Association between Eating Disorders with Depression: A Descriptive Study

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Abstract

Background: Depression is the most prevalent mental health problem in the world, and it is considered more prevailing in women than in men. It is a recognized mental health problem that adversely impact upon the individual's ability to function and sufferer's daily life. Depression is common in people with eating disorders. It has a higher rate in patients with eating disorders than those without eating disorders.

Method: This is a descriptive study which included a sample of 50 patients diagnosed with major depressive disorder and having eating disorder behaviors visiting Ali Kamal consultation center for treatment and follow up. A questionnaire developed including Beck Depression Inventory and Garner-Eating Disorder Inventory. Data collected and analyzed using SPSS version 22.

Results: The result of this study indicated that there is statistical of interpersonal distrust, interoceptive awareness, and ineffectiveness of Garner-EDI-2 subscales with depression.

Keywords: *A descriptive study, eating disorders, depression.*

Introduction

Major depressive disorder is one of the public health problems[1], diagnosed as mental disorder (APA, 2013), with prevalence 3.6% of global population (WHO, 2012). The associations between depression and somatic and biological health have been recognized earlier [1], only recently there has been attention for the link between feeding and eating related behaviors and major depressive disorder[2]. Depressed patients have been found to present eating disorder[3], disturbances in dietary patterns[4] and in eating styles[5], Eating disorders are somatic and mental health problems including anorexia nervosa, bulimia nervosa and binge eating, and subclinical forms are more frequent across all age groups, are classified in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (APA, 2013). Major depression in eating disordered patients varies from 30% to 70% in anorexia nervosa and about 40% in bulimia nervosa[6]. Anorexia nervosa is characterized by persistent behaviors that interfere with weight gain, disturbance in the way in which one's body weight or shape is experienced and lack of recognition of the seriousness of the current low body weight. Bulimia nervosa is characterized repetitive episodes of binge eating, followed by compensatory behaviors such as vomiting in an attempt to undo the excessive intake of food, as well as a disturbance in the perception of shape and weight, like in anorexia nervosa. In binge-eating disorder, patients do not generally have regular compensatory behaviors to combat excessive consumption of food and often present with overweight or obesity[7].

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Methodology

Study Design: This is descriptive cross- sectional design that was conducted to assess the socio-economical and clinical background of the depressive patient. This study was carried out at the out-patient psychiatric clinic in Ali Kamal medical consultation center which is located in Sulaimani city from January 10th 2018 till October 1st 2019. The psychiatric clinic provides mental health treatment services to the community clients with psychiatric disorders. Most of the clients attending the clinic are already diagnosed previously by consultant psychiatrist.

Study Sample: A non-probability, purposive sample size of (50) patients with major depressive disorder were recruited from consecutive attendances to psychiatric clinic in Ali Kamal medical consultation center which were referred by consultant psychiatrist to the researcher of this study for data collection at the same setting.

Patients being older than 18 years old and above of both genders already diagnosed with major depressive disorder, and had drug adherence have been included in this study. Any patient was diagnosed with other mental disorders such as drug abuse, and pregnant women or puerperium was excluded from this study.

The Study Instrument:

A questionnaire was developed by the researcher which includes four parts:

The first, socio-demographic characteristics which include patient's age, gender, marital status, and level of education, occupation, residential area, income and anthropometric measurement {height, weight and body mass index (BMI)}.The second part is psychiatric history characteristics which include the duration of depression, number of hospitalizations, suicidal attempts and family history of mental illness.The third part is Beck Depression Inventory (BDI), which include minimal depression, mild depression, moderate depression and severe depression. It is one of the most widely used psychometric tests used for measuring the severity level of depression. It is a (21) multiple choice scale statements that evaluates key symptoms of depression. The fourth part is Garner Eating Disorder Inventory (G-EDI). This inventory used to assess eating behaviors. It comprises of 64 statements subdivided into eight subscales including behaviors concerning eating which are drive for thinness, bulimia, interpersonal distrust, perfectionism, bulimia, maturity fears, interoceptive awareness, body dissatisfaction and ineffectiveness.

