

# Experience of Iraqi Women Who Received In Vitro Fertilization Treatment in the Erbil Maternity Teaching Hospital, Iraq

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**Abstract--- Background:** Women who experience in-vitro fertilization (IVF) treatment report increased levels of distress as this condition impacts virtually every aspect of their lives. This is true throughout the world, including in the Kurdistan region of Iraq. This is the first qualitative study that aims to explore and describe the experiences of Kurdish women undertaking IVF therapy in Erbil, Iraq. **Methods:** This qualitative study based on a thematic analysis approach targeted a sample group of women who were seeking infertility treatment through IVF at a referral center in Hawler Maternity Hospital. Semi-structured interviews were utilized to gather data. **Results:** Through analysis, four main categories of respondents' attitudes were identified including: "gleam of hope along with fear," "stabilization of marital relationship," "attention reception," and "social criticism." **Conclusions:** The findings from this study are important for informing care by fertility specialists and healthcare workers who interact with patients at fertility clinics. Results can be used to gain a deeper understanding of Kurdish women's feelings and emotions regarding IVF treatment from the perspective of their sociocultural values and norms.

**Keywords---** IVF Treatment, Iraqi Women, Culture.

## I. INTRODUCTION

The study showed that infertility is a global problem impacting women's life and social well-being. It is estimated that infertility, defined in biomedical terms as 'the inability to conceive after 12 months of regular unprotected intercourse', affects 80 to 168 million people in the world [1] [2]. One Iranian qualitative study showed that having a child was seen as the aim of marriage and the absence of children might cause marital problems for both partners [3]. The affected couple are often beset by feelings of inadequacy and guilt, and then they seek some methods for treatment such as in vitro fertilization [4]. The inability to have a child is regarded as 'a personal problem' and 'a tragedy' affecting not only individual couples but also society more generally. Negative psychosocial consequences of childlessness are common and often severe [3]. In vitro fertilization (IVF) is a laboratory procedure in which sperm is placed with an unfertilized egg with the aim of achieving fertilization. After fertilization, the embryo is transferred into the uterus to begin a pregnancy [5].

IVF is a physically and psychologically stressful treatment. The couples are hoping and longing to have a child and the consequences of perceiving themselves to be at risk of infertility include increased levels of anxiety and depression during the IVF process. In addition, most of them experienced emotional pain and suffered from psychological problems like sleep disturbance, a sense of defeat, distress, and hopelessness[6] [7][8].

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Women who have participated in an in vitro fertilization mentioned that the treatment was one of the most stressful experiences of their lives. Also, they often complained due to negative pregnancy result, if they had lost a child prior to IVF treatment [9]. In addition to the uneasiness caused by high levels of emotional disturbance and stress, there is evidence that the couples exhibited depressive symptoms which in turn might actually reduce the chances of achieving a successful pregnancy [10] [11].

Verhaak et al., [9] noted that while undergoing IVF treatment women showed clinically relevant problems like anxiety, depression, lack of acceptance, and social support. The state of 'helplessness' was identified by asking patients to agree or disagree with such treatments as, " my infertility controls my life" and "I can handle the problem related to my infertility". Some studies mentioned that while most women adjust well emotionally to IVF, others have suffered from psychological problems after their last unsuccessful IVF treatments [12].

In Iraqi Kurdistan, the IVF treatment center in Hawler Maternity Hospital is the only governmental center to treat infertility among Kurdish/Arabic couples. It should be noted that about 80 to 100 infertile couples refer to this center every month to receive treatment, and out of this number, 30% obtain positive results from the treatment. Women in the Kurdistan region, just as those elsewhere in the world who undergo IVF treatment, report increased level of distress, as this condition may impact on virtually every aspect of their lives; in addition, many women who received IVF treatment are blamed by others as being responsible for their own condition.

The authors have not been able to find any qualitative study about women's experiences of and views on IVF therapy in Iraq, especially in Kurdistan. Therefore, this is the first qualitative study that has been conducted to explore and describe the experiences of Kurdish infertile women regarding IVF therapy from a sociocultural perspective.

### ***Purpose of the Study***

The purpose of this study is to analyze the experiences of infertile women who have received in vitro fertilization.

