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# Assessment of eating disorder among undergraduate in Al Qadisiyah University Student

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**Abstract**--Background: Eating disorders are “a behavioral cognition characterized by severe and persistent disturbance in eating behaviors and associated distressing thoughts and emotions and it's are the most severe psychiatric disorders where Undergraduate students are highest among the groups who suffer from high levels of stress and have the most risk of fatigue and mental health problems, including eating disorders. Due to societal stigma and lack of awareness, it is plausible that disordered eating behaviors among students may go unrecognized and under-reported. The current study aimed to assessment the eating disorders among Undergraduate in Al Qadisiyah University Student. A Descriptive correlational design ,conduct to assess the eating disorders among undergraduate students in AL-Qadisiyh University for the period from 20<sup>th</sup> October, 2021 to May<sup>10<sup>th</sup></sup>, 2022. The sample selected was 380 undergraduate students from different colleges from University of AL qadisiyah for the study. A probability sampling technique (cluster sample) used through dividing AL qadisiyah University to three cluster based on homogeneous properties (Health faculties, Scientific faculties & Humanistic faculties). Results A total of 380 participants completed the Eat-26 questionnaire and the our study show that found to be percentage of (21.84) at high risk of developing eating disorders. It also shows that there is significant relationship between risk of eating disorder and some of demographic characteristics (gender, specialty, college). the study concluded that the current study showed College students are at increased risk of developing eating behavior disorders, it found that less than a quarter of the students were at risk of developing an eating disorder. Our study recommended that conducting weekly or bi-monthly courses and workshops with students, as this allows them to share their concerns about an eating

disorder. Focus on conducting research and studies that may focus on identifying negative feelings associated with coping with stress and eating disorder. Focus on risk factors associated with eating disorders, such as social, psychological, and environmental risk factors such as gender, economic status.

**Keywords**---Eating Disorder, university student, mental health.

## Introduction

Health, body image and fitness have become a necessary requirement in today's health conscious society but following a severe diet may be dangerous especially if it develops into an eating disorder, which is one of the most common type of mental disorder described in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders <sup>(1)</sup>.

Eating disorders categorized are serious illnesses that incline to be chronic and involve deteriorations that are associated with a great degree of comorbidity with other psychiatric illnesses, and approximately 56% of patients with bulimia nervosa have at least one co-morbid diagnosis and anorexia nervosa about 94.5% , described in ( DSM-5 ) <sup>(2)</sup>

This disorders may ascend from a grouping of behavioral, psychological factors, biological, and sociocultural factors emotional paradoxically, individuals who develop eating disorders often start dieting, believing as a result that losing weight will improve self-esteem <sup>( 3 ) ( 4 )</sup>. Studies of eating disorders in Arab countries focus mostly on female college students, and some experts have suggested that globalization has brought the ideal of beauty and the pursuit of thinness, as well as the beauty value and social norms of Western cultures over non-Western cultures <sup>(5)</sup>.

The body image of university students is affected by lifestyle, social media and social pressure. to strengthen awareness about the impact of these variables on physical dissatisfaction, which can lead to eating disorders, educational and supportive programs should be undertaken <sup>(6)</sup>. In previous years, little was known about how the college transition affected those with eating disorders and how participants could best support this process. The transition to university is likely to involve many unique challenges, as students begin to explore increasing independence and independence and have many competing requirement university life <sup>(7)</sup>.

The eating behavior is accompanied by a specific type of thinking biases that causes a young person to overlook, ignore, and underestimate their health needs; Ironically, the more sick they are, the more likely they are to ignore their health <sup>(8)</sup>. In recent years, psychiatry has given greater and deeper attention to the broadening of eating disorders and the broadening of the definition to include a wide range of problems, including binge disorder, atypical anorexia nervosa, food avoidance/restriction disorder <sup>(9)</sup>.

People who have eating disorders (EDs) tend to engage in behaviors that are usually seen as normal in society, such as eating a restricted diet. However, when people are diagnosed with an eating disorder, they may often feel stigmatized, which is likely to act as a barrier to recovery <sup>(10)</sup>.

Individuals with un healthy eating behavior and their caregivers have reported concern about the lack of face-to-face accountability through weight operations, as well as concern that social isolation may lead to long periods of time to engage in excessive exercise. Technologies such as mobile applications (“apps”), self-help resources, and web-based information can be important sources of support during COVID-19 <sup>(11)</sup> <sup>(12)</sup>.

