

# Prevalence of Pregnancy Related Anxiety in Pregnant Women in Southern Fringes of Pune, India

Vijaya Bagade<sup>1</sup>, Bhavana Mhatre<sup>2</sup>

<sup>1</sup>Professor, St. Andrews College of Physiotherapy, Pune.

<sup>2</sup>Professor, Seth G.S. College and KEM Hospital, Mumbai.

Corresponding Author: Vijaya Bagade

## ABSTRACT

Pregnancy is an important period of women's life. It is not only a period of great joy, but also one of great stress to a woman both physically and mentally. There are hormonal, physical as well as psychological changes. The Anxiety and depressive symptoms are common during pregnancy. Up to one-third of women may experience anxiety symptoms during pregnancy. Pregnant women worry about the upcoming labor and anticipated pain, also referred to as fear of childbirth or they may be concerned about the health of the child they are carrying or the physical changes they experience.

**Objective:** To find out the Prevalence of Pregnancy related anxiety in pregnant women by using Pregnancy Related Anxiety questionnaire (PRAQ-R2).

**Design:** An observational study was conducted among 70 low-risk Indian pregnant women of age 20–35 years.

**Setting:** A public health care hospital in southern fringes of Pune, India.

**Participants:** 70 low risk pregnant women who attended the hospital were selected as convenient sample.

**Methods:** Participants were recruited as per the selection criteria Pregnancy-Related Anxiety Questionnaire–Revised were used to collect the data.

**Results:** 78.57% pregnant women had Pregnancy related Anxiety. 33 % pregnant women had mild Anxiety while 32 % women had moderate and 5% were suffering from severe Anxiety. Considering the component of anxiety 74.3% women had fear of giving birth, 77.1 % worries about bearing a handicap child, 74.3% women were concern about own appearance.

**Conclusion:** During the joyful phase of pregnancy there is higher prevalence of pregnancy related anxiety.

**Key Words:** Pregnancy, Pregnancy Related Anxiety Questionnaire (PRAQ-R2)

## BACKGROUND

Pregnancy is a period of great joy, and also one of great stress to a woman both physically and mentally.<sup>1</sup> pregnancy brings with it in the nine months to follow multiple tests of inner strength and flexibility as well as relationship stability in a couples life.<sup>2</sup> Depression and Anxiety are commonly occurring mental conditions during pregnancy, there is emerging evidence that presence of anxiety may be more common than that of depression. Pregnancy anxiety is defined as a negative emotional state that

is associated with worries about “the health and well-being of one's baby, the impending childbirth, of hospital and health-care experience (including one's own health and survival in pregnancy) during birth and parenting or maternal role.<sup>1</sup>

In developing countries, more importance is given towards addressing obstetric complications and reducing the maternal mortality; while a woman's emotional and mental health receives less attention than is due. Symptoms like poor sleep and tiredness which are suggestive of

a disturbed mental health are likely to be ignored and attributed to a normal physiological condition associated with pregnancy.<sup>3</sup> Physiotherapy treatment which include exercises and the relaxation techniques can help in improving feeling of well being. Relaxation techniques are therapeutic exercises designed to assist individuals with decreasing tension and anxiety. For the Proper Prescription of therapeutic exercises for Anxiety assessment of Anxiety during Pregnancy is Necessary.

There are evidences that suggest anxiety and similar mental conditions during pregnancy could increase the risk of adverse pregnancy outcomes and offspring neurodevelopment.<sup>4,5</sup>

The adverse outcomes include low birth weight, prolonged labor, preterm delivery and a higher incidence of caesarean section.<sup>1</sup> anxiety not only increases the risk of adverse pregnancy outcome but also it can affect the perforce of the woman in daily life and can affect her well being.

Published literature related to pregnancy related anxiety seems to be limited. The aim of this study was to determine Prevalence of Pregnancy related Anxiety in pregnant women in southern fringes of Pune

## **MATERIAL AND METHODS**

The study participants included pregnant woman who were seeking care at public Hospital,

The study participants were included according to the inclusion criteria of the study protocol. Pregnant women with in the age group of age 20-35 years with a confirmed pregnancy, Women with healthy and low risk Pregnancy. Primigravida and multigravida were included. Those diagnosed with obstetric complications were excluded. The study analyzed the data of 70 eligible pregnant women who had completed baseline visit of the study. The participants were informed about the nature and purpose of the study, the eligible pregnant women who agreed to participate

were asked to give a signed consent. Pregnancy Related anxiety Questionnaire Revised 2 (PRAQ-R2) was explained to the participants.<sup>6</sup> Participants filled the questionnaire. Responses were noted Privacy was ensured during data collection.(translated version)

## **STATISTIC ANALYSIS:**

Data were collected and analyzed by using MS Excel The presence of anxiety using the (PRAQ-R2 questionnaire was indicated by a score of more than 10. Anxiety was explained in terms of mild Anxiety (score 10 -20), moderate Anxiety (score 20 -30) and severe Anxiety (score 31-40).<sup>7</sup> Descriptive statistics were reported using Frequency and percentages.

