

Impact of Irritable Bowel Syndrome upon Female s' Health Related Quality of Life

*Huda Baqer Hassan**

*Batool Amin Jadoow***

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Abstract:

Irritable bowel syndrome (IBS) is a highly prevalent gastrointestinal disorder characterized by abdominal pain with diarrhea and/or constipation. The morbidity records reveal large differences per 1000 patients per year, the incidence varies from 4-13 % and the prevalence from 6-20 % and that the syndrome is more prevalence among women than among men, it is occurs mainly between the ages of 15 and 65 and often causes long- term complications. Its about 15-20% in women the etiology of IBS has not been definitively established. It was originally thought to be a psychosomatic disorder, but more recent studies have identified chronic immune activation. The impact of IBS upon humans 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 and healthy life.

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 Health Related Quality of Life at females.

The present study was carried out in the Gastroenterology and Liver Disease Hospital (G&LDH) in Baghdad.

A non- probability (purposive) sample of 100 adults females who have IBS.

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 Short-form 36 Items version II, (Standard Version of WHO for quality of life) which included: (Health status, Physical function, Role physical, Role emotion, Social function, Bodily Pain, Vitality, Mental health, and General health).

The findings of (100) IBS females of present study Indicated that the (30%) at 28-37 years old, (54%) continuous married , most of them (61%) were government employee, Majority of sample (42%) were college graduate, half of the sample were high level income, and the females complain from alternate between constipation and diarrhea were 47%. The total means of role physical and role emotion were lower than total means for other domains of Health Related Quality of life.

A negative impact of IBS on Health Related Quality of life in females at 28-37years, widow were lowered quality of life, the IBS were negative impact on government employed females.

Key words: IBS, Chronic condition, Life style, Health Related Quality of life, (Short Form – 36)

*Dr. Assisst proph/PHD innursing/Iraq / University of Baghdad / Nursing College.

**Dr. proph/PHD innursing/Iraq / University of Baghdad / Nursing College.

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 [2, 3] 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 %. Its about 15-20% in women and 5-20% in men [4, 5].

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 [6].

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 [7].

About 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 [8].

Importance of the study: 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 Irritable Bowel Syndrome upon Health Related Quality of Life at Females.

Objectives of the study:

- 1- To determine the impact of Irritable Bowel Syndrome upon females' Health Related Quality of Life through the measurement of Quality of Life by using Short Form (SF- 36) version.
- 2- To find-out the relationship between Health Related Quality of Life domains for females with Irritable Bowel syndrome and their socio-demographic characteristics of age, marital status, employments, and types of IBS.

Methodology

Design of the Study: Descriptive analytical design of the study starting from July 8th 2008 to the April 29th 2009.

Setting of the Study: 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).

The Sample of the Study: A non-probability (purposive) sample of 100 females who have IBS who Were attending to the G&LDH in Baghdad.

The Study Instrument: The questionnaire was composed of two parts.

Part I: Socio- Demographic Information Sheet.

It was consisted of 26 items which included: age, marital status , level of education, employments, socio-economic status and Types of IBS

Part II: Used three domains from Short-form 36 Version II.

Validity of the Instrument: The face validity of the instrument was established through a panel of (11) expert. These experts had more than 10 years of experience in their Job with mean (20.72) year, and (SD=7.9).

Reliability of the Questionnaire : 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. Cronbach s' Coefficient alpha score for 36 items of Health Related Quality of Life are reported = (0.73).

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

1- Descriptive data analysis

(Frequencies, Percentage, Mean, Standard Deviation).

2- **Inferential data analysis:** (Independent sample t tests, Analysis of Variance test).

