

## Assessment of Psychosocial Functioning and Quality of Life among Depressed Patients

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### Abstract

Depression is a common illness worldwide and its burden is on the rise. It causes feelings of sadness and/or a loss of interest in activities once enjoyed and can lead to a variety of emotional and physical problems and can decrease a person's ability to function at work and home. **The study aimed to** assess the psychosocial functioning and quality of life among depressed patients. **Design:** A descriptive research design was used. **Subjects and method:** The convenient studied sample includes 70 patients with depressive disorders. **Tools:** Included structured interview questionnaire (Demographic and clinical characteristics), Beck depression inventory scale (BDI), Quality of Life Scale (QoL), Impairment function scale (SDS). **Results:** Depressed patients have highly impaired in their quality of life and poor functioning. Most depressed patients, have the highest impairment in family life, followed by social life, and the last impairment was at work and school impairment. **Conclusion:** Depressed patients have a high level of social, physical, and cognitive functional impairment. **Recommendation:** Psychosocial intervention should be delivered to hospitalized depressed patients as an important way for improving their social functioning.

**Keywords:** *Depressed Patients, Psychosocial Functioning Impairment & Quality of Life*

### Introduction

Depression is a common and serious medical illness that negatively affects how you feel the way you think and how you act (López et al., 2020). Fortunately, it is also treatable. Depression causes feelings of sadness and/or a loss of interest in activities once enjoyed. It can lead to a variety of emotional and physical problems and can decrease a person's ability to function at work and home (American Psychological Association (APA, 2019). According to the World Health Organization (WHO), depression is the most common illness worldwide and the leading cause of disability. It estimates that 350 million people are affected by depression (Marcus et al., 2016). Depression is the most treatable mental disorder. Between 80 percent and 90 percent of people with depression eventually respond well to treatment and gain some relief from their symptoms [American psychiatric association] (APA, 2019). The term depression covers a wide range of phenomena, ranging from normal sadness, through grief and depressive symptoms, to severe forms of depressive psychosis. It is also used to designate different reactions to stress and is linked to suicide (Hill et al., 2018).

Depression is a very painful and difficult human experience; it affects about one in ten people at some time in their lives. It might happen only once for some people and pass quite quickly without any

outside help. For others, depression may be more of a problem it may last longer or come back multiple times in these cases, it needed to be treated (Griffiths et al., 2022). Depression can be so severe it requires admission to the hospital [World Health Organization,] (WHO, 2017). Major depression (MD) is a public health problem that is associated with grave consequences in terms of excessive mortality, disability, and secondary morbidity. Indeed, it ranked fourth burden among all psychiatric disorders in 1990 (Saragoussi et al., 2018).

The physical, cognitive, and emotional symptom dimensions of depression lead to considerable impairment in psychosocial functioning. Psychosocial functioning reflects a person's ability to perform the activities of daily living and to engage in relationships with other people in ways that are gratifying to him and others, and that meet the demands of the community in which the individual lives. The relationship between physical depressive symptoms and impaired physical activity can be attributed to the fact that depressive episodes are defined by three symptoms relevant to physical activity these symptoms are decreased interest or pleasure in almost all activities throughout the day, psychomotor agitation or retardation, and fatigue or loss of energy nearly every day (Douglas et al., 2022)

Many studies on the quality of life in depression have demonstrated that depressed patients present with deficits in many areas of social functioning (e.g., leisure, work, interpersonal relations, health status, and academic performance), which constitute the global part of quality of life (Saragoussi, et al., 2018). Major Depressive Disorder (MDD), a significant cause of disability and suicide worldwide, affects about 17% of the US population at least once in their lifetime (Kiouset al., 2018), costing the US economy \$210.5 billion annually. Treatment for MDD aims to reduce depressive and associated symptoms and restore function and quality of life. However, the degree of depressive symptom changes during treatment, that is clinically meaningful to patients, is not well established for most depressive symptom measures (Rush et al., 2021).

