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Assessment of Emotional Difficulties among Women with Recent Miscarriage in Kerbala, 2024

A Thesis

Submitted to the Council of College of Medicine -University of Kerbala as Partial Fulfilment for the Degree of Higher Diploma in Family Medicine

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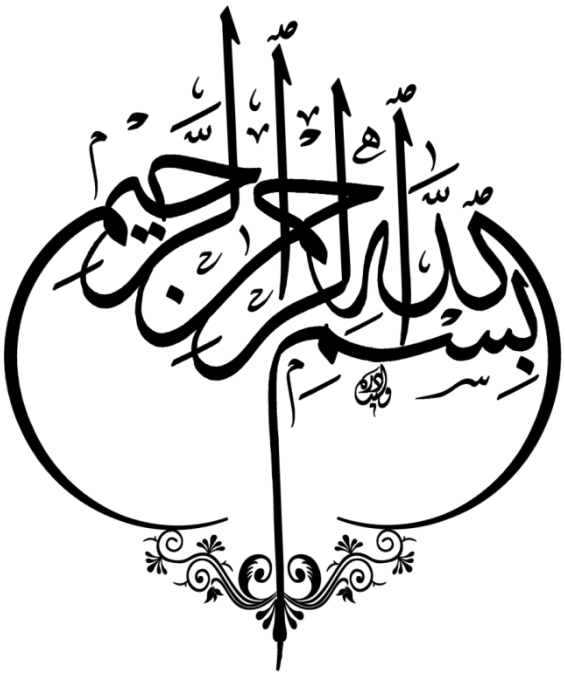

﴿ يرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِير ﴾

صَدَقَ اللهُ العَليّ العَظيمْ

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Supervisors Certification

We certify that this thesis titled "**Assessment of Emotional Difficulties among Women with Recent Miscarriage in Kerbala, 2024**" Was prepared under our supervision as a partial requirement for the Degree of High Diploma in Family Medicine

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"In the name of God, the most gracious the most merciful"

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And thanks to my husband for his support and thanks to his family.

Dedication

To.....my father and mother

To.....my husband's father and my mother in low "my second mother "may God have mercy on their souls.

To.....my husband and my two little daughters.

To..... all my husband's family

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Abbreviations

Abbreviations	Full text
ACOG	American college of obstetricians and Gynecologists
APH	Antepartum hemorrhage
BMI	Body mass index
CBT	Cognitive behavior therapy
DNA	Deoxyribonucleic acid
D.M	Diabetes mellitus
FH	Fetal heart
G.A	Gestational age
GSI	Global severity index
HCG	Human chorionic gonadotropin
HPS	Health professionals
IR	Insulin resistance
LPD	Luteal phase defect
MTHFR	Methylenetetrahydrofolate reductase
PCOS	Polycystic ovarian syndrome
PEDI	Percieved emotional distress inventory
PTSD	Post-traumatic stress disorder
RPL	Recurrent pregnancy loss
RPOC	Retained product of conception
SPSS	Statistical package for the social sciences
TPO-AB	Thyroperoxidase antibodies

ABSTRACT

Background

Miscarriage is considered one of an important sequel of pregnancy and has short- and long-term adverse emotional effects on women. Women may experience emotional problems after miscarriage, such as anxiety, anger, depression, or hopelessness.

Objective:

This study aims to evaluate the emotional difficulties of recent miscarriage among women in Holy Kerbala province 2024.

Subjects and Methods:

This descriptive (cross− sectional) study conducted on 450 women who had one or more previous miscarriages before six months or less and who attended Obstetrics & Gynecology Teaching Hospital and Al-Husseinyia General Hospital. The data was collected by simple random sampling technique from Tenth of March 2024 to Eleventh of July 2024. The research tools included a structured questionnaire, and the revised Perceived Emotional Distress Inventory (PEDI) Scale. Data were analyzed using SPSS software. Moreover, $p < 0.05$ was considered statistically significant.

Results:

The study revealed that the history of previous miscarriage was reported by 50.7%; spontaneous miscarriage was reported by more than two third 66% of the study sample. Miscarriage in first trimester reported by 70%, complication after miscarriage reported close to two third of the study 65.3% including bleeding, infection, and retained pieces. Infertility before miscarriage was reported by more than one half of the study participants 53.1%, most of them have infertility of one year duration. Regarding emotional distress, the highest mean of score was for

anger (1.60±0.68), the least score was for hopelessness (1.40±0.74), the mean score for all items (1.53±0.57). There is a significant association between occupation, chronic disease, drug history, parity, previous miscarriage, complication after miscarriage, infertility before miscarriage, conception with all the items of perceived emotional distress inventory scale (PEDI).

Conclusions:

There is a significant association between miscarriage and emotional distress (anger, anxiety, depression, hopelessness) Additionally, anger is the most prominent in this study followed by anxiety then depression and hopelesness in women who have previous miscarriage.

Key words:

Miscarriage, depression, anxiety, anger, hopelesness

CHAPTER ONE

Introduction

1. INTRODUCTION

1.1 Background of the Study

Miscarriage refers to the loss of a pregnancy before the fetus reaches viability. Globally, it is estimated that approximately 23 million miscarriages occur each year, which equates to around 44 pregnancy losses every minute. The combined risk of miscarriage among recognized pregnancies is about 15.3% (95% CI: 12.5–18.7%). In terms of prevalence, about 10.8% of women have experienced one miscarriage, 1.9% have had two, and 0.7% have suffered three or more (Quenby et al., 2021).

According to the American College of Obstetricians and Gynecologists (ACOG), spontaneous miscarriage, is the most frequently occurring type of pregnancy loss. Estimates suggest that miscarriage occurs in around 26% of all pregnancies. (Alipanahpour et al., 2020).

Miscarriage is one of a common problem during pregnancy. The criteria used to define miscarriage vary from country to country. In Canada, the United States, and Australia, miscarriage is defined as the loss of a pregnancy before the twenty-first week of a pregnancy, which typically lasts forty weeks. In the United Kingdom, the definition includes all pregnancy losses from the moment of fertilization until the twenty-fourth week of pregnancy (Martina et al., 2021).

Miscarriage not only represents a medical event but also carries a profound psychological impact, often leading to feelings of grief, anxiety, and depression among affected women (Hussein et al., 2022).

One of the most common causes of maternal death is miscarriage. The Ministry of Health in Iraq and Social Welfare estimates that approximately 16% of

maternal deaths are the result of miscarriage complications (Abed and Ibtisam, 2021).

In a survey of 468 pregnant women in Riyadh, Saudi Arabia, approximately one-fourth had a previous miscarriage (Rouzi et al., 2020).

From "2007 to 2013", the Legal Medicine Organization of Iran documented a total of 1,664 miscarriage cases, 339 of which were due to maternal health factors, and the remaining 1,325 were induced abortions (Alipanahpour et al., 2020).

There are approximately 147 000 miscarriages per year in Australia (Lee et al., 2025).

In the UK, there are approximately 125,000 miscarriages each year, resulting in 42,000 hospital admissions. Although miscarriages often resolve on their own without treatment and rarely result in significant maternal morbidity, the burden of disease remains high due to high morbidity and the associated costs of diagnostic workup, hospitalization, surgical treatment, and follow-up care. Miscarriages are often stressful for women and their partners and have a negative impact on their social and psychological well-being (Galeotti et al.,2022).

Statistics from 1985 to 2008 in the UK show that the maternal mortality rate due to miscarriage ranges from 0.05 to 0.22 per 100,000 births. Sever bleeding and sepsis are the most common causes of death, especially after a second-trimester miscarriage (Jurkovic, Overton, and Bender-Atik, 2013).

Miscarriage is clinically classified into two main types:

- early miscarriage “occurring before 13 weeks of gestation”
- late miscarriage “occurring between 13 and 24 weeks of gestation”.

Early miscarriage occurs in 10% to 30% of all pregnancies and in approximately 11% to 16% of medically confirmed pregnancies, while late miscarriage is estimated to occur in less than 1% (Campillo et al., 2019).