## **Subjects and Methods**

### **Research design**

A Descriptive correlational design conduct to assess eating disorders among undergraduate student in AL-Qadisiyh university for the period from November 1<sup>st</sup> , 2021 May 10<sup>th</sup> 2022.

### **Setting**

This study was conducted in Al-Diwaniya province for undergraduate student in AL-Qadisiyah University

### **Study sampling**

The sample selected was 380 undergraduate students from different colleges from University of AL qadisiyah for the study. A probability sampling technique (cluster sample) used through dividing AL qadisiyah University to three cluster based on homogeneous properties (Health faculties, Scientific faculties & Humanistic faculties).

### **Instrument Construction**

To assess the Eating disorder among undergraduate in AL qadisiyah university. A questionnaire was used that includes three parts.

### **The first part: Self-Administered Questionnaire Sheet Related to Demographic Characteristic of the student**

Containing demographic information for each student the researcher-developed demographic questions ,these questions were used to describe the characteristics of the sample that responds to the questionnaire, these questions included (age, gender ,Residence ,marital status, family income , family number ,specialty ,college, stage , BMI )and measuring body mass index by weight and height tape with scale of EAT-26 to identify each student suffering from risk eating disorder , each of them is a highly reliable and valid scale and used to assess the risk of eating disorders.

## **The two Part: Administered Questionnaire Sheet related to assess the eating disorders**

### **A. The Eating Attitudes Test–26 (EAT-26)**

Is a 26-item self-administered test that evaluates attitudes, feelings and preoccupations in relation to food, weight, and exercise. Each item can be rated as 1 of the 3 responses ranging from 'never' to some time to 'always'

### **B. Behavioral scale**

The EAT-26 has three criteria for determining if the participant needs to seek further evaluation of the risk of having eating disorders, these criteria include the EAT-26 scores, low body weight compared to age-matched norms, and behavioral questions indicative of possible ED .in the current study, five behavioral questions were added to the EAT-26 to determine the presence of extreme weight-control behaviors as well as providing an estimate of their frequency. These questions assess self-reported binge eating, self-induced vomiting, use of laxatives, over-exercising, and loss of more than 8 kg over the preceding 6 months<sup>(13)</sup> . According to the guideline, individuals who endorsed any of these items have high potential of having risk ED and require further assessment by trained mental health specialist<sup>(14)</sup>

### **Data collection**

The data was collected through the utilization of the developed questionnaire and by means of self-administrated questionnaire with the subjects' who were included in the present study, before data collection the investigator met the students at the classrooms to clarify the study subjects' and get their verbal agreement to participate in the study with right refuse or withdrawal in participation and confidential the information , then a copy of the questionnaire was distributed for each sample to completely. A total of 380 questionnaires for statistical analysis were collected from undergraduate university students, this process was applied at each college that was included in the present study , the data collection process has been performed from 29 December 2021 until 15 Feb 2022.

### **Statistical Analysis**

It has been confirmed that there is no missing data and then converts the data into calculated data (conversion into numbers) and inserts them into the Microsoft office Excel 2010 program in order to arrange them and transfer them to the "Statistical Package of Social Sciences program (SPSS)" version 25 for statistical analysis and then to Microsoft Office Word 2010 to move the tables to the final results and presented for study.

### **Result**

The studied samples included 380 student from al qadesiyah university. The statistical distribution of study sample by their socio-demographic data, it

explains that the highest percentage of the students' subgroup are: students with ages between (18-22) years old (72.6 %), female students (55.3 %) ; those living in urban areas (75 %), those who are single (81.1 %), those with roughly sufficient monthly income (41.6 %) , those living with (2-8) family member (73.9) , those who are studying in pure science specialty was (48.2 %), those who are studying in science college (18.2) ,Regarding stage of study, the students are approximately equally distributed (25%, 25%, 24.7%, 25.3% for first, second, third and fourth respectively) ,those with normal BMI (54.5%). This (table 1).

Regarding the overall assessment the study participants of eating disorder among undergraduate student the descriptive statistics of student's subgroups according to their EAT-26 scale assessment. This table reveals that the majority of students have (no risk ) eating attitudes (78,16 %;) while (21.84 %) of them have risk eating disorder. (This table 2). In our study about ANOVA table for the differences in EAT-26 total score of students and their demographic data. It shows that there is a significant relationship between students' EAT-26 total score and the following demographic data: gender, specialty and college.

