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# A CROSS SECTIONAL STUDY ON SOCIAL FACTORS RESPONSIBLE FOR MENTAL MORBIDITY AMONG PREGNANT WOMEN

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# **ARTICLE INFO**

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### ABSTRACT

**Introduction:** Pregnancy is often considered as the golden period in woman's life. There are physical as well as mental challenges faced by them during that period, while apparent physical problems are often addressed but the challenges related to mental health often go undiagnosed .

Mental health problems such as depression and anxiety are very common during pregnancy and after childbirth in all parts of the world. Nearly 20% of women suffer from mental health disorders during gestation which causes significant morbidity for mother as well as child worldwide.

**Materials and methods**:Study subjects included in the study were pregnant women attending the antenatal clinic of the hospital. After taking consent from them, participants was screened for Mental health by using Goldberg's 6 item General Health Questionnaire. Those who answered 'YES' for at least one question were considered as mentally ill and assessed the severity of mental illness by using Hamilton 'D' scale for depression and Hamilton 'A' scale for anxiety.

**Results**: Out of 254 pregnant women 113(44.49%) were having mental morbidity and 141(55.51%) were normal. Among those with mental morbidity, 54 (21.26%) were having mild depression, 13(5.12%) were having anxiety and 17 (6.69%) were having both anxiety with depression .Social factors like occupation of husband,domestic violence,support of husband,addiction of alcohol in husband were found to be statistically significant with mental morbidity in pregnant women.

**Conclusion**: The study shows that a substantial number of pregnant women screened in obstetrics settings have significant symptoms of depression, and most of them are not being monitored effectively during this vulnerable time. This information may be used to justify and streamline systematic screening for depression in clinical encounters with pregnant women as a first step in determining which women may require further treatment for their symptoms of mental illness.

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### **INTRODUCTION**

Pregnancy is often considered as the golden period in woman's life. There are physical as well as mental challenges faced by them during that period, while apparent physical problems are often addressed but the challenges related to mental health often go undiagnosed<sup>1</sup>.

Mental health problems such as depression and anxiety are very common during pregnancy and after childbirth in all parts of the world. Nearly 20% of women suffer from mental health disorders during gestation which causes significant morbidity for mother as well as child worldwide. About one in ten in developed countries, and one in three to one in five women in developing countries, have a significant mental health problem during pregnancy. As a matter

of fact, in India prevalence of depression ranges from 10% to 41%  $^{\rm 2}.$ 

Social determinants like illiteracy, low income, domestic violence and associated diseases increase their susceptibility to develop mental health problems specially in developing country <sup>3</sup> .Pregnant mothers with mental health problems are much more disabled and less likely to care adequately for their own needs. These women are less likely to seek and receive antenatal or postnatal care or adhere to prescribed health regimens. So they have increased risk of obstetric complications and preterm labour. Mental illness have been associated with poor prenatal care,

inadequate nutrition, impulsive behavior, increased incidence of postpartum depression, preterm birth and low Apgar score. Certain symptoms of depression including appetite change, lowered energy, sleep disturbance are considered normal in pregnancy and their psychological

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significance is therefore underestimated. Mental health problems among pregnant women

are often undiagnosed. Depression during pregnancy is the most common predictor of depression in postnatal period. Untreated depression during pregnancy has a number of adverse outcomes not only for the mother but also for her unborn child <sup>4</sup>.

## **MATERIALS AND METHODS**

The present cross sectional hospital based study conducted in Katuri Medical College was and Hospital, Guntur (Andhra Pradesh) . The study period was from July 2010 to December 2010. Before the start of the study, Clearance was taken from College Ethical Committee. Study subjects included in the study were pregnant women attending the antenatal clinic of the hospital. After taking consent from them, participants were screened for Mental health by using Goldberg's 6 item General Health Questionnaire. Those who answered 'YES' for at least one question were considered as mentally ill and assessed the severity of mental illness by using Hamilton 'D' scale for depression and Hamilton 'A' scale for anxiety. A standard pre-tested questionnaire was used to assess the sociodemographic information. Total study subjects participated in the study was 254.