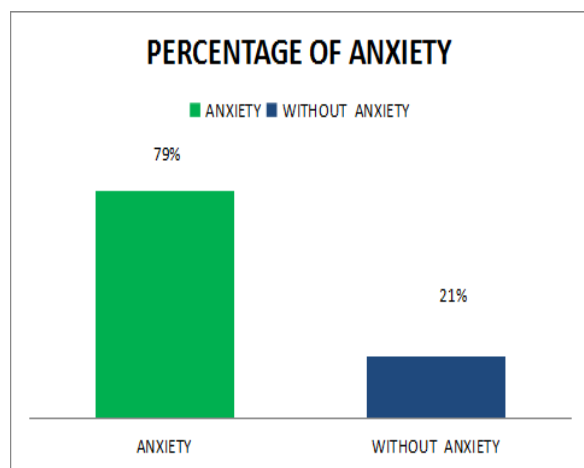
## **RESULTS**

Majority of the subjects in this study belonged to the age group of 22-28 years and the least were above 30 years.43% of the study population was Primigravida and 57% were multigravida. 19% women were in 1<sup>st</sup> trimester, 57% women were in 2<sup>nd</sup> trimester and 23% women were in 3<sup>rd</sup> trimester .21% women gave history of Miscarriage and 11% lost their baby after birth.

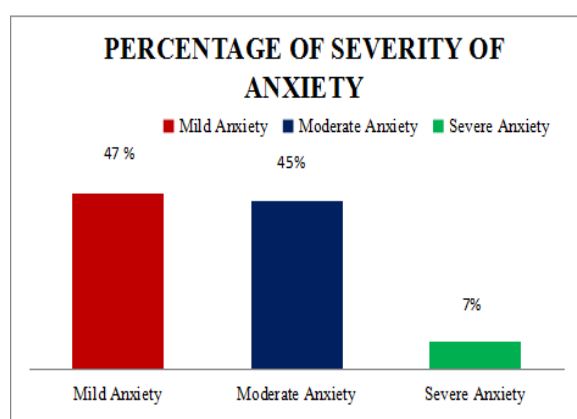
### **Prevalence of anxiety**

Out of 70 pregnant women, 55 (79%) were found to have pregnancy-related anxiety. The total mean score obtained from the PRAQ-R2 scale is 28.53  $\pm$ 3.5. And score of its component is shown in Table 1. The severity of the Anxiety is shown in Graph 2 which shows that 47% women had the mild anxiety, 45% women were with moderate Anxiety and 75 women were suffering from severe Anxiety.

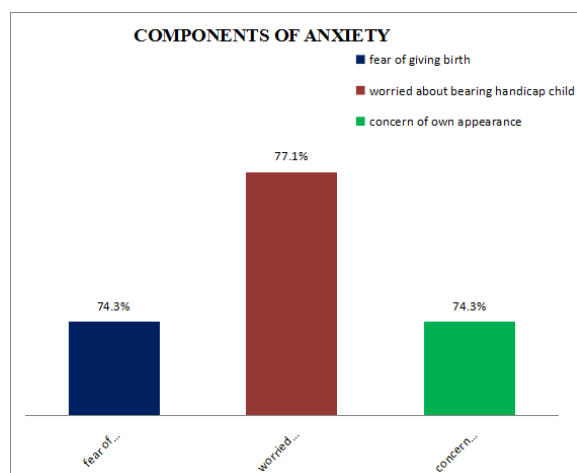
As in Graph 3 shows the Percentage of fear of giving birth was 74.3% and also women were concern about their own appearance percentage is 74.5% and 77.1 were worried about bearing a handicap child.