Regarding gender male student had eating disorder higher than female (29.57 and 26.99 respectively); the humanitarian colleges exhibited the highest risk eating disorders score (MS=30.48) comparing the other specialties; college of art recorded the highest risk eating disorders score (MS=33.63) in comparison to the other colleges included in the study.( table 3).

Table (1) Study Sample Demographic Data and clinical data

Items	Sub-groups	Study group (Total = 380)	
		Frequency	Percentage
Age / Years	18-22	276	72.6
	23-30	99	26.1
	≥ 31	5	1.3
Gender	Male	170	44.7
	Female	210	55.3
Residence	Urban	285	75.0
	Rural	95	25.0
Marital Status	Single	308	81.1
	Married	72	18.9
Monthly Income	Sufficient	154	40.5
	Roughly Sufficient	158	41.6
	Insufficient	68	17.9
Family Member	2-8	281	73.9
	9-15	96	25.3
	16-22	3	0.8
Specialty	Medical	61	16.1
	Pure Science	183	48.2
	Humanitarian	136	35.8
College	Dentistry	40	10.5
	Nursing	21	5.5
	Art	32	8.4

		Law	68	17.9
		Computer Science	49	12.9
		Science	69	18.2
		Education for girls	36	9.5
		Engineering	65	17.1
Stage		First	95	25.0
		Second	95	25.0
		Third	94	24.7
		Fourth	96	25.3
BMI		Underweight	43	11.3
		Normal	207	54.5
		Overweight	120	31.6
		Obese	10	2.6

Table (2): Descriptive statistics of student's subgroups according to their EAT-26 scale assessment

Descriptive Statistics		Student Subgroups	
		Non risk for Eating Disorder	Risk for Eating Disorder
EAT-26	Frequency	297	83
	Percentage	78.16	21.84

Table (3): Table (3) ANOVA table for the differences in EAT-26 total score of students and their demographic data

Items	Sub-groups	Mean	SD	F Test	P value Sig.
Age / Years	18-22	27.97	9.25	0.18	0.830
	23-30	28.60	8.65		
	≥ 31	27.00	----		
Gender	Male	29.57	9.29	7.76	0.006
	Female	26.99	8.74		
Residence	Urban	28.19	9.34	0.07	0.932
	Rural	28.03	8.30		
Marital Status	Single	27.81	9.05	2.24	0.134
	Married	29.58	9.10		
Monthly Income	Sufficient	28.18	9.58	2.11	0.122
	Roughly Sufficient	27.30	8.34		
	Insufficient	30.00	9.36		
Family Member	2-8	27.97	9.25	0.30	.741
	9-15	28.60	8.65		
	16-22	27.00	----		
Specialty	Medical	28.00	7.12	7.96	0.000
	Pure Science	26.45	8.50		
	Humanitarian	30.48	10.09		
Stage	First	27.66	8.90	0.37	0.772

	Second	28.86	8.74		
	Third	27.70	9.47		
	Fourth	28.33	9.25		
College	Dentistry	28.40	6.16	5.21	0.000
	Nursing	27.24	8.77		
	Art	33.63	8.68		
	Law	29.26	10.88		
	Computer Science	22.47	7.30		
	Science	27.61	8.09		
	Education for girls	29.97	9.33		
	Engineering	28.23	8.90		
BMI	Underweight	26.07	9.27	1.92	0.13
	Normal	28.16	9.09		
	Overweight	28.41	8.59		
	Obese	33.40	11.99		

## Discussion

Eating disorders (ED) are serious psychiatric disorders characterized by unhealthy eating habits. the incidence of eating disorders have increased over the last 30 years. According to (Table 1) the results show statistical distribution of study sample by their socio-demographic data, it explains that the highest percentage of the students' subgroup are (Age ,Gender, Residence, Marital status , Monthly income, Family number , Specialty, college , stage of college, BMI ).

Throughout the course of the data analysis of the current research, the results appear the highest percentage of the age students' subgroup are : students with ages between (18-22) years old with (72.6 %) the reason is that most college students often ranged (18-22) and this difference was due to the study community. this result agree with previous study that performed by <sup>(15)</sup>. where the ages of the students ranged between 18-22 years and the percentage for them was (79.3%).