Table. (1) Types of Miscarriages with the Relevant Ultrasound Findings and Clinical Presentation (Crosbie and Kenny, 2024)

Type of miscarriage	Ultrasound scan findings	Clinical presentation	Management
Threatened miscarriage	Intrauterine pregnancy (appropriately developed ±FH)	Vaginal bleeding and abdominal pain Speculum: cervical os closed	Supportive
Inevitable miscarriage	Intrauterine pregnancy (no FH)	Vaginal bleeding and abdominal pain Speculum: cervical os closed or open, blood seen	Expectant, medical or surgical approach
Incomplete miscarriage	Retained products of conception	Vaginal bleeding and abdominal pain Speculum: cervical os open, products of conception located in cervical os	Remove pregnancy tissue at time of speculum, if possible Expectant, medical or surgical approach
Complete miscarriage	Empty uterus (need serum hCG to exclude ectopic pregnancy if there is no previous ultrasound scan identifying intrauterine pregnancy)	Pain and bleeding has resolved Speculum: cervical os closed	Supportive
Missed miscarriage (silent/delayed miscarriage)	Intrauterine pregnancy (no FH)	Asymptomatic Often diagnosed at booking ultrasound scan Speculum: cervical os closed	Expectant, medical or surgical approach

Threatened miscarriage is the most common gynecological emergency, occurring in 15–20% of all pregnancies with 20–25% eventually progressing to spontaneous miscarriage (Tan et al., 2020).

Threatened abortion increases the risk of obstetric complications such as antepartum hemorrhage (APH), preterm delivery, cesarean section, preeclampsia,

placenta previa, and placental abruption, as well as adverse perinatal outcomes such as small-for-gestational-age fetuses and early neonatal death (Iqbal et al., 2024).

In cases of spontaneous miscarriage, the fetus and placenta are typically expelled from the uterus without medical intervention. However, complications can arise if the miscarriage is incomplete, potentially leading to heavy bleeding or infection (Volgsten et al., 2018).

Researches demonstrate that the incidence of spontaneous miscarriage is between15% to 30% of all pregnancies; it ought to be famous that most of the spontaneous miscarriage happens in the early weeks of pregnancy. Thus, it can be confused with menstrual bleeding. The hazard of miscarriage diminishes after 12 weeks' gestation (Sheck et al., 2023).

An incomplete miscarriage is diagnosed when pregnancy tissue has been partly expelled by the uterus (Chu et al., 2020). Complete spontaneous miscarriage, is defined as the resolution of symptoms and the absence of RPOC (retained product of conception) (Asri et al., 2015). Recurrent pregnancy loss is defined as the loss of two or more pregnancies (Cavalcante et al., 2023).

In Iraq, many women have been experiencing recurrent miscarriages in recent years. The increase in abnormal karyotypes and patterns of recurrent miscarriages has been shown to have an impact on this condition with the increase in environmental pollution in Iraq (Khamees and Al-Ouqaili, 2022).

Understanding the underlying causes of miscarriage, including genetic, hormonal, and environmental factors, is essential for providing effective care and support to affected women and couples. In particular, for women and couples experiencing recurrent pregnancy loss (RPL), the situation is even more serious.

Although the prevalence of RPL in the general population is relatively low, it represents a significant issue for those who experience miscarriage. Therefore, each miscarriage warrants careful investigation to identify specific causes and risk factors (Turesheva et al., 2023).

Although the cause of most miscarriages is unknown, they presumably result from a complex interplay between maternal age, genetic, hormonal, immunological, and environmental factors. The greatest known risk factor is maternal age. Younger women have a slightly higher risk of miscarriage, whereas older mothers have a much higher risk. The underlying risk factors for miscarriage and other unfavorable pregnancy outcomes may be similar. Fewer studies have examined how pregnancy problems may predict future miscarriage risk, but several studies have examined the relationship between past miscarriages and future risk of other pregnancy issues (Magnus et al., 2019).

Causes of miscarriage or pregnancy loss are (Abdelazim et al., 2017):

1. "Chromosomal abnormalities; especially autosomal trisomy.
2. Immunological causes associated with failure of the mechanisms involved in the prevention of fetal rejection
3. Thrombophilia's:

A. Acquired Thrombophilia (Anti phospholipid syndrome).

B. Inherited Thrombophilia (factor V Leiden, prothrombin gene mutations, protein C and S deficiencies).

C. Methylenetetrahydrofolate reductase (MTHFR) gene mutation.

4. Endocrine causes:

A. Polycystic ovary syndrome (PCOS), and insulin resistance (IR).

B. Luteal Phase defect (LPD).

C. Diabetes Mellitus (DM).

D. Thyroid Disorders; Subclinical hypothyroidism and increase thyroperoxidase antibodies (TPO-Ab).

5.Genetic reproductive disease

A. Sperm DNA fragmentation.

B. Failure of embryo selection.

C. Anatomical factor (uterus, cervix).

D. hCG gene polymorphisms.

6. Lifestyle factors; Alcohol, coffee, smoking, advanced maternal age, and BMI ≥30 kg/m2

7. Infections; Bacterial vaginosis as a risk factor for late miscarriage".

Miscarriage is a medical event with a complex combination of psychosocial squeal. Nevertheless, researches indicate that healthcare providers and clinical teams often fail to attend to the complex and sensitive nature of miscarriage (Hiefner and Villareal, 2021).

Many cases go unreported, and even among professionals who provide care for miscarriages, the emotional impacts may be severe but frequently receive little to no attention. In scholarly research, they are occasionally confused with the results of other perinatal losses, like stillbirth and neonatal death (Williams et al., 2020).

Numerous qualitative studies have detailed and assessed the miscarriage experience of women who wanted to bring their pregnancy to term. One study discusses the traumatic elements of miscarriage, such as pain, blood, and quick hospitalization. Some women saw their miscarriages as personal failures and they were worried that miscarriages might have been caused by a disease, food they had consumed, or even breathing in car exhaust fumes. Other women believed that they were under too much stress, that they did not want the baby enough, or that their

own negative thoughts were the cause of the miscarriage (Kukulskienė and Žemaitienė, 2022).

Miscarriage can also lead to a threat to the life beside that it can increases women risk for psychiatric symptoms. It can cause Grief, depression and anxiety following miscarriage. There have also been reports of obsessive-compulsive disorder and post-traumatic stress disorder (Pathiraja et al., 2018).

Qualitative work has highlighted that many women experience Grief and guilt feeling after miscarriage, and that the 'silence that surrounds miscarriage' can lead to feelings of loneliness and isolation (Anderson et al., 2024). A history of psychiatric illnesses, infertility, lack of social support or marital satisfaction, fetal loss in prior pregnancies, and unintended or unwanted pregnancies are some of the risk factors that contribute to psychiatric issues (Barat et al., 2020).

Both the woman who miscarries and her male spouse are impacted by recurrent miscarriages. When comparing the impacts of repeated miscarriages, 51% of women and 19% of their male partners showed a risk of depression, while 72.7% of the affected women and 66.3% of their male partners showed a risk of anxiety. Women are generally more likely to experience anxiety and despair (Cuenca, 2023).

This issue of reproductive health is extremely complicated since it impacts not only the health of women but also that of their partners, kids, and entire family. Numerous scientific studies have demonstrated the connections between miscarriage and various mental and physical health conditions, including difficult grief, anxiety, depression, post-traumatic stress disorder, suicidal thoughts and feelings, psychosomatic illnesses, sexual health disorders, and more. One month following the loss of a pregnancy, 29% of women had symptoms suggestive of post-traumatic stress disorder, 24% of moderate-to-severe anxiety, and 11% of moderate-to-severe depression, according to one of the largest studies on

longitudinal morbidity following pregnancy loss. Even after nine months, these symptoms were still at clinically significant levels, even though they gradually decreased (Kukulskienė and Žemaitienė, 2022).

Other research has revealed that women seem to be at a very high risk of psychological morbidity after miscarriage; within a month, up to 41% of women self-report clinically significant levels of anxiety, 36% report depression, and 39% self-report meeting criteria for post-traumatic stress disorder (PTSD) after three months (Farren et al., 2018).

Following a miscarriage, anxiety symptoms begin right away and last for almost four to six months. Additionally, there is typically a lot of uncertainty and anxiety while waiting for the next pregnancy, which makes it harder for the person to deal with issues. As per the World Health Organization's guidelines, women should wait six months following a miscarriage before trying to conceive again. Nonetheless, between 50 and 80 percent of women conceive again shortly after the miscarriage, and the subsequent pregnancy may result in anxiety and melancholy. Therefore, it is uncertain if women's anxiety or depression is linked to previous recurrent miscarriages. Therefore, it is unknown what the long-term effects of a repeated miscarriage will be (Adib-Rad et al., 2019).

