

Anxiety, Depression And Ego - Strength Assessment In Duodenal Ulcer And Somatizer Patients

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ABSTRACT

This work is designed to assess the psychological condition of peptic ulcer patients; 100 male duodenal ulcer patients and 30 male somatizers were studied. 30 normal males as controls were taken and they were all subjected to Beck Depression Inventory for assessing depression, Hamilton Anxiety Scale and Barron Ego-Strength Scales. We found that personality characteristics of duodenal ulcer and somatizer groups were nearly the same, both groups differed from the control. They scored higher on anxiety, somatization, depression, obsessions but lower on ego strength scales compared to the control group, which can be explained by the possible role of chronic iatrogenic factor, in our culture, which could invite dependency, decompensation leading to parasitic relation.

INTRODUCTION

No rigorous definition, or even acceptable description of psychosomatic illness has ever been proposed, the only common characteristic being the assumption that psychological factors play an important role in their complex, obscure aetiology (Lipowski 1984). Myren (1983) said that factors such as anxiety, masked depression and emotional conflicts were reported to be related to peptic ulcer. In a study by Piper et al (1977), they found that gastric ulcer male patients were significantly more neurotic and less extraverted than controls and they were characterized by a personality pattern of independence

and self-sufficiency and were prone to anxiety and depression. Alp et al (1970) found gastric ulcer patients to be more independent, depressed and anxious than controls. Lyketsos et al (1982) in their study on duodenal ulcer patients, reported that ulcer patients showed less dominant hostility and more dependent behaviour compared to controls. Anxiety only and depression appeared to be prominent in ulcer patients. Magni et al (1982) in their study, found anxiety and neuroticism but not depression to be prominent too.

The aim of this work is to assess anxiety, depression and ego-strength in a group of duodenal ulcer patients compared to a group of somatizers (patients complaining of symptoms simulating peptic ulcer disease, but endoscopic examination revealed normal finding), and a control healthy group not suffering from any gastrointestinal troubles.

MATERIAL AND METHODS

The three groups compared in this work were:

- 1) Duodenal Ulcer Group : this group included 100 male patients diagnosed endoscopically as having duodenal ulcer disease.
- 2) Somatizers Group: this group included 30 male patients who were complaining of symptoms simulating peptic ulcer disease, but on endoscopic examination, no abnormal findings were revealed.
- 3).Control group : included 30 normal males not suffering from any gastrointestinal troubles and were selected from the attendants coming with patients as their partners in work or relatives.

The three groups were matched for age, educational level and social class, on the assumption that such factors may affect the affective tone and personality of the individual.

The three group were subjected to the following procedures:

- 1) Beck Depression Inventory : Arabic version by Souief and Darwish (1978).
- 2) Hamilton Anxiety Scale : Arabic version by Okasha (1979).
- 3) Barron Ego-strength Scale : Arabic version by Kafafy.

The results were compared and analysed statistically .

RESULTS

All the results obtained in this study are summarized in the following tables and figures.

Table (1) : showing the difference between the three groups: Duodenal ulcer group, the somatizers group and the control group on Beck Depression scale.

	Duodenal ulcer gp.		Control gp.		t	Duodenal ulcer gp.		Somatizer gp.		t
	No	%	No	%		No	%	No	%	
Normal (0-12)	38	38	26	86.67	***	38	38	5	16.67	**
Mean	8.5		5.19		± 6.18	8.5		7.2		± 2.55
S. D.	± 3.0		± 2.62			± 3.0		± 1.64		
Mild 13 - 20	21	21	4	13.33		21	21	13	43.3	**
Mean	14.48		16.0		± 1.03	14.48		16.77		± 2.25
S. D.	2.48		2.94			2.48		2.65		
Moderate (21 -31)	29	29	---	---	***	29	29	6	.20	
Mean	25.31		---		± 6.39	25.31		23.67		* ±1.05
S. D.	± 2.98		---					± 2.98		
Severe 32 +	12	12	---	---	***	12	12	6	.20	*
Mean	43.17		---		± 3.69	43.17		43.17		±1.00
S. D.	± 5.11		---			± 5.11		± 9.24		
Total	100	100	30	100		100	100	30	100	
Mean	19.22		6.63		***	19.22		21.83		*
S. D.	± 11.62		± 11.56		± 8.73	± 11.62		± 12.71		± 0.99