## **II. METHODOLOGY**

### ***Design of the Study***

A qualitative design, based on a thematic analysis approach, was used to carry out this study among a sample of women who were seeking infertility treatment through IVF at a referral center in Hawler Maternity Hospital. Semi-structured interviews were conducted to gather data. Content analysis is a systematic coding approach, which can be used to identify and describe a large amount of textual information in order to determine patterns of communication[13]. The methodological structure is situated within the field of thematic analysis where the role of language itself has been identified as essential in the research process. Data analysis was performed based on the steps suggested by Graneheim and Lundman [14] as a method for analyzing the collected data:

1. Transcribing the interviews verbatim and reading through several times to obtain a sense of the whole.
2. Dividing the text into meaning units that were condensed.
3. Abstracting the condensed meaning units and labelling with codes.

4. Sorting codes into sub-categories and categories based on comparisons regarding their similarities and differences.
5. Formulating themes as the expression of the latent content of the text.

#### ***Data Collection and Participants Characteristics***

The research respondents comprised women having IVF treatment who had attended the IVF center in the Maternity Hospital in Hawler. The sample includes 8 infertile women who met the inclusion criteria of the study. The participants were Kurdish infertile women that were willing to participate in the study aged 27-44 years old. However, it should be stated that most clients were not willing to take part in the study and discuss their experiences, which could be related to their low trust of the researcher and also cultural issues. In order to collect data, semi-structured interviews conducted, tape recorded, and transcribed verbatim. No specific data collection instruments were constructed for the purpose of this study. Instead, the researcher started each interview with an open-ended question like: "Can you tell me your story of IVF therapy?", "What is the effect of IVF therapy on your life?", "What is your feeling and opinion about that?". Subsequent questions posed were based on the respondents' descriptions of their experiences. All interviews were conducted in the hospital (IVF center) and in the subjects' native language (Kurdish). The interviews continued until data saturation occurred.

#### ***Trustworthiness and Ethical Considerations***

To achieve trustworthiness, credibility was established through member checking, peer checking, and prolonged engagement. Member checking was done by asking the respondents to verify the preliminary findings from the interviews [14]. Prolonged engagement was achieved by the authors in the research field in order to attract the participants trust and gather in-depth data. The Ethics Committee of Hawler Medical University /College of nursing approved the study proposal and corroborated its ethical considerations. All participants were informed about the purposes and the methods of study. Permission to tape record the interviews was obtained from the participants. Their participation in the study was voluntary with signed written consent obtained from them.

### **III. FINDING**

According to the results of the present study, the researchers could identify 4 main categories as an outcome of the conducted analysis. One of the most important is undoubtedly "gleam of hope along with fear". Other categories included "stabilization of marital relationship", "attention reception", and "being affected by others' attitudes toward IVF". The following paragraphs present and explain the meaning of these categories along with the subcategories that the participants believe derive from them.

#### ***Gleam of Hope Along with Fear***

These categories include subcategories like "the end of gloom" and "fear of losing". The participants' statements indicated that the period of infertility and treatment was a period of sadness and expectation for them, which was relieved following various treatments including IVF and receiving positive news of pregnancy, at which point their sadness and waiting turned into hope. Along with this hope, they several times referred to their stress and concern in their heart due to having lost a baby or had an abortion. In this regard, one of the participants stated, "It is really

painful if you are infertile and have no baby, because you always have a sense of deficiency and heartsickness. But now thanks goodness the pregnancy result is positive, and I'm happy that something I've been waiting for a long time is coming, but what if it dies? I fear that something may happen to it in my womb, because doctors say I need to be very careful about it unless something happens to it."

Another participant expressed her experience as, "Now that my baby is 8 months, I feel that I've been alive for 8 months, and before it, I was dead, I was always sad, a sadness that I felt would never end. I was hopeless. In fact, I feel I'm reborn and my life has changed."

In this regard one participant said, "I had IVF three times, and this is my third time, but my babies died soon the previous two times, so I'm really scared this time because I'm too tired and I've spent lots of money, I hope it won't go. The worst thing is that you're told your baby is dead after so much bother of getting pregnant."

The fourth participant said her happiness was indescribable and stated, "I'm really happy that I'm pregnant now. When I was first told about my pregnancy, I cried from happiness and didn't believe that it was me being pregnant. Believe me, before my pregnancy, my face was black from sadness, but now it's turned whiter, everybody says this." All of these statements indicate the impact of the 'gleam of hope' and change on the lives of the participants; however, their struggle with fear proves their fear of abortion.