Furthermore, a lot of women have talked about how their pregnancy loss caused them to experience severe grief. Emotional wellbeing is also impacted by hospital experiences, particularly contact with health professionals (HPs) and information sharing. In actuality, women's mental health is impacted by the level of care they receive during a miscarriage even years after it has happened (Galeotti et al., 2022).

Unfortunately, some women may not receive adequate screening for depression, which can leave them unidentified and untreated, thereby increasing the risk of psychiatric squeale (Gebeyehu et al., 2023).

In a Kuwaiti study, included 248 pregnant women who had previously experienced a miscarriage and were enrolled in prenatal clinics at the Maternity Hospital and the Maternity unit inside the hospital. Women who gave their consent had their anxiety and depression symptoms evaluated. It was discovered that 6.9% of the women in the study had considerable levels of anxiety, and 6.5% of all the women had psychiatrically significant levels of depression. Clinically significant levels of emotional discomfort, namely symptoms of anxiety, sadness, or both, were reported by 13.4% of all individuals (Alyatama et al., 2000).

According to some studies, anxiety is more common and persistent than depression in women following miscarriage. In one study 18% of 336 women who had a miscarriage fulfilled the criteria for PTSD nine months after the loss (FernandezPineda et al., 2024).

It is noteworthy that the proportion of Arabs who seek psychological assistance is often smaller than that of Western nations. Because of this, most research on the psychological effects of miscarriage has been carried out in Western nations (Taybeh et al., 2023).

There have been numerous studies on different psychological supports for patients' mental suffering in the field of infertility. Pregnancy rate improvement and psychological status enhancement are the two main categories of their results. The general conclusion drawn from three meta-analyses is that at least one of the two is expected.

Few earlier studies found out that individuals who had experienced a single miscarriage benefited from psychological support, such as cognitive behavior therapy (CBT). Although no additional progress has been made, it has been suggested that psychological support, such as counseling and more frequent

checkups during the first trimester of pregnancy, can help enhance the fertility rate (Nakano et al., 2013).

1.2 Rationale of Study

1. Miscarriage is a common problem during pregnancy and emotional distress after miscarriage is possible.
2. There has been little research was done on the emotional effects for women after recent miscarriage in Iraq especially in Holy Kerbala Governorate.

1.3 Aim of Study

The study aims to evaluate the emotional difficulties of recent miscarriage among women in Holy Kerbala province 2024.

CHAPTER TWO

Subjects and Methods

2.SUBJECTS AND METHODS

2.1 Study Design Setting and Time

This descriptive (a cross-sectional study) was conducted on 450 women who had one or more previous miscarriage before 6 months or less and who attended Obstetrics & Gynecology Teaching Hospital which is in the center of Kerbala and Al-Husseinyia General Hospital which is in the periphery of Kerbala. Data collection was conducted from tenth of March 2024 to eleventh of July 2024, The data was collected by simple random sampling technique.

2.2 Sample and Sampling Technique

The estimate of the sample size was predicated on the 50% chance of a sufficient association between female miscarriage and emotional distress (this is taken from pilot study), with a 95% CI and a 5% margin of error. The aforementioned estimation technique indicated that a minimum sample size of 384 was needed. By the end of the survey, 450 samples had been collected, more than the study's minimum need.

$$N= Z^2 P (1-P)/d^2$$

- Where **n** is the sample size,
- **Z** is the statistic corresponding to level of confidence (1.96 for 95% CI),
- **P** is expected prevalence (that obtained from a pilot study conducted by the researcher), p was set as 0.5.
- **d** is precision (corresponding to effect size).

2.3 Inclusion Criteria

Women who have one or more previous miscarriage before 6 months or less.

2.4 Exclusion Criteria

1.Women who are seriously ill to ensure participants safety and to reduce variability in study result.

2.Women who refuse participation.

3.Women who have history of psychiatric illness.

2.5 Ethical Consideration

The study was approved by research ethical committee at the College of Medicine, University of Kerbala and Kerbala Health Directorate. Verbal consent was obtained from women who participated in the study. The aim of the study was explained to all participants.

2.6 Data Collection

After providing informed consent to 450 women, the response rate was 100%.

2.7 Data Collection (Instruments and Tools)

The data were collected in 3 days per week and the questionnaire was compiled from other research studies (Moscoso et al., 2012; Humadee, 2013). The data was examined by the supervisor to make sure it was collected and stored appropriately. The questionnaire included [age, occupation, residence, education, economic state, smoking, parity, previous miscarriage, type of miscarriage, chronic disease, drug history, Gestational age at time of miscarriage, complication after miscarriage, infertility before miscarriage, duration of infertility before miscarriage, conception before miscarriage if spontaneous or induced pregnancy].

2.8 Questionnaire Scoring

The revised Perceived Emotional Distress Inventory (PEDI) is a 15-item self-report screening scale designed to reflect the presence and severity of emotional distress and general mood disturbance. The measure assesses anxiety, anger, depression and hopelessness making distinctions regarding the expression and suppression angry feelings. In responding to each PEDI item, subjects report to what extend they have experienced each emotional distress related symptoms, during the past month, by rating themselves on a 4-point scale ranging from 0 to 3:

- Not at all (0)
- Sometimes (1)
- Often (2)
- Very much so (3)

A Global Severity Index (GSI) is determined simply by summing the ratings for each individual item that comprises the PEDI. The total score for the inventory ranges from 0 to 45 points. Higher scores correspond to higher levels of perceived emotional distress. The PEDI is not a diagnostic measure. Accordingly, there are no cut-offs scores. Since the instrument has been developed for research purposes only, our intention is to make comparisons between the subjects in the study samples.

2.9 Pilot Study

A pilot study had been conducted in Obstetrics and Gynecology Teaching Hospital in February 2024; twenty women participated in this study. The purpose of this study was to determine whether the questionnaire was feasible and to address any challenges that might come up throughout the data collection process. The participant interview lasted from ten to fifteen minutes. The final analysis did not include the results from the pilot study.

2.10 Statistical Analysis

The Statistical Package for the Social Sciences (SPSS 24.0 for Windows) was used to enter and analyze the data for this study. In the relevant tables and figures, the descriptive statistics were utilized in terms of frequency, percentage, and mean ±SD. The Kruskal-Wallis test was used to compare the means of three or more groups, and the Mann-Whitney test was used to compare the means of two groups in order to identify any potential associations for abnormally distributed variables (by applying the Kolmogorov-Smirnov test). When $p < 0.05$, the significance threshold was taken into account.

CHAPTER THREE

Results

3. RESULTS

The study revealed that more than one half of the study participants (52.7%) aged 24- 35 years. Close to one half of the study women (49.6%) were employed. Primary and secondary educations were close to one half of the study population (50.9%). Chronic disease and drug history were reported by more than one third of the study women (36.4% and 35.3% respectively) as described in Table. (2) below.

Table.(2) Socio-Demographic Characteristics of the Study Participants

Characteristics	Categories	Frequency	Percentage %
Age (years)	23 or less	82	18.2
	24-29	117	26
	30-35	120	26.7
	36-41	84	18.7
	42 and more	47	10.4
Residence	Rural	205	45.6
	Urban	245	54.4
Occupation	Housewife	227	50.4
	Employee	223	49.6
Education	Illiterate	43	9.6
	Primary	118	26.2
	Secondary	111	24.7
	College and higher	178	39.6
Economic state	Poor	76	16.9
	Medium	269	59.8
	Good	105	23.3
Smoking	Yes	54	12.0
	No	396	88.0
Chronic disease	Yes	164	36.4
	No	286	63.6
Drug history	Yes	159	35.3
	No	291	64.7

Nulliparity was reported by one quarter of the examined women. History of previous miscarriage was reported by 50.7%. Spontaneous miscarriage was reported by less than two thirds (66%) of the examined women. Close to two thirds of the examined women (65.3%) reported complication after miscarriage. Bleeding, infection and retained piece were the most frequent complication reported by the examined women Figure. (1). Infertility before miscarriage reported by more than one half of the study participants (53.1%). Induced pregnancy reported by about one third of the examined women as offered in Table. (3) below.

