

Mental Illness of Pregnant Women in Al-zahraa Teaching Hospital, Wasit Al-Kut 2019

Areej Sabah Abdulridha¹, Baidaa Abdulkareem Alwan¹, Mahdi Abdulkarim Hamood²

¹Instructor, Obstetrics and Gynecology Department, College of Medicine, Wasit University, ²Consultant

Psychiatrist, Ministry of Health Wasit Health Department

Abstract

Maternal mental health considered as an important subject among leading public health experts. It has been shown that women are two to three times more likely to be diagnosed with mental illness compared to men. Chronic stress, experiencing war, and history of abuse are the most effective factors that associated with mental illness. Iraq has experienced years of challenging circumstances due to the political and social environment as well as due to physical barriers to health care services. This paper presents findings of previous literatures in relative to mental illness among Iraqi women. In the current study, we are aiming to determine the mental illness symptoms and effects in pregnancy during a period of all trimesters. Moreover, we try to assess risk factors' effects on mental illness symptoms in order to have better understanding of the occurrence and associated factors in pregnancy. Type of study comparative cross-sectional study with analytic component. A cross section study was conducted from 2018/9/5 to 2019/8/25. Observations of present study show that there is a relationship between some factors like domestic violence, un planned for pregnancy, previous miscarriage, psychological trauma before or during pregnancy. Our study mainly focusing on women with maternal mental illness and inform strategies that would help to reduce and manage maternal mental problems in order to promote their general health status.

Key words: Mental illness, Pregnant, Teaching Hospital, Kut 2019.

Introduction

Mental illness is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental illness are usually associated with significant distress or disability in social, occupational, or other important activities¹. Mental health problems may be a result of an excessive stress. As with cancer, diabetes and heart disease, mental illnesses are often physical as well as emotional and psychological. Furthermore, mental illnesses may be caused by a reaction to environmental

stresses, genetic factors, biochemical imbalances, or a combination of all mentioned factors. Notably, with proper care and treatment many individuals learn to cope or recover from a mental illness or emotional disorder². Although the incidence of mild mental health problems is not significantly different during pregnancy, the risk of bipolar or severe depressive illness is greatly increased postpartum and this period represents perhaps the highest risk period in a woman's life for the development of a psychiatric disorder. Furthermore, women with previous serious mental health problems are at high risk of recurrence during both the antepartum and postpartum periods³. Previously, it has been illustrated that the most common types of mental illness are Anxiety disorders, that including panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, and phobias. Moreover, Depression, bipolar disorder, and other mood disorders have also been described as types of mental

Corresponding author:

Areej Sabah Abdulridha

Wasit University / Medical College,

E-mail: areejsabah@uowasit.edu.iq

illness. In addition, same study has referred to eating, personal and psychotic disorders as other types of mental illness⁴. Moreover, Neurotransmitters (brain chemistry), are naturally occurring, as brain chemicals that carry signals to other parts of your brain and body. When the neural networks involving these chemicals are impaired, the function of nerve receptors and nerve systems change, leading to depression⁵. Common risk factors: Family history of mental health problems, Complications during pregnancy or birth, Personal history of Traumatic Brain Injury, Chronic medical condition such as cancer or diabetes, especially hypothyroidism or other brain-related illness such as Alzheimer's or Parkinson's, Use of alcohol or drugs, Poor nutrition and lack of sleep⁶. Furthermore, there is a wide range of symptoms could be categorized as indicators of mental illness. For instance, anxiety: excessive worry or fears. Persistent sad or low mood, unusual or illogical thoughts, unreasonable anger or irritability and poor concentration⁷. Previously, it has been shown that diagnosing a mental health disorder is a multi-step process. During a first appointment, doctor may perform a physical exam in order to look for signs of physical issues that could be contributing symptoms. Some doctors may order a series of laboratory tests trying to screen for underlying or less obvious possible causes. Moreover, doctor may ask to fill out a mental health questionnaire. Patients may also undergo a psychological evaluation. You might not have a diagnosis after your first appointment. In some cases, doctor may refer patient to a mental health expert, because mental health can be complex and symptoms may vary from person to person, it may take a few appointments to get a full diagnosis⁸. However, these are widely believed to be underestimates, due to poor diagnosis (especially in countries without affordable access to mental health services) and low reporting

rates, in part because of the predominant use of self-report data, rather than semi-structured instruments such as the structured clinical Interview for DSM-IV (SCID); actual lifetime prevalence rates for mental disorders are estimated to be between 65% and 85%⁹. In the current study, we are aiming to determine the mental illness symptoms and effects in pregnancy during a period of all trimesters.

