

Prevalence of Major Depression in Peptic Ulcer Patients in Iraq

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Abstract

Features of depression in peptic patients were studied in 200 outpatients; a total of 26% met the criteria for depression on the M.I.N.I. plus structured interview and 18% in the non-peptic ulcer control group. It was more in female and old age group peptic ulcer patients and long duration of the disease, unemployed patients. Most frequent symptoms of the depression in peptic ulcer patients were symptoms of appetite changes, depressed mood, and weight changes.

Keywords

Peptic ulcer, Symptoms, Patients, Depression, Duration, Control group.

Introduction

Peptic ulcer is an excoriated area of the mucosa caused by the digestive action of gastric juice. The usual cause of peptic ulceration is an imbalance between the rates of secretion of gastric juice and the degree of protection afforded by a gastroduodenal mucosal barrier and the neutralization of gastric acid by duodenal juice [1,2]. The aim of the study is to make a survey of depression in relation to peptic ulcers using M.I.N.I. plus structured interviews [3]. Peptic ulcer is a chronic condition with the natural history of spontaneous relapse and remission lasting for a decade, if not for life [4]. Complication of peptic ulcer are perforation and gastric outlet obstruction bleeding. The diagnosis of peptic ulcer can be done by many different tests for H.pylori infection. Some are invasive and require endoscopies, and others are non-invasive as serology. Many medical illnesses are associated with depressed mood, but the biological symptoms are unreliable [5]. Psychological factors in functional dyspepsia have been discussed in many previous articles. However, the relationship between depression and functional dyspepsia is still obscure. Gastrointestinal symptoms are often an expression of psychiatric disorders, and medically unexplained gastrointestinal symptoms are common in the general population and are significantly associated with psychiatric. Disorder and it has been held that mental activity can affect the stomach, and peptic ulcers have been produced in animals by electrical stimulation of the hypothalamus, and the effect of emotion on gastric mucosa has been demonstrated in a patient with gastric fistula [6,7]. Some evidence suggests an association between depression and peptic ulcers [8]. Remaining alert for and addressing coexisting psychiatric illness will enhance treatment outcomes (increased patient compliance, functioning, and satisfaction [9]. Among the patients with physical diseases, those with major depression stayed longer at the hospital than those without it. The study of major depression is important as major depression is estimated to be the fourth most important illness leading to functional disability worldwide [10]. There are estimates that there are at least one hundred million people in the world who suffer from depressive disorders amenable to treatment, and social damage caused by depression has assumed enormous proportions; depression is a major public health problem. Depression as a disease with pathogenesis and certain symptoms defined medically; depression as an illness describing the experience of an individual and reflecting the cultural definition of illness in general and depression as a sickness describing societal recognition of the patient state as a reason for obtaining sickness benefits and accepting lesser performance in

the social role [11]. Depressive disorder is particularly important in medical patients as it not only represents considerable distress but also amplifies disability and increases the cost of medical care. When compared with the non-depressed group, depressed subjects were significantly more likely to report the presence of hypertension, heart disease, gastrointestinal ulcers, and hardening of the arteries [12]. It has often been suggested that mood and personality predispose to peptic ulcer, but little prospective evidence exists. These associations are partially accounted for by confounding, or mediation by standard risk factors and are, to some extent, related to socioeconomic status. It is demonstrated that depression, intellectual work, and cigarettes. smoking, heavy alcohol intake, and higher educational level were correlated with the occurrence of peptic ulcer, and it was revealed that the prevalent rates of Peptic Ulcer were different according to age, sex, geographic area, educational level, and professional aspects, and the influence of psychological factors to the prevalence rate of Peptic Ulcer should also be considered [14]. Early studies of peptic ulcer disease suggested that psychological factors had a role in the increased production of ulcer vulnerability, mediated through the increased gastric acid excretion associated with psychosocial stress studies of prisoners of war during World War II documented rates of peptic ulcer formation twice as high as in control. Psychosocial factors are involved in the clinical expression of symptoms [15]. The aim of this study is to make a survey of depression in relation to peptic ulcers using M.I.N.I. plus structured interviews for patients with peptic ulcers attending Ibn Sina. Peptic ulcer group. They were screened to detect depressive cases in comparison with non-peptic people. [16]