Table (3). Obstetric and gynecological history of the examined women

Characteristics	Categories	Frequency	Percentage %
Parity	Nullipara	115	25.6
	Primipara	187	41.6
	Multipara	148	32.9
Previous miscarriage	Yes	228	50.7
	No	222	49.3
Type of miscarriage	Induced	153	34.0
	Spontaneously	297	66.0
Gestational age at time of miscarriage	First trimester	315	70.0
	Second trimester	135	30.0
Complication after miscarriage	Yes	294	65.3
	No	156	34.7
Infertility before miscarriage	Yes	239	53.1
	No	211	46.9
Duration of infertility	One year	173	72.4
	More than one year	66	27.6
Conception	Spontaneously	306	68.0
	Induced	144	32.0

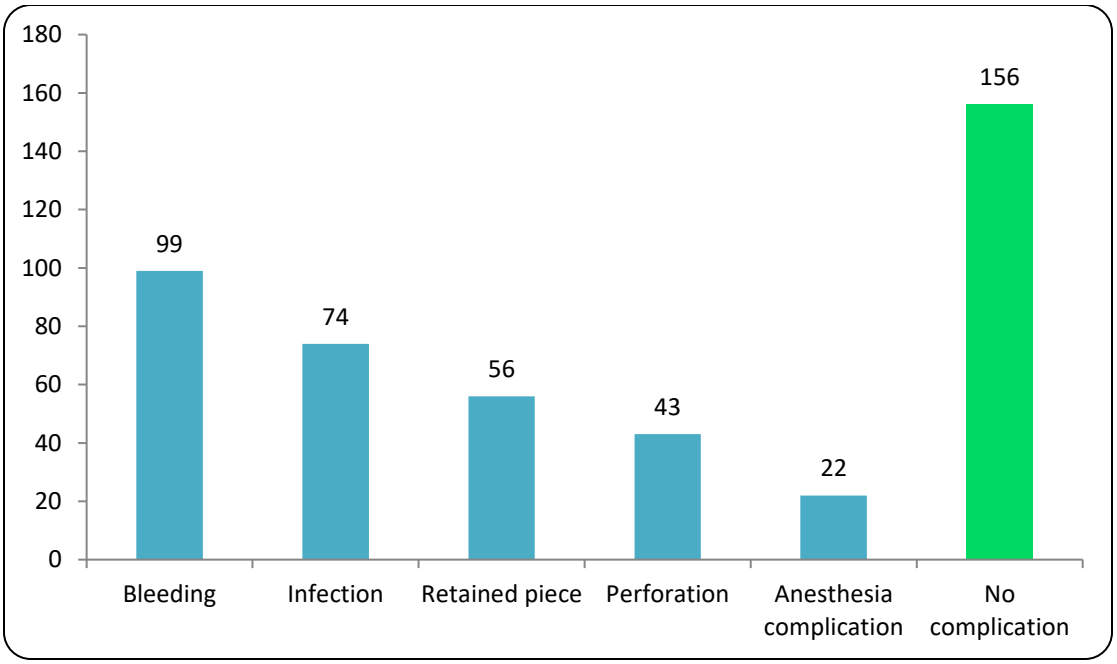

Figure. (1) Types of complication after miscarriage among study participants

Regarding the 15-item self-report screening scale of the questionnaire form to assess the presence and severity of emotional distress and general mood disturbance (Higher scores correspond to higher levels of perceived emotional distress), the results of the study concluded that Global Severity Index (GSI) was **22.97** out of 45 and mean of **1.53±0.57**. as revealed in Table. (4).

In regard to anxiety, anger, depression and hopelessness scores, the higher mean score was for anger followed by anxiety and depression; the least score was for hopelessness as shown in Table. (4) and Figure. (2) below.

Table.(4). Frequencies and mean scores for answers to the 15-item of the questionnaire

	PEDI Questions	Not at all	Sometimes	Often	Very much so	Mean score
PEDI: Anxiety	I feel strained Q(2)	49 (10.9%)	169 (37.6%)	144 (32%)	88 (19.6%)	1.60±0.92
	I feel nervous (Q5)	73 (16.2%)	139 (30.9%)	130 (28.9%)	108 (24%)	1.61±1.02
	I feel confused and restless (Q6)	61 (13.6%)	154 (34.2%)	145 (32.2%)	90 (20%)	1.59±0.96
	I feel overwhelmed by "simple difficulties" (Q7)	76 (16.9%)	170 (37.8%)	112 (24.9%)	92 (20.4%)	1.49±1.00
	Mean score					1.57±0.69
PEDI: Depression	I worry that my condition will get worse (Q8)	95 (21.1%)	141 (31.3%)	127 (28.2%)	87 (19.3%)	1.46±1.03
	I feel sad (Q14)	57 (12.7%)	128 (28.4%)	140 (31.1%)	125 (27.8%)	1.74±1.00
	I am not enjoying the things I usually do for fun (Q9)	78 (17.3%)	159 (35.3%)	137 (30.4%)	76 (16.9%)	1.47±0.97
	Mean score					1.56±0.74
PEDI: Hopelessness	I feel distant from my friends (Q3)	89 (19.8%)	149 (33.1%)	131 (29.1%)	81 (18%)	1.45±1.00
	I am losing hope in the fight against my illness (Q10)	108 (24%)	143 (31.8%)	115 (25.6%)	84 (18.7%)	1.39±1.05
	I feel like a failure (Q15)	111 (24.7%)	134 (29.8%)	115 (25.6%)	90 (20%)	1.41±1.07
	I am losing faith in my medical treatment (Q12)	114 (25.3%)	141 (31.3%)	113 (25.1%)	82 (18.2%)	1.36±1.05
	Mean score					1.40±0.74
PEDI: Anger	I get easily irritated (Q1)	83 (18.4%)	160 (35.6%)	81 (18%)	126 (28%)	1.56±1.09
	I am angrier than I am willing to admit (Q4)	83 (18.4%)	145 (32.2%)	138 (30.7%)	84 (18.7%)	1.50±1.00
	I feel angry (Q13)	55 (12.2%)	123 (27.3%)	144 (32%)	128 (28.4%)	1.77±1.00
	I "boil inside", but I try not to show it (Q11)	81 (18%)	135 (30%)	121 (26.9%)	113 (25.1%)	1.59±1.05
	Mean score					1.60±0.68
Global Severity Index (GSI)						22.97±8.50
Mean						1.53±0.57

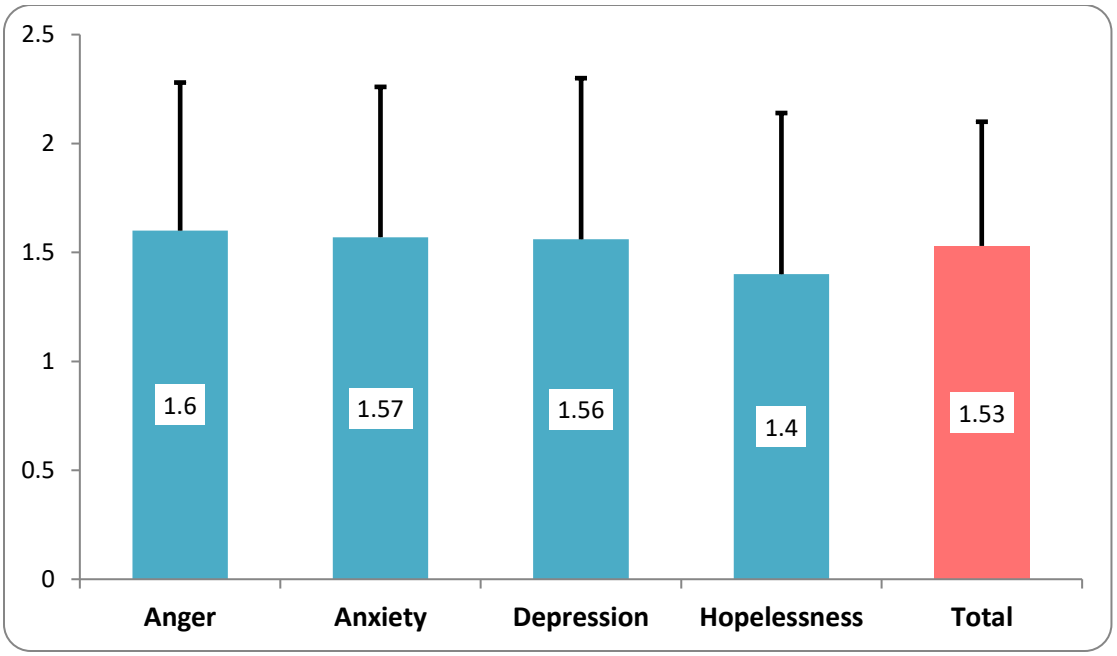

Figure. (2) Bar chart demonstrates mean scores of perceived emotional distresses among study participants

Concerning the association of the socio-demographic and obstetric/ gynecological correlates and the severity of the score, analysis of data revealed that the employed women had significantly higher severity score than housewives (p=0.004). There was no significant difference between educational level and the severity score (p=0.066). The results indicated that women with no history of chronic diseases and those with no drug history had significantly lower severity score than those with history of chronic diseases and those with drug history (p= 0.005 and 0.041 separately). There was a significant difference between parity and the severity score (p=0.045), the post hoc test concluded that nulliparous women had significantly lower severity score than primipara and multiparous women. The study revealed that women with history of previous miscarriage, presence of complication after miscarriage, history of infertility before miscarriage and induced pregnancy had significantly higher severity score than others ($p<0.05$) as illustrated in Table. (5) below.