Methodology

Describe mental illness in Iraqi women during pregnancy a cross section study was conducted in 2019 depending on many references. The time of study from 2018/9/5 to 2019/8/25. The study included women in 2018 and 2019 who are visited Al-Zahra hospital singy necology outpatient clinic, to identify women who are needed for psychological support or suffer from sign and symptoms of mental illness during pregnancy.

Risk factors for mental illness during pregnancy, risk of history of psychological trauma on pregnant women was also measured. In this study 250 cases collected in age group ranged from 19 – 35 years, in any gestational age. We collected samples from Al-kut depending on questioners. Actually, pregnant women have been asked many questions that relative to signs and symptoms of mental illness and depend on psychiatry classification the questioner contain 20 questions. If the number of positive questions is seven in number or below there is no mental illness. If the number of positive questions is eight or above there is a mental illness⁹.

Results

We took 250 cases from Al-kut to estimated prevalence of mental illness during pregnancy and its risk factors.

Table 1 .Ratio of available of mental illness or not.

Score 20 sign and symptoms of mental illnesses					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	normal	87	34.8	34.8	34.8
	abnormal	163	65.2	65.2	100.0
	Total	250	100.0	100.0	

Our observations show that there was no strong correlation between gestational age and signs and symptoms of mental illnesses (table 2).

Table 2. Correlation of sign and symptoms of mental illnesses and gestational age.

Correlations			
		gestational age	score 20 sign and symptoms of mental illnesses
gestational age	Person Correlation	1	.039
	Sig. (2-tailed)		.536
	N	250	250
score 20 sign and symptoms of mental illnesses	Person Correlation	.039	1
	Sig. (2-tailed)	.536	
	N	250	250

Most of cases in the present study were in low education level, however there was no strong correlation between education level and mental illnesses even the results show that prevalence of mental illnesses in low education more than high education level (table 3).

Table 3. Correlation between educational level, occupation and income with mental illnesses.

Correlations					
		score 20 sign and symptoms of mental illnesses	education level	occupation	income
score 20 sign and symptoms of mental illnesses	Person Correlation	1	-.063-	-.143-*	-.099-
	Sig. (2-tailed)		.321	.024	.120
	N	250	250	250	250
education level	Person Correlation	-.063-	1		
	Sig. (2-tailed)	.321			
	N	250	250		
occupation	Person Correlation	-.143-*		1	
	Sig. (2-tailed)	.024			
	N	250		250	
income	Person Correlation	-.099-			1
	Sig. (2-tailed)	.120			
	N	250			250

*. Correlation is significant at the 0.05 level (2-tailed).

In our study were 203 cases unemployed (81%) and (19%) employers. We found that there is a high risk of developing signs and symptoms of mental illnesses among unemployed pregnant women (table 3).

In the present study, prevalence of sign and symptoms of mental illnesses in low income more than high income (table 3), there was 55 cases with low

income (22%), 180 cases with moderate income (72%), and 15 cases with high income (6%) .

In the is study, there was 167 cases with no any complication (66%), 83 with complication most of them hypertension and bleeding (33%). We found that there is high risk of developing mental disorders in complicated pregnancy comparing to those with un complicated pregnancy (table 4).

Table 4. Correlation between mental disorders and pregnancy complications

Correlations			
		score 20 sign and symptoms of mental illnesses	complication during pregnancy
score 20 sign and symptoms of mental illnesses	Person Correlation	1	.158*
	Sig. (2-tailed)		.012
	N	250	250
complication during pregnancy	Person Correlation	.158*	1
	Sig. (2-tailed)	.012	
	N	250	250
*. Correlation is significant at the 0.05 level (2-tailed).			

Additionally, we indicated that 240 cases with history of good relationship (96%), and 10 cases with poor relationship (4%), there was very high score of signs and symptoms of mental illnesses among women with poor sexual relationship (table 5).

Table 5. Correlation between domestic violence and sexual relationship with mental illness.

Correlations				
		score 20 sign and symptoms of mental illnesses	sexual and relationship history	domestic violence
score 20 sign and symptoms of mental illnesses	Person Correlation	1	.149*	163*
	Sig. (2-tailed)		.018	.010
	N	250	250	250
sexual and relationship history	Person Correlation	.149*	1	
	Sig. (2-tailed)	.018		
	N	250	250	
domestic violence	Person Correlation	.163*		1
	Sig. (2-tailed)	.010		
	N	250		250

*. Correlation is significant at the 0.05 level (2-tailed).