### ***Stabilization of Marital Relationships***

This category has two sections or subcategories including "getting rid of diatribes" and "improving relationship with husband". The collected data in the present study revealed the fact that during IVF treatment, the participants noticed a change in their husband's behaviour. In this regard, a participant said, "Others did not stop picking on us. They always told my husband, "Why haven't you ever had a child? Get another wife; you may have a child with her." But my husband never listened to them. And now that I'm pregnant, his behaviour is better, he's kinder to me. He was not bad before, but now he's more emotional." A second interviewee referred to "Not having a son as the cause of the relatives' diatribes" and related her referral to the center with the hope of becoming pregnant with a male baby. "My husband's family teased us and said it would be better if one of your twins was a boy, so that this man [her husband] would not be so lonely and without an heir. My only problem was having no son. Now I'm pregnant with a boy, no one teases me and my husband's behaviour is much better with me."

Participant 3 stated, "I'm so excited. Every morning I get up with more enthusiasm. Even my relationship with my husband has changed." Another participant referred to her pregnancy as a cause to get rid of the feeling of heartbreak created by others' opinions and expressed her experience as, "My current pregnancy is a way to escape from my husband's relatives. You know, most of them chose not to talk to me. They kept telling my husband, "Who's that you got married with? She can't have children." My husband and I had no problems, but whenever we had an argument, he used to flaunt my infertility in my face. Others also flaunted my defect in my face. I hope no one has to experience this, it's too tough. Thanks God, I'm relieved now." One interviewee stated that having no son was a concern for her and she had urged her husband have IVF. She continued, "My husband was not much satisfied to have IVF for the second time, but I insisted too much and he came with me. He kept saying we have children and why should we look for treatment again? But because I feared that having no son would be a problem for me some

day, and my husband would annoy me because of it, I wanted to have IVF. He has not said anything in this regard, though. But who knows, maybe one day, he would blame me for that.” Paying close attention to these data makes it clear that the participants try to preserve their marital life even in such a difficult and stressful period as a pregnancy with IVF.

### ***Attention Reception***

This category is more retrieved from the participants’ statements about others’ kindness and attention. They referred to their pregnancy as the reason for others’ attention and kindness. And in fact, this category is based on their statements about their parents’ family. For example, one of the participants said, “Now I really owe my mother and sisters. Even my mother- and sisters-in-law are very kind to me. I can’t sit on my hands and they serve me. But they are happy that I’m pregnant because they know that I shouldn’t move, they take good care of me. Like me, they really like these days to finish.” Another participant who had to stay in her sister’s home because her house is far from the clinic stated, “My sister is very kind to me. She doesn’t let me go home. She says, “Your home is far, something may happen to you while getting back home. Stay here for a while, I will personally take care of you.” In this regard, one interviewee stated, “They do me lots of favours. Their behaviour has changed a lot, especially now that they know my baby is a boy. They are more hopeful and happy. They don’t let me do anything. I rest all the time, so that my baby will be born healthy. It is difficult for me, but it’s sweet because I’m happy, they take good care of me.” This participant considers being pregnant with a boy as the reason for others’ attentiveness to her.

### ***Being affected by other’s Attitude Toward IVF***

Like other categories that were taken from the participants’ experiences, this category was obtained by putting other subcategories like “concealing the reality” and “escaping from the public” together. The reason for naming or selecting this category is that based on the data of the present study, the interviewees referred to concealing their pregnancy from their relatives and friends several times. In some interviews, participants even referred to concealing the method of their pregnancy from their relatives including their mother, sister, and mother- and sisters-in-law and kept it as a secret with their husband. They referred to staying away from the public and attending fewer social events as a way of escaping from others’ curiosity. In this regard, one of the participants stated, “The method of my pregnancy is like a secret between my husband and me. I’ve not told anyone. It’s not haram or a question of guilt, but I don’t want anyone to know my secrets, I’ve not even told my mother-in-law, nor my sister-in-law, because if they know, they’ll think the baby is not ours, especially when the deficit is from the husband, they’re sure to think it’s from another man, they may say God knows that the baby is not theirs.”

Another participant referred to their relatives’ remarks, telling her husband to have a DNA test after the baby is born, and they referred to this a reason for hiding themselves from the public. She continued, “They asked my husband for the baby to be given a DNA test after it is born. Although they were joking, it shows their real idea. I try to hide myself from everything. We can’t tolerate scrutiny, we don’t tell anyone anything.”