### Significance of the study:

People with depression, haven't the ability to perform their daily living activities or to engage in relationships with others, also, frequently relapse. Depression is a common illness worldwide and its burden is on the rise. In **Egypt**, the prevalence of depression was estimated to be 3.5% (WHO, 2018). The total prevalence of depressive symptoms was 28.6% (21.5% for mild, 7.1% for moderate, and 0% for severe depression) and the prevalence of depressive disorders was 11.3% as reported in the study by Al Bahnasy et al., 2013. So, the present study tries to clarify psychosocially, the quality of life, and functioning impairment in patients with depression.

### Operational Definitions:

#### Functional impairment:

Functionally impaired means individuals whose illness, disabilities, or social problems have reduced their ability to perform self-care and household tasks in an independent manner.

#### Psychosocial functioning:

The psychosocial function can be defined on a micro level as our day-to-day ability to contend with environmental and social tasks (e.g., maintaining work and relationships), and on a macro level as the pursuit of significant life outcomes (e.g., self-actualization).

#### Aim of the study:

This study aimed to assess the functional impairment and quality of life among depressed patients.

#### Research questions

1. What is the level of psychosocial functioning of depressed patients?
2. What is the level of quality of life among depressed patients?

### Materials and Method

**Research design:** A descriptive research design was used in this study.

### Setting of the study:

The study was carried out in a neuropsychiatric and neurosurgery hospital in the psychiatric department and emergency psychiatric unit at Assiut University Hospital it is the biggest hospital in Upper Egypt that provides services for Assiut city and most of the neighboring governorates (Assiut, Sohage, Qena, and Aswan). The hospital contains a psychiatric department's emergency, psychiatric in-patient male and female, addiction department, and outpatients' psychiatric clinics. The total number of beds in a psychiatric hospital are 94 beds, 12 beds in the emergency department, 30-beds in the females' psychiatry unit, 36 beds in the male psychiatry department, and 16 beds in the addiction unit.

### Subjects:

Subjects of the study were included 70 convenient patients, this number is all depressed patients available in the period of 6 months, which agreed to participate in the research. These subjects were enrolled in the previous inpatient unit, with the following criteria:

- Definite diagnosis of depression for at least 6 months.
- No comorbidity, intellectual disabilities, drug/ alcohol abuse, or other psychiatric mental disorders.
- Able to communicate in a coherent and relevant answer.

**Tools of data collection:** Four tools were used for data collection.

#### Tool I: Self-administer questionnaire (Demographic and clinical data).

This tool developed by the researcher consists of questions related to demographic characteristics of patients, including name, age, sex, working status, level of education, and marital status. Clinical data includes the date of admission, number of hospitalization, parental consanguinity, and the presence of family history.

#### Tool II: Beck depression inventory scale (BDI).

This scale has been developed by Beck, first published in (1961) and later revised in (1969) and copyrighted in (1979), by Polgar & Michael, (2003), in the English language, and was translated to Arabic by Abdel- Khalek, (1998) and back-translated into English to check validity and reliability and was updated by Basher, (2010). Internal consistency showed a high value for standardized alpha (Cronbach's) = 0.92. This scale contains 21 questions about how the subject has been feeling; each question has an asset of at least four possible answer choices, ranging from 0 to 3, and indicated the severity of the symptom. The questions of the BDI scale assess mood, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, self-accusation, suicidal

ideas, crying, irritability, social withdrawal, body image, work difficulties, insomnia, fatigue, appetite, weight loss, bodily preoccupation, and loss of libido. Items 1 to 13 assess psychological symptoms, while items 14 to 21 assess physical symptoms (Polgar & Michael, 2003). The score was ranged from (0-to 63) and the levels of depression were categorized as follows:

- Minimal depressive symptoms range from zero to 13.
- Mild depression ranges from 14 to 19.
- Moderate depression ranges from 20 to 28.
- Severe depression ranges from 29 to 63.

