

## Anxiety and Depression among Couples Attending The Infertility Clinic Center in AL-Hilla

### القلق والاكتئاب بين الأزواج الذين يحضرون عيادة العقم في الحلة

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#### الخلاصة

**الهدف :-** دراسة وصفية أجريت لأجل تقييم مستوى القلق والاكتئاب للأزواج الذين يعانون من العقم في مدينة الحلة، محافظة بابل - العراق.  
**المنهجية :-** شملت العينة الغرضية ( غير احتمالية) ٥٠ زوج عقيم ( ٥٠ امرأة عقيمة و ٥٠ رجل عقيم). تم اختيارهم من مركز العقم في محافظة بابل. تم جمع العينة في ١٧ شباط ٢٠١٥ ولغاية ٢٢ آذار ٢٠١٥. جُمعت البيانات من خلال الاستبانة ومن خلال عملية المقابلة ومراجعة سجلات الأزواج. تم تحليل البيانات من خلال التحليل الاحصائي الوصفي (( التكرار ، النسبة المئوية ، وكذلك التحليل الاحصائي الاستنتاجي ( معامل الثقة، انحراف قياسي، اختبار مربع كاي)).

**النتائج :-** أشارت نتائج الدراسة الى أن هناك فروق ذات دلالة إحصائية بين الذكور والإناث مع مستوى القلق.

**الاستنتاج:** استنتجت الدراسة إلى أن هناك ارتباط معنوي قوي بين القلق والاكتئاب.

**التوصيات:-** توصي الدراسة بتزويد هذه المراكز بمرضى مستشار مختص لمساعدة الأزواج الذين يعانون من العقم خلال حضور المركز ومتابعتهم من قبل الزيارات المنزلية ليتم العثور على حل لمشاكلهم النفسية بالإضافة الى رفع الوعي لدى أطباء أمراض النساء إزاء انتشار الاضطراب النفسي لدى الأزواج الذين يعانون من العقم والأطباء النفسيين من أجل الإدارة السليمة.

#### Abstract

**Objective:** -A descriptive study utilizing a study approach was carried out to assess the level of anxiety and depression for infertile couples in AL-Hilla city, Babylon Governorate- Iraq.

**Methodology:** -A purposive (non-probability) sample of (50) infertile couple ((50) infertile wives and the other (50) infertile husbands) was selected from the center of infertility in Babylon Governorate. The data had been carried out from February 17<sup>th</sup> 2015 to March 22<sup>nd</sup> 2015. Data were collected through the use of the questionnaire, the application of the interview technique, and review of the infertile couples' records. Data were analyzed through application of descriptive statistics analysis which include; frequency, percentage, mean and the inferential data analysis approach (Pearson correlation coefficient, standard deviation, Chi-square and t-test).

**Results:-**The results of the study indicated that a significant differences between males and females with level of anxiety.

**Conclusion:** The study concluded that is a high significant relationship between anxiety and depression.

**Recommendation:-** The study recommended that a competent counselor nurse to assist the infertile couples during attending the center and follow them by home visiting to found any solution for their psychosocial problems. Raising awareness among gynecologists about the prevalence of psychiatric and personality disorder among infertile couples and their psychiatrists for proper management.

**Keywords:** Anxiety; Depression; couples; infertility clinic.

## INTRODUCTION

Infertility is one of great problems of society in the world because the child is the best fortune for human beings. It is a medical problem. It places a huge psychological burden on infertile couples. Approximately one in ten couples experience infertility; its rate differs from country to country<sup>(1)</sup>. Kids are the beauty of life where we can see ourselves in different way through them. Humans want to have offspring as a deep desire to continue their descent and leave a worthy memory of themselves<sup>(2)</sup>.

Noorbala and his colleagues have reported that 50% of couples have considered infertility as the most disappointing experience in their lives<sup>(3)</sup>. Females who suffer from infertility will face complicated issues which span biological, social, psychological and even ethical domains<sup>(4)</sup>. Man can be affected by it in different ways: when receiving a diagnosis of

his infertility, when being the partner of a wife who is infertile or being part of a couple with unexplained infertility<sup>(5)</sup>. It has psychological, social, and reproductive consequences, including depression, anxiety, and loss of self-esteem, lack of confidence, relationship difficulties and sexual dissatisfaction<sup>(6)</sup>.