*** P < .001 highly significant

** P < .02

* P < .1

From table (1) it was observed that only 13.3% of control and 62% of duodenal ulcer and 83.38% of somatizers scored pathologically on the depression scale. The highest score of the duodenal ulcer group was obtained on moderate and severe depression scale which differs significantly from the control group at $P < 0.001$. While the duodenal ulcer group did not differ significantly from the somatizers group. The highest score of the somatizers group was obtained on normal and mild degree scale which differs significantly from the duodenal ulcer group $P < 0.02$. Both duodenal ulcer and somatizer groups recorded pathological on the depression to the same extent. Fig.(1) shows the mean of different groups (Duodenal ulcer, somatizers and the control group on Beck Depression scale.)

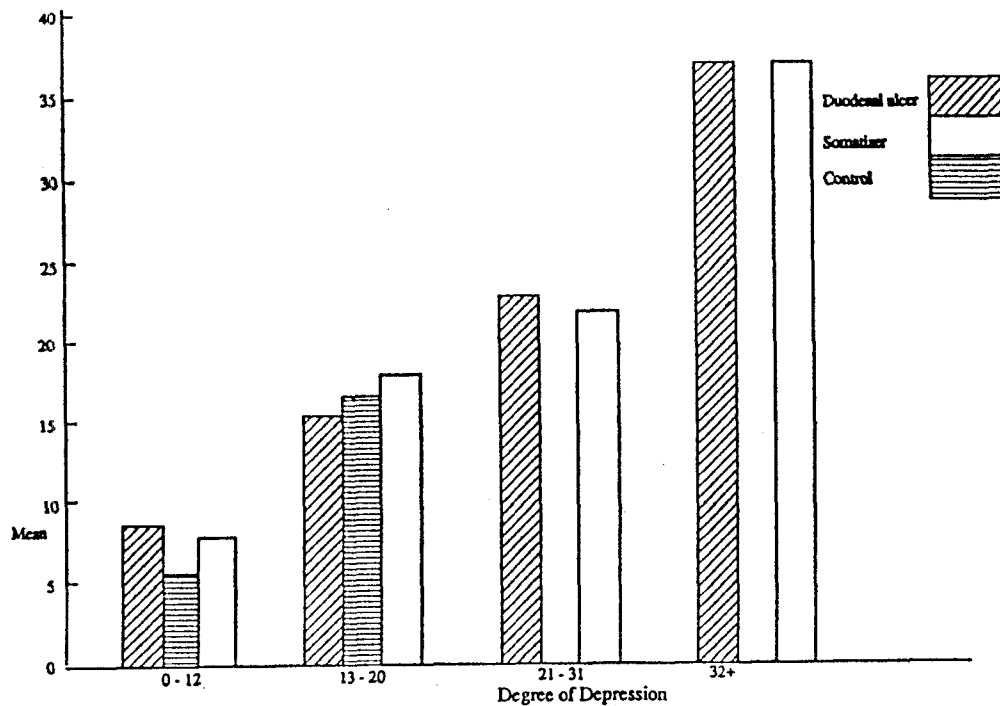


Table (2) : showing the difference between the three groups; Duodenal ulcer group, the Somatizer group and the Control group on Hamilton Anxiety scale {Total morbidity scale (Psychic Anxiety Scale + Somatic Anxiety Scale)}.