Table. (5) Association of the Socio-Demographic and Obstetric and Gynecological Correlates and the Mean Score among examined women

Characteristics	Categories	Mean score	SD	P value
Age (years)	23 or less	22.09	10.27	0.728
	24-29	23.08	8.26	
	30-35	23.74	7.19	
	36-41	22.61	7.89	
	42 and more	22.96	9.88	
Residence	Rural	23.43	9.34	0.298
	Urban	22.60	7.72	
Occupation	Housewife	21.83	9.04	0.004*
	Employee	24.14	7.75	
Education	Illiterate	22.74	9.90	0.066
	Primary	22.49	8.50	
	Secondary	21.59	8.43	
	College and higher	24.21	8.06	
Economic state	Poor	24.87	8.76	0.095
	Medium	22.70	8.50	
	Good	22.31	8.18	
Smoking	Yes	23.72	6.63	0.491
	No	22.87	8.72	
Chronic disease	Yes	24.46	7.54	0.005*
	No	22.12	8.90	
Drug history	Yes	24.08	7.50	0.041*
	No	22.37	8.95	
Parity	Nullipara	21.28	8.90	0.045*
	Primipara	23.64	7.80	
	Multipara	23.45	8.90	
Previous miscarriage	Yes	22.87	8.27	0.023*
	No	22.05	8.64	
Type of miscarriage	Induced	23.67	7.81	0.217
	Spontaneously	22.62	8.82	
Gestational age at time of miscarriage	First trimester	22.85	8.38	0.632
	Second trimester	23.27	8.78	
Complication after	Yes	23.83	8.34	0.003*

miscarriage	No	21.35	8.58	
Infertility before miscarriage	Yes	25.18	8.26	<0.001*
	No	20.48	8.08	
Duration of infertility	One year	24.61	7.72	0.085
	More than one year	26.67	9.45	
Conception	Spontaneously	21.36	8.18	<0.001*
	Induced	26.41	8.16	
* Significant P value of less than 0.05.Independant t - test or ANOVA test was used.				

CHAPTER FOUR

Discussion

4. DESCUSSION

According to the current study, the largest proportion of the study sample is in the 30 to 35-year-old age range, which disagree with the study conducted in Iraq, 2013 (Humadee, 2013) that shows the majority of women between the age (23-27 years), and other study done in Iraq (Hussein et al., 2022) that reveals the highest percentage between the age (20-29 years), and further study done in Turkey, 2022 (Sayın and Pınar, 2022) that denotes the highest percentage between (26-35 years).

Our study disagrees with the study that was done in Egypt, 2018 (Shereda et al., 2018), which revealed the rate of primary and secondary education was 40% while the rate of college and higher education was 60%, this rate of illiterate was 0%. In contrast, the present study shows that the rate of illiterate is 9.6%, the rate of primary and secondary education is 50.9%, while the rate of college and higher is 39.6%. This discrepancy may be attributed to differences in socio-economic conditions and educational opportunities between the two populations. Furthermore, education level plays an important role in shaping women's awareness, coping strategies, and access to healthcare. Women with lower levels of education may face greater emotional difficulties following miscarriage due to limited knowledge about reproductive health and reduced ability to seek psychological or medical support. Therefore, the higher rate of illiteracy and lower rate of higher education in our sample could be one of the factors contributing to the increased emotional burden observed among women in Kerbala.

This study shows that the percentage of women that do not had chronic disease is 63.6%, While those who have chronic disease was 36.4%, this result agrees with the study done in India (Kotta et al., 2018) that shows the rate of women who do not have chronic disease 73%, while the rate of women that have

chronic disease 27%. The similarity between our findings and the Indian study suggests that chronic disease remains a common and significant issue among women with miscarriage across different populations. However, the slightly higher percentage of chronic diseases in our study may reflect variations in healthcare access, environmental conditions, or lifestyle differences between Iraq and India. These factors could contribute not only to physical health outcomes but also to the intensity of emotional difficulties faced by affected women.

The current study indicates that the rate of women with previous miscarriage is 50.7%, which is approximately equal to those without previous miscarriage (49.3%). This contrasts with the study conducted in Iraq (Sabit and Fadhil, 2022), which reported a much higher rate of previous miscarriage (86.7%) compared to those without miscarriage (13.3%). Such variation may be attributed to differences in sample size, study population, or regional health conditions. Moreover, the high proportion of women with previous miscarriage in both studies highlights the significant burden of recurrent pregnancy loss and its potential impact on women's emotional well-being.

This study shows that the rate of housewives is 50.4%, which is approximately equal to the rate of employees (49.6%). This contrasts with the study conducted in Bangladesh (Nahar et al., 2023), which reported a higher rate of housewives (70%) compared to employees (30%), and also disagrees with the study conducted in Portugal (Mendes et al., 2024), which showed a predominance of employees (93.2%) over housewives (6.8%). These variations may reflect differences in socio-economic conditions, cultural norms, and labor market opportunities across countries, all of which can influence women's roles and their emotional experiences following miscarriage.

Concerning residence, the study shows the rate of women who live in urban area was 54.4% which is more than the rate of women who live in rural area 45.6%. This might be due to that urban areas are crowded, and transportation is available, making it easier to seek health care. However, in rural areas, women rarely visit hospitals and health centers, or they may not return because they are stigmatized as having spontaneous miscarriages. As a result, they prefer to see a midwife to receive facility care, which raises the likelihood that there are more urban women in the sample than rural women. This goes in line with the study that has been done in Nigeria, 2019 (Odinka et al., 2019) which shows the rate of women who live in urban area is 92.20%; it is more than the rate of women who live in rural area 7.80%.

As for the economic state, the current study shows that the majority of women with previous miscarriage were of medium income (59.8%), compared to 23.3% with good income and 16.9% with poor income. These findings are in agreement with a study conducted in Turkey (Sayın and Pınar, 2022), which also reported a predominance of medium income (70.5%) over poor income (20.5%) and good income (9.1%). However, the present results disagree with a study conducted in Iraq (Hussein et al., 2022), which revealed that women with good income had the highest rate (44.1%), followed by medium income (28.8%) and poor income (27.1%). Such differences may reflect variations in socio-economic structures, healthcare accessibility, and cultural contexts, all of which can influence both reproductive outcomes and the emotional challenges women face following miscarriage.

Regarding conception, the current study found that the rate of women with spontaneous pregnancy was 68%, compared to 32% with induced pregnancy. This result contrasts with the findings of a study conducted in Iraq (Sabit and Fadhil,

2022), which reported a higher rate of induced pregnancy (62%) compared to spontaneous pregnancy (38%). Such differences may be attributed to variations in reproductive health services, accessibility of assisted reproductive technologies, and socio-cultural factors influencing women's choices. These factors are of particular importance, as the mode of conception can affect both the physical outcomes and the emotional responses of women following miscarriage.