#### **Tool III: Quality of Life Scale (QoL).**

This scale was developed by Baxter et al., (1998); in the English language to assess areas of functional status considered important to persons with varying levels of wellness and disability. The response scale for the QoL ranges from 0, extremely dissatisfied, to 10, extremely satisfied. 19 items resulted in satisfaction in three factors labeled as follows:

**P** = Satisfaction with physical health and well-being (5 questions 1,2,4, 5 and 19).

**S** = Satisfaction with social health and well-being (12 questions 8,9,10,11,12,13,14,15, 16, 17,18, and 20).

**C** = Satisfaction with cognitive health and well-being (2 questions 3, and 6).

While one item (number 7) did not appear to fall into any factor and was used on its own. It has also been established as a valid and reliable instrument.

- Satisfaction/dissatisfaction for items 1-19 and happy/unhappy for item 20, can be shown to these.
- The response of the patient ranged from zero to 10 where 0= being extremely dissatisfied and 10= extremely satisfied.
- The total score of each subscale was done by counting scores assigned to each question in each factor.

#### **Tool IV: Impairment function scale (Sheehan Disability Scale):**

This scale was developed by Sheehan in the English language, (1983) to assess functional impairment in three interrelated domains: Work-life, social, and family life. The response of the patient rating from zero to 10 where zero considered no impairment and 30 was extremely impaired. Its validity and reliability have been investigated in several studies (Sheehan & Sheehan, 2008). Confirmatory factor analysis supported a unidimensional total score in the short-term studies, with internal consistency (Cronbach's  $\alpha$ ) being 0.878. The total score exhibited good construct validity, with moderate and statistically significant correlations (Yee et al., 2021). There was excellent internal consistency reliability for the Sheehan Disability Scale (SDS) total score (Cronbach's  $\alpha$  = 0.89). Test-retest reliability was acceptable for the SDS total score (intraclass correlation coefficient =

0.73). Correlations with other instruments demonstrate convergent and divergent validity. The SDS exhibited excellent internal consistency ( $\alpha$  = .89) (intraclass correlation coefficient = 0.55) (Zeljic et al., 2020).

#### **Pilot Study:**

A pilot study was conducted before starting data collection. It was carried out on 10% of the total sample, seven patients to check the clarity, applicability of the study tools and to estimate the time needed to collect data (approximately 40 minutes for each patient). This 10% of patients were included in the study because no modification was done.

#### **Procedure:**

1. A written official letter from the dean of the faculty of nursing at – Assiut University was directed to the head of the psychiatric department, at Assiut University hospital to get permission to conduct the study.
2. Before starting data collection, the aim of the study was explained to the patients, and oral consent was taken from them who were reassured about the confidentiality of the obtained information to avoid misunderstanding.
3. Each patient was interviewed to obtain the data.
4. Data collection and selection of the subjects started from the emergency and inpatient department (work field) as this is the routine of the hospital (the patient was first admitted to the emergency department then transferred into the ward) after a confident diagnosis of depression assessment was done for patients by the previous four tools.
5. The assessment was done three days a week by the researcher, during the day according to the availability of the patients.

#### **Ethical considerations:**

1. The research proposal was approved by the ethical committee in the faculty of nursing.
2. Privacy was provided during data collection.
3. Confidentiality and anonymity were assured.
4. Study subjects have the right to refuse to participate and or withdraw from the study without any rationale at any time.

#### **Statistical Analysis:**

The data were tested for normality using the Kolmogorov-Smirnov test and for homogeneity variances before further statistical analysis. Categorical variables were described by number and percent (N, %), whereas continuous variables were described by the mean and standard deviation (Mean, SD). The chi-square test was used to compare categorical variables were to compare continuous variables by t-test (independent-samples T-Test and One-way ANOVA). A two-tailed  $p < 0.05$  was considered statistically significant. All analyses were performed with the IBM SPSS 20.0 software.