GRAPH -1



GRAPH-2



GRAPH -3

Table 1: Score of PRAQ-R2

	MEAN	SD
FEAR OF GIVING BIRTH	8.3	±1.6
WORRIES ABOUT BEARING A HANDICAP CHILD	8.2	±1.3
THE CONCERN OF OWN APPEARANCE	9.1	±1.7
TOTAL SCORE	28.53	±3.5

## DISCUSSION

In this study, (79%) of the pregnant women were suffering from pregnancy-

related anxiety during their pregnancy period determined by using the PRAQ-R2 scale. The systemic reviews reveal studies from different countries which reported prevalence rates using differing scales which seem to be much lower- 23.6% in Saudi Arabia using the State Anxiety scale, 21 26.8% in Brazil using the Hospital Anxiety Subscale, 22 23% in South Africa using the Mini-International Neuropsychiatric Interview diagnostic interview and 25% in Tanzania using the Pregnancy-related anxiety questionnaire. The study states that the variation in the prevalence is because of different scales were used to measure anxiety .<sup>8, 9</sup> Also the variations in prevalence might be because different cultures and lifestyle and the socioeconomic status. In Indian study which was conducted in south India the prevalence were found 55.7% .<sup>10</sup>

We found that 74.3% women had the fear of giving birth with the mean score 8.3 and SD ± 1.6 ,77.1 % women were worried about bearing a handicap child with mean score 8.2 and SD ± 1.3. 74.3 % women were concern about their appearance with mean score 9.1 and SD ± 1.7.

This can be because of the fact that there are many hormonal, physiological and psychological changes during pregnancy. Also some pregnant women perceive pregnancy and childbirth as moments of vulnerability, capable of triggering feelings of fear in women, which can be present even in women who have experienced previously.<sup>11</sup>

The feeling of fear can be increased with the approaching moment of the child's birth, even though it is expected throughout gestation, thus predisposing the pregnant woman to changes in her psychological well-being, since the literature demonstrates that women who are afraid of childbirth may be at greater risk of developing anxiety during pregnancy.<sup>11</sup> Some women are concern about their post pregnancy health status like weight gain , self appearance and musculoskeletal problems which occurs during pregnancy.

In this study 21% of women had past history of miscarriage while 11 % of women lost their child immediately after the delivery.

According to that study done by Monica Maria de Jesus Silva et al, there is association between the presence of prenatal anxiety and complications during previous pregnancies including the experience of an abortion/risk of preterm and women's experience in the ongoing pregnancy, so that the history of complications in past pregnancies invariably has a negative effect translated into accentuating anxiety levels in the present pregnancy.<sup>12</sup>

They also found the association of pregnancy related Anxiety with the pregnant woman's occupation, history of abortion, presence of complications in previous pregnancies, maternal desire regarding the pregnancy, addiction.

A study demonstrate that the woman's desire for pregnancy and having baby is important, it is relevant to mention that an unwanted pregnancy may contribute to psychological maladaptation, being responsible for developing anxiety during pregnancy<sup>11</sup>. In this context, there is evidence of an association between the maternal desire regarding pregnancy and the greater propensity to trigger emotional disturbances, such as feelings of anguish and unhappiness that, when associated with other factors, may represent potential triggers for developing mental disorders in pregnant women, giving an indication of the profound impact of an unwanted pregnancy.<sup>13</sup>

The study population of this study was from low socioeconomical strata. 38 female were house wife, 10 females were working as a house maids, 8 females were labourer, 4 females were farmer, 3 females were vegetable vendor, one female was running her tea stall, 3 were Clerk in the office and 3 were primary teacher. Anita Nath et al says that financial status, family conflict, addiction and family support all these factors are also responsible for the pregnancy related anxiety.<sup>10</sup>

As these factors triggers the Anxiety in females. anxiety along the the all the changes occurs during pregnancy can affect the woman's performance in daily life.

The prevalence of anxiety was significantly higher among women in the present study.

## CONCLUSION

The prevalence of anxiety was fairly high in the study population i.e. 47 %. The 7% pregnant women had severe Anxiety, maximum number of women had mild and moderate that is 47% and 45% of Anxiety respectively. Among them Fear of giving birth was 74.3%. The worries about bearing a handicap child is 77.1% and the concern of own appearance 74.3 %

## CLINICAL IMPLICATION:

The findings from this study have significant implications for the health care organizations. Antenatal anxiety must be taken care as a top priority to reduce the adverse pregnancy outcomes. A formal antenatal screening for pregnancy-related anxiety should be a part of routine antenatal check up to identify the high risk groups of pregnant women with pregnancy anxiety and fear. The findings of the present study suggest the necessity of implementing interventions to reduce pregnancy-specific anxiety and there by positively influence birth outcomes.

