Antenatal prevalence of fear associated with childbirth and depressed mood in primigravid women

Sanjay Jaju, Lamya Al Kharusi, Vaidyanathan Gowri
Department of Research, Ministry of Health, Oman, 'Department of Obstetrics and Gynecology, Sultan Qaboos University, Oman

ABSTRACT

Aim: To investigate the antenatal prevalence of fear of childbirth and its association with depressed mood in low-risk primigravidae in a referral teaching hospital.

Settings and Design: The study was conducted in a tertiary referral center catering to three districts in the state of Kerala. This was a cross-sectional study with internal comparison of associated factors.

Materials and Methods: Malayalam translation (translation back translation) of Edinburgh Postnatal Depression Scale (EPDS) was self-administered by the participants. It was followed by a structured interview based on the International Classification of Diseases 10 (ICD 10) after which the EPDS scale was scored.

Statistical Analysis: Chi-square test was used to compare the presence of fear in women with a EPDS of ≥ 12 and the association of fear and depression.

Results: Fear associated with childbirth was expressed by 17.7% women. The prevalence of depressed mood based on the EPDS (score > 12) was 9.8% but based on the ICD 10 criteria, the prevalence of depression was 8.7%. A significant number of women with depressed mood and clinical depression had fear of childbirth of some sort.

Conclusions: A significant number of primigravid women with depressed mood and clinical depression had fear of childbirth of some sort.

Key words: Childbirth, depression, Edinburgh Postnatal Depression Scale, fear, primigravida

INTRODUCTION

Some women dread and avoid childbirth despite desperately wanting a baby. This is called tocophobia that can be primary or secondary. There are a few epidemiological investigations of maternal depression in developing countries and especially those restricted to primigravidae. Pregnancy-related depression has been less researched as compared to postpartum depression. Pregnancy may be a time of considerable anxiety with symptoms escalating in the third trimester. Over 20% of pregnant women report fear and 6% describe a fear that is disabling. Some women dread and avoid pregnancy despite wanting to be a mother, and this is called tocophobia. It is more common in primigravid women than multiparous women. It is called primary tocophobia if it pre-dates pregnancy.

Women’s fears that are associated with pregnancy and childbirth can be explained by different factors – pain, obstetric injury, emergency caesarean section, and behavior of healthcare staff. For some, the greatest fear is of delivering a physically damaged or congenitally malformed child.

The pregnancy-related fears may result in anxiety and stress, manifesting as changes in emotions, behavior or physical symptoms. In a large prospective study by Milgrom et al.,

| Access this article online | Quick Response Code |
|---------------------------|---------------------|
| Website: www.indianjpsychiatry.org |
| DOI: 10.4103/0019-5545.158152 |
previous depression, current depression/anxiety, and low partner support are found to be key antenatal risk factors for postnatal depression.[8]

Depression, anxiety during pregnancy, and experiencing stressful life events during pregnancy are strong predictors of postpartum depression.[9]

The antenatal period provides an ideal time to screen and assess the first onset of depression along with the routine check-up. There are not many studies from India regarding the prevalence of fear and depressed mood in antenatal women. Since the fear of childbirth in multiparous women is related to previous obstetric history, it was decided to study only primigravid women.

MATERIALS AND METHODS

Sample frame
The study was conducted in the state of Kerala in South India, which has maternal care indicators similar to many of the western countries. The Sree Avittom Thirunal Hospital attached to the Medical College Trivandrum, is a tertiary referral center catering to three districts of Southern Kerala. Approximately, 16,000 deliveries are conducted annually out of which 53% are primigravidae.

A sample size of 323 was calculated anticipating 16% prevalence of fear, with an absolute precision of 4. This study recruited 368 consenting women, fulfilling the criteria, consecutively over a 12 weeks period. The staff nurses identified the subjects between 28 and 32 weeks of gestation based on the LMP dates (n = 368). The researcher confirmed the recruitment based on either the report of the Ultrasonography done before 20 weeks of gestation or clinical examination findings of the first trimester along with the inclusion and exclusion criteria (n = 368). Then the subject was referred to the trained research assistant for explanation of the purpose of the study after which informed consent was taken. The study was approved by the Human Ethical Committee, Medical College, Trivandrum.