	Duodenal ulcer		Control		t	Duodenal ulcer		Somatizer		t
	No	%	No	%		No	%	No	%	
0-15	24	24	28	93.33	$\pm 11.10^*$	24	24	5	16.67	$\pm 0.9^{**}$
16-25	50	50	2	6.67	$\pm 6.41^*$	50	50	15	50.0	± 0.00
26+	26	26	—	—	$\pm 5.93^*$	26	26	10	33.33	$\pm 0.76^{**}$
Total	100	100	30	100		100	100	30	100	
Mean	20.66		5.17		$\pm 11.95^*$	20.66		22.77		$\pm 1.38^{**}$
S. D	± 6.87		± 5.92			± 6.87		± 7.33		

* $P < 0.001$ High significant .

** $P < 0.1$

The total scale of Hamilton Anxiety scale is the sum of both Psychic and Somatic Anxiety scales.

From table (2) it can be observed that the duodenal ulcer group scored higher in level (16 - 25), (26)⁺ than the control group to a highly statistically significant level at $P < 0.001$. On the other hand, the somatizers group did not differ statistically from the duodenal ulcer group at all levels.

Table (3) : showing the difference between the three groups (Duodenal ulcer group, the Somatizers group and the Control group on Hamilton Anxiety scale (Psychic Anxiety scale).

	Duodenal ulcer		Control		t	Duodenal ulcer		Somatizers		t
	No	%	No	%		No	%	No	%	
0 - 8	41	41.00	28	93.3	$\pm 7.81^*$	41	31.00	8	26.67	$\pm 1.52^{**}$
9 - 14	48	48.00	8	6.67	$\pm 6.11^*$	48	4.800	14	46.67	$\pm 0.13^{**}$
15+	11	11.00	—	—	$\pm 3.52^*$	11	11.00	8	26.67	$\pm 1.81^{**}$
Total	100	100	30	100		100	100	30	100	
Mean	9.16		2.9		$\pm 8.88^*$	9.16		10.77		$\pm 1.81^{**}$
S. D	± 4.23		± 3.03			± 4.23		± 4.21		

* $P < 0.001$ Highly significant

** $P < 0.1$

Table (4) : showing the differences between the three groups (Duodenal ulcer, Control, and the Somatizers group) on (Hamilton Anxiety Scale). Somatic Anxiety Scale.

	Duodenal ulcer		Control		t	Duodenal ulcer		Somatizers		t
	No	%	No	%		No	%	No	%	
0 - 8	21	21.00	28	93.33	$\pm 11.84^{**}$	21	21.00	8	26.67	$\pm 0.63^*$
9 - 14	60	60.00	2	6.67	$\pm 7.97^{**}$	60	60.00	15	50.00	$\pm 0.97^*$
15+	19	19.00	—	—	$\pm 4.84^{**}$	19	19.00	7	23.00	$\pm 0.50^*$
Total	100	100	30	100	$\pm 13.26^{**}$	100	100	30	100	$\pm 0.56^*$
Mean	11.50		2.27			11.50	12.00			
S. D	± 3.95		± 3.08			± 3.95	± 4.27			

* $P < 0.1$

** $P < 0.001$ Highly significant

From table (3) and (4) it was observed that, duodenal ulcer group scored higher significantly than the control group at $P < 0.001$ at level from (9 - 14) , (15+).

Although the somatizers group scored higher than the ulcer group at level (9- 14), it was not to a statistically significant level.

Fig.II shows the mean of different groups : duodenal ulcer groups, somatizers group and normal control group on Hamilton Anxiety Scale (both Psychic and Somatic Anxiety Scales).