### RESULTS

Among 254 pregnant women, 117(46.06%) were in age group of 23 to 27 years, 67(26.38%) were in the age group of 18-22 years, 44(17.32%) were in age group of 28-32 vears. 235(78.3%) were housewife and 65 (21.7) were farm workers. Husbands of 47(18.50%) pregnant women were unemployed and husbands of 207(81.50%) pregnant women were farm worker and coolie. 127 (42.3%) women were primigravida and 173(57.7%) were multigravida. Only 43(16.93%) pregnant women were illiterate.63(24.80%) women were from joint, 93(36.62%) from three generation and 98(38.58%) from nuclear family. According to Modified B.G. Prasad classification, 17.32% were from class II, 40.94% were from class III and 24.02% were from class IV (Table 1) .Out of 254 pregnant women 113(44.49%) were having mental morbidity and 141(55.51%) were normal. Among those with mental morbidity, 54 (21.26%) were having mild depression, 13(5.12%) were having anxiety and 17 (6.69%) were having both anxiety with depression (Table 2) .Social like occupation of husband,domestic factors violence, support of husband, addiction of alcohol in husband were found to be statistically significant with mental morbidity in pregnant women(Table 3).

### DISCUSSION

In the present study, prevalence of mental morbidity like depression, anxiety and both anxiety with depression among pregnant women was 44.49 % .In the study conducted in Hawaii in 2006 among 44 pregnant women between age group of 18 to 35 years of which 5% were having depression and 13% were having anxiety <sup>4</sup>. Another study done in rural area of Tamil Nadu in 2002 among 991 pregnant women, by using Clinical Interview Schedule(CIS-R) showed that

16% women were suffering from depression <sup>5</sup>. Study done in China in 2001 by Dominic et al <sup>6</sup> among 959 pregnant women showed 13.5% of them to be suffering from depression. Prevalence of mental illness was 39.5% 8 in the study conducted at Tanzania 7 .In the present study, social factors like occupation of husband, domestic violence, support of husband, addiction of alcohol in

husband were found to be statistically significant with mental morbidity in pregnant women

Prevalence of depression and anxiety by using EPDS was 18% and 29% respectively which was found significantly associated with domestic violence, poor partner relationship in a study done in Bangladesh<sup>8</sup>. In a Study done in Pakistan also showed that unemployment status of husband and physical violence were strongly associated with the depression among pregnant women <sup>9</sup>.Partner violence was associated with depression during pregnancy in a study from Peru<sup>10</sup> which was similar with the results of our study.

Table 1: Socio-demographic characteristics of pregnant women Characteristics Number(%)

Age					
18-22 yrs		67(	26.38%)		
23-27 yrs		117	(46.06%)		
28-32 yrs			17.32%)		
Above 32 yrs			10.24%)		
Education		20(	10.2170)		
Illiterate		120	16.93%)		
			,		
Literate		211	.(83.07%)		
Occupation of hush	band		10 5000		
Unemployed			18.50%)		
Farm worker		201	7(81.50%)		
Type of family					
Joint			24.80%)		
Nuclear		98(	38.585)		
Three generation		93(	36.62%)		
Socioeconomic sta	tus				
I		130	5.13%)		
II		-	17.32%)		
III			(40.94%)		
IV			· ·		
			24.02%)		
V		32(	12.59%)		
Domestic violence					
Yes			2(44.09%)		
No		142	2(55.91%)		
Support of husban	d				
Yes		139	(54.72%)		
No		115	6(45.28%)		
Addiction of alcoho	ol in				
husband		105	(41.32%)		
Yes		149	(58.68%)		
No			()		
Associated diseases		780	30.71%)		
Yes			6(69.29%)		
No		1/0	(0).2070)		
Sternous workload	l at homo	120	(54.72%)		
Yes	at nome		(45.28%)		
No		11.	0(43.20%)		
	of montal i	1			
able 2: Distribution	of mental f			nan	twomen
Mental Illness		r	lo(%)		
		+			
None			.41(55.51%)		
Mild depression			54(21.26%)		
Moderate depression			21(8.27%)		
Severe depression			8(3.15%)		
Anxiety		1	3(5.12%)		
Anxiety with depres	sion		7(6.69%)		
able 3: Associatio				ara	cteristics with
nental morbidity in p	oregnant w	ome	n		
Characteristics	Mental Morbidity				Chi Square
	Yes		lo		value
Type of family	100	1			·uiuc
Joint	29(25.66%	6)	34(24.11%)		
Nuclear		-	64(45.39%)		¥2-711 D
	34(30.09%	-	. ,		$X^2 = 7.11 P$
Three generation	50(44.25%	ΌJ	43(30.50%)		=0.028 N <b>S</b>
Occupation of					W2 40 - 1 -
husband	a				X <sup>2</sup> =10.76 P <
Unemployed	31(27.43%		16(11.35%)		0.0010 <b>S</b>
Farm worker	82(72.57%	6)	125(88.65%)		
Domestic violence				-	X <sup>2</sup> =62.84 P <
Domestic violence					