The study shows that there is a high levels of emotional distress in women with recent miscarriage and there is an association between all the four categories of emotional distress (anger, anxiety, depression, hopelessness) and miscarriage, this result was in agreement with a study in (He et al.,2019) and in (Blackmore et al.,2011) and this could be explained by grief for the loss, anxiety about future pregnancies, hormonal shifts, and feelings of guilt or shame.

the study revealed that those women suffered primarily from anger followed by anxiety and depression; hopelessness was the least to suffer from, this may be due to that anger is a common response to a miscarriage due to feelings of loss of control, betrayd expectations, and unfairness, often leading to feelings of frustration toward oneself, one's body, or others, while hopelessness was the least to suffer from because miscarriage is usually a temporary, acute grief process, where as hopelessness a symptom of major depressive disorder, implies a more enduring and debilitating state of persistent sorrow and despair. this was in disagreement with (Humadee, 2013) study which show that women suffered primarly from anxiety while hopelessness was the least to suffer from also.

The study indicates a significant association between occupation and emotional distress among women following miscarriage. In the current study, working women had a higher mean emotional distress score (24.14) compared to housewives (21.83). This may be due to the combined pressures of occupational

responsibilities, financial obligations, and the physical and emotional demands, which can increase stress levels and limit opportunities for emotional recovery. In contrast, studies conducted in China (Wang et al., 2021) and Pakistan (Haghparast et al., 2016) did not find a significant relationship between occupational status and post-miscarriage emotional distress, possibly because women in these countries experience more balanced working hours and better access to rest periods. Furthermore, the limited availability of psychological support services in Iraq—often minimal or absent—may exacerbate emotional distress, whereas women in China and Pakistan may have greater access to such support. While employment provides autonomy and financial stability, it can also intensify psychological strain and expose women to negative societal scrutiny, as observed in Egypt (Hassan, 2016). These factors collectively explain why occupational status significantly influences emotional distress among Iraqi women following miscarriage.

Regarding chronic disease, this study shows that there is a significant relation between chronic disease and emotional distress for women who have previous miscarriage, this may be due to hormonal changes prior psychological and emotional stress associated with the disease and lack of social and family support in addition to the fact that miscarriage may interfere with treatment interactions and pregnancy complications, this result disagrees with the study that has been done in Saudi Arabia 2024 (Tehsin et al., 2024).

The current study shows a significant relationship between complications following miscarriage and emotional distress among women with previous miscarriage. This finding disagrees with the study conducted in China (Luo et al., 2023), which did not find a significant association but aligns with a study in Nigeria (Akinsulore et al., 2021), which reported a similar relationship. The discrepancy with the Chinese study may be explained by differences in healthcare

access, post-miscarriage care practices, and cultural attitudes toward reproductive health, which can influence the emotional impact of complications after miscarriage.

Regarding parity, the study shows a significant relation between parity and emotional distress among women who have experienced miscarriage. Specifically, women with higher parity tended to report greater emotional distress. These findings are consistent with the study conducted in China (Wang et al., 2021) and align with the results of a study in Bangladesh (Gausia et al., 2011), both of which reported that parity plays an important role in influencing women's psychological responses following miscarriage.

In this study, the mean emotional distress score for primiparous (23.64) and multiparous women (23.45) was higher than for nulliparous women (21.28). This contrasts with the study conducted in Egypt (Shereda et al., 2018), which reported higher emotional distress among nulliparous women following miscarriage. The higher distress scores among primiparous and multiparous women in the current study may be attributed to increased anxiety about the loss of an existing or previous pregnancy, the responsibilities of caring for other children, and concerns about family planning and future pregnancies, which can amplify the emotional impact of miscarriage.

The current study shows a significant relation between previous miscarriage and emotional distress for women . This aligns with the study that has been done in Keyna 2019 (Mutiso et al., 2019), which concluded that the repetition of the traumatic occurrence immediately enhances the intensity of symptoms since the experience of recurrent miscarriage is a painful event that causes emotional suffering.

Additionally, there is a significant relation between conception and emotional distress for women who have miscarriage in this study; This agrees with the study that has been done in India 2018 (Ashok et al., 2018) which shows also a significant correlation between the two.

The current study indicates that there is a significant relation between drug history and emotional distress. This agrees with the study that has been done in Turkey 2021 (Cavusoglu et al., 2021), and the study in China 2024 (Shen et al., 2024) which shows elevated risk of miscarriage after drug use, and misuse of some drug that contribute to decline in emotional and mental wellbeing.

Regarding infertility before miscarriage, the current study shows that there is a significant relation between infertility before miscarriage and emotional distress. This goes in line with the study that has been done in Bangladesh 2023 (Hasan et al., 2023).

Concerning age, this study shows that there is no significant relation between age and emotional distress in women with previous miscarriage. This contrasts with the study conducted in Turkey (Adib-Rad et al., 2019), but agrees with the study in Iran (Alipanahpour et al., 2020), which also found no significant correlation. The lack of association in the current study may be explained by similar coping mechanisms, social support, or life experiences across different age groups, which could mitigate the impact of age on emotional distress following miscarriage.

For smoking, the current study shows that no significant relation is noticed between smoking and emotional distress. This result disagrees with the study that has been done in Australia 2015 (McCarthy et al., 2015). Which reveals a significant relation, and disagrees with the study in United states (Wang et al.,

2024). The discrepancy may be explained by differences in sample characteristics, smoking intensity, cultural attitudes toward smoking, or the presence of supportive coping mechanisms, which can influence the emotional impact of miscarriage differently across populations.

The current study reveals that no significant relation exists between gestational age at time of miscarriage and emotional distress. This aligns with the study in Turkey 2020 (Gümüşsoy et al., 2020) which shows no significant relation. However, it contrasts with the study that has been conducted in Kenya 2019 (Mutiso et al., 2019) which shows a significant relation between emotional distress and gestational age at time of miscarriage. The discrepancy may be attributed to differences in sample characteristics, cultural perceptions of pregnancy, access to healthcare services, or the level of social and emotional support available to women experiencing miscarriage at different gestational stages.

The current study denotes the absence of relation between type of miscarriage and emotional distress of women with previous miscarriage. This goes in line with the study that has been made in Lithuania 2022 (Kukulskienė and Žemaitienė, 2022). The lack of association may be explained by the fact that, regardless of miscarriage type, the emotional impact is primarily influenced by personal, social, and psychological factors rather than the clinical classification of the loss.

Regarding education, the study shows no significant relation between education and emotional distress. This can be rationalized by the idea that educated women are more aware of their health problem and can easily cope with. This agrees with the study in India 2018 (Tavoli et al., 2018), which shows no significant correlation too.

Concerning residence, the current study shows no significant relationship between residence and emotional distress among women with previous miscarriage. This finding contrasts with a study conducted in Turkey (Adib-Rad et al., 2019), which reported a significant association. The discrepancy may be explained by differences in access to healthcare services, availability of social support, or urban-rural lifestyle variations, which can influence how women experience and cope with emotional distress following miscarriage.

The current study shows that there is no significant relation between economic state and emotional distress in women with previous miscarriage. This agrees with the study that has been done in Saudi Arabia 2024 (Tehsin et al., 2024), and Iran 2022 (Ghanbarpoor et al., 2022), which shows no correlation too. However, it disagrees with the study in China (Luo et al., 2023) which shows a significant correlation between economic state and emotional distress.

The study found out that there were high levels of emotional distress following miscarriage among women and there was a statistical correlation between socio-demographic characteristic and gynecological and obstetric history with all items of perceived emotional distress inventory scale. Assessing the emotional distress following miscarriage among women by using the perceived emotional distress inventory scale, revealed that the women who have miscarriage suffered from emotional distress.

This study reveals that the mean score for emotional distress for poor income 24.87 which is more than good income 22.31 and medium income 22.70. This may due to the fact that patients belonging to poor families are concerned about themselves and about the treatment expenses because they are unable to bear high expenses of treatment of infertility and miscarriage. This agrees with the study that has been done in Egypt 2016 (Hassan, 2016).

4.1. Limitations of the study

The study has some limitations:

1. Only the women who visited hospitals have been examined. Thus, some women have been missed and this may change the result.
2. There are difficulties in collecting the samples which occur three days per week and the center of collecting data is far from home.
3. Using a cross-sectional study restricts the generalizability of its results which might create selection bias.
4. As its hospital based, it might give higher rates than normal population, as higher rates of infertility reported.

CHAPTER FIVE

Conclusions and Recommendations

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study shows that there is a high level of emotional distress in women with recent miscarriage and there is an association between all the four categories of emotional distress (anger, anxiety, depression, hopelessness) and miscarriage and there is approximately close ratio between all four items of emotional distress scale in women who have previous miscarriage.