**Results**

The main results yielded by this study were:

**Table (1): Distribution of demographic data of the studied patients**

Demographic characteristics	Studied sample (n=70)	
	No.	%
<b>Age</b>		
Less than 25 years	25	35.7
From 25 to 35 years	26	37.2
More than 35 years	19	27.1
Mean±SD	31.59±11.13	
<b>Sex</b>		
Male	20	28.6
Female	50	71.4
<b>Marital status</b>		
Married	29	41.4
Single	32	45.7
Divorced	4	5.7
Widowed	5	7.2
<b>Residence</b>		
Rural	36	51.4
Urban	34	48.6
<b>Educational level</b>		
Illiteracy or read and write	19	27.1
Primary education	7	10.0
Preparatory education	11	15.7
Secondary education	25	35.7
University education	8	11.5
<b>Working status</b>		
Not work	53	75.7
Work	17	24.3

**Table (2): Distribution of clinical data of studied patients**

Clinical data	Studied group (n=70)	
	No.	%
<b>Medical diseases</b>		
No	2	2.9
Yes	68	97.1
<b>Previous of admission</b>		
Never	17	24.3
Once	26	37.1
Twice	7	10.0
Three times	10	14.3
Four times	7	10.0
Five times and more	3	4.3
<b>Presence of family history</b>		
No	27	38.6
Yes	43	61.4
<b>Parental consanguinity</b>		
No	34	48.6
Yes	36	51.4



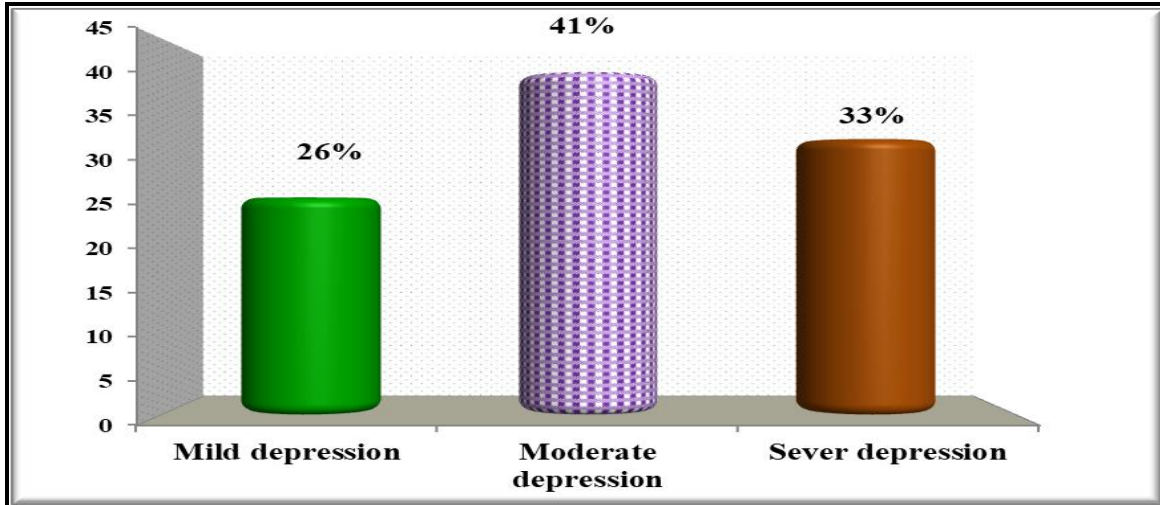


Fig (1): Distribution levels of depression for the studied patients.