81(71.68%)

32(28.32%)

31(21.99%)

110(78.01%)

with

0.0001 S

Yes

No

Support of

husband

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Yes		49(43.36%)	90(63.83%)	X <sup>2</sup> =10.60 P
No		64(56.64%)	51(36.17%)	<0.001 <b>S</b>
Addiction of				
alcohol in				
husband				
Yes		72(63.72%)	33(23.40%)	X <sup>2</sup> =42.03 P <
No		41(36.28%)	108(76.60%)	0.0001 <b>S</b>
Associated				
diseases				
Yes		33(29.20%)	45(31.91%)	X <sup>2</sup> =0.21 P =
No		80(70.80%)	96(68.09%)	0.64 NS
Workload	at	64(56.64%)	75(53.19%)	X <sup>2</sup> =0.30 P =
home		49(43.36%)	66(46.81%)	0.58 NS
Yes				
No				

# CONCLUSION

This study concludes high prevalence of mental morbidity in terms of depression, anxiety and both among pregnant women. The finding of this study highlights the potential significance of identifying and addressing the unmet needs of low- income women during pregnancy. These data show that a substantial number of pregnant women screened in obstetrics settings have significant symptoms of depression, and most of them are not being monitored effectively during this vulnerable time. This information may be used to justify and streamline systematic screening for depression in clinical encounters with pregnant women as a first step in determining which women may require further treatment for their symptoms of mental illness. Presence of mental morbidity in gravid women has been associated with adverse maternal and infant outcomes; hence further study of the impact of psychiatric treatment is essential. The finding in this study demonstrates the significance of screening for mental health issue in pregnant women and the need for intervention and prevention.

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## **CONFLICT OF INTEREST**: None declared

### REFERENCES

1. Gemmillb AW, Justin LB, Barara H, Bryanne B, Janette B, Jennufer E et al .Antenatal risk factors for postnatal depression: A large prospective study. Journal of affective disorders 2008, l108 (1);147-57.

2. Maternal mental health and child health and development in low and middle income

countries. Available on

http://www.int/mentalhealth/prevention/suicide/mmh\_ja n08-

meeting\_report.pdf.

3. Dietz PM, Williams SB, Callaghan WM, Backman DJ, Whitlock EP, Hornbrook MC. Clinically identified maternal depression before, during, and after pregnancies ending in live births. American Journal of Psychiatry 2007:164; 1515-20.

4. Deborah G, Leslie M, Leighann F, Jane O,Courteney M. Mental health during pregnancy: A study comparing Asians, Caucasian and Native Hawaiian women. Maternal Child Health J.

2006;16(4):34-7.

5. Chandran M. Post partum depression in a cohort of women from a rural area of Tamil Nadu,India. Incidence and risk factors. British journal of psychiatry 2002:181; 499-04.

6. Dominic TS, Alexander SKY, Helen KD, Tony YSL, Tony KHC. A psychiatric epidemiological study of postpartum Chinese women. AM J Psychiatry 2001:150; 220-6.

7. Kaaya SF, Mbwambo JK, Kilonzo GP, VanDen BH, Leshabari MT, Fawzi MC et al .Socioeconomic and partner relationship factors associated with antenatal depressive morbidity among pregnant women in Dares salaam, Tanzania. Tanzan J Health Res 2010; 12(1):23-35.

8. Nasreen HE, Kabir ZN, Forsell Y, edhborq M. Prevalence and associated factors of depression and anxiety symptoms during pregnancy: population based study in rural Bangladesh.

BMC Women Health 2011; 11: 22-24.

9. Karmaliani R, Asad N, Bann CM, Moss N, Mcclure EM, Pasha O et al. Prevalence of anxiety, depression and associated factors among pregnant women of Hyderabad, Pakistan. Int J

Soc Psychiatry 2009;55(5):414-24.

10. Gomez BA, Williams MA, Sanchez SE, Lam N.Intimate partner violence and risk for depression among postpartum women in Lima, Peru.Violence Vict 2009; 24(3):380-98.

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