The patients and Methods

This is a perspective of a descriptive study, which was conducted through the period from 1st July 2020 to 20th December 2021. Data was collected from both studies groups regarding age, sex, marital status, occupation, income, employment, and duration of illness. The study groups then were assessed regarding having depression from patients attending the endoscope room at Ibn-Sina hospital. There is no single best method for diagnosing depression in general medical settings (no method with the high sensitivity and specificity across all patient groups). Study samples were selected for this study; the first was 200 peptic ulcer patients which have had the disease for more than one year attending the endoscopic room at Ibn-Sina Hospital, and were willing to participate in the study; the second sample was 200 apparently normal persons as control group also willing to participate in the study were selected randoming every 3 cases. The interview was delivered to each patient to be answered personally, and another copy would be read to the patient by the interviewer, supplemented by an explanation. Then the patient selects the statement which suits him at the time of the interview. Total of 200 peptic ulcer patients were screened, and an equal number of non-peptic ulcer companions of the patients were taken as the control group; both groups were matched for age, sex, and marital status.

- ***Inclusive Criteria:***

- Age 15-74
- Male and female
- Those who are willing to participate.
- Those who were diagnosed as duodenal ulcer and gastric ulcer

- ***Exclusion Criteria:***

- Patient who did not want to complete the interview
- Patients who had a gastric ulcer and proved to have a malignancy and they were 12.

Data were summarized and putted into tables, descriptive statistics were used, and inferential statistics analyzing the data statistically. The diagnosis of depression was done by using M.I.N.I. plus structured interviews.

Results

Table 1- Distribution of patients according to the peptic ulcer and non-peptic person.

	Respondent	DEPRESSION	
		NO	%
Peptic ulcer patients	200	52	26
non-peptic person	200	36	18

Table. 2 A- Distribution of peptic ulcer patients according to sex.

Sex	Respondent with p. u.	DEPRESSION	
		NO.	%
MALE	132	28	21
FEMALE	68	24	35
TOTAL	200	52	26

Table 2 B- Distribution of non-peptic ulcer patients according to sex.

Sex	Respondent control	DEPRESSION	
		NO.	%
MALE	124	18	14.5
FEMALE	76	18	23.6
TOTAL	200	36	18

Table. 3A- Distribution of peptic ulcer patients according to age.

Age group	Respondent with p. u.	%	DEPRESSION	
			NO.	%
15-24	0	0	0	0
25-34	18	9	2	11
35-44	24	12	6	25
45-54	60	30	24	40
55-64	72	36	16	22
65-74	26	13	4	15
TOTAL	200	100	52	26

Table. 3 B- Distribution of non-peptic ulcer patients according to age.

Age group	Respondent control	%	DEPRESSION	
			NO.	%
15-24	20	10	2	10
25-34	56	28	8	14
35-44	28	14	4	14
45-54	44	22	8	18
55-61	28	14	6	21
65-74	24	12	8	33
TOTAL	200	100	36	18

Table. 4 A- Distribution of peptic ulcer patients according to the marital status.

Marital status	Respondent with p. u.	%	DEPRESSION	
			NO.	%
SINGLE	28	14	10	35.7
MARRIED	130	65	24	18.4
WIDOWED	30	15	12	40
DIVORCED	12	6	6	50
TOTAL	200	100	52	26

Table. 4 B- Distribution of non-peptic ulcer patients according to the marital status.

MARITAL STATUS	Respondent control	%	DEPRESSION	
			NO.	%
SINGLE	26	13	6	23
MARRIED	128	69	14	10.9
WIDOWED	26	13	10	38.4
DIVORCED	20	10	6	30
TOTAL	200	100	36	18

Table. 5 A- Distribution of peptic ulcer patients according to employment.

Employment	Respondent with p. u.	%	DEPRESSION	
			NO.	%
Employed	48	24	4	12
Student	10	5	4	40

Retired	26	13	8	30.7
Unemployed Including Housewife	116	58	36	31
TOTAL	200	100	52	26

Table. 5 B- Distribution of non-peptic ulcer patients according to employment.

Employment	Respondent control	%	DEPRESSION	
			NO.	%
Employed	40	20	2	5
Student	8	4	2	25
Retired	30	15	6	20
Unemployed Including Housewife	122	61	26	21
TOTAL	200	100	36	18

Table. 6 A- Distribution of peptic ulcer patients according to income.