### **OBJECTIVES OF THE STUDY:**

1. To assess the level of the anxiety and depression for infertile couples
2. To find out the relationship between Anxiety and Depression and socio-demographical data (age, gender, educational level, occupation, and years of marriage.) of infertile couples.

### **METHODOLOGY**

Descriptive correlation study used the assessment approach to assess the level of anxiety and depression for infertile couples at the infertility center in AL-Hilla city. The sample consisted of (50) couple ((50) infertile wives and the other (50) infertile husbands) with infertility were selected from the early stated center, during the period of February 17<sup>th</sup> 2015 to March 22<sup>nd</sup> 2015.

A questionnaire was constructed by the researcher for the purpose of the study it consist of two parts:

#### **Part 1. Socio-demographic Data sheet**

The first part contains information regarding; Gender, age (wife and husband), age of marriage, infertile duration, and monthly income.

#### **Part II. A. Items related to Anxiety and Depression** included two parts;

**A.1. Anxiety:** This domain from The Taylor scale that includes 20 items to assess the anxiety disorder by using 3-level likert rating scale always, sometimes, never. They were rated and scored as (1 for Never), (2 for some times), (3 for always). Tell the patients that choose the item that apply to it completely from each of the statements.

**A.2. Depression:** This domain from The Beck scale for depression consists of 20 set of statements to assess the depression disorder, we developed the scale for our objectives with each presentation of symptoms of depression, ranging according to the strength of the three items. Using 3-level likert rating scale always, sometimes, never. They were rated and scored as (1 for Never), (2 for some times), (3 for always). Tell the patients that choose the item that apply to it completely from each of the statements, ranging from the overall degree of scale between 1-60 degrees, and divided the levels of depression, according to this scale to four levels, namely.

**Data analysis:** A numerical value was given to each rating point, 1 was given for never 2 for sometimes and 3 for always. Data were analyzed through application of descriptive statistics analysis which include; frequency, percentage, mean and the inferential data analysis approach (Pearson correlation coefficient, standard deviation, Chi-square and t-test). Data were analyzed through the use of statistical package for social sciences (SPSS)

## RESULTS:

**Table 1: Distribution of the infertile Couples according to their sociodemographic data**

Age (Year)	Variables	F	%
	> 19	9	9
	19-29	50	50
	30-40	31	31
	< 40	10	10
	<b>Total</b>	<b>100</b>	<b>100</b>
Age of marriage	13-18 years	24	24
	19-24 years	43	43
	25-35 years	26	26
	<35 years	7	7
	<b>Total</b>	<b>100</b>	<b>100</b>
Duration of infertility	> 5 years	57	57
	5-9 years	31	31
	< 9 years	12	12
	<b>Total</b>	<b>100</b>	<b>100</b>
Monthly income	Sufficient	50	50
	Somehow sufficient	34	34
	Insufficient	16	16
	<b>Total</b>	<b>100</b>	<b>100</b>

Table 1 indicated that (50%) of infertile couples who were at age group that (19-29 years).Also indicated that (43%) of infertile couples who were married at age group that (19-24 years).According to the duration of infertility the table showed that (57%) of infertile couples had infertility duration that (> 5 years).Regarding to the monthly income table revealed that (50%) of infertile couples had sufficient income.

**Table 2: Distribution of the sample according to their level of anxiety**

Anxiety	F	%
Mild	34	34.0
Moderate	34	34.0
Severe	32	32.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Table 2 revealed that the majority percentage of the infertile couples had severe anxiety (32%), and the greater of them mild (34%) and (34%) had moderate level.

**Table 3: Distribution of the sample according to their level of depression**

Depression	F	%
Mild	33	33.0
Moderate	29	29.0
Severe	38	38.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

Table 3 revealed that the highest percentages of the infertile couples had severe depression (38%), and the greater percentages of them have mild level (33%) and (29.0%) had moderate level.