Measurement and Scoring: Beck depression inventory. This is (21) multiple choice scale statements, most widely used as psychometric test for measuring the severity levels of depression which includes minimal depression (17-20), mild depression (21-30), moderate depression (31-40), and severe depression (Over 40). Each item of Beck depression inventory is ranked in terms of severity of the symptoms, and scored four responses. Choices ranging from absence of a symptom (0) to an intense level (3).

Garner eating disorder inventory scale (G-EDI): A list of (64) items related to (8) subscales rated on six-point scale ranging from never to always. Items are scored as (never = 0, very rarely = 1, rarely = 2, occasionally = 3, frequently = 4, always = 5). For each sub-scale, item's score was added, and mean was calculated to find out the severity of the subscale. The higher the mean of score refers to the higher severity of eating disorder behaviors in each subscale.

Validity and Reliability: The face validity of the present study questionnaire was established through a panel of (13) experts of different specialists related to the field of the present study.

The internal consistency of the instrument was determined through the computation of Cronbach's Alpha test. The Cronbach Alpha test of the reliability of the questionnaire was (0.842).

Data Management: Data of the present study was analyzed through using application of statistical package for social sciences (SPSS) version (22). Frequency and percentage was used to show the sociodemographic attributes، psychiatric history and severity level of depression. Spearman's correlation coefficient was used to find out the association between depression and eating disorder behaviors and depression. The P-value of ≤ 0.05 was considered statistically significant.

Results

Table (1) shows that 50% of the sample are aged (30-39) years old with the mean 34.74 (±8.32). The age range was 19 to 55 years. More than half (60%) of the sample were females. Regarding educational level, the table reveals that the highest percentage of the sample (40%) falls in read and writes level, followed by primary level

(32%). Most of the subjects were unemployed (64.0%), from urban area (82%), and insufficient monthly income were (56%), and (58%) falls in the normal range body mass index.

Table (2) appears that the duration of the current illness was less than five years in 36% of the total sample, 5-9 years in 26%, and ≥ 10 years in 38% of the sample. Around two thirds (64%) of the sample had no history of hospitalization and 26% had history of 1-2 admissions. Less than half (44%) of participant had history of suicidal attempt and 34%had family history of psychiatric illnesses.

Table (3) indicates that (40%) of the study sample has moderate level of depression, followed by (36%) mild depression, and (18%) severe depression.

Table 4 reveals the correlation of eating disorder behaviors among depressed patients. The result indicates that there is a significant correlation of some eating disorder behaviors with depression. This finding demonstrates that there is a significant relation of interpersonal distrust, interoceptive awareness and ineffectiveness associated with depression. Statistical values have shown that (r= 0.39, p=0.005) (r= 0.333, p=.018) and (r= 0.657, p=0.000) respectively.

Table 1: Psychiatric history characteristics of the study sample.

Medical Background Characteristics	No.	%
Duration of current illness		
< 5	18	36.0
5-9	13	26.0
≥ 10	19	38.0
No. of hospitalization		
None	32	64.0
1-2	13	26.0
≥ 3	5	10.0
Suicidal attempt		
Yes	22	44.0
No	28	56.0
Family history of psychiatric illnesses		
Yes	17	34.0
No	33	66.0
Total	50	100.0

Table 2: Severity of depression of the study groups

Severity of Depression	No.	(%)
Minimal clinical depression	3	(6.0)
Mild depression	18	(36.0)
Moderate depression	20	(40.0)
Severe depression	9	(18.0)
Total	**50**	**(100.0)**

Table 3: Spearman's correlation of eating disorder behaviors with depression.

Eating Disorder Behaviors	Spearman's Correlation Coefficient	P-value
Drive for thinness	0.256	0.072
Interpersonal distrust	0.394**	0.005
Perfectionism	-0.023	0.874
Bulimia	-0.207	0.150
Maturity fears	0.245	0.087
Interoceptive awareness	0.333*	0.018
Body dissatisfaction	0.095	0.510
Ineffectiveness	0.657**	0.000

Discussion

In this study, results show that patients mean age was 34.7 (±8.32) years, more than half were married, low educated level and most of them unemployed. These findings are similar to the result of the study done by Yousafzai and siddiqi (2007) in Pakistan, who found that patients with major depressive disorder were in the middle of thirty years old, mostly married with low educational status. The findings of this study also confirmed by Fortinash and Warret (2012) who noted that, age of onset for major depressive disorder was between 25 to 44 years.

