Anxiety and Depression During Antenatal Period In Low Risk Pregnant Women

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ABSTRACT

Objective — *To determine the frequency of anxiety and depression during antenatal period in low risk pregnant women.*

Study design — *Cross-sectional study.*

Place & Duration of study — *Department of Obstetrics and Gynaecology, Jinnah Postgraduate Medical Centre (JPMC) Karachi, from October 2018 to March 2019.*

Methodology — *Pregnant women visiting the outpatient Department were enrolled in the study after informed consent. Brief history was taken in a conducive environment while maintaining confidentiality. Hospital anxiety and depression scale (HADS) was used to diagnose anxiety and depression. Data were collected on a pre designed form. Quantitative data were presented as simple descriptive statistics with mean and standard deviation and qualitative variables as frequency and percentages. Effect modifiers were controlled through stratification to find out the effect of these on the outcome variables. Post stratification Chi square test was applied taking p-value of < 0.05 as significant.*

Results — *A total of 150 consecutive pregnant women participated. Mean age of the women was 30.93±7.28 year, mean HAD depression score of 8.86±4.15 and mean anxiety score of 9.23±5.68 were noted. Thirty-five (23.3%) women had depression and 30 (20%) suffered from anxiety.*

Conclusions — *Anxiety and depression were quite common during antenatal period even in low risk pregnant females. Screening for anxiety and depression should be incorporated in the currently existing antenatal program.*

Key words — *Anxiety, Depression, Pregnancy, Antenatal, Morbidity.*

INTRODUCTION:

Anxiety and depression disorders are becoming important public health issues encountered during pregnancy. A high prevalence and related adverse pregnancy outcomes are reported in such conditions.[1] According to WHO, the depression disorders will be among the leading causes of global disease burden by 2020.[2] Women are twice more vulnerable to develop depressive illness than men.[3] Literature review reveals 10% -34.5% prevalence of anxiety and 25% of depression.[4-10]

Etiology of depression is largely unknown. It is mainly considered to be associated with neuro-biological and environmental factors in genetically predisposed individulas.[11] History of anxiety disorders, postnatal depression and family history of psychiatric illnesses, childhood abuse, single mother, poor social support, domestic violence and unplanned pregnancy are among the risk factors.[12] Un-treated depression during pregnancy will result in adverse pregnancy and child birth outcomes like miscarriages, pre eclampsia, growth restriction, low birth weight babies,

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pre term deliveries, low Apgar score and increased cesarean section rate.[13]

Literature search revealed that most of the previous studies focused on the development of psychiatric illnesses in high risk pregnancies and during postpartum period. This study aimed to determine the frequency of anxiety and depression disorders in low risk pregnancies. The results would form the basis of designing interventions for such women.

METHODOLOGY:

In this cross-sectional study women were enrolled from Outpatient Department of Obstetrics and Gynecology, Jinnah Postgraduate Medical Centre Karachi. This was conducted from October 2018 to March 2019. Patients with singleton pregnancy, cephalic presentation, at > 12 weeks gestation and Para 1 were included. Patients with cognitive impairment, communication difficulties, history of chronic illness, pre eclampsia, psychiatric illness, uncontrolled diabetes mellitus and cardiac diseases, were excluded.

Brief history and demographic information were collected. Interviews were conducted after informed consent in a comfortable environment while maintaining confidentiality. Hospital Anxiety and Depression scale (HADS) was used to diagnose anxiety and depression. The score = 8 was considered as representing the disorder.

Data were analyzed on SPSS version 20. Demographic data were presented as mean and standard deviation for maternal age, HADS score for anxiety and depression. For qualitative variables like parity, occupational status, education status, family history of depression, family history of anxiety, were presented as frequency and percentages. Effect modifiers were controlled through stratification of maternal age, parity, occupational status, educational status, family history of depression and anxiety to find the effect of these on outcome variables. Post stratification Chi square test applied taking p value of < 0.05 as statistically significant.

RESULTS:

A total 150 women were enrolled in this study. The minimum age of the study participant was 21 years and maximum 36 years with mean age of 30.93 years. Mean HAD depression score was 8.86±4.15 and mean anxiety score 9.24±5.68. Of the total 35 (23.3%) women were suffering from depression and 30 (20%) had anxiety. Twenty-one (14%) women with depression had family history of depression while 32 (21.3%) with anxiety had family history of anxiety as well. Thirteen (37.1%) women who had depression were in the age group of 20 - 30 years and 22 (62.9%) belonged to age group 31 - 45 years (p= 0.15). Thirteen women who suffered from depression were mother of less than four children whereas 22 (62.9%) had more than four children (p= 0.32). Eleven (31.4%) women who had depression were employed and 24 (68.6%) were unemployed (p= 0.30)

As observed by the result of this study depression was more common in lower income group as 14 (40%) women belonged to low socioeconomic status (p= 0.62). Depression was more prevalent in women with secondary level education (n=26 - 74.3%)

Table I: Frequency Distribution of Depression (n=150)