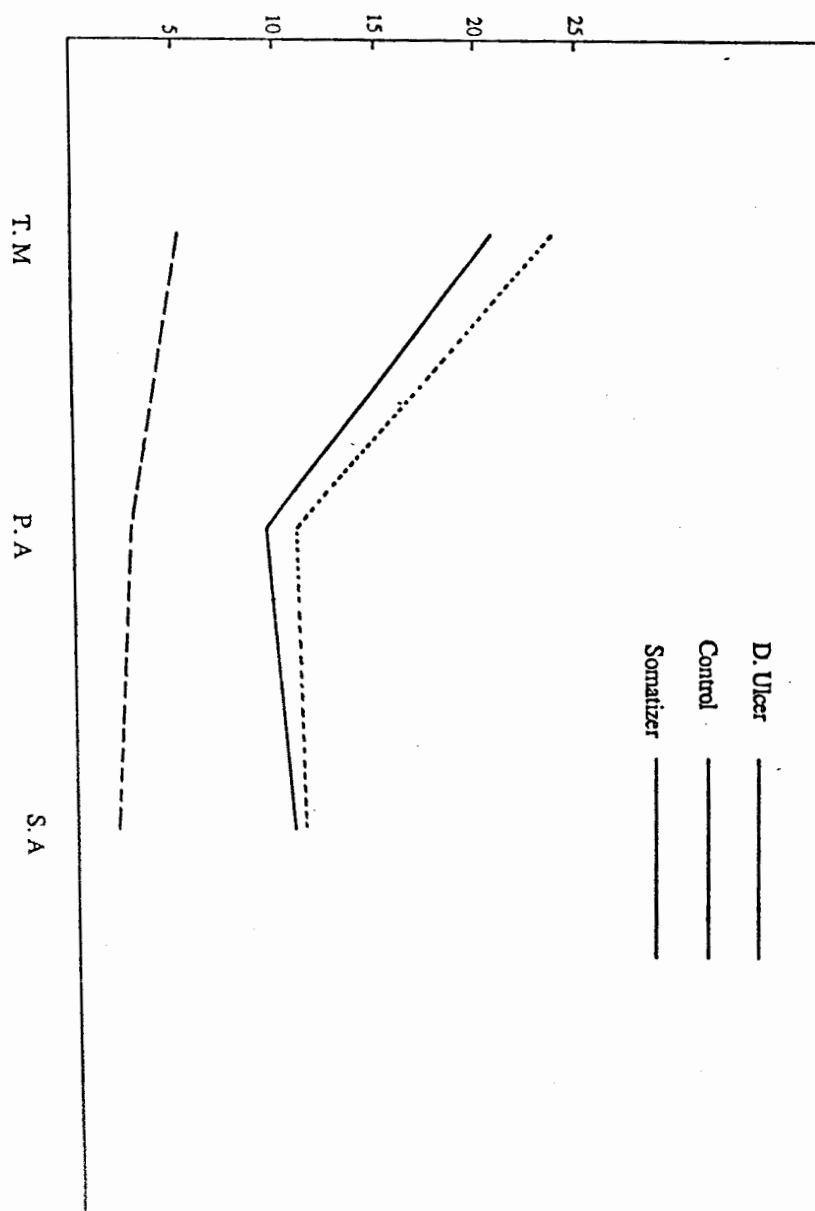


Table (5) : Showing the difference between the three groups : duodenal ulcer group, the control group and the somatizers group (on Barron Ego - strength Scale).

	Duodenal ulcer		Control		t	Duodenal ulcer		Somatizer		t
	No	%	No	%		No	%	No	%	
0 - 32 Low score	62	62.00	6	20.00		62	62.00	19	63.3	**
Mean	25.23		24.5		$\pm 4.79^*$	25.23		24.47		± 0.13
S. D	± 4.67		± 5.09			± 4.67		± 5.99		
32+ High score	38	38.00	24	80.00		38	38.00	11	36.67	**
Mean	35.63		38.83		$\pm 4.97^*$	35.63		34.00		± 0.13
S. D	± 2.87		± 3.38			± 2.87		± 2.68		
Total	100		30 100			100 100		30 100		
Mean	29.18		35.97			29.18		27.97		**
S. D	± 6.49		± 6.90		$\pm 4.72^*$	± 6.49		± 6.83		± 0.85

* $P < 0.001$ Highly significant.