Inclusion criteria
Primigravid women between 28 and 32 weeks of pregnancy, aged ≤ 30 years, with a singleton pregnancy.

Exclusion criteria
Multiparous women, twin pregnancy, preexisting (prior to pregnancy) medical, cardiac, renal problems and psychiatric illnesses and those not willing to participate.

Methodology
A separate room attached to the antenatal clinic was allotted for the interviewing the subjects individually and in total privacy.

Initially the Malayalam translation (translation back translation) of Edinburgh Postnatal Depression Scale (EPDS) (self-report scale, which is validated for antepartum period) was answered by the women independently and kept turned upside down (research assistant blinded).

• The research assistant, (a graduate trained to do the assessment) then administered a semi-structured questionnaire (based on literature search and expert consensus), which included a question concerning “fear of childbirth” (asked to specify if affirmative), and after completion of the same she then scored the EPDS as per the recommendations.

All the subjects scoring equal to 12 and above 12 (cut off is > 12) were referred to the researcher (blinded to the score) sitting separately, for purpose of clinical assessment of depression based on International Classification of Diseases and Related Health Problems 10th edition (ICD 10) criteria and specific fears related to childbirth.

• The subjects who were found to be clinically depressed based on the ICD 10 criteria and those scoring 3 points on the item number 10 of the EPDS (self harm/ suicidal item) were further referred to the Psychiatry Department for further immediate management.

RESULTS

The mean age of the primigravidae was 22.76 (standard deviation 2.91); 98.7% were educated up to the secondary standard and above; 92.7% were housewives while 7.3% were in employment.

All of the samples had received education or information related to pregnancy, the major sources being parents, in-laws, friends and neighbors, husband, books and periodicals and church. Only 5.2% of this sample received this knowledge through public health facilities and 0.5% from radio and TV.

The antenatal clinic facilities were utilized by approximately 67% Hindus, 15% Muslims and 18% Christians, which represents the ethnic mix in Trivandrum.

Three out of 368 complained, in combinations, either one or both, of physical and/or psychological abuse prior to and/or during pregnancy. All three had depressed mood (severe depression on clinical assessment), husbands were not loving and caring, relations with in-laws were not cordial, had no decision-making capacities, no social support but surprisingly having no financial problems in family. Of these three, only one complained of fear during pregnancy and delivery. One woman gave history of her husband consuming alcohol frequently. Eight of 368 subjects (2.2%) reported their husbands as not loving and caring and they could not share each other’s feelings; 16.67% that is, 6 of the 36 with score > 12 voiced this problem).
Eighty-five percent of women did not have any specific gender preference, 6.5% expected a female child whereas only 8.4% wanted a male child.

Thirty-four women (9.2%) were referred to the Psychiatry Department for further consultation.

- Proportion of fear associated with childbirth: 65 women (17.7%) expressed fear of some sort related to childbirth (95% confidence interval [CI] 1.481–8.764)
- The prevalence of depressed mood based on the EPDS (score > 12) was 9.8% (95% CI 7% to 12.6%). However, when all the referred women (scoring ≥ 12) were clinically assessed by the researcher psychiatrist and diagnosed based on the ICD 10 criteria, the prevalence of depression was 8.7% (95% CI 5.8% to 11.4%).

Our study shows that 18% of the women reported fears about pregnancy and delivery. Our results compare well with another study where over 20% of pregnant women reported anxiety related to childbirth (95% confidence interval [CI] 1.481–8.764). However, when all the referred women (scoring ≥ 12) were clinically assessed by the researcher psychiatrist and diagnosed based on the ICD 10 criteria, the prevalence of depression was 8.7% (95% CI 5.8% to 11.4%).

### DISCUSSION

This study has special relevance to Kerala where female empowerment, education, and health awareness is apparently better than the other states in India and in fact comparable with western standards.