Results:

Table (1): Demographic characteristics of Females

List	Demographic characteristics	F	%
1	Age (year)		
1.1	18-27 years	22	22
1.2	28-37	30	30
1.3	38-47	24	24
1.4	48-57	20	20
1.5	58 years and over	4	4
	Total	100	100%
2	Marital status		
2.1	Single	26	26
2.2	Continuous Married	54	54
2.3	Widowed	16	16
2.4	Divorced	4	4
	Total	100	100%
3.	Level of education		
3.1	Unable to read & write	8	8
3.2	Read & Write	3	3
3.3	Primary	7	7
3.4	Intermediate	11	11
3.5	Secondary	15	15
3.6	Institute	14	14
3.7	College and above	42	42
	Total	100	100%
4.	Employment	100	100%
4.1	Free to study	5	5
4.2	Government employee	61	61
4.3	Non governmental employee	9	9
4.6	Housewife	25	25
	Total	100	100%
5	Socio-economic Status		
5.1	Low Income	13	13
5.2	Moderate Income	29	29
5.3	High Income.	58	58
	Total	100	100%
6	Types IBS of		
6.1	Diarrhea.	9	9
6.2	Constipation	44	44
6.3	Alternate of both	47	47
	Total	100	100%

The demographic characteristics of (100) females (table 1) Indicated that (30%) of females was 28-37 years old, (54%) continuous married , most of females (61%) was government employee, more than half of the samples were high level income,

and the females complain from constipation, were (44%) and alternate of both were (47%).

Table (2): Mean and Standard Deviation of female regarding to Health Related Quality of Life Domains

Domains	Mean	SD
Health status	3.48	0.82
Physical Function	2.046	0.53
Role Physical	1.27	0.32
Role Emotion	1.26	0.34
Social Function	2.39	1.0
Bodily Pain	2.79	1.3
Vitality	2.56	0.81
Mental Health	2.67	0.71
General Health	2.64	1.09

The findings of table (2) indicated that there was lower means in both physical and emotional roles of females.

Table (3): Relationship between Health Related Quality of Life Domains and Females Age

Health Related Quality of Life Domains	Age (year)				
	18-27	28-37	38-47	48-57	58 years and over
Health Status	2.67 .89	3.42 .810	3.72 .75	3.62 .72	3.83 .55
Physical Function	2.26 .41	2.17 .45	1.36 .54	1.99 .62	1.85 .46
Role Physical	1.35 .32	1.27 .37	1.25 .29	1.32 .32	1.13 .181
Role Emotion	1.25 .36	1.24 .37	1.27 .39	1.32 .40	1.22 .23
Social Function	2.18 .99	2.67 1.08	2.34 .98	2.25 1.21	2.27 .90
Bodily Pain	3.64 1.32	3.91 1.29	4.09 1.30	3.55 1.27	3.66 1.95
Vitality	3.56 .767	2.32 .78	2.46 .61	2.60 .94	2.66 .70
Mental Health	2.85 .85	1.60 .72	2.79 .62	2.58 .77	2.64 .50
General Health	3.06 .87	1.48 .67	2.85 1.71	2.55 .98	2.27 0.90
Total Means	21.8	19.7	22.2	21.4	21.1

The findings of (table 3) indicated that the total means of Health Related Quality of Life Domains of females at 28 – 37 years old lower level than that of other age group.

Table (4): Relationship between Health Related Quality of Life Domains and Marital Status of IBS Females

Health Related Quality of Life Domains	Marital status			
	Single N=26	Continuous Married N=54	Widow N=16	Divorced N=4
Health Status	3.23 .94	3.55 .755	1.58 .83	1.75 .35
Physical Function	2.08 .508	2.09 .496	1.95 .678	1.25 .02
Role Physical	1.31 .343	1.29 .302	1.29 .35	1.0 .00
Role Emotion	1.36 .405	1.22 .28	1.25 .41	1.0 .00
Social Function	2.615 .908	2.23 1.08	2.24 1.16	3.50 .707
Bodily Pain	3.807 1.393	3.64 1.28	4.08 1.16	5.5 .707
Vitality	2.596 .784	2.64 .792	2.39 .86	1.25 .35
Mental Health	2.82 .665	2.73 .702	2.28 .68	2.5 1.83
General Health	2.66 .71	2.75 1.22	2.36 1.04	1.5 .00
Total Means	22.1	22.09	18.8	19.1

The findings of table (4) revealed that the total means of Health Related Quality of Life domains for widow and divorced were lower level than other marital status groups.