**Table 4 Distribution of the sample in regard to the levels of anxiety**

Demographics		Levels of Anxiety							
		Mild		Moderate		Severe		Total	
		f	%	f	%	F	%	f	%
Gender	Male	22	22%	18	18%	10	10%	50	50%
	Female	12	12%	16	16%	22	22%	50	50%
	<b>Total</b>	<b>34</b>	<b>34%</b>	<b>34</b>	<b>34%</b>	<b>32</b>	<b>32%</b>	<b>100</b>	<b>100%</b>
Age	> 19 years	3	3%	4	4%	2	2%	9	9%
	19-29 years	19	19%	17	17%	14	14%	50	50%
	30-40 years	8	8%	9	9%	14	14%	31	31%
	< 40 years	4	4%	4	4%	2	2%	10	10%
	<b>Total</b>	<b>34</b>	<b>34%</b>	<b>34</b>	<b>34%</b>	<b>32</b>	<b>32%</b>	<b>100</b>	<b>100%</b>
Age at marriage	13-18 years	6	6%	12	12%	6	6%	24	24%
	19-24 years	16	16%	10	10%	17	17%	43	43%
	25-35 years	10	10%	11	11%	5	5%	26	26%
	< 35 years	2	2%	1	1%	4	4%	7	7%
	<b>Total</b>	<b>34</b>	<b>34%</b>	<b>34</b>	<b>34%</b>	<b>32</b>	<b>32%</b>	<b>100</b>	<b>100%</b>
Duration of infertility	> 5 years	21	21%	19	19%	17	17%	57	57%
	5-9 years	9	9%	12	12%	10	10%	31	31%
	< 9 years	4	4%	3	3%	5	5%	12	12%
	<b>Total</b>	<b>34</b>	<b>34%</b>	<b>34</b>	<b>34%</b>	<b>32</b>	<b>32%</b>	<b>100</b>	<b>100%</b>
Monthly Income	Sufficient	26	26%	16	16%	8	8%	50	50%
	Somehow sufficient	4	4%	16	16%	14	14%	34	34%
	Insufficient	4	4%	2	2%	10	10%	16	16%
	<b>Total</b>	<b>34</b>	<b>34%</b>	<b>34</b>	<b>34%</b>	<b>32</b>	<b>32%</b>	<b>100</b>	<b>100%</b>

Regarding gender the table (4) shows that the highest percentage (22%) of the sample were females, they have Severe levels of Anxiety, while (22%) of the sample were males having Mild levels of Anxiety. And the lowest percentages (12%) of the sample were females have severe levels of Anxiety, while (10%) were males have severe levels of Anxiety.

The table also shows that the most of the study sample (19%) have mild of levels of Anxiety, they were from age (19-29) years. And the lowest percentages (20%) of the sample have severe levels of Anxiety; they were age (< 40).

Regarding the age at marriage the highest percentage (17%) of the sample have Severe of levels of Anxiety were from age group (19-24) years. And the lowest percentage (1%) of the total sample have Moderate levels of Anxiety were from age group (< 35) years.

Concerning duration of infertility the table shows that the highest percentage (19%) of the sample have Moderate levels of Anxiety were from duration group (> 5 years). And the lowest percentage (3%) of the sample have Moderate levels of Anxiety were from duration (< 9 years). Regarding monthly income the table indicates that the highest percentages (26%) of the sample have Mild levels of Anxiety were from (Sufficient) income. And the lowest percentage (2%) of the sample have Moderate levels of Anxiety were (Insufficient) income.