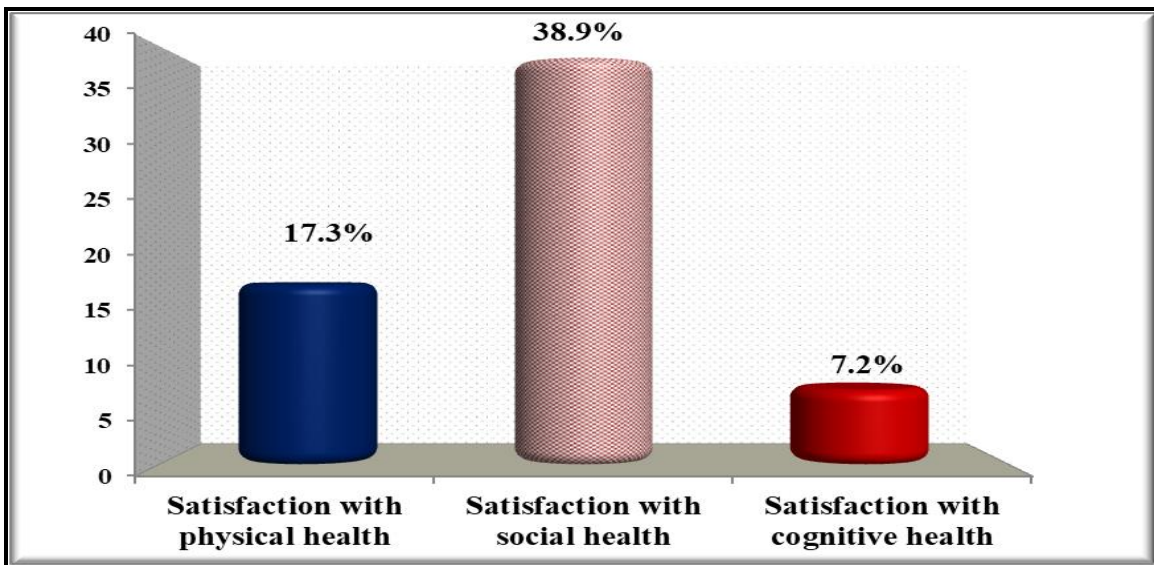


Fig (2): Distribution of quality of life for studied patients.

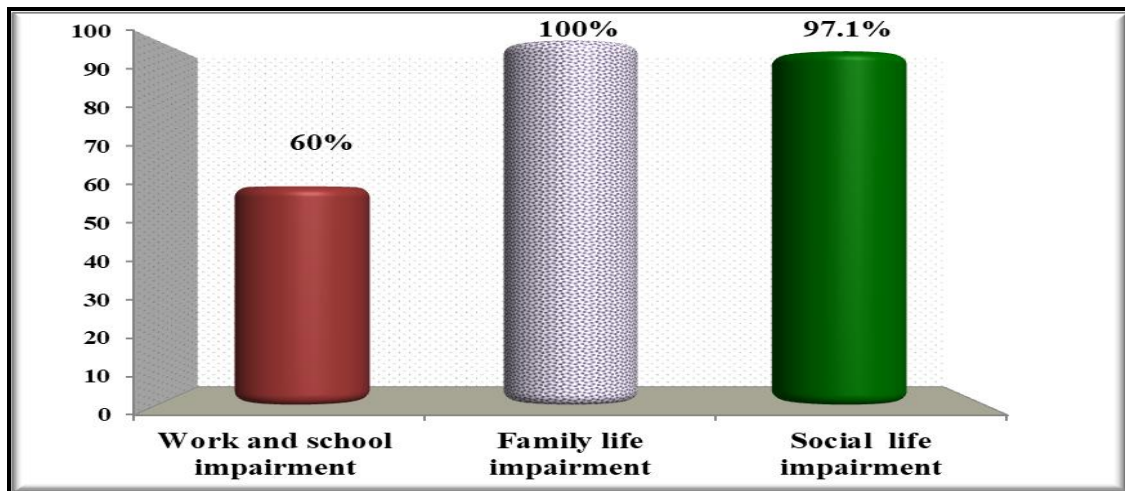


Fig (3): Distribution of functional impairment for the studied patients.

**Table (3): Distribution of the studied patients according to maximum and means score of depression level, quality of life, and functional impairment.**

Studied sample (n=70)	Maximum	Mena $\pm$ SD
Level of depression	35	19.2 $\pm$ 8.16
Quality of life	146	67.33 $\pm$ 28.07
Functional impairment	28	19.63 $\pm$ 5.6