Regarding to the gender the results revealed that female students percentage was (55.3%) while male was (44.7%) because most of the sample were women and always has view and share to know more details about the disorder, which is more in women , this study similar to the previous study that performance by the <sup>(16)</sup>. where percentage female was (54.8%) and male percentage was (45.2%). With regard to residence, the current study found that the percentage of students who live in urban areas was about (75%). the reason for this may be that the majority of students are from urban areas, which Represent the vast majority of Iraqi society. this result is consistent with the previous study conducted <sup>(17)</sup>. with percentage was (86.0%).

Regarding to students who are single was the result (81.1 %), This due to the fact that the sample size is mostly unmarried and can explained too that most students who are busy studying or because of the high costs of marriage in Arab societies, including Iraq. this result agree with <sup>(18)</sup>. where the percentage was (78.7%). In this study, show the students with roughly sufficient monthly income

(41.6 % ; %) this may be explained by the nature of living for the family, which may depend on specific source of livelihood, , our results were interpreted too by reflecting the nature of the study sample, which provides evidence that it is from the middle class in addition to the economic situation in Iraq. this result is similar to the previous study that supported by <sup>(19)</sup>. where the result was (49.3%). Those living with (2-8) family member was (73.9 %),%,Because of the economic situation that requires living inside the house for several people by <sup>(20)</sup> <sup>(21)</sup>. Regarding specialization, pure sciences were more than the other disciplines with percentage (48.2%) it is possible to explain these results that pure sciences contain the largest number of students compared to other colleges in the study community. that similar to the study conducted by <sup>(22)</sup> . where the result was (44.8%) .

With regard to the college, science was the most among the colleges included in the study where percentage was (18.2 %), because it includes many scientific departments and the number of its students is the largest, according to the statistics of the University of Al-Qadisiyah. this outcome agree with study <sup>(23)</sup>. Regarding stage of study, the students are approximately equally distributed (25%, 25%, 24.7%, 25.3%) for first, second, third and fourth, respectively). This can be explained in two ways, the first is that the method of sample collection has affected these results, or it may be due to the college's work strategy in accepting students equally as a statistic approaching annually, this result correspond with the previous study by <sup>(24)</sup>

In this current study the student with normal BMI were (54/6%) May explain that on considering that this category is more to work and participate in sports clubs than others, Trying to reach the ideal weight and body to maintain an ideal weight and a healthy body. The result similar to study conducted by <sup>(25)</sup>. where the result was (62.0%).

In Table (2) the results of the study showed that (78.16) of the students have no risk eating behavior, while (21.84%) of them suffer from risk eating disorder, this may be due to the fact that during puberty, both boys and girls become more sensitive than older adults to criticism of their weight and body shape or perhaps due to parental and peer teasing. This may lead to body resentment which in turn leads to unhealthy eating behavior and this result is supported by the study <sup>(26)</sup> <sup>(27)</sup> the result was (31.8% ). Table (3) It shows that there is a significant relationship between students' EAT-26 total score and the following demographic data: (gender, specialty and college).

Relation to Gender male had eating disorders level is significantly higher than female, These results can be explained by the fact that male with eating disorders usually strive for the whole world to be perfect, and its standards are always unrealistic, rigid, inflexible, and they apply it all to eating habits, physical appearance, body weight and body image. Thinking about the perfect body, and because a man is affected by social media that calls for body agility and the pursuit of perfection and considers it a feature of a man's beauty, it may be due to a lack of self-confidence. this result disagree with <sup>(28)</sup>.

In relation to specialty; the humanitarian colleges exhibited the highest risk eating comparing the other specialties ,this result disagree with <sup>(29)</sup> Regarding to college, Art college was the highest risk eating disorders among the selected colleges included in the study, .this result may be interrupted art is usually associated with form by virtue of the nature of work in some departments of the Faculty of Arts, so some students seek to follow a strict diet to appear in front of the public.<sup>(30)</sup> this agree with <sup>(31)</sup>.

## Conclusions

According to the present study findings, the researcher can mention the following conclusions:

The results showed that the College students are at increased risk of developing eating behavior disorders, it found that less than a quarter of the students were at risk of developing an eating disorder.

## Recommendations

Conducting weekly or bi-monthly courses and workshops with students, as this allows them to share their concerns about an eating disorder. Focus on conducting research and studies that focus on identifying negative feelings associated with coping with stress and eating disorder. Focus on risk factors associated with eating disorders, such as social, psychological, and environmental risk factors such as gender, economic status.

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