**Table 5 Distribution of the sample in regard to the levels of depression**

Demographics		Levels of Depression							
		Mild		Moderate		Sever		Total	
		F	%	F	%	F	%	F	%
Gender	Male	18	18%	16	16%	16	16%	50	50%
	Female	15	15%	13	13%	22	22%	50	50%
	<b>Total</b>	<b>33</b>	<b>33%</b>	<b>29</b>	<b>29%</b>	<b>38</b>	<b>38%</b>	<b>100</b>	<b>100%</b>
Age	> 19 years	4	4%	16	16%	16	4%	9	9%
	19-29 years	19	19%	13	13%	18	18%	50	50%
	30-40 years	6	6%	11	11%	14	14%	31	31%
	< 40 years	4	4%	4	4%	2	2%	10	10%
	<b>Total</b>	<b>33</b>	<b>33%</b>	<b>29</b>	<b>29%</b>	<b>38</b>	<b>38%</b>	<b>100</b>	<b>100%</b>
Age at marriage	13-18 years	7	7%	5	5%	12	12%	24	24%
	19-24 years	16	16%	12	12%	15	15%	43	43%
	25-35 years	6	6%	12	12%	8	8%	26	26%
	< 35 years	4	4%	0	0%	3	3%	7	7%
	<b>Total</b>	<b>33</b>	<b>33%</b>	<b>29</b>	<b>29%</b>	<b>38</b>	<b>38%</b>	<b>100</b>	<b>100%</b>
Duration of infertility	> 5 years	20	20%	14	14%	23	23%	57	57%
	5-9 years	12	12%	8	8%	11	11%	31	31%
	< 9 years	1	1%	7	7%	4	4%	12	12%
	<b>Total</b>	<b>33</b>	<b>33%</b>	<b>29</b>	<b>29%</b>	<b>38</b>	<b>38%</b>	<b>100</b>	<b>100%</b>
Monthly Income	Sufficient	21	21%	15	15%	14	14%	50	50%
	Somehow sufficient	8	8%	10	10%	16	16%	34	34%
	Insufficient	4	4%	4	4%	8	8%	16	16%
	<b>Total</b>	<b>33</b>	<b>33%</b>	<b>29</b>	<b>29%</b>	<b>38</b>	<b>38%</b>	<b>100</b>	<b>100%</b>

Table 5 present that the highest percentage of the sample were females (22%), they have Severe level of Depression, while (18%) of the sample were males having Mild level of Depression. And the lowest percentages (13%) of the sample were females have Moderate level of Depression, while (16%) of the sample were males have Moderate levels of Depression and (16%) of them have Severe levels of Depression.

The table also shows that the most of the study sample (19%) Mild of levels of Depression, they were from age group (19-29) years. And the lowest percentages (2%) of the sample have severe levels of Depression; they were age (< 40).

Regarding the age at marriage the highest percentages (16.0%) of the sample have Mild of levels of Depression was from age group (19-24) years. And the lowest percentage (3%) of the sample have Severe levels of Depression were from age group (< 35) years.

Concerning duration of infertility the table shows that the highest percentage (23%) of the sample have Severe levels of Depression were from duration group (> 5 years). And the lowest percentage (1%) of the sample have Mild levels of Depression were from duration group (< 9 years).

Regarding monthly income the table shows that the highest percentages (21%) of the sample have Mild levels of Depression were from (Sufficient) income. And the lowest percentage (4%) of the sample have Mild levels of Depression were (Insufficient) income and (4%) of them have Moderate levels of Depression.

**Table 6: The differences between mean of scores of Anxiety and Depression in Females and Males for Gender group**

Variables	Gender		Independent t-test
	Female	Male	

	mean	St. d.	Mean	St. d.	t	p
<b>Anxiety</b>	2.20	0.808	1.76	0.771	-2.786	<b>0.01</b>
<b>Depression</b>	2.14	0.857	1.96	0.832	-1.065	0.29

Table 6 indicates that there are high significant differences between Females and Males in Gender group and **Anxiety, P- value is 0.01**

**Table7. Association between Anxiety and Depression with Demographic Characteristics**

			Psychosocial indicators			
Demographic Characteristics	No	df	Anxiety		Depression	
			X <sup>2</sup>	Sig.	X <sup>2</sup>	Sig.
<b>Gender</b>	100	1	7.55	<b>0.02</b>	1.53	<b>0.47</b>
<b>Age</b>		3	4.22	0.65	6.07	<b>0.42</b>
<b>Age at marriage</b>		3	9.34	0.15	9.01	<b>0.17</b>
<b>Duration of infertility</b>		2	1.29	0.86	6.85	<b>0.14</b>
<b>Monthly Income</b>		2	23.57	<b>0.01</b>	5.23	<b>0.27</b>

Table 7 shows there is a significant relationship between Anxiety and Gender, **P- value is 0.02**. And High significant relationship between Anxiety and Monthly income, **P- value is 0.01**.