**Acknowledgement:** None

**Conflict of Interest:** None

**Source of Funding:** None

**Ethical Approval:** Approved

## REFERENCES

1. Girija Kalayil Madhavanprabhakaran, Melba Sheila D'Souza, Karkada Subrahmanya Nairy. Prevalence of pregnancy anxiety and associated factors. International Journal of Africa Nursing

- Sciences, Vol. 3 (2015); 1-7. <https://doi.org/10.1016/j.ijans.2015.06.002>
2. Ruth Sapsford, Bullock Saxton, Markwell. Women's health: a textbook for physiotherapist. Bailliere Tindall publisher 1<sup>st</sup> edition 1997.
  3. Rahman A, Patel V, Maselko J, Kirkwood B. The neglected 'm' in MCH programmes—why mental health of mothers is important for child nutrition. *Trop Med Int Health*. 2008;13(4):579–583. doi:10.1111/j.1365.2008.02036.x
  4. Bonari L, Pinto N, Ahn E, Einarson A, Steiner M, Koren G. Perinatal risks of untreated depression during pregnancy. *Can J Psychiatry*. 2004;49(11):726–735. doi:10.1177/070674370404901103
  5. Alder J, Fink N, Bitzer J, Hösli I, Holzgreve W. Depression and anxiety during pregnancy: a risk factor for obstetric, fetal and neonatal outcome? A critical review of the literature. *J Matern Fetal Neonatal Med*. 2007;20(3):189–209. doi:10.1080/14767050701209560
  6. C. Huizink1 et al Adaption of pregnancy anxiety questionnaire—revised for all pregnant women regardless of parity: PRAQ-R2 *Arch Womens Ment Health* (2016) 19:125–132, DOI 10.1007/s00737-015-0531-2
  7. Srinivasan A, Smitha Sarah Thambi Krishnarajan D, et: Incidence and Impact of Various Complications on Pregnancy Related Anxiety in Women Attending an Obstetrics Clinic in a Tertiary Care Hospital *Indian Journal of Pharmacy Practice*, Vol 13, Issue 4, Oct-Dec, 2020 page 318
  8. van Heyningen T, Honikman S, Myer L, Onah MN, Field S, Tomlinson M. Prevalence and predictors of anxiety disorders amongst low-income pregnant women in urban South Africa: a cross-sectional study. *Arch Womens Ment Health*. 2017;20 (6):765–775. doi:10.1007/s00737-017-0768-z
  9. Wall V, Premji SS, Letourneau N, McCaffrey G, Nyanza EC. Factors associated with pregnancy-related anxiety in Tanzanian women: a cross sectional study. *BMJ Open*. 2018;8(6):e020056. doi:10.1136/bmjopen-2017-020056
  10. Anita Nath Shubhashree Venkatesh Sheeba Balan, Chandra S Metgud, Murali Krishna, Gudlavalleti Venkata Satyanarayana Murthy The prevalence and determinants of 'pregnancy-related anxiety amongst pregnant women at less than 24 weeks of pregnancy in Bangalore, Southern India' *International Journal of Women's Health* 2019:11
  11. Gourounti K, Anagnostopoulos F, Lykeridou K. Coping strategies as psychological risk factor for antenatal anxiety, worries, and depression among Greek women. *Arch Womens Ment Health [Internet]*. 2013 [cited 2013 Oct 17];16(5):353-61. Available from: <http://link.springer.com/article/10.1007%2Fs00737-013-0338-y>
  12. Mônica Maria de Jesus Silva Anxiety in pregnancy: prevalence and associated factors. *Journal of school of nursing Rev Esc Enferm USP*. 2017;51:e03253. DOI: <http://dx.doi.org/10.1590/S1980-220X2016048003253>
  13. Bayrampour H, McDonald S, Tough S. Risk factors of transient and persistent anxiety during pregnancy. *Midwifery*. 2015;31(6): 582-9.7
- How to cite this article: Bagade V, Mhatre B. Prevalence of pregnancy related anxiety in pregnant women in southern fringes of Pune, India. *Int J Health Sci Res*. 2021; 11(10): 41-45. DOI: <https://doi.org/10.52403/ijhsr.20211007>

\*\*\*\*\*