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## To assess the level of stress among primigravida mother in Koyambedu Urban primary health centre

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### **Abstract**

Pregnancy is a period of incredible changes and numerous mothers do feel worried eventually. This is totally common and not in any way surprising as observing a mothers need to adapt to the obligations that filled her life before she fell pregnant just as set herself up, mentally and physically for another appearance. While momentary pressure isn't hindering to the soundness of the mother or child and can really be useful in specific conditions, delayed times of stress have been connected to negative outcomes of pregnancy. Pregnancy in and of itself is a stressor, the changes one's body undergoes. Stress is a complex genetically determined pattern of response of the human physiology for the demanding situation. The component of recognition demonstrates that human stress reactions reflect contrast in personality, just as contrasts in physical quality or general health. Excessive stress in pregnancy can prompt likely issues with the pregnancy. The present study aims to assess the stress level among third trimester primigravida mother. A quantitative descriptive research design was conducted among 60 primigravida mothers. Convenient sampling technique was used to select