Assessment of Psychological Risk Factors Which Contributed to the Occurrence of Peptic Ulcer in Patients at Irbil Governorate

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الخلاصة :

الهدف: دراسة وصفية تحليلية تهدن إلى تقييم العوامل النفسية التي تساهم في حدوث قرحة الجهاز الهضمي ومقارنتها مع غير المصابين بقرحة الجهاز الهضمي.

المنهجية: اعدت استصارة استبيانية تحتوي على محورين وتشمل على المعلومات الديموغرافية و)٣٢(فقرة تصنف العوامل النفسية ،قلق) الكابة، الاعراض النفسية(.

شملت عينة البحث ١٠٠ مريض من الذين ادخلوا الى قسم الناظور في مستشفى هولير ورزكاري التعليمي في اربيل والذين شخصوا بالاصابة بقرحة الجهاز الهضمي، وكذلك ١٠٠ شخص كعينة ضابطة، تم اختيارهم من المجتمع والذين لايعانون من اي اضطراب في الجهاز الهضمي.

النتائج: اشارت نتائج البحث بان اعلى نسبة من عينة البحث هم بعمر ٥١ فما فوق ومن الرجال اكثر من النساء، ومعظم المرضى كانوا من المتزوجين، وبمستوى ثقافي ضعيف، ومن الذين لايعملون، وذوي الدخل الشهري الغير كافي، وكان اغلبهم قد تعرضوا الى شد نفسي وكذلك قد اظهرت النتائج بوجود علاقة ذات دلالة احصائية بين العوامل النفسية الخطرة وحدوث قرحة الجهاز الهضمي.

التوصيات: اوصت الباحثة بتزويد الممرضات باداة التقييم التي استخدمت في الدراسة، وتطبيق برامج تثقيفية للمرضى المصابين بقرحة الجناز النضمي لزيادة معلوماتبم حول المرض وتتليل خطورة قرحة الجناز النضمي.

Abstract:

Objective: An analytic- descriptive study to assess the psychological factors that may contribute to the occurrence of peptic ulcer as risk factors and to compare between studied and control groups with the impact of psychological risk factors.

Methodology: A questionnaire 25 designed, which consisted two parts including sociodemographic characteristics and the 32 items to describe the psychological factors (anxiety, depression, somatoform symptoms). The sample consist of (100) patients who were admitted to the endoscopy department at two teaching hospitals (Hawler and Rezgari) in Irbil, and were diagnosed as a peptic ulcer patients; and (100) person as a control sample were selected from community and they were free of any gastrointestinal disorders.

Results: The results of the study revealed that the majority of the study group was above 51 years old and above, the males were more presented than females, they were married, with low educational level, unemployed, within sufficient monthly income with insufficient and most of them were exposed to stressfill life events, also the study revealed that there was a significant relationship between psychological risk factors and the occurrence of peptic ulcer.

Recommendations: The researcher recommends that nurses should be provided with the assessment tools which was used in this study, and conduct an educational program to the patient with gastrointestinal ulcer to increase their knowledge toward disease and reduce the risk of peptic ulcer disease.

Key words: Psychological risk factors. Peptic ulcer.

Introduction:

Psychosomatic disorder is due to chronic exaggerated state of physiological expression of anxiety which may lead to structural change in organ or viscera through which it is expressed1[1]

Peptic ulcer disease is a major problem of modem society, and approximately 5-10 % of general population in the world will have a peptic ulcer during a life time, at least half of these patients will have a recurrence within 5 years[1]

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It is found in diagnostic statistical manual IV that peptic ulcer is one of medical conditions which affected by psychological factors, and according to psychoanalytic theories, peptic ulcer have been described as a disease in which hungry stomach eats itself (!).

Emotional stress has been proposed as a possible factor in the pathogenesis of peptic ulcer and patients understand that his/ her emotional status will help to aggravate their condition, because the psychological factors are important in such disease which represents as a serious medical problem due to a large part of frequency and high cost[4]

People with peptic ulcer need support, and understanding at time of crisis, so the objective of the study was to assess the psychological risk factors (anxiety and depression) among these patients and to find out the relationship between these psychological risk factors and some variables.

Methodology:

Λ questionnaire was constructed by the authors based on Hamilton scale of anxiety. Beck scale for depression and Crown Crisp scale for somatoform symptoms.