INCOME	Respondent with p. u.	%	DEPRESSION	
			NO.	%
MORE THAN ENOUGH	14	7	2	14
ENOUGH	50	25	8	16
NOT ENOUGH	136	68	42	30.8
TOTAL	200	100	52	26

Table. 6 B- Distribution of ulcer non-peptic patients according to income.

INCOME	Respondent control	%	DEPRESSION	
			NO.	%

MORE THAN ENOUGH	18	9	0	0
ENOUGH	72	36	10	13.8
NOT ENOUGH	110	55	26	23.6
TOTAL	200	100	36	18

Table. 7- Distribution of peptic ulcer patients according to duration.

DURATION	Respondent with p. u.	%	DEPRESSION	
			NO.	%
1-5 YEARS	30	15	8	26.6
6-10	44	22	6	13.6
11-15	46	23	10	21.7
16-20	42	21	14	33
>21	38	19	14	36.8
TOTAL	200	100	52	26

Table. 8- Distribution of non-peptic patients according to the symptoms.

HISTORY	NO	%
	Before p. u.	20
After p. a	32	61.6
TOTAL	52	100

Discussion

Depression prevalence among peptic ulcer patients was 26% compared to 18% in non-peptic people that there

was a difference in the distribution of depression, giving the clue of association of depression and peptic ulcer, and that goes with other study done in America and our study. Show also shows the significant difference as in the American study. Also, it was found that depression had significant associations with peptic ulcers in another study done in America. Comparing with other medical illnesses, the prevalence was less than that found in diabetic patients 37% in Iraq, and to that in rheumatoid arthritis patients 38% in Iraq, and to that in medical in-patients 40% in Iraq and maybe peptic ulcer has less impact in relation to depression than these diseases, but it was greater than depression prevalence among primary care patients in America 5-20% and within range of hospitalized patients 20-33% [17]. The prevalence of depression among peptic ulcers in Iraq may also be due to the effect of war and bombing, sanction violence, and terrorism. Also, prevalence and incidence figures vary from culture to culture within the country and from country to country, and the differences are enormous; some of these can be explained by the difference in method sampling in the techniques used for assessment and diagnosis [18]. The prevalence of depression distribution according to sex there were higher prevalence in female than male, and it was significant in the peptic group, and it was not significant in the non-peptic ulcer control group. This difference is consistent with the general increase of depression among females in the population. Concerning the distribution of depression according to age groups, it was more prevalent among the middle age group in peptic ulcer patients, and it was a significant result, and it was more prevalent in the older age group in control groups and show no significant result. This declination toward the middle age group may be due to the effect of peptic ulcer on general well-being and financial cost and fear of future complications. While concerning marital status, it was more prevalent in single, divorced, and widowed persons in both the peptic ulcer age group and control group, and this may be due to the effect of social relationships, and both groups show significant differences. Concerning the result of the distribution of depression according to employment, the result was more prevalence of depression among unemployed peptic ulcer patients and the control group, and this may be due to the effect of employment on self-respect and achievement, but this needs at perspective study to show whether unemployment leads to depression or unemployment is part of depression and loss of interest [19]. And it was significant in the peptic group and not significant in the non-peptic. There was also an increase prevalence of depression among those with low income in the peptic ulcer group and control group, and this may be because of peptic ulcer on fitness for a job, bias in hiring, and early age of retiring, but it was not significant result. There was an increased prevalence of depression with increasing duration of peptic ulcer, and this may be due to the effect of long duration of suffering or the development of complications, but it was not a significant result. Also, there was an increased prevalence of depression after getting peptic ulcer disease than those who had depression before the disease and show a significant difference. The most frequent symptom profile in peptic ulcer patient was a change of appetite and weight changes, and this is due to the effect of both depression and peptic ulcer on the gastrointestinal system, and it was found that somatization symptoms has been reported as more prominent in people from developing countries. while in the control group, depressed mood, loss of interest, and fatigue, and loss of energy were most frequent. [20]

Conclusion

Depression is an important psychiatric disorder in peptic ulcer patients that should be detected early. This is the first study done on depression in peptic ulcer patients in IRAQ, and the result of this study supports the relationship of depression and peptic ulcer, and it reaches a significant level when comparing with the non-peptic group. The result of this study gives the impression of an association of depression and peptic ulcer, and this result is significant in relation to the history of the disease, and a perspective study has to be done to confirm such an association, but many variables were used which will also affect the reliability of the study and also a large sample size needed to be taken for a more accurate result.

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