**Table (4): Relation between demographic characteristics of studied patients and level of depression:**

Demographic characteristics	level of depression						p-value
	Mild depression		Moderate depression		Severe depression		
	N	%	N	%	N	%	
<b>Age</b>							
less than 25 years	4	22.2	11	37.9	10	43.5	0.700
25 to 35 years	8	44.5	10	34.5	8	34.8	
More than 35 years	6	33.3	8	27.6	5	21.7	
<b>Sex</b>							
Male	10	55.6	8	27.6	2	8.7	<b>0.004**</b>
Female	8	44.4	21	72.4	21	91.3	
<b>Marital status</b>							
Married	7	38.8	14	48.3	8	34.8	0.633
Single	10	55.6	12	41.4	10	43.5	
Divorced	0	0.0	2	6.9	2	8.7	
Widowed	1	5.6	1	3.4	3	13.0	
<b>Residence</b>							
Rural	4	22.2	20	69.0	12	52.2	<b>0.008**</b>
Urban	14	77.8	9	31.0	11	47.8	
<b>Educational level</b>							
Illiteracy or read & write	4	38.9	9	3.4	6	13.0	<b>0.024*</b>
Primary education	1	22.1	2	31.0	4	26.1	
Preparatory education	7	5.6	1	6.9	3	17.4	
Secondary education	3	16.7	12	41.4	10	43.5	
University education	3	16.7	5	17.2	0	0.0	
<b>Working status</b>							
Not work	14	77.8	21	72.4	18	78.3	0.863
Work	4	22.2	8	27.6	5	21.7	

(\*) Statistical significant difference

chi-square test was used

(\*\*) Highly statistical significant difference

**Table (1):** Showed the demographic characteristics of the studied group, their mean age was 31.59 $\pm$ 11.13 and the highest percentage of them were in the age group ranging from 25 to 35 years (37.2%). The highest percentage were female, single, had secondary education, not working (71.4%, 45.7%, 35.7%, and 75.7% respectively), and more than half of them were from rural areas (51.4%).

**Table (2):** Showed the distribution of clinical data of studied patients, the majority percentage of the studied group have a medical disease (97.1%) with one previous admission (37.1%). Regarding family history, the highest percentage of the studied group reported they had a family history (61.4%), and more

than half of the studied group 51.4% have parental consanguinity.

**Figure (1):** Showed the distribution of depression levels in the studied sample, there were 33% of participants had severe depression, 41% have moderate depression, and 26% of them have mild depression.

**Figure (2):** Illustrated the distribution of quality of life for the studied patients and reported that 17.3%, 38.9%, and 7.2% had satisfaction with physical, social, and cognitive health respectively.

**Figure (3):** Found that the highest impairment was in family life (100%), followed by social life (97.1%), and the last impairment was at work and school impairment (60%).

**Table (3):** Showed the distribution of the studied patients according to mean score of depression, total quality of life, and total functional impairment. It was reported that the maximum score was 35, 146, and 28 for depression level, quality of life, and functional impairment respectively. The mean and SD of depression level, quality of life, and functional impairment were  $19.2 \pm 8.16$ ,  $67.33 \pm 28.07$ , and  $19.63 \pm 5.6$  respectively.

**Table (4):** Reported that there was a positive relation between the level of depression and patient's sex, residence, and educational level p-value were 0.004, 0.008, and 0.024 respectively.

### Discussion:

Major depressive disorder (MDD) is a multifaceted condition with emotional (e.g., feelings of worthlessness or diminished interest in life), cognitive (e.g., trouble concentrating), and physical symptoms (e.g., insomnia or fatigue), which are important for psychosocial functioning (Zhang et al., 2018). According to the World Health Organization (WHO), quality of life (QOL) represents the individual's subjective evaluation of physical, mental, and social domains. Major depressive disorder (MDD), which is the leading cause of disability globally affecting nearly 350 million people worldwide (WHO, 2021), is associated with substantial deficits in QOL (Ishak et al., 2018).

The current study revealed that a majority of the studied patients had moderate and severe depression. This might be because they still suffering from a symptom of depression as they were in the acute phase of depression. Similar to a study conducted by Thokchom & Ray (2020), whose study aimed to assess the level of depression among depressed patients, found that the majority of patients have a moderate level of depression.

