clients Age.

Patients age / Psychosocial Domains	18-27years N=22	28-37years N=40	38-47years N=38	48-57years N=34	58years and over N=16
	Mean (SD)	Mean (SD).	Mean (SD)	Mean SD.	Mean SD.
Emotional Status	3.772 (0.972)	3.80 (1.136)	4.00 (1.23)	4.02 (1.242)	3.750 1.00
Social Status	4.363 (1.76)	4.70 (2.16)	4.92 (1.95)	4.55 (2.42)	5.06 (2.37)
Mental Health	14.727 (3.88)	13.55 (3.73)	13.86 (3.44)	13.26 (3.77)	12.87 (3.11)
Total Means	22.85	22	22.76	21.7	21.0

The findings of table 7 presented that the total means of patients at age between 48-57years and between ages of 58years and over were lower than the total means of other age groups of the clients.

Table (8): Comparison of Psychosocial Domains Regarding to Marital Status of the Clients.

Marital status / Psychosocial Domains	Single	Married	Widow	Divorced	Separated
	Mean (SD) N=32	Mean (SD) N=93	Mean (SD) N=21	Mean (SD) N=2	Mean (SD) N=2
Emotional Status	4.00 (1.191)	3.924 (1.115)	3.619 (1.160)	3.00 (0.00)	4.500 (2.121)
Social Status	5.25 (1.831)	4.462 (2.144)	4.809 (2.315)	7.00 (1.414)	4.50 (3.535)
Mental Health	14.343 (3.327)	13.892 (3.588)	11.714 (3.480)	12.50 (9.192)	14.00 (0.00)
Total Means	23.59	22.27	20.11	22.5	23

Table 8 presented that the total means of widow was lower level than the total means of other groups of marital status.

Table 9: Comparison of Psychosocial Domains Regarding to Employments of the Clients

Employments / Psychosocial Domains	Free to study N=8	Government employee N=88 N=88	Non Government employee N=8	Retired Has job N=8	Retired not has job N=3	Free job N=8 N=8	House Wife. N=25 N=25	Unemployed N=2 N=2
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Emotional Status	4.00 (1.30)	4.022 (1.174)	3.750 (1.03)	3.50 (0.925)	4.33 (1.15)	4.00 (1.31)	3.560 (1.044)	3.00 (0.00)
Social Status	4.50 (1.60)	4.61 (2.183)	3.50 (1.41)	4.75 (2.549)	6.333 (1.52)	5.50 (2.77)	5.04 (1.968)	5.00 (1.41)
Mental Health	16.75 (3.65)	13.863 (3.474)	16.00 (3.85)	12.125 (4.015)	15.00 (3.00)	11.75 (3.15)	12.60 (3.20)	8.500 (2.12)
Total Means	25.2	22.46	23.2	20.3	25.6	21.2	21.1	16.5

The findings of table 9 revealed that the total means of un employed patients was lower level than the total means of other groups of clients employment.

Table 10: Comparison of Psychosocial Domains Regarding to Types of IBS

Types of IBS / Psychosocial Domains	Diarrhea N=20		Constipation N=65		Alternate of both N=65	
	Mean	SD.	Mean	SD.	Mean	SD.
Emotional Status	3.600	0.9403	4.138	1.235	3.738	1.064
Social Status	4.800	2.419	4.784	2.182	4.615	2.005
Mental Health	13.700	3.826	13.630	3.764	13.692	3.472
Total Means	22.1		22.4		21.9	

Table 10 presented that the total means of alternate of both for types of IBS was lower than the total means of other types IBS patients.

Discussion :

1- Throughout the course of the data analysis of present study, the findings of table (1) showed that the most of patients were females 66%, 34% were males. Lee, et al., (2001) analyzed these results, they discuss that the several physiological factors may play a role in these gender-related differences in self reporting bowel habits, including difference in autonomic control, enteric nervous system physiology and smooth muscle and addition that the females responses to stress or threat is different than men [8] .The present study revealed that the patients at age 28-37 years and 38-47 years more affected (26.7%, 25.2%) respectively. Ware, and Sherbourne, (1992) shows that the IBS affected primarily those of working age
(30-50) years old. The researcher believed that the lack of opportunity for employment and strong events may effect on study findings at this age group in Iraq [9].