** $P < 0.1$

From table (5) we can observe that 62% of duodenal ulcer patients were having low scores (score below 32), which is significantly higher than the control ($P < 0.001$). On the other hand, 80% of the controls and 38% only of ulcer group were having high scores (32+) at ($P < 0.001$).

While ulcer group scored more or less the same as that of somatizers group.

DISCUSSION

The interpretation of our findings should be taken within the limitations of the applied tools

The first tool is Beck's Inventory which is not yet standardized on the Egyptian population, that is why we are going to rely, for some limited validation at his stage, on the control sample being matched for age, education level and social class.

As a whole, duodenal ulcer patients scored higher on this test than the control. Simply, this is evidenced by the fact that the normal score in the control group outnumbers significantly the corresponding normal score in the duodenal ulcer sample (and vice versa). If we consider that this means that peptic ulcer patients are more depressed, we find ourselves agreeing with Myren (1983) who found depression to be more prominent in duodenal ulcer patients than controls. We have to take this agreement cautiously with the least generalization. It is a well known psychodynamic assumption that psychosomatic disorder alleviates, at least partly, the intolerable affective discomfort. The present higher score could indicate the original dysthymia (underlying the psychosomatic disease) as well as the possible resulting disturbances secondary to the somatic pain and awareness of the disease. Moreover, we did not correlate the degree of exacerbation of ulcer symptom (including endoscopic findings) with the degree of depression as Lyketsos (1982) did. He reported that the acute depression encountered in some patients was not seen during periods of exacerbation of ulcer symptoms. This reciprocal relation stressed by Dumber (1959) needs to be verified through a longitudinal study, individual analysis of certain cases as well as clinicodynamic assessment rather than quantitative self report questionnaire.

However, coming to some detailed quantification of our results, we find that mild depression is less represented in duodenal ulcer patients than in somatizers. The absence of significant differences between peptic ulcer group and control group does not mean that both groups are the same in the overall depression. On the contrary, we can deduce that a peptic ulcer patient, once depressed, he surpasses the threshold of presenting as a mild complainer to present by some moderate and severe presentation. On the other hand, a

somatizer occupies the spectrum of grades of depression (mild, moderate and severe) more or less evenly disturbed. Perhaps this could refer to the possibility that the depression differs in both groups, not only in severity but also in quality. To verify this latter hypothesis some other measure, including clinical rating and judgement is needed.

Future research should be designed to disentangle and differentiate qualitatively between depressive presentation in both groups, as well as to disentangle the cause and effect relationship in the ulcer group.

As regards anxiety, it was rated through Hamilton rating scale. The general trend was analogous to those found in Beck's depression self report scores. However mild anxiety was represented higher than in normal controls just as moderate and severe degree. This common general inclination may refer to the difficulty to disentangle anxiety from depression. What the patient reports as depression could refer to the same aspect the rater reports as anxiety. However a clinical rater is expected to score mild anxiety more readily than an ulcer patient who may not be able to declare such suffering as mild depression (see before). Again, we can observe that the anxiety was present simultaneously in both the ulcer patients and the somatizer patients. As regard the presence of anxiety in the ulcer group, this agrees with Henderson and Batchelor (1964), Magni et al (1982), Lyketsos et al (1982), Myren (1983), and McIntosh et al (1983). At the same time, the appearance of the ulcer seems not to substitute the anxiety as a successful psychosomatic outlet. It appears that it only partially did so leaving the original anxiety present in the realm of consciousness of the patient. Moreover, chronic anxiety is claimed to be an active factor in the pathogenesis of psychosomatic disorder (Fenichel 1949). Being that chronic, it is not expected to be wholly replaced by the ulcer producing mechanism. Lastly, anxiety could be secondary to the disturbance caused by the ulcer provoking continuous worry about one's health, diet and outcome of the disease.