Referring to her mother-in-law, another participant said, “When my pregnancy was confirmed, because the problem was from both my husband and me, we both received treatment, my mother- and sister-in-law said interesting things. They kept saying our baby would be blonde with blue eyes.”

One of them related this issue to religion and said, “What we’re doing is not non-religious to be considered as a matter of guilt, but because the wrong belief is that an IVF baby is from another man, even if it is ours, they consider it as something guilty. Not everybody thinks so, but most believe so. Religion has proved what we’re doing, even on TV clergymen announced it as halal. Let them say whatever they like. It’s not just my problem. What if their daughter has the same problem one day? Come on, it’s better not to say anything to anyone.”

Taking these quotations into account, it can be concluded that the participants were affected by the attitudes of people around them, which caused them to conceal the method of their pregnancy and refer to it as a natural pregnancy following treatment, so that they could escape from others’ misunderstandings.

#### **IV. DISCUSSION**

Based on the interviewees’ characteristics and data collection during the interviews, out of the 8 pregnant women participating in the present study, 5 had undergone IVF experience 2 or 3 times and the other 3 were having their first experience. Almost all of the participants referred to this period as a stressful experience, particularly at the beginning of the treatment and while awaiting the results of their pregnancy test. After they had received a positive result of pregnancy; however, ‘a gleam of hope’ shone on their lives, and this was one of the key categories to emerge out from their stories and experiences, such that they believed that even the period of their pregnancy was full of fear of experiencing miscarriage and losing their baby. In their studies, some researchers stated that the first stages of IVF treatment are accompanied with stress and pain [6][15]. Fear of infertility even with availability of treatment is one of the issues that these studies have focused on [16][17]. Pedro and Mwaba [18] indicated that the IVF treatment itself can also be the source of stress and anxiety for many infertile women because it is a procedure which requires the patient to receive an injection at a specific time daily for a period of time, and the need to monitor hormone levels through ultrasound and laboratory tests [19]. Furthermore, the participants described waiting for results as being what “kills you, takes so much from you, and makes you detest yourself and your body”.

Another category extracted in the present study was “stabilization of marital relationships”. The pregnant participants referred to their pregnancy through IVF as reason for the stabilization of their married life, especially in case of being pregnant with a boy baby because in Kurdish culture, having a son is an important factor for stabilization of marital life, which has its root in the old beliefs and tribal heritage which is still prevalent in many families in the region. In some studies, the authors referred to the participants’ stories and feelings regarding their husbands’ cooperation as an important factor in tolerating the painful period of treatment that the theme of “enduring hardship with a loving relationship” extracted from such stories [6][18]. As the results of different studies showed, receiving attention from relatives is one of the most important categories identified from analysis of the participants’ experiences. Their pregnancy was the reason for attentiveness towards the women from relatives, particularly by their mother-in-law. In other studies, the participants referred to their parents’ spouses, children’s, parents’ and friends’ support as the only reason for continuing treatment especially in the challenging first stages of treatment [20][21][6].

The unique result of the present study is the effect of other people’s social attitudes on the pregnant women’s own attitudes towards their IVF treatment, such as keeping it secret and going out less in public. This is because

people's views on this type of treatment have not changed yet, and it is their religious beliefs which dominate this issue. In some other studies, researchers have referred to separation of couples under treatment from the public. For instance, a study focused on people's intellectual backwardness and limited knowledge about IVF. Wrong beliefs even influence the success scope of this type of treatment [17][19].

The participants described the IVF treatment as being 'very emotionally taxing'. Whilst the psychological trauma from their family cultural aspects and social suffering are evident, there are no readily-accessible 'psychosocial support and family counseling services available at IVF center or other infertility clinics.

This study gave the opportunity to the fertility specialists and healthcare workers at these fertility clinics or other readers the opportunity to understand Kurdish women's feeling and emotions regarding IVF treatment from a sociocultural perspective and with reference to the norms of the context in which they live. Greater attention to the emotional consequences of infertility treatment like IVF could lead to a more individualized client approach which would prepare infertile women for the emotional needs and strains of the treatment by highlighting the need to employ a psychologist or family counsellor as part of the infertility treatment process to allow the couples to engage more effectively with fertility treatments in general, and more specifically with the challenges of the IVF treatment process.

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