

Research Article

A cross sectional study on mental health status of pregnant women at urban health centre of Bangalore, India

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ABSTRACT

Background: Depressive disorders are a common source of disability among women. In addition to the economic and human costs of maternal depression, children of depressed mothers are at risk for health, developmental, and behavioural problems. Community-based epidemiological data on antenatal depression from developing countries is scarce.

Methods: A cross sectional study was carried out for a period of 4 months in urban health centre in Bangalore. Simple random sampling technique was used to select 250 pregnant women attending antenatal clinic. Information on socio-demographic variables, obstetric variables and mental health status was collected based on preformed proforma. Data was analysed using Statistical Programme for the social science (SPSS) version 16.0.

Results: Amongst the study population, prevalence of depressive disorder was 24.8%. The depression was significantly increasing with advancing pregnancy. Socio economic status and depression was associated statistically significant ($p=0.024$). Educational status of women was associated with depression ($p=0.053$). Women with history of abortion had more depression as compared to those who did not have abortions was statistically significant ($p=0.02$).

Conclusions: Depressive symptoms occur commonly during 2nd and 3rd trimester of pregnancy, drawing attention to a need to screen for depression during antenatal care. Maternal health policies, a priority in developing countries, must integrate maternal depression as a disorder of public health importance. Interventions should target women in the early antenatal period.

Keywords: Depression, Pregnant women

INTRODUCTION

The World Health Organization defines maternal mental health as “a state of well-being in which a mother realizes her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to her community”.^{1,2}

Mental health problems such as depression and anxiety are very common during Pregnancy and after childbirth in all parts of the world. One in three to one in five women in developing countries, and about one in ten in developed countries, have a significant mental health problem during pregnancy and after childbirth.⁴ Addressing mental health concerns such as maternal

depression could play an important role in achieving the Millennium Development Goals set by the United Nations.³

METHODS

A Cross sectional study was conducted at urban health centers affiliated to Dr.B.R.Ambedkar medical college for a period of 4 months (1st August to 30th November 2013). Simple random sampling technique was used to select women for study among all registered pregnant women were included. Women with bad obstetric history, obstetric complications in the present pregnancy, known psychological disorders, women on an antiepileptic, neurogenic drugs, anti-depressants or CNS stimulants

were excluded from the study. Sample size was estimated on the WHO report on mental health for antenatal depression observed the prevalence of depression during antenatal period to be about 15% in India. So considering $p = 15\%$ $N = (1.96)^2 \times 15 / (0.15)^2 = 237 = 250$, a predesigned proforma to collect sociodemographic information. Edinburgh postnatal depression scale (EPDS) was used to assess mental health status.

RESULTS

Most of the women belong to Hindu religion (140) and out of which 23.5% showed EPDS positivity and Muslim (110) out of which 26.71% showed EPDS positivity. Majority were in age group of 18-30yrs (157) but 34.40% of 93 women in age group 30-45yrs scored more than 10 on EPDS. 0.043 significant differences between age groups were seen. Majority 34.4% belong class 4 of socioeconomic class as classified by kuppuswamy. Of which 30.37% were showing positive on EPDS. There was statistically significant (0.024) difference between groups in their EPDS positivity.

Table 1: Distribution according to age and EPDS>10.

Age	Frequency	Epds (>10)	%
18-30Yrs	157	30	19.10%
30-45Yrs	93	32	34.40%

P=0.043 statistically significant

Table 2: Distribution according socioeconomic status and EPDS>10.

Socio economic status (Kuppuswamy)	Frequency	%	Epds (>10)	%
Class 1	31	14.6%	2	6.45%
Class 11	53	21.2%	8	15.09%
Class 111	82	29.8%	19	23.17%
Class 1V	96	34.4%	33	30.37%

P=0.04 statistically significant.

Table 3: Distribution according to gestational age at time of interview And EPDS >10.

Gestational age	Frequency	EPDS (>10)	%
1st trimester	44	8	17.1%
2nd trimester	88	20	23%
3rd trimester	118	34	30.11%

P=0.03 statistically significant

Table 4: EPDS >10 based on previous H/O abortion.

No. of abortions	Frequency	EPDS (>10)	%
0	188	28	14.89%
1	54	28	51.85%
2	8	6	71.34%

P=0.04 statistically significant

Table 5: EPDS according to relationship with in laws.

Relation with in laws	Frequency	EPDS (>10)	%
0(very good)	124	16	12.90%
1(good)	66	20	30.30%
2(bad)	28	12	42.85%
3 (very bad)	32	14	43.75%

Majority of women at the time interview were in their 3rd trimester out of which 30% were showing positive for Epds which was statistically significant (0.03). 188 women had no history of abortion out of which 14.89% were positive on Epds, but there was statistically significance with Epds positivity and history of abortion. Though majority enjoyed good relation with their in laws, there was statistically significant presence of depression in pregnant women who had bad relation with in laws as per their scores on Epds.

DISCUSSION

In present study it was found that nearly one fourth (24.8%) of pregnant women attending antenatal clinics had depression. Consistent with the study in Pakistan, where a high prevalence of depression among pregnant women was seen.⁵ Another study in Pakistan showed, prevalence of depression, based on the cut-off score of 16 or more on CES-D scale, was 39.4%.⁶ Majority of women with EPDS score more than 10 were in the age group above 30 years and in 3rd trimester of pregnancy. Increasing biological age has been found to be associated with increased depression.^{7,8} Most of women EPDS>10 belonged to class 4 SES and with the history of abortion. Increase in CES-D scores with increasing number of gravidity and abortions.⁶ This study found that poor social relations in-laws were strongly related with depression among pregnant women, as has been found in other cultures as well.^{9,10}

CONCLUSION

Our questionnaire was limited to depression and does not screen for psychosomatic disorders. There is a strong need to screen for depression during antenatal period. Further studies should be encouraged to assess the impact of antenatal depression on pregnancy outcomes. Counselling sessions, yoga and meditation to be included as part of antenatal care.

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