The somatizers group shows anxiety as much as the ulcer group does with no statistical differences between both groups. In the somatizers, there is no such psychosomatic mechanism to absorb or alleviate the anxiety. Moreover, somatized anxiety was as represented as the psychic anxiety which again could

indicate that one does not replace the other in this nosological category. Perhaps they are complementary.

When we come to Barron's ego-strength scale, we find that low ego scores were more represented in the ulcer group and the somatizer group more than the normal control. There has been no significant difference between the two former groups. Nevertheless, explanations should differ. In the ulcer group, the results are beyond our expectations and against the Mittleman and Wolf study (1942) who described the patient as assertively independent. This could be explained by the fact such findings may be expected in the etiology of ulcer patient, but once the ulcer sets in and perhaps because of the possible chronic iatrogenic factors in our culture which invite dependency, decompensation into parasitic relation could explain the low score as indicated. However, other records as De M'uzan and Bonfils (1961) reported that (50% of their studied group had weak ego pattern), 25% of them had the (pseudo-independent profile). 15% of these patients were overtly passive and parasitic.

As regards the somatizer group, low score is expected as part and parcel of the nagging dependent tendency with the least painstaking tolerant attitude of such group.

SUMMARY

In a study of 100 duodenal ulcer, 30 somatizers patients and 30 normal controls, we found that personality characteristics of duodenal ulcer and somatizers group were nearly the same, both groups differed from the control, they scored higher on anxiety and depression but lower on ego strength scales, compared to the normal control group.

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EVALUATION DE L'ANGOISSE, LA DÉPRESSION ET LA "FORCE DU MOI" CHEZ LES PATIENTS ATTEINTS D'ULCÈRE DUODÉNAL ET SOMATISEURS.

ABSTRAIT

Nous savons que les facteurs psychologiques jouent un rôle important dans l'étiologie des maladies psychosomatiques.

Nous avons évalué les conditions psychologiques des patients atteints d'ulcère duodénal ainsi que 30 malades, mâle, somatiseurs ont été étudiés.

Nous avons administré les tests psychométriques suivants aux deux groupes ainsi qu'à 30 mâles, contrôles, normaux.

Dans l'inventaire de la dépression de Beck, l'échelle d'angoisse d'Hamilton, et l'échelle de la "force du moi" de Barron, nous avons trouvé que les caractéristiques de la personnalité des patients atteints d'ulcère duodénal étaient semblables à ceux des somatiseurs, les deux groupes étaient différents du groupe contrôle.

الموجز

أجرى هذا البحث لدراسة شخصية مرضى قرحة الأثنى عشر ومقارنتها بمجموعتين أخريتين وتم تقسيم الثلاث مجموعات كالآتي : المجموعة الأولى وهم مرضى فعلاً بقرحة الأثنى عشر وقد ثبتت بعد منظار المعدة . والمجموعة الثانية وهى "مرضى يعانون من نفس أعراض مرضى قرحة الأثنى عشر ولكن الاختلاف الوحيد أن منظار المعدة والأثنى عشر أثبت خلوهم نهائياً من أى مرض عضوى . أما المجموعة الثالثة وقد أعتبرت كعينة ضابطة . وهم أناس أصحاء لا يعانون من أى أعراض وليس عندهم مرض عضوى . وقد تم تعريض المجموعات الثلاث لاستبارات متعددة . استبار "هاميلتون للقلق النفسى" واستبار "باك للأكتئاب" واستبار "ق 1" وقد وجد أن مجموعة مرضى قرحة الأثنى عشر (الأولى) والمجموعة التى تعاني من أعراض القرحة دون دلالة عضوية (الثانية) قد أظهرنا إرتفاعاً له دلالة إحصائية عن المجموعة الضابطة (الثالثة) فى المستويات الآتية (القلق - المخاوف - الأعراض الجسمية - الاكتئاب - الوسواس والهستيريا - والشخصية). بينما لم يكن هناك فروق تذكر بين مجموعة مرضى قرحة الأثنى عشر والمجموعة التى تعاني من الآلام دون مرضى عضوى .