In regarding to gender, this study indicated that most of the cases 60% were female. Similar finding was found (2) in Netherlands. While this study is controversial with Ahmad et al (2016) in India and YousafZai and Siddiqi (2007) in Pakistan, who show that men are more predominance than women in major depressive disorder. However, some literatures noted that the lifetime prevalence of major depression more common in women than men. In this study most patients were insufficient with monthly income, and this finding was parallel with results of study by Ahmad (2017) in Sulaimani city. Previous studies widely acknowledged that the stressful social factors such as insufficiently economic status and unemployed contributed significantly to vulnerability

for depression.The mean BMI was 24.38 kg/(± 5.21). The BMI mean were almost similar to the finding in Paans et al, (2018) study in Netherlands. Some studies showed that depression may be related to disturbances in neurobiological appetite-related processes, and some of depressive patient would loss body weight (Boyd, 2008), while in this study the finding regarding to BMI was within normal.

The findings show that the higher percentage of duration of illness, 38%, was ≥10 year's history of depression and two thirds of the patients had no history of hospitalization. Similar finding was confirmed by Darwesh (2017) study in Sulaimani city. Currently, the psychiatric treatment is based on outpatient or community-based treatments, and the institutionalized patients are stay short in hospital. Many chronic patients will not require hospitalization unless for high risk patients with suicidal behaviors or sever psychotic symptoms.

The current study showed that suicidal attempts occurred among 44% among the subjects. This finding goes in the line of Kaviani et al (2011) study in Iran and Ribeiroet al (2018) study in USA. The American Psychiatric Association (2013) reported that the possibility of suicidal behavior exists at all times during depressive episodes. Ribeiro et al (2018) and Karasu et al (2009) confirmed the findings of this study and noted that the patients with major depressive disorder are at risk of suicidal behaviors.

This study demonstrated that 34% of patients had history of family mental illnesses. Similarly, Karasu et al (2009) reveal on that biological relationship have increased 1.5 to 3 times more risk of depression than general population. Moreover, the presence of family history of recurrent major depressive disorder increases the chances that patient's own illness will be recurrent.

In the term of symptomatic severity of depression, the results showed 40% of the total sample had moderate level of depression and 18% had severe level through the Beck Depression Inventory at baseline. The results of this study are similar to the findings of Salih (2016) study in Sulaimani and Paans et al (2018) study; they found that the severity of depressive symptoms was moderate level mostly among chronic disorder. In mild depression, usually causes symptoms that are detectable and impact upon daily activities; moderate depression can cause real difficulties; people with severe depression may also suffer from delusion or hallucination, suicide is a distinct (APA, 2013). These findings are similar to the results of Calvert et al, (2018) study in Australia, Paans et al (2018) study in Netherland and Fairburn et al (2009) study in UK, who described the individuals with eating disorders have high levels of self-criticism, shame, dissociation, perfectionism and rigid thinking pattern.

The findings of this study confirmed by results of Penninx et al (2013) study who reported that depressed persons have been found to present disturbances in food-related behaviors including interpersonal distrust, interoceptive awareness and ineffectiveness.

A study depicted that both eating disorder and depression are interdependent on each other (3). The results indicate that there is a significant correlation of some eating disorder behaviors with the severity level of the depression. These findings demonstrate that there is a significant relationship of interpersonal distrust, interoceptive awareness and ineffectiveness with depression ($P \leq 0.05$). Another study has revealed that depression were associated with more emotional and uncontrolled eating and with less cognitive restrained eating (2).

Conclusion

The finding of this study indicates that the eating disorder behaviors which are interpersonal distrust, interoceptive awareness, and ineffectiveness are highly correlated with depression.

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Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the College of Nursing and all experiments were carried out in accordance with approved guidelines.

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