The study reveals that there is a significant association between (occupation, drug history, parity, chronic disease, previous miscarriage, complication after miscarriage, infertility before miscarriage, conception) and all four items of emotional distress.

5.2 Recommendations

1. There is a clear need for the development of targeted support programs that women with previous miscarriage especially who have risk factor of miscarriage for psychological and mental follow up by psychiatrists (Hospitals, Private clinics, Primary Health Care Centers) to look for any psychological, emotional, or mental effects that occur after miscarriage.
2. Future research should build upon the findings of this study by examining the psychological impact of miscarriage across a wider range of demographics and within diverse cultural contexts.
3. Long-term studies may offer valuable insights into the enduring psychological impact of miscarriage and the long-term effectiveness of different coping strategies and support system.
4. The findings of this study have significant implications for clinical practice and support services. Healthcare providers should be trained to offer compassionate, informed care that addresses both the physical and psychological needs of women experiencing a miscarriage.
5. Public health initiatives should aim to break the silence around miscarriage, reducing stigma and fostering a supportive community that acknowledges miscarriage as a significant loss requiring both emotional and physical care.

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APPENDICES

QUESTIONNAIRE OF EMOTIONAL DISTRESSES AMONG WOMEN WITH RECENT MISCARRIAGE

Code			
Age			
Residence	**Rural**	**Urban**	
Occupation	**Housewife**	**Employee**	
Education	**Uneducated**	**Primary**	**Secondary**
	College	**High education**	
Economic state	**Poor**	**Medium**	**Good**
Smoking	**Yes**	**No**	
Parity	**Null**	**Primi**	**Multi**
Previous miscarriage	**Yes**	**No**	
Type of miscarriage	**Induced**	**Spontaneously**	
Chronic disease	**Yes**	**No**	
Drug history	**Yes**	**No**	
Gestational age at time of miscarriage	**First three months**	**Fourth or fifth month**	
Complications after the miscarriage	**Bleeding**	**Perforation**	**Incomplete expulsion of the fetus / Retained piece**
	Infection	**Complications due to anesthesia**	**No complications**

History of infertility before the miscarriage	**yes**	**No**
Duration of infertility before the miscarriage	**One year**	**More than one year**
Conception	**Spontaneously**	**Induced**

PERCEIVED EMOTIONAL DISTRESS INVENTORY

	Not at all	**sometimes**	**often**	**Very much so**
1. I get easily irritated				
2. I feel strained				
3. I feel distant from my friends				
4.lam angrier than lam willing to admit				
5. I feel nervous				
6. I feel confused and restless				
7.I feel overwhelmed by simple difficulties				
8. I worry that my condition will get worse				
9.lam not enjoying the things I				

usually do for fun				
10.lam losing hope in the fight against my illness				
11.I boil inside but I try not to show it				
12.lam losing faith in my medical treatment				
13.I feel angry				
14. I Feel sad				
15. I feel like a failure				

University of Kerbala
College of Medicine
Medical Research Bioethical Committee
No: 24-26
Date: 21/5/2024

ETHICAL APPROVAL LETTER

Zina Ali Hussein
Family & Community Medicine dept.\ College of Medicine \ University of Kerbala

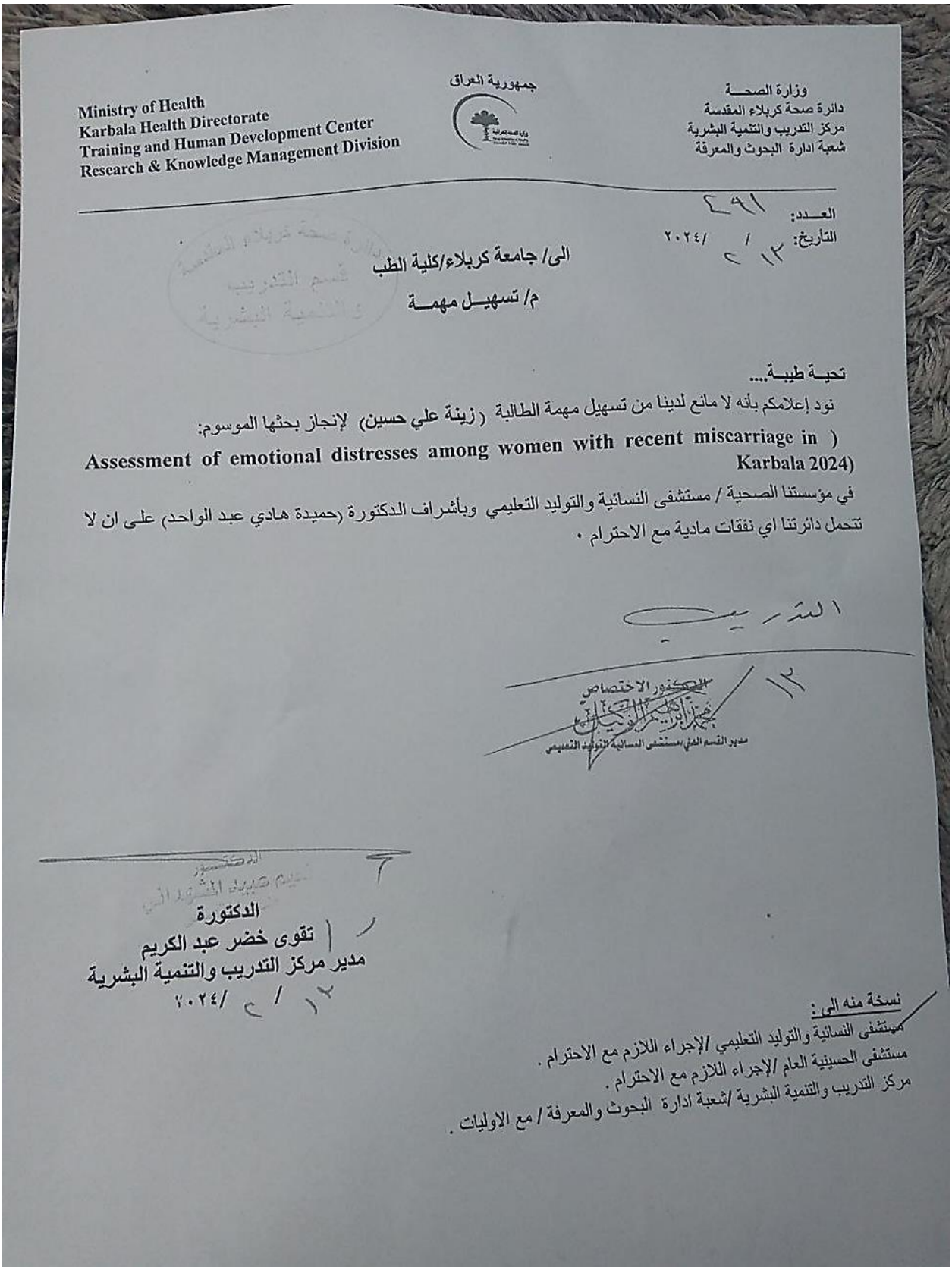
Title of Project: ***"Assessment of Emotional Distresses among Women with recent miscarriage in Karbala 2024"***

This is to certify that proposal provided have satisfactorily addressed the research bioethical guidelines.

Please consider the following requirements of approval:

1. Approval will be valid for one year. By the end of this period, if the project has been completed, abandoned, altered, discontinued or not commenced for any reason, you are required to announce to the Committee. And you should inform the committee if the study extends over one year.
2. You must notify the Committee immediately in the event of any adverse effects or annoyance on participants or of any unforeseen events that might affect continued ethical acceptability of the project.
3. At all times you are responsible for the ethical conduct of your research in accordance with the standard bioethical guidelines. In agreement with WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants.
4. All participants must be informed about the research issue and objective, taking their consent to participate. Always consider the confidentiality of personal information and/or opinions, and they must never be obligated to participate and explaining the value and benefits of their participation.
5. The Committee should be notified if you will be applying for or have applied for internal or external funding for the above project.
6. This document does not compensate administrative or ethical approval might be required from directorate of Health in Karbala, Hospitals or other bodies.