**Table 8: Correlation coefficient between Anxiety and Depression**

<b>R</b>	<b>X<sup>2</sup></b>	<b>Sig.</b>	<b>C.s</b>
<b>0.499</b>	<b>27.852</b>	<b>0.01</b>	<b>HS</b>

Table 8 reveals that is high significant between Anxiety and Depression.

## DISCUSSION

The result of the study indicated that (50.0%) of infertile couples who were at age group that (19-29 years) table (1). Hamad (2009) reported that most common age of infertility centered around (20-25). This might be due to the age of marriage and reproductive age in Iraqi community and the desire to have a kid in the family<sup>(7)</sup>. Also table (1) indicated the infertile couple's age at marriage, this table indicated that (43.0%) had of infertile couples who were married at age group that (19-24 years). This is considering early age for women to have marriage at Iraqi society it is an acceptable for women to have marriage, it is consider the most productive age to have a child, while Hamad (2005) found that most common age of marriage around (13-18)<sup>(8)</sup>. The table (1) showed that (57.0%) of infertile couples had infertility duration that (> 5 years). This findings supportive with the findings of Hamad (2009) reported that the most findings of infertile duration centered around (2-5) years<sup>(7)</sup>. Also the table (1) indicated that (50.0%) of infertile couples had sufficient income. Unfortunately, no supportive evidence was available in the literature for this result. The table (5) revealed that (34.0%) have mild level of anxiety, (34.0%) have moderate level, and (32.0%) have severe level. This results showed that infertile couples more likely to have severe level of anxiety (especially women). The table (6) revealed that (33%) have mild level of depression, (29%) have moderate level, and (38%) have severe level. These findings revealed that infertility has effect on the infertile couples. These findings supported by Chiara, (2009) who find that depression are more prevalent among infertile couples than those who are not infertile<sup>(9)</sup>.



About the age the study found that (50%) of the sample in age group were (19-29) had differences in the levels in relation to anxiety, and depression for infertile couples. (14%) of the sample were had severe level of anxiety, and (18%) had severe level of depression. This findings supported by Hamad (2009) found that most common age for anxiety and depression was (20-25) years<sup>(7)</sup>.

About age at marriage the study found that (43%) of the sample in age at marriage group were (19-29) had differences in the levels in relation to anxiety, and depression for infertile couples. (17%) of the sample were had severe level of anxiety, and (15%) had severe level of depression. While, Hamad (2005) found that the infertile women married at age (13-18) were (43%) and (19-24) were (37%)<sup>(8)</sup>.

Regarding duration of infertility the result of the study showed that (57%) of the sample in duration of infertility group were (>5 years) had differences in the levels in relation to anxiety, and depression for infertile couples. (17%) of the sample were had severe level of anxiety; while (23%) had severe level of depression. These findings were supported by Hamad (2009) found in his (59%) of infertile women had duration of infertility (2-3 years)<sup>(7)</sup>.

About the monthly income the result of the study found that (50.0%) of the sample in monthly income group were (sufficient) had differences in the levels in relation to anxiety, and depression for infertile couples. (8%) of the sample were had severe level of anxiety, and (14%) had severe level of depression. Unfortunately, no emphasized evidence was available in the literature for this result. The findings of this study indicated that there are high significant differences of the scores of females and males for gender group in the anxiety variable at p-value (0.01). Unfortunately there is no supportive study for this result.

There are significant relationships were found between anxiety and depression with some demographic characteristics (table 9) such as gender (0.02), and high significant relationship was between monthly income (0.01) and anxiety. This result revealed that economic status had a strong impact of life of the infertile couples.

Findings of revealed that Anxiety is correlated positively with Depression in our study. This result indicates that infertile couples who get anxiety may be due to Depression especially if the infertile couples do not supported by their families, friends, and relatives.

## **CONCLUSION**

The study concluded that is a high significant relationship between Females and Males in Gender group with anxiety and depression.

## **RECOMMENDATION:**

1. Competent counselor nurse to assist the infertile couples during attending the center and follow them by home visiting to found any solution for their psychosocial problems.
2. The study recommended that counseling method, especially the supportive psychotherapy, should be considered for infertile couples to improve the mental health and raise their chance to get conceive.
3. Raising awareness among gynecologists about the prevalence of psychiatric disorder among infertile couples and their needs for referral for psychiatrists for proper management.

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