		Yes	No	Total	P-value
Age (years)	20-30	13 (37.1%)	56 (48.7%)	69 (46%)	0.15
	31-45	22 (62.9%)	59 (51.3%)	81 (54%)	
Parity (n)	<4	13 (37.1)	50 (43.5%)	69 (46%)	0.15
	>4	22 (62.9%)	65 (65.5%)	87 (58%)	
Gravida (n)	<3	08 (22.9%)	17 (14.8%)	25 (16.7%)	0.19
	>3	27 (77.1%)	98 (85.2%)	125 (83.3%)	
Occupational Status	employed	11 (31.4%)	29 (625.2%)	40 (26.7%)	0.30
	unemployed	24 (68.6%)	86 (74.8%)	110 (73.3%)	
Family History of Depression	Yes	2 (5.7%)	19 (16.5%)	21 (14%)	0.08
	No	33 (94.3%)	96 (83%)	129 (86%)	
Family History of Anxiety	Yes	2 (5.7%)	30 (26.1%)	32 (21.3%)	0.00*
	No	33 (94.3%)	85 (73.9%)	118 (78.7%)	

Table II: Frequency Distribution of Anxiety (n=150)

		Yes	No	Total	P-value
Age (years)	20-30	17 (56.7%)	52 (43.3%)	69 (46%)	0.13
	31-45	10 (33.3%)	53 (44.2%)	63 (42%)	
Parity (n)	<4	13 (37.1)	50 (43.5%)	69 (46%)	0.19
	>4	20 (66.7%)	67 (55.8%)	87 (58%)	
Gravida (n)	<3	11 (36.7%)	14 (11.7%)	25 (16.7%)	0.00*
	>3	19 (63.3%)	106 (88.3%)	125 (83.3%)	
Occupational Status	employed	15 (50%)	25 (20.8%)	40 (26.7%)	0.00*
	unemployed	15 (50%)	95 (79.2%)	110 (73.3%)	
Family History of Depression	Yes	07 (23.3%)	14 (11.7%)	21 (14%)	0.09
	No	23 (76.7%)	106 (88.3%)	129 (86%)	
Family History of Anxiety	Yes	11 (36.7%)	21 (17.5%)	32 (21.3%)	0.02*
	No	19 (63.3%)	99 (82.5%)	118 (78.7%)	

followed by higher education level (n=9 - 25.7%). Seventeen (56.7%) women with anxiety were in the age group of 20-30 years followed by 13 (43.3%) women, who were between 31-45 years of age. Twenty (66.7%) women suffering from anxiety were mother of more than four children while 10 (33.3%) women had less than four children. (p= 0.19).

Fifteen (50%) women in anxiety group were employed (p= 0.00). Six (20%) women with anxiety were educated up to secondary level and 24 (80%) were highly educated. Seven (23.3%) had family history of depression who developed anxiety (p= 0.09). Of the women in anxiety group, 11 (36.7%) had family history of anxiety (p= 0.02).

DISCUSSION:

Pregnancy and postpartum period can be times of rejoice and positive expectations but could end up in stressful events because of the accompanying psychological issues. Anxiety as well as depression are the most common psychiatric problems encountered during pregnancy, postpartum period and adversely affect women's quality of life. Exponentially high prevalence of psychiatric illnesses in pregnant women has been reported in South Asia which is attributed to gender sensitivity and cultural settings. The symptoms of depression, anxiety may mimic normal physiological changes during pregnancy and range from mild to severe.

In the index study 35 (23.3%) women had depression and 30 (20%) women were suffering from anxiety. The prevalence of depression varies in different countries. In Brazilian women it is reported in 14.2% while it is 25% in Jamaica, 32.0% in Japan and 48.4% in Pakistan.[14] Majority of the women in a study were either anxious or depressed.[10] Mean age observed in study by Ali NS et al was 30.93 years which is in accordance with Brazilian study and same findings noted by Ghaffar R et al in study done at Quetta, Pakistan.[15,16] Increasing age of women is risk factor for developing depression as documented in index study. Majority of women who developed depression were between 31 - 45 years of age and similar findings were observed in another study.[10]

Multiparity is associated with high prevalence of anxiety and depression as observed in present study and this is in accordance with an Indian study in which the prevalence of depression was found higher in multigravida when compared with primagravida.[7] Financial dependence and unemployment are associated with depression as depicted in our study. Similar findings were observed in a national study where 81.4% cases were unemployed.[16] Similarly it is evident in the index study that low socioeconomic status has positive association with the development of depression and similar findings are reported by Nath et al.[17] Women's level of education has some effect on antenatal depression and anxiety. In this study majority of women were educated up to secondary level while 80% women who had anxiety were highly educated. The increasing educational status of women thus is a risk factor as reported in another study.[18]

CONCLUSIONS:

Anxiety and depression were quite common even among low risk pregnant females. Increasing age, low socioeconomic status, higher level of education were the risk factors.

DISCLOSURE:

This is a dissertation based article.

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