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Original Research Article

An epidemiological study to assess the mental health status of pregnant women in a tertiary care hospital, Srinagar, Jammu and Kashmir, India

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ABSTRACT

Background: Pregnancy is a major psychological, as well as physiological event; women may find themselves unable to cope with additional demands of pregnancy. Mental illness during pregnancy-whether anxiety, depression or more severe psychiatric disorders-can have a significant negative impact on a mother and her baby. Poor psychological health has been associated with low birth weight, premature birth, perinatal and infant death, postnatal depression, as well as long term behavioural and psychological impacts on the child. Depressive disorders are a common source of disability among women. Mental health problems during pregnancy and postpartum periods are one of the alarming health issue among women. Community-based epidemiological data on antenatal depression from developing countries is scarce. This study was conducted to assess the mental health status of pregnant women attending antenatal clinic of tertiary care hospital, SKIMS, Srinagar (J and K).

Methods: A cross sectional study was conducted over a period of six months from 1st September 2016 to 28th February 2017 among randomly selected pregnant women attending antenatal clinic of tertiary care hospital, SKIMS, Srinagar. A total of 200 pregnant women formed the study subjects. Data was collected by interviewing the pregnant women using pre-designed, pre-tested, semi-structured questionnaire. Data was analysed using Statistical Programme for the social science (SPSS) version 19.0.

Results: Amongst the study population, prevalence of depressive disorder was 26%. The depression was significantly increasing with advancing pregnancy and advancing age. Socio-economic status and depression was associated statistically significant ($p=0.024$). Women with bad relationship with in laws had significantly more depression compared to those who had good relationship with in laws ($P=0.0037$). The association between parity and depressive disorder was statistically insignificant ($P=0.7144$).

Conclusions: When we care for mother we care for two live and live without psychological consideration is completely materialistic. A depressive symptom occurs 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. Intervention should target women in the early antenatal period.

Keywords: Depression, Pregnant women, Parity, Socioeconomic status

INTRODUCTION

For most women, pregnancy and child birth are a time of celebration. However, this can also be a time of change in a woman's body and lifestyle, which may increase the risk of poor mental health. Women are vulnerable to mood instability during reproductive transition.¹ The World Health Organization defines mental health as a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community.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.³ Addressing mental health concerns such as maternal depression could play an important role in achieving the Development Goals set by the United Nations.⁴ Right from the registration of pregnancy at health care centre the assessment of psychological state must be initiated along with physical and physiological evaluation. Psychosocial assessment of all pregnant women is an integral part of good antenatal care⁵.

METHODS

A Cross sectional study was conducted at antenatal clinic of tertiary care hospital, SKIMS, Srinagar for a period of 6 months (1st September 2016 to 28th Feb. 2017). Simple random sampling technique was used to select pregnant women for the study.

Inclusion criteria

- Pregnant women registered at antenatal clinic of tertiary care hospital, SKIMS.
- Pregnant women in their 2nd and 3rd trimester and
- Pregnant women giving consent.

Exclusion criteria

- Women with bad obstetric history, obstetric complications in the present pregnancy, known psychological disorders, women on an antiepileptic, neurogenic drugs, anti-depressants or CNS stimulant were excluded from the study.
- Pregnant women who did not give consent.

Sample size was calculated with an anticipated prevalence of depression during antenatal period to be about 15% in India (WHO report) using 95% C.I and absolute error of 5%. So, considering $p=15\%$ $N=(1.96) 2 \times 15(100-15)/(5) 2=199.92= 200$. Data was collected using a pre-tested and pre-structured questionnaire which was divided into two parts:

Part I: Included questions on socio-demographic particulars and questions on diet and physical activity besides enquiry about various symptoms pertaining to health problems of pregnant women.

Part II: Included an Edinburgh postnatal depression scale (EPDS) used to assess mental health status.

An informed verbal consent was taken from all participating pregnant women before the start of interview, after telling them about the objective of study and approximate time that would involve in completion of interview.

RESULTS

Out of total 200 study subjects, 52 (26%) patient had EPDS score of 10 or more indicating depression. Maximum number of cases 110 (55%) were seen in age group of >30 years, followed by 65 (32.5%) in the age group of 25- 30 years. Out which 36.36% and 15.38% showed EPDS positivity respectively. The difference was statistically significant ($P=0.0130$). Majority of women were in 3rd trimester out which 32.3% were showing positivity for EPDS which was statistically significant (P value =0.0294). Majority 78 (39%) belonging to the lower middle-class family as classified by Prasad's Scale. Of which 38.46% were showing positivity on EPDS. The difference was statistically significant ($P=0.0052$). Majority of women were multipara out which 27.45% showing positivity for EPDS but the difference was statistically insignificant ($P=0.7144$). Though maximum number of women enjoyed fair relationship with their In laws, there was statistically significant ($P=0.0037$) presence of depression in pregnant women who had bad relation with in law.

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

Age	Frequency (%)	EPDS >10 (%)
20-25 Yrs	25 (12.5)	2 (8)
25-30 Yrs	65 (32.5)	10 (15.38)
>30 yrs	110 (55)	40 (36.36)
Total	200	52(26)
P value -0.0130		

Table 2: Distribution according to gestational age at time of interview And EPDS >10.

Gestational age	Frequency (%)	EPDS>10 (%)
2 nd	70 (35)	10 (14.28)
3 rd	130 (65)	42 (32.30)
Total	200	52
P value = 0.0294		

DISCUSSION

A total of 200 pregnant women from antenatal clinic of Department of Gynecology and Obstetrics, SKIMS, Srinagar were taken up for this study. They were studied

in detail with regard to socio-demographic characteristics and the presence of depression by EPDS (presented below in the tabulated form). Only patients who consented to complete the interview and responded to all EPDS (Edinburgh postnatal depression scale) questions were considered in the final analysis.

Table 3: Distribution according socioeconomic status and EPDS>10

Socio-economic scale (Prasad's scale)	Frequency%	EPDS>10 (%)
Class I (upper class)	26 (13%)	0 (0%)
Class II (upper middle class)	39 (19.5)	5 (38.46)
Class III (middle class)	57 (28.5)	17 (29.82)
Class IV (lower middle class)	78 (39)	30(38.46)
Class V (lower class)	-	-
Total	200	52
P value= 0.0052		

Table 4: Distribution according to parity and EPDS>10.

Parity	Frequency (%)	EPDS>10 (%)
Primi	98 (49%)	24 (24.48)
multipara	102 (51%)	28 (27.45)
Total	200	52
P value=0.7144		

Table 5: Distribution according to relationship with in laws and EPDS >10.

Relationship with in laws	Frequency (%)	EPDS>10 (%)
0 (bad)	34 (17)	18 (52.94)
1 (fair)	120 (60)	30 (25)
2 (good)	46 (23)	4 (8.69)
Total	200	52
P value =0.0037		

It was found that 26 % patients had EPDS score of 10 or more indicating depression which was comparable to study conducted by Maheshwari M, et al (2016)⁶. Majority of women with EPDS score >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. The difference was statistically significant (P=0.0052). The study done by Prady SL, et al (2013)⁹ also found an association between poor mental status and low socio economic status. Our study found that poor social relations In-laws were strongly related

with depression among pregnant women, as has been found in other studies as well.^{6,10}

CONCLUSION

Even when witnessed tremendous advance in patients care system, all these considered instrumental treatment, if Psychological aspect of care not included. 'care' is treatment including emotional attachment with patient. Being in a novel profession our aim should be 'care' rather than treatment. Maternal health policies, a priority in developing countries, must integrate maternal depression as a disorder of public health importance. Intervention should target women in the early antenatal period.

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