Regarding the quality of life (QOL) of the studied patients. The highest mean score was found in satisfaction with social health and well-being, followed by satisfaction with physical health and well-being, then cognition health and well-being. The impaired QOL often overlaps with depressive symptom severity. This dissatisfaction with the social, physical, and cognitive quality of life may be due to lack of family or social support, marital conflict, life situations, and those socio-demographic factors such as race, education, employment, and medical insurance status, as well as general medical illness were associated with poorer QOL, which is under the results of Vieta et al., (2021) whose study aimed to examine the effects of treatment on functional outcomes in patients with bipolar I disorder, reported that mood changes might lead to social, interpersonal,

and occupational impairments and contribute negatively to the quality of life.

The present study shows that functioning impairments of the studied patients, the highest impairment in family life, followed by social life, and the last impairment was at work and school impairment. This finding can be interpreted that depressed patients have impairment in role function in family or society, related to hopelessness, helplessness, worthlessness, and lack of interest or pleasure in daily activities. Our study is similar to, Baune & Christensen, (2019), who revealed that functional impairment observed in patients with mood disorders depressive episodes extends to work, social, and family life and has important consequences for their health-related quality of life. Also., Bosaipo et al (2017), whose study aimed to systematically review and critically analyze the cognitive function in patients with atypical depression, reported that depressive episodes are the most common and the most persistent affective states in BD and are the main cause of functional disability.

The present study presented the maximum score for the studied sample for depression level, quality of life, and functional impairment. depressed patients have a psychosocial functioning impairment, in the quality-of-life score of the studied group, and functional impairment score. A possible explanation for that is due to lack of family or social support, stressful life events for depressed patients and the depressive episode is affecting badly on a patient's motivation, and concentration, and has severe impacts on social functioning. Similarly, Bosaipo et al (2017), reported that depressed patients are the most common effective with quality of life and functioning impairment. Also., Tonga et al., (2021), whose study aimed to evaluate the feasibility and effectiveness of a psychosocial intervention to manage depressive symptoms, found that there is highly impairment in the studied and control groups in their quality of life, and, Greer et al., (2016), whose study aimed to examine the extent to which exercise augmentation improved several domains of psychosocial functioning and quality of life (QoL) among depressed participants, proved that major depressive disorder (MDD) often adversely affects psychosocial functioning and quality of life (QoL). On the other hand, Stefan et al., (2017), whose study aimed to examine changes in QOL in adults with a major depressive disorder, found that there were no statistically significant differences in QOL and depressive symptoms.

The current study showed that there was a relation between the demographic characteristics of the studied subject and the level of depression, regarding patient's sex, residence, and educational level, with a

highly statistically significant difference. Our study confirms the theory of the prevalence of major depression is affected by demographic characteristics, similar to, **Hubbard et al., (2021)** established a significant positive relationship between depression and sociodemographic factors. In **Awan, (2019)**, who studied the relationship between the demographic variables and the prevalence of depression among university students, found that depression levels were affected by different demographic characteristics. Also., **Weintraub et al., (2022)**, who studied depression among youth, found that the participants were mostly women.

Contrary to our findings, **Islam & Adnan, (2017)**, whose study aimed to assess the socio-demographic characteristics of depressive disorders patients and to discover their role in the severity of disease, found that gender and education have a significant negative relationship with depression severity. Also., **Başkaya & Demir (2022)**, whose study aimed to measure the effect of training given to patients with bipolar disorder on social functioning, and quality of life, found that there was no significant difference between the demographic characteristics and pre-test scale scores of the patients in the studied and control groups ( $p > 0.05$ ).

### Conclusions:

Based on the results of the present study, it can be concluded that:

- Most depressed patients have the highest impairment in family life, followed by social life, and the last impairment was at work and school impairment.
- Depressed patients have a high-level impairment in their quality of life and dissatisfaction with physical, social, and cognitive health and well-being.
- There was a positive relationship between the level of depression and the patient's sex, residence, and educational level

### Recommendations:

- Based on the findings of the present study, the following recommendations are suggested:
- Psychosocial intervention should be delivered to hospitalized depressed patients as an important method for improving their social functioning, and quality of life.
- Psychiatric nurses need to provide psychosocial intervention to patients to reduce the occurrence of psychological symptoms, or the frequency of mood episodes, and to reduce the length of stay in the hospital.

### Limitation of the study:

- The low admission rate of depressed patients during the period of data collection.

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