Our study shows that 18% of the women reported fears about pregnancy and delivery. Our results compare well with another study where over 20% of pregnant women reported fear and 6% described a fear that was disabling.[2] Women are afraid of many things like pain, obstetric injury, emergency caesarean section, and behavior of healthcare staff.[3]

Our sample reported mainly fear of pain during delivery, fear whether delivery would be caesarean, fear of something happening during delivery due to a health problem and fear instilled in her by friends. There is an association between antenatal depressive and/or anxiety disorders and increased number of visits to the obstetrician related to fear of childbirth.[1] Though we could not study the increased number of visits, we found this factor per se to be nearly 4 times more prevalent in the women with depressed mood (odds ratio 3.603, 95% CI 1.481–8.764, P = 0.005). There was a significant association between the prevalence of fear in the antenatal period and depressed mood.

Ninety percent had planned pregnancies—though when it came to the overall decision taking regarding personal and health matters, only 78% could do so. All of them wanted to continue the pregnancy. This could either reflect the social context in this culture that emphasizes early child bearing and viewing first pregnancy as precious or maybe reflect a positive attitude of the educated and independent women. Also, this question is most likely to elicit an affirmative answer at this stage of gestation.

This study supports the suggestion given in an earlier study[4] that it is important for prenatal health caregivers to ask pregnant women about their feelings related to the current pregnancy, childbirth, and future motherhood. Women who express fears should be given an opportunity to discuss them, paying special attention to primigravidae. The antenatal clinic visit is the best time to screen for fear and depressive illness. Screening and appropriate referring can take place in a busy obstetric setting and this study endorses this view. We received 100% cooperation from all the women who were identified for screening. Two females who were initially reluctant and apprehensive, later agreed after seeing others readily volunteer. This reflects the women’s increasing willingness to report symptoms to their primary caregivers.[1]

### ACKNOWLEDGMENTS

The authors would like to acknowledge the help of Dr. K. T. Shenoy, Dr. Sheela Shenoy, Dr. V. Soja, Dr. Saramma and Mrs. Ramadevi Saradamma in conducting this study. We also acknowledge Dr. Gillian white in editing the manuscript.

## REFERENCES

1. Ryan D, Millis L, Misri N. Depression during pregnancy. Can Fam Physician 2005;51:1087-93.
2. Searle J. Fearing the worst – why do pregnant women feel ‘at risk’? Aust N Z Obstet Gynaecol 1996;36:279-86.
3. Hofberg K, Brockington I. Tokophobia: An unreasoning dread of childbirth. A series of 26 cases. Br J Psychiatry 2000;176:83-5.
4. Melender HL. Experiences of fears associated with pregnancy and delivery.
childbirth: A study of 329 pregnant women. Birth 2002;29:101-11.
5. Areskog B, Kjessler B, Uddenberg N. Identification of women with significant fear of childbirth during late pregnancy. Gynecol Obstet Invest 1982;13:98-107.
6. Melender HL, Lauri S. Fears associated with pregnancy and childbirth – Experiences of women who have recently given birth. Midwifery 1999;15:177-92.
7. Szeverényi P, Póka R, Hetyey M, Török Z. Contents of childbirth-related fear among couples wishing the partner’s presence at delivery. J Psychosom Obstet Gynaecol 1998;19:38-43.
8. Milgrom J, Gemmill AW, Bilszta JL, Hayes B, Barnett B, Brooks J, et al. Antenatal risk factors for postnatal depression: A large prospective study. J Affect Disord 2008;108:147-57.
9. Robertson E, Grace S, Wallington T, Stewart DE. Antenatal risk factors for postpartum depression: A synthesis of recent literature. Gen Hosp Psychiatry 2004;26:289-95.
10. Bergink V, Kooistra L, Lambregtse-van den Berg MP, Wijnen H, Bunevicius R, van Baar A, et al. Validation of the Edinburgh Depression Scale during pregnancy. J Psychosom Res 2011;70:385-9.
11. Andersson L, Sundström-Poromaa I, Wulff M, Aström M, Bixo M. Implications of antenatal depression and anxiety for obstetric outcome. Obstet Gynecol 2004;104:467-76.
12. Thoppil J, Rutcel TL, Nalesnik SW. Early intervention for perinatal depression. Am J Obstet Gynecol 2005;192:1446-8.

Source of Support: Nil, Conflict of Interest: None declared