Table (5): Relationship between Health Related Quality of Life Domains and Employment of IBS Females

Health Related Quality of Life Domains	Employments			
	Free to study N=5	Govern ment employee N=61	Govern ment employee N=61	House Wife N=25
Health Status	2.7 1.03	3.36 .78	3.75 .5	3.83 .71
Physical Function	2.33 .37	2.12 .48	1.6 .53	1.92 .65
Role Physical	1.45 .41	1.30 .31	1.25 .288	1.18 .33
Role Emotion	1.33 .408	1.28 .34	1.16 .19	1.1 .35
Social Function	2.2 .908	2.35 1.07	3.25 1.7	2.56 .98
Bodily Pain	3.8 1.78	3.55 1.24	4.6 1.6	4.22 1.4
Vitality	3.4 .83	2.64 .77	2.37 1.33	2.31 .79
Mental Health	3.44 .69	2.75 .71	2.25 .71	2.47 .61
General Health	3.0 1.3	2.73 .65	2.0 1.0	2.55 1.81
Total Means	23.5	18.45	20.9	21.8

Findings of table (5) revealed that the total means of Health Related

Quality of Life domains for government employed females were lower level than the other groups of employments.

Table (6): Relationship between Health Related Quality of Life Domains and types of IBS

Health Related Quality of Life Domains	Diarrhea N=9		Constipation N=44		Alternate of both N=47	
	Mean	SD.	Mean	SD.	Mean	SD.
Health Status	3.44	.91	3.51	.89	3.48	.82
Physical Function	2.16	.42	1.94	0.59	2.13	.53
Role Physical	1.22	.20	1.68	.33	1.53	.32
Role Emotion	1.11	.67	1.58	.39	1.40	.34
Social Function	2.72	1.11	2.18	1.12	2.72	1.06
Bodily Pain	3.78	1.3	3.50	1.38	3.34	1.35
Vitality	2.39	.62	2.56	.97	2.45	.81
Mental Health	2.64	.74	2.78	.75	2.72	.71
General Health	2.31	.80	2.89	1.4	2.13	1.09
Total Means	20.2		22.2		21.4	

The findings of table (6) presented that the total means of Health Related Quality of Life domains for females with diarrhea were lower level than the total means of constipation and alternative of both.

Discussion:

Table (1) presented that the females at age 28-37 years and 38-47 years more affected (30%, 24%) respectively [9]. Shows that the IBS affected primarily those of working age. The researcher believed that the lack of opportunity for employment and sever events may effect on study findings at this age group in Iraq.

Fifty four percent of the study sample of females was continuous married. These result supported by [10] who stated that the stress-full lives and heavy work around the house, shopping, child care, and studying may has affected on married persons.

Most of the sample is graduated from college and above

(42%). The researcher believes that the present results of collagens females that may be a wariness about importance of seeking health care or treatment to avoid complication related illness and to get rid of effectiveness of disease on their work, so the frequency of follow up considered important to them.

Sixty one percent of the study sample was government employee, these findings in agreement with [11] who assess the prevalence of IBS among employees and the impact of disease on work productivity and on Health Related Quality of Life in an employed population in the United State. Researcher believes that employee workforce and the environment of work may be affected. These may be related to symptoms of disease.

Table (2) presented that the role physical and role emotion of females have lower level than other domains of Health Related Quality of Life [12] analyzed these results, 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.

Relationship between Health Related Quality of Life domains and female age presented in table 3 that the IBS have negative impact on females at 28-37 years of age in all domains of Quality of Life. The researcher believes that the 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 life.

The findings of table (4) revealed that the total means of Health Related Quality of life domains for

widow and divorced females were lower level than the continuous married and single. These findings agree with [10]. 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 unpartnered patients.

Present study findings revealed that the total means of Health Related Quality of Life domains of government employed females were lower level than the other groups of employments [13]. Stated that the physical function of female may be affected as results of symptoms of IBS so the roles of women toward family members and activities in their house and work place may be affected too and the outcome of role limitations due to physical problems of IBS (table 5).

Present findings was revealed that the total means of Health Related Quality of Life domains for females with diarrhea types of IBS were lower level than the total means of constipation and altered to both (table 6)[7]. Stated that there was significantly associated with type of IBS, diarrhea having a greater impact on their lives, because the patients required to bathroom and toilet during workdays or during traveling and restriction on most of activities as a result of disease.