It consisted of 32 items describing the psychological factors, 10 items for anxiety, 12 items for depression and 10 items for somatoform, These items scored rated from (1- 4) as follows never 1, low 2, moderate 3, high 4.

Content validity of the questionnaires was established through a panel of (16) experts in the field of psychiatry, nursing, psychology, medical, and surgical. For the purpose of measuring the reliability of the questionnaires, a pilot study was carried out on (10) patients who were referred to endoscopy department at two teaching hospitals (Hawler, Rezgari), and were diagnosed as new patients of having peptic ulcer. Λ test and retest was carried out to measure the reliability of the questionnaires on 10 patients and 10 control sample were selected randomly. It which was computed by SPSS, the results was (0.97), which means that the questionnaire was reliable.

The study sample consisted of (100) subject who were referred to endoscopy department in two teaching hospitals (Resgari, Hawler) and were newly diagnosed as having peptic ulcer. Another (100) person as a control groups were selected out of the community who were free of any gastrointestinal disorders.

Data were collected from the patients through the utilization of the study instrument and the employment of interview with each sample and it took approximately 30 minutes for each one.

Appropriate statistical methods were employed, such as frequencies, chi-square, to analyse the data.

Results:

Table (1): Distribution of the demographic characteristics of cases and control groups.

Age (years)	Cases		Control	
	f	**O**	**f**	**./.**
<20	13	13.0	4	4.0
21-30	**20**	20.0	18	18.0
31-40	23	23.0	23	23.0
41-50	14	14.0	20	20.0
51 and above	30	30.0	35	35.0
Total	100	100.0	100	100.0
Z-test p value: 0.8047	Non significant differences			
Sex	**f**	**O/**	**f**	**O/**
Male	**59**	59.0	59	59.0
Female	**41**	41.0	41	41.0
Total	100	100.0	100	100.0
Z-test p value: 1	Non si nifcant differences			
Marital status	f	O/	f	O
Single	22	22.0	22	22.0
Married	59	59.0	59	59.0
Divorced	1	1.0	1	1.0
Widowed	18	18.0	18	18.0
Total	100	100.0	100	100.0
Z-test p value: 1	Non significant differences			
Occupation	f	O	f	O/
Un employee	53	53.0	46	46.0
Retired	7	7.0	7	7.0
Employee	17	17.0	**22**	22.0
Earner	23	23.0	25	25.0
Total	100	100.0	100	100
Z-test p value: 0.525	Non significant differences			
Educational levels	**f**	**O**	**f**	**O/**
Illiterate	37	37.0	37	37.0
write	4	4.0	4	4.0
Primary	28	28.0	27	27.0
Secondary	13	13.0	13	13.0
College	18	18.0	19	19.0
Total	100	100.0	100	100.0
Z-test p value: 0.874	Non significant differences			
Family size	**f**	**O/**	**f**	**./o**
1-3	**6**	6.0	17	17.0
4-6	18	18.0	29	29.0
7-9	43	43.0	34	34.0
10-12	25	25.0	14	14.0
13 and more	**8**	8.0	**6**	6.0
Total	100	100.0	100	100.0
Z-test p value: 0.001	significant differences			
Stressful life events	**f**	**o/.**	**f**	**O**
Yes	83	83.0	29	29.0
No	17	17.0	71	71.0
Total	100	100.0	100	100.0
Z-test p value: 0.000	highly significant differences			

19

Table (1) continued

Age (years)	Cases		Control	
	f	%	f	o/o
Type of stressful life events				
None	17	17.0	71	71.0
Death of spouse	18	18.0	18	18.0
Divorce or separation	1	1.0	1	1.0
Ruined	13	13.0	1	1.0
Death of family members	30	30.0	5	S
Severe illness	8	8.0	3	3
Imprisonment	13	13.0	1	1.0
Total	100	100.0	100	100.0
Z test p value 0.000	highly significant differences			

It appeared from table (1) that the majority (30%)0٤ study group and (35%) of control group were 51 years and above. Most of them (59%) were male for both groups. Majority of them (59%) were married for both groups. According to occupation most of two groups were unemployed, (53%) for study group and (46%) for controls. In regard to their educational level the table indicates that the highest frequent level was those of illiterate, (37%) for both groups. Also the table presented most of study (43%) were in (7-9) family size, and (34%) for control group.