Results of our study revealed that there are 213 cases with no history of domestic violence (85%), 37 cases with history of domestic violence (14%). We found a strong correlation between domestic violence and symptoms of mental illnesses among pregnant women (table 5).

Twenty hundred and thirteen pregnant women with no history of psychological disorders before pregnancy (85%), 37 cases with history of psychological disorder (14%) there was strong correlation and prevalence of mental illnesses in women with history of psychological disorders before pregnancy than those with no history (table 6).

Table 6. Correlation between psychological disorders before pregnancy, family history of psychological disorder and social support with mental disorders .

Correlations					
		score 20 sign and symptoms of mental illnesses	psychological disorder before pregnancy	family history of psychological disorder	social and family support
score 20 sign and symptoms of mental illnesses	Person Correlation	1	.304**	.124	.143*
	Sig. (2-tailed)		.000	.050	.024
	N	250	250	250	250
psychological disorder before pregnancy	Person Correlation	.304**	1		
	Sig. (2-tailed)	.000			
	N	250	250		
family history of psychological disorder	Person Correlation	.124		1	
	Sig. (2-tailed)	.050			
	N	250		250	
social and family support	Person Correlation	.143*			1
	Sig. (2-tailed)	.024			
	N	250			250

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Present study also shows that 243 cases with no family history of mental illnesses (97%), 7 cases with family history (3%). All women with family history of mental illnesses suffer from some signs and symptoms of mental illnesses but not related to pregnancy (table 6).

In the current study, we determine that 196 pregnant women with good family support (78%), 41 with moderate support (16%), and 13 cases with poor family

support (6%). It was strong correlation between family and social support in relative to developing of signs and symptoms of mental illnesses in those with poor or moderate family and social support (table 6).

Discussion

This cross-section study presents detailed description of women's maternal mental health in Al-kut. Many systematic reviews have suggested that

women are at high risk of mental illnesses because of social and cultural customs. There are also significant barriers to receive mental health services due to infrastructure challenges and perception of stigma at population level. WHO estimates that prevalence rate for mental illnesses is higher in low income countries (20%) compared to women in high income countries (16%), this provides to be true in Iraq, especially since 2003. Previous studies have demonstrated that Iraqi women present high rates mental illnesses compared to women in other countries¹⁰. Actually, global prevalence rate for maternal depression and anxiety is between 15-20%. Moreover, it has been shown that depression and anxiety are highly indicated during antenatal period. The most relevant factors associated with antenatal depression or anxiety (ranked according to the number of studies that have found the factors to be significant predictors, and presenting also the number of studies who did not) are: lack of family or social support, history of abuse or domestic violence, personal history of mental illnesses, unplanned pregnancy, high perceived stress, present or past pregnancy loss or complication, low education level, low income, dissatisfied relationship with partner. Consistently, numerous previous studies revealed that young women are significantly associated with antenatal depression and anxiety¹¹. Whereas, 10 studies found that old age to be a significant risk factor. Another 10 researchers did not find any association with age. In agreement with previous studies, current study shows that there is no significant of age correlation. Strikingly, no studies regarding the psychopathology of the partner as potential risk factor for antenatal mental illness. In our study, we found that majority of the participants are in low income group. Our interpretation is that low income increases the like-hood of poor living conditions, financial struggle and influences interpersonal relationship¹². Moreover, we also found among pregnant women observed that patients being educated but not employed could predispose to depression during pregnancy (prenatal depression) and its associated Risk factor Among women in Bangalore. In the current study and in agreement with aforementioned studies, we showed that the chance of getting depressed is significantly high in

case of unplanned pregnancy¹³. Furthermore, our study shows significant correlation between domestic violence and antenatal depression as well as anxiety. The linkage between poor social and family support and antenatal depression has been well documented. In fact, low social support may increase mental stress by inducing feeling of insecurity, predispose to substance abuse, and promotes interpersonal conflict. Other studies have reported that negative life event may lead to persistent higher levels of depressive symptoms since positive life event would reduce the severity of depression over time. It is important to mention that body mass index was not linked with the risk of prenatal depression in this study, even other research have indicated an interconnection between obesity and depression, the causal pathway could include inflammation, hormonal imbalance or sleep disturbance^{14,15}.

Conclusion

In summary we can conclude that there is a correlation between the mental illness in pregnant women and the following risk factors; domestic violence, not planned for pregnancy, house wife, previous miscarriage, history of psychological trauma before pregnancy. These factors affect the mental health of the mother.

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Ethical Clearance: Taken from institutional ethics committee before beginning the study.

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