Professor Dr. Ali A. Abutiheen
Chair, Medical Research Bioethical Committee
College of Medicine – University of Kerbala



وزارة الصحـــة
دائرة صحة كربلاء المقدسة
مركز التدريب والتنمية البشرية
شعبة ادارة البحوث والمعرفة

جمهورية العراق

Ministry of Health
Karbala Health Directorate
Training and Human Development Center
Research & Knowledge Management Division

العـــدد: ٢٩١
التاريخ: ١٢ / ٢ /٢٠٢٤

الى/ جامعة كربلاء/كلية الطب
م/ تسهيـــل مهمـــة

تحيـــة طيبـــة....

نود إعلامكم بأنه لا مانع لدينا من تسهيل مهمة الطالبة (زينة علي حسين) لإنجاز بحثها الموسوم:

Assessment of emotional distresses among women with recent miscarriage in (Karbala 2024)

في مؤسستنا الصحية / مستشفى النسائية والتوليد التعليمي وبأشراف الدكتورة (حميدة هادي عبد الواحد) على ان لا تتحمل دائرتنا اي نفقات مادية مع الاحترام .

الدكتور الاختصاص
مدير القسم الفني /مستشفى النسائية والتوليد التعليمي

الدكتورة
تقوى خضر عبد الكريم
مدير مركز التدريب والتنمية البشرية
١٢ / ٢ /٢٠٢٤

نسخة منه الى :
مستشفى النسائية والتوليد التعليمي /لإجراء اللازم مع الاحترام .
مستشفى الحسينية العام /لإجراء اللازم مع الاحترام .
مركز التدريب والتنمية البشرية /شعبة ادارة البحوث والمعرفة / مع الاوليات .

وزارة التعليم العالي والبحث العلمي
جامعـــــة كربـــــلاء
كلية الطب
معاون العميد لشؤون العلمية
شعبة شؤون الدراسات العليا

جمهورية العراق

العـدد: 682 / د ع
التاريخ: 2 / 7 / 2024

الى/دائرة صحة كربلاء/مستشفى النسائية والتوليد
م/ تسهيل مهمة

كلية الطب
الصـــادر

تحية طيبة:

يرجــى تفضــلكم بتســهيل مهمــة طالبــة الدراســات العليــا/دبلوم عــالي /طــب الاســرة (ســنتان تقويميتــان) فــي فــرع طــب الاســرة والمجتمع **(زينة علي حسين)** في مشروع البحث الموسومة :

((Assessment of emotional distresses among women with recent miscarriage in kerbala 2024.))

لغــرض جمــع عينــات البحــث , شــاكرين تعــاونكم معنــا خدمــة للحركــة العلمية في بلدنا العزيز.

... مع التقدير ...

أ.د. علي عبدالرضا كاظم ابو طحين
معاون العميد للشؤون العلمية
2024/7/2

نسخة منه:
- دائرة صحة كربلاء المقدسة/شعبة التدريب والتطوير.. للتفضل بالاطلاع وأتخاذ مايلزم .. مع التقدير
- مكتب السيد العميد المحترم للتفضل بالاطلاع مع التقدير.
- مكتب معاون العميد للشؤون العلمية المحترم للتفضل بالاطلاع مع التقدير.
- فرع طب الاسرة والمجتمع للتفضل بالاطلاع مع التقدير.
- شعبة الدراسات العليا/الحفظ.
- الصادرة.

وزارة التعليم العالي والبحث العلمي
جامعـــة كربـــلاء
كلية الطب
معاون العميد لشؤون العلمية
شعبة شؤون الدراسات العليا

جمهورية العراق

العـدد: د/6/ 681
التاريخ: 2024/2/7

الى/دائرة صحة كربلاء/مستشفى الحسينية العام
م/ تسهيل مهمة

جامعة كربلاء - كلية الطب
الصـــادر

تحية طيبة:

يرجـــى تفضـــلكم بتســـهيل مهمـــة طالبـــة الدراســـات العليـــا/دبلوم عـــالي /طـــب الاســـرة (ســـنتان تقويميتـــان) فـــي فـــرع طـــب الاســـرة والمجتمع **(زينة علي حسين)** في مشروع البحث الموسومة :

((Assessment of emotional distresses among women with recent miscarriage in kerbala 2024.))

لغـــرض جمـــع عينـــات البحـــث , شـــاكرين تعـــاونكم معنـــا خدمـــة للحركـــة العلمية في بلدنا العزيز.

... مع التقدير ...

أ.د. علي عبدالرضا كاظم أبو طحين
معاون العميد للشؤون العلمية
2024/2/7

**نسخة منه:
- دائرة صحة كربلاء المقدسة/شعبة التدريب والتطوير.. للتفضل بالاطلاع واتخاذ مايلزم .. مع التقدير
- مكتب السيد العميد المحترم للتفضل بالاطلاع مع التقدير.
- مكتب معاون العميد للشؤون العلمية المحترم للتفضل بالاطلاع مع التقدير.
- فرع طب الاسرة والمجتمع للتفضل بالاطلاع مع التقدير.
- شعبة الدراسات العليا/الحفظ.
- الصادرة.

الخلاصة

خلفية البحث:

يُعدّ الإجهاض من المضاعفات الرئيسية للحمل، وله آثار عاطفية سلبية قصيرة وطويلة الأمد على النساء. قد تعاني النساء بعد الإجهاض من اضطرابات الانزعاج العاطفي، مثل القلق، الغضب، الاكتئاب، أو اليأس.

الهدف:

هدفت هذه الدراسة إلى تقييم الضيق العاطفي الناتج عن الإجهاض الحديث بين النساء في كربلاء المقدسة لعام 2024.

طرق العمل:

تكوّنت عينة هذه الدراسة الوصفية من 450 امرأة سبق لهن أن تعرضن لإجهاض واحد أو أكثر خلال مدة لا تتجاوز الستة أشهر، وقد راجعن مستشفى النسائية والتوليد التعليمي ومستشفى الحسينية العام. تم جمع البيانات من شهر آذار 2024 إلى تموز 2024. تضمنت أدوات البحث استبيانًا منظمًا، كما تم استخدام مقياس الضيق العاطفي المُدرَك المعدّل .(PEDI) تم تحليل البيانات باستخدام برنامجSPSS ، واعتُبر مستوى الدلالة الإحصائية عند.($p < 0.05$)

النتائج:

أظهرت الدراسة أن نسبة 50.7% من النساء أبلغن عن وجود تاريخ سابق للإجهاض، واقل من ثلثي العينة (66%) تعرضن لإجهاض تلقائي. وقد وُثق الإجهاض في الثلث الأول من الحمل بنسبة 70%. أما المضاعفات بعد الإجهاض فقد سُجلت لدى ما يقارب ثلثي العينة (65.3%)، وشملت النزيف، العدوى، وبقاء أنسجة داخل الرحم. كما أبلغت أكثر من نصف المشاركات (53.1%) عن وجود عقم قبل الإجهاض، ومعظمهن استمر العقم لمدة عام. فيما يخص الضيق العاطفي، كان أعلى متوسط للدرجات للغضب (1.60±0.68)، وأقل متوسط لليأس (1.40±0.74)، وكان المتوسط العام لكافة العناصر (1.53±0.57).

وتبيّن وجود علاقة ذات دلالة إحصائية بين كل من المهنة، الأمراض المزمنة، التاريخ الدوائي، عدد الولادات، الإجهاض السابق، المضاعفات بعد الإجهاض، العقم قبل الإجهاض، ونوع الحمل، مع جميع عناصر مقياس الضيق العاطفي المُدرَك.(PEDI)

الاستنتاج:

توجد علاقة ذات دلالـة إحصـائية بـين الإجهـاض والضـيق العـاطفي (الغضـب، القلـق، الاكتئـاب، اليأس)، وتبيّن وجود تقارب في نسب هذه المشاعر الأربعة لدى النساء اللاتي تعرضن للإجهاض سابقًا.

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامـــــعة كـــــربلاء
كـــــلية الطـــــب
قسم طب الأسرة والمجتمع

تقييم الصعوبات العاطفية بين النساء حديثات الإجهاض في كربلاء، 2024

رسالة

دراسة مقدمة إلى مجلس كلية الطب/ فرع طب الاسرة والمجتمع/ جامعة كربلاء كجزء من متطلبات نيل درجة دبلوم عالي في طب الأسرة

من قبل
زينة علي حسين
بكالوريوس طب وجراحة عامة

بإشراف

أ.م.د بشير عقيل العلي
إختصاص طب المجتمع

أ.م.د نورا صباح رسول
إخصائية أمراض النساء والتوليد

2025 م **1446هـ**