Table (2) Statistical comparison between study group and control group according to the levels of anxiety.

Anxiety	Peptic ulcer		P value Chi-square	Sign.
	Study group	Control group		
Low	12	54		
Moderate	15	25	0.00001	Highly Significant
High	73	21		
Total	100	100		

Table (2) presented highly significant differences between study and control group related to level anxiety

Table (3): Statistical comparison between studied group and control group according to the levels of depression.

Depression	Peptic ulcer		P value Chi-square	Sign.
	Study group	Control group		
Low	6	73		Highly Significant
Moderate	37	9	0.00001	
High	57	18		
Total	100	100		

ı Table (3) presented that highly significant differences between studied and control group related to severity of depression.

Table (4) Statistical comparison between study group and control group according to the levels of psychosomatic symptom.

Somatoform symptom	Peptic ulcer		1 value Chi-square	Sign.
	(study group)	(control group)		Highly Significant
Low	11	63		
Moderate	21	6	0.0001	
High	68	31		
Total	100	100		

Table (4) indicated that significant differences between two groups related to psychosomatic symptoms.

Table (5): Association between Age and psychological risk factors in study group (Anxiety, depression, somatoform).

Age	Anxiety (study group)			Total	p-value Chi-square	Sign.
	Low	Moderate	High			
<20	1	1	11			
21-30	1	5	14			
31-40	4	5	14		0.282	Non significant
41-50	1	2	11			
51 and above	5	2	23			
-total	12	15	73	100		
Ase	Depression (study group)				P-value Chi-square	Sign.
	Low	Moderate	High			
<20	0	6	7			
21-30	1	7	12			
31-40	3	6	14		0.469	Non significant
41-50	1	4	9			
51 and above	1	14	15			
Total	6	37	57-	100		
Age	Somatoform (study group)				P-value Chi-square	Sign.
	Low	Moderate	High			
<20	2	4	7			
21-30	0	7	13		0.950	Non significant
31-40	3	3	17			
41-50	1	2	11			
51 and above	5	5	20			
Total	11	21	68	100		

This table presented non significant association between psychological risk factors and Age in studied group

Table (6): Association between Sex and psychological risk factors

Sex	Anxiety (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Male	8	11	40		0.350	Non significant
Female	4	4	33			
Total	12	15	73	100		
Sex	Depression (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Male	5	26	28		0.058	significant
Female	1	11	29			
Total	6	37	57	100		
Sex	Somatoform (studied group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Male	6	14	39		0.713	Non significant
Female	5	7	29			
Total	11	21	68	100		

This table shows that there is significant association between Sex and depression and non significant association between sex and anxiety and somatoform.

Table (7): Association between psychological risk factors and Marital status.

Marital status	Anxiety (study group)			Total	p-value Chi-square	Sign.
	Low	Moderate	Hish			
Single	1	5	16	22	0.423	Non significant
Married	20	9	40	59		
Divorced	0	0	1	1		
Widowed	1	1	16	18		
Total	12	15	73	100		
Marital status	Depression (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Single	0	11	11	22	0.361	Non significant
Married	6	20	33	59		
Divorced	0	0-	1	1		
Widowed	0	6	12	18		
Total	6	37	57	100		
Marital status	Somatoform (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	Hioh			
Single	2	6	14	22	0.222	Non significant
Married	9	11	39	59		
Divorced	0	1	0	1		
Widowed	0	3	15	18		
Total	11	21	68	100		

This table presented non- significant differences between psychological risk factors (Anxiety, depression, somatoform) and marital status of study group.

Table (8) Association between psychological risk factors and Occupation.

Occupation	Anxiety (study group)			Total	p-value Chi-square	Sign.
	Low	Moderate	High			
Un employee	5	4	44		0.403	Non significant
Retired	2	1	4			
Employee	2	4	11			
Earner	3	6	14			
Total	12	15	73	100		

Occupation	Depression (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Un employee	1	20	32		0.136	Non significant
Retired	0	3	4			
Employee	1	5	1			
Earner	4	9	10			
Total	6	37	57	100		

Occupation	Somatoform (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	Hish			
Un employee	6	11	36		0.966	Non significant
Retired	1	0	6			
Employee	2	4	11			
Earner	2	6	15			
Total	11	21	68	100		

This table indicates that there is no- significant differences between psychological risk factors and occupation in the study group

Table (9) Association between psychological risk factors and their Level of Education.