Sixty two percent of study sample was continuous married. These result supported by Coffin, et al., (2004) who stated that the stress-full lives and heavy work around the house, shopping, child care, studying) may has affect by increasing the number of married persons.[10]

Most of the sample of the present study was college and above educational graduated (36.7%) and 2% were reading and writing. The researcher believes that the present results of collagens clients that may be a wariness about importance of seeking health care or treatment to avoid illness related complication and to get rid of effectiveness of disease on their work, so the frequency of follow up considered important about them.

Fifty eight percent of study sample was government employee, 1.3% was unemployed. Researcher believes that employee workforce and the environment of work may be affected. These may be related to symptoms of disease.

The present study shows that the clients with high income are half of a study sample, 28% have low income.

2- The findings of present study revealed that the IBS-A were 30% in females and 20% in males, IBS-C were 29.3% in females and 13.4% in males while IBS-D were 6% in females and 7.3% in males (table 2) Leplege, et al, (2004)found in their study that the 28.5% of subjects had diarrhea predominance symptoms and 25.7% constipation predominance. Diarrhea predominance was found more in men than in women, and inversely constipation predominance more in women than men [11]

3- Table 3 presented that the 72% of patients have a problem in accomplished their regular activities as a result of emotional problems
4- (22%) of patients have moderate difficulties which interfered with their social activities and 35.3% of IBS clients have been a very nervous in a bit of time as a mental problem resulted from IBS (table 4 and 5).
5- There were significant differences between male and female concerning to emotional status domain at $P \leq 0.05$ levels (table 6). Gore, et al., (2005) Founded that there were significantly lower in emotional wellbeing for women than men at $P \leq 0.05$ as results of disease. [12].
6- Total means of psychosocial status for patients at 58 old years and over was lower level than that of 18-27 years. researcher believes that the oldest clients have bad attitude about health status caused by long terms schedule of treatments and restriction in diet and traveling and other social activities because the IBS interfering with the different dimensions of daily living activities, so that effect on their psychosocial status (Table 7).

7- Total means of psychosocial status of Widow were lower level than the total means of other groups of marital status (table 8). These findings agree with Gore, et al., (2005) they evaluate the relationship status in specific disease. They concluded that the partnered patients had better mental health, higher spiritually, and lower symptoms distress than un partnered patients [12].

8- Total means of psychosocial status of unemployed patients were lower level than the total means of other groups of employments (table 9). Present findings agree with Jian, et al., (2004) they founded in their study that the sufferer from IBS in China were retired and unemployed. The researcher believes that the change environment and merger with others in social relationship for retired and finding out of opportunity to work by government to young unemployed and try to search a simple work to retired men to full their times, these activities play to reduce the burden of psychosocial status on IBS patients[13].

9 – Total means of psychosocial status of low income patients were lower level than the total means of moderate and high income (table 10).

10-The findings was revealed that the total means of Psychosocial status of patients with alternate of both for IBS types were lower level than the total means of constipation and diarrhea (table 11) Simren, et al., (2002) stated that there was significantly associated with type of IBS, diarrhea having a greater impact on psychosocial status, because the clients required to bathroom and toilet during workdays or during traveling [5].

Conclusion:

1- Most of study sample were females, IBS more common in 28- 37 years old, and majority of them were college graduate, and most of them complain from constipation and alternate bowel pattern (diarrhea and constipation).

2- IBS was a negative impact on their psychosocial status up on the female and male patients.

3- Males with IBS have better in emotional status than females

4- Elderly patients with IBS have problems in psychosocial status than younger.

5- Widowed patients batter than the Continuous married patients in psychosocial status.

6- Un employed IBS patients need to full their times to reduced from burden of IBS.

7- Low income was highly impact upon psychosocial status of IBS patients.

Recommendations:

Based on the results of study the researcher recommends the following.

1- Establishing special department in L&DDH called (psychotherapy and nutritional management) to instruct and to prepare programmed lectures for patients who attending to the center weekly to learn stress management and diet modification, and to improve adherence to treatment, quality of life, and satisfaction with care. .

2- Supporting patients with documented report from liver and digestive disease to help them in their work and study.

4- Printing disseminates and distributing guide booklet to IBS patients to learn how to coping with syndrome.

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