Conclusion:

1- Most of the study sample was 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- Irritable Bowel Syndrome had a negative impact on the physical and emotional roles of females.

3- Females of 28-37 years ago lower Quality of Life as a result of chronic condition of IBS.

4- The study presented that the widowed and divorced IBS females was lower Quality of Life.

5- Government employed females have difficulties in their lives as a results of disorder.

6- Diarrhea females more restricted in their lives than other types of IBS.

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تأثير تهيج القولون العصبي على نوعية حياة النساء

بتول أمين جدوع**

هدى باقر حسن جواد*

* أ.م.د. جامعة بغداد /كلية التمريض

** أ.د. جامعة بغداد /كلية التمريض

الخلاصة :

متلازمة القولون التهيجي هو من الحالات الشائعة الحدوث والمتصفه بالم في البطن مع الاسهال او الامساك. وتشير الاحصائيات ان نسبة حدوث المرض هي 1 من بين 1000 فرد مريض سنويا" ونسبة الاصابة تختلف ما بين 4-13% ونسبة انتشار المرض من 6-20% وهذه الحالة المرضية كثيرة الانتشار بين النساء عنه عند الرجال ، وتحدث ما بين الاعمار 15 و 65 مسببة" مضاعفات طويلة الامد. ان نسبة 15-20% من الاصابات عند النساء تكون مجهولة السبب ويعتقد البعض ان الاضطرابات الجسمية -النفسية قد تكون سبب في ظهور الحالة المرضية واشارت بعض الدراسات ان النشاطات المناعية في الجسم قد يكون عامل اخر في ظهور الحالة . لتهيج القولون العصبي تأثير كبير على الانسان من خلال استمرارية ظهور الاعراض وبشكل مزمن مما يؤثر ويعيق النشاطات والمهارات اليومية بالاضافة لتأثيره على الوضع النفسي والعاطفي للفرد، لذا لابد من ايجاد وسائل مساعدة لمعالجة وابقاف هذه العلامات المستمرة ولكي يتكيف المريض مع حالته الصحية دون التأثير على حياته العامة.

دراسة وصفية تحليلية بدأ العمل بها ما بين 8 تموز 2008 ولغاية 29 من تشرين الاول 2009 للتعرف على تأثير تهيج القولون العصبي على نوعية حياة النساء.

اجريت الدراسة الحالية في مستشفى امراض الجهاز الهضمي والكبد في بغداد. عينة غرضية اجريت على 100 مريضة مصابة بتهيج القولون العصبي. تكونت أداة الدراسة من جزئين مع صفحة الترحيب بالمشاركين في الدراسة

الجزء الاول: المعلومات الديموغرافية للمريض.

الجزء الثاني: تم استعمال المقياس العالمي المتضمن 36فقرة الذي يتعلق بقياس نوعية الحياة الصادر من منظمة الصحة العالمية والمتضمن المحاور التالية (الوضع الصحي، الوظائف الجسمية، الدور الوظيفي، الدور العاطفي، الوظيفة الاجتماعية، الالم الجسدي، الفعاليات، الصحة العقلية، الصحة العامة).

اظهرت نتائج الدراسة ل(100) امراة مصابة بتهيج القولون العصبي ان 30% من النساء هن من الفئات العمرية (28-37) سنة و 54% منهن متزوجات ومستمره حياتهم الزوجية ومعظم المصابات هن موظفات (61%) وغالبية المصابات هن خريجات جامعيات (42%) واطهرت الدراسة ان نصف العينة من ذوات الدخل العالي ونسبة 47% من المصابات هن من النوع المتناوب بين الامساك والاسهال لتهيج القولون وكان الدور الجسدي والدور العاطفي قد حصل على اقل متوسط حسابي عن المحاور الاخرى لمقياس نوعية الحياة.

توصلت الدراسة ان لتهيج القولون العصبي تأثير سلبي على نوعية حياة النساء اللواتي ضمن الفئات العمرية (28-37) وعلى النساء المطلقات والنساء الموظفات في المؤسسات الحكومية.