Educational level	Anxiety (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Illiterate	3	6	28	37	0.798	Non significant
write	1	0	0	4		
Primary	4	5	19	28		
Secondary	3	1	9	13		
College	4	3	14	18		
Total	12	15	73	100		

Educational level	Depression (study group)			Total	P-value Chi-square	Sign.
	Low	Moderate	High			
Illiterate	0	14	23	37	0.212	Non significant
Read and write	0	3	1	4		
Primary	3	10	15	28		
Secondary	2	6	5	13		

Table (9) continued

Educational level	Depression (study group)			Total	P-vahie Chi-square	Sign.
	Low	Moderate	High			
College	1	4	13	18		
Total	6	37	57	100		
Educational level	Somatoform (study group)				P-value Chi-square	Sign.
	Low	Moderate	High			
Illiterate	5	7	25	37	0.050	Non significant
Read& write	1	1	2	4		
Primary	1	10	17	28		
Secondary	4	1	8	13		
College	0	2	16	18		
Total	11	21	68	100		

This table presented significant association between somatoform disorder and educational le''el and non- significant association between Anxiety, depression and education.

Discussion

The results showed that the majority of the study groups were of (51) years old, this finding was supported by (5, 6) Dong (2004) ठ Beare (1994) who were found that the majority of peptic ulcer disease was found at the age of 40 – 50 years (table 1). In relation to sex, 59% of the study group were males, Gold man & Bennett (2000) reported that the prevalence of peptic ulcer was 12 % in males & 9 % in females (table 1).[7]

In relation to marital status most of the groups were married (59 %) Moayyadi (2002) found that married people are at increased risk of peptic ulcer disease.[7] Regarding to occupation [8]

53 % of the sample was unemployed. These results are supported by levestein (1996) who stated that patients with peptic ulcer significantly worse if they had no occupation. (9, 10). 37% of the sample were illiterate, (table 1) and this result is supported by Johenson (1991) who concluded that risk of peptic .ulcer disease is increased with low educational background.

Regarding to stressful life events (83 %) of the sample have stressful life events (table 1), Piper (1993) found that stressfill life event are more associated with peptic ulcer.(',)

The results of the study indicate that there is a highly significant differences between study and control group related to the level of anxiety (table 2), this result was supported by Goodwin (2003) who found that anxiety is associated with peptic ulcer disease('^

Also it appears that there is a significant differences between study 8 control related to the severity of depression which mean that patient with peptic have high scores of depression (table• 3).Ts result is supported by Brown (2004) who found that there is a relationship between depression and peptic ulcer disease.[13]

The result show that there was also a significant differences between two groups (study & control) related to psychosomatic symptoms and the patient ha''e high scores of these symptoms (tale 4) Locke (2004) concluded that psychological factors were significantly associated with functional gastric intestinal disorder('^.

The study also revealed that there was no significant association between psychological risk factors (anxiety, depression and somatoform) and age (table 5) this result is contrast with the finding of Bear (1994) who stated that there is a relationship between age and occurrence of peptic ulcer disease<6)

It appears that there was a significant differences between sex and the occurance of peptic ulcer (table 6) this result is agree with Gotran (1994) who found that the male to female ratio for peptic ulcer is about 3:1 which means that men are more affected than females('!).

The result was presented that there is non significant association between psychological risk factors and marital status for the occurrence of peptic ulcer (table 7). and this result was not supported by Moayadi (2002) who found that married people are at increased risk of peptic ulcer (table 7).

htiV! regard to occupation, the results indicate that there is no association between occupation & occurrence of peptic ulcer, table (8).

This is in contrast with the finding of Stanghellin (1999) who emphasized that there are association between the prevalence of p.u. & occupation.(!6'!7)

In conclusion, the study confirms that psychological factors play an important role in the occurrence of peptic ulcer disease.

Recommendation:

1- Establish specialized center for gastric- intestinal tract (GIT) in Erbil governorate   provided with services for direct patients about psychological factors and it's effect on peptic ulcer

2- Psychiatric nurse should take their role in GIT center by using a chart for assessing the psychological risk factors for such patient.

3- Conduct an educational program for those were complain of gastric disorder to increase their knowledge about disease & to help them to cope with the psychological distress to reduce the occurrence of peptic ulcer.

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