

# Assessment of Psychological Risk Factors for Spontaneous Abortion at Maternity Wards in Baghdad City Hospitals

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## Abstract

**Objectives:** To assess the psychological risk factors for spontaneous abortion. **Methods:** A descriptive Analytical study has been conducted on Non- probability sample consisted of (160) women who are suffering from spontaneous abortion in maternity wards from six hospitals at Al Rusafa, AlKarekh and Medical city health directorate. Study has been implemented for the period of January 10<sup>th</sup> 2020 to March 10<sup>th</sup> 2020 . A questionnaire used as a tool of data collection , the study instrument consist of Risk Factors (psychological, depression and anxiety ). Descriptive and inferential statistical analysis are used to analyze the data. **Results:** The study results shows that (60.6%) of women suffering from stress and anxiety during current pregnancy. Only (1.9%) have depression, (8.1%) are reporting the presence of sad events during current pregnancy, (8.8%) are reporting presence of death during current pregnancy, (26.3%) are experiencing a family problem, (25.6%) are violated by their husbands, and (6.9%) are violated by their husband's family. **Conclusion:** The majority of women are experiencing mild depression during their pregnancy, and more than half of women are experiencing moderate anxiety during their pregnancy.

**Keywords:** Assessment, Risk factors, depression, anxiety, Spontaneous abortion.

## Introduction

Having a baby is an amazing and positive experience for most of the women. However, the dream of having a baby can be shattered by the huge blow couples receive during miscarriage and introduces physical and emotional challenges<sup>(1)</sup>. Spontaneous abortion is the most common complication during early pregnancy in women with a rate of 15-20% among pregnant women nearly 80% of spontaneous abortion occurs in the first trimester menses <sup>(2)</sup>, as well as expelling of the fetus from the uterus during the first half of gestation at 20 weeks or less <sup>(3)</sup>. Studies revealed that anywhere from 10 to 25% of all clinically recognized pregnancies will end in miscarriage <sup>(4)</sup>. A study conducted in Saudi Arabia reported that 44% of Saudi women with high-risk pregnancy were aged between 30 and 35 years of age. Approximately 35% of them had two or more previous abortion <sup>(5)</sup>. In a study it has been reported several modifiable risk factors for miscarriage, advanced maternal age at conception, obesity, smoking, alcohol and caffeine consumption, lifting of heavy weights,

night shift work and psychological stress have all been identified as modifiable risk factors during pregnancy for miscarriage <sup>(6)</sup>.

## Methodology

A descriptive Analytical study has been conducted on Non- probability ( purposive) of (160) women who are suffering from spontaneous abortion in maternity wards from six hospitals at Al-Elwyia maternity Teaching hospital, and Fatima Al Zahraa and Ibn Al Balady maternity & children hospital at Al Rusafa health directorate. Al Karckh maternity hospital, and Al Yarmook Teaching hospital at Al Karckh health directorate and Baghdad Teaching hospital at Medical city health directorate . Study has been implemented for the period of January 10<sup>th</sup> 2020 to April 1<sup>st</sup> 2020 . A questionnaire used as a tool of data collection , the study instrument consist of Risk Factors (psychological, depression and anxiety ) . A pilot study has been carried out to test the reliability of the questionnaire and content validity has been carried out through (12) experts.

Descriptive and inferential statistical analysis are used to analyze the data.

## Results

**Table (1): Assessment of Psychological Risk Factors among Women with Abortion (N=160)**

Lst	Psychological factor	No		Yes	
		f	%	f	%
1	Exposure to Psychological problems	159	99.4	1	0.6
2	Suffering Stress and anxiety during the current pregnancy	63	39.4	97	60.6
3	Depression	157	98.1	3	1.9
4	Presence of sad events during the current pregnancy	147	91.9	13	8.1
5	The presence of death during current pregnancy	146	91.3	14	8.8
6	Exposure to family problems	118	73.7	42	26.3
7	Subjected to violence from the husband	119	74.4	41	25.6
8	Subjected to violence from the husband s family	149	93.1	11	6.9
9	Subjected to Physical Violence	149	93.1	11	6.9
10	Subjected to Verbal Violence	119	74.4	41	25.6
11	Subjected to Domestic Violence	129	80.6	31	19.4
12	Subjected to Sexual Violence	159	99.4	1	0.6
13	Subjected to Economic Violence	147	91.8	13	8.2
14	Subjected to Social Violence	158	98.7	2	1.3

### **f: Frequency, %: Percentage**

The table (1) shows that (60.6%) of women suffering from stress and anxiety during current pregnancy. Only (1.9%) have depression, (8.1%) are reporting the presence of sad events during current pregnancy, (8.8%) are reporting presence of death during current pregnancy, (26.3%) are experiencing a family problem,

(25.6%) are violated by their husbands, and (6.9%) are violated by their husband's family. The types of violence among women refer to: physical (6.9%), verbal (25.6%), domestic (25.6%), sexual (0.6%), economic (8.2%), and social (1.3%).

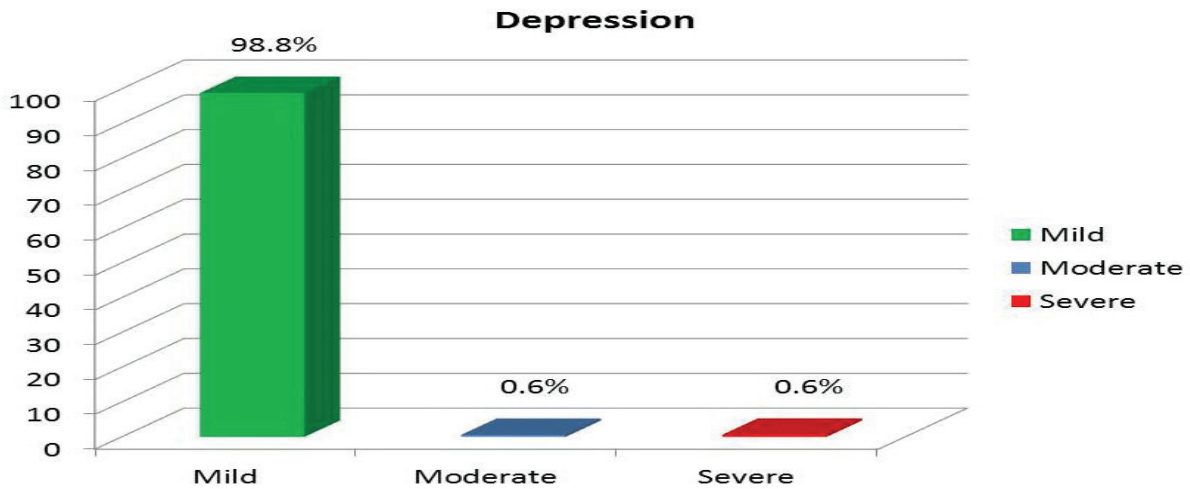


Figure (1): Assessment the Level of Depression among Women with Abortion (N=160) , Using (Beck Scale for Depression consist of (20) items)

The figure depicts that women are experiencing mild depression during their pregnancy (98.8%), and moderate and sever (0.6) depression respectively.

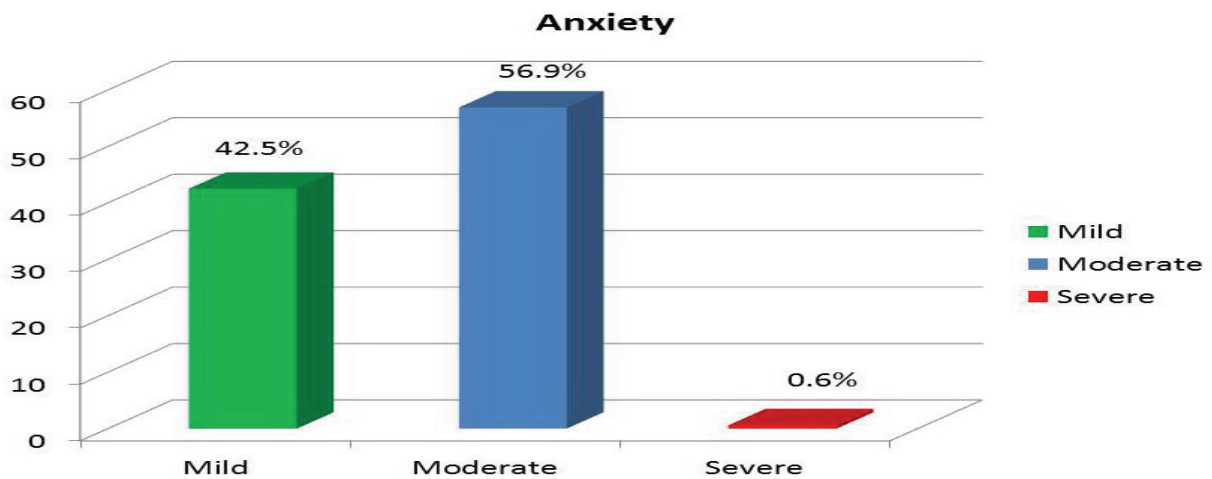


Figure (2): Assessment the level of Anxiety among Women with Abortion (N=160), Using (Taylor’s anxiety scale consist of (20) items)

## Discussion

### Discussion of Psychological Risk Factors among Women with Abortion:

The study results shows that there are (60.6%) of women suffering from stress and anxiety during current pregnancy, (1.9%) have depression, (8.1%) are reporting the presence of sad events during current pregnancy, (8.8%) are reporting presence of death during current pregnancy, (26.3%) are experiencing a family problem, (25.6%) are violated by their husbands, and (6.9%) are violated by their husband’s family. The types of violence among women refer to: physical (6.9%), verbal (25.6%),

domestic (25.6%), sexual (0.6%), economic (8.2%), and social (1.3%) **Table (1)**. This result in agreement with the study, which reported a significantly increased miscarriage risk in women suffering from psychological stress <sup>(7)</sup>. The association between psychological stress and miscarriage could result, at least in part, from activation of the hypothalamic-pituitary-adrenal axis by recruitment of hypothalamic neurons which secrete corticotrophin-releasing hormone, increasing pituitary secretion of adreno- cortico-trophic hormone secretion and hence of adrenal cortisol. This hormone has direct effects on decidual and placental metabolism but also interacts with progesterone signaling stress-related early

pregnancy failure could also result from suppression of the hypothalamic-pituitary-gonadal axis<sup>(8)</sup>. Other studies reported that violence against woman constitute an important global public health problem, and for women of reproductive age lead to negative pregnancy outcomes<sup>(9, 10)</sup>.

#### **Discussion of Depression as Psychological Risk Factors among Women with Abortion:**

The study results shows that women are experiencing mild depression as indicated by the mean scores of the item scales that refer to low among all item of the scale, the figure (1) depicts that women are experiencing mild depression during their pregnancy (98.8%). A study found that the mean (**Beck Depression Inventory**) BDI score of the pregnant women was  $11.12 \pm 6.65$ . According to the BDI, 46.2% of the pregnant women had no depression symptoms, 34.59% of them had mild, 13.91% had moderate, and 4.89% had severe level of depression symptoms<sup>(11)</sup>.

#### **Discussion of Anxiety as Psychological Risk Factors among Women with Abortion:**

The present study indicates that women having mild to moderate level of anxiety as reflected by the mean scores of the items, the figure shows that more than half of women are experiencing moderate anxiety during their pregnancy (56.9%). This result in agreement with the study which reported that the risk of miscarriage was significantly higher in women with a history of exposure to psychological stress<sup>(7)</sup>.

#### **Conclusion**

The study concluded that the majority of women are experiencing mild depression during their pregnancy, and more than half of women are experiencing moderate anxiety during their pregnancy.

**Conflict of Interest:** Nil

**Source of Funding:** the source of funding is self

**Ethical Clearance:** is obtained from the Ministry of Health (Al-Elwya maternity Teaching hospital, and Fatima Al Zahraa and Ibn Al Balady maternity & children hospital at Al Rusafa health directorate. Al – Karckh maternity hospital, and Al-Yarmook Teaching hospital at Al Karckh health directorate and Baghdad

Teaching hospital at Medical city health directorate) . All women with spontaneous abortion participated in the research - have been approved before the questionnaire is started.

#### **Recommendations:**

The study recommended to Conduct Structured teaching programed (STP) for mothers with history of miscarriage included meaning, risk factors, causes and prevention of miscarriage. It also includes the do and don'ts during 1<sup>st</sup> trimester of pregnancy.

**Financial Disclosure:** There is no financial disclosure.

**Conflict of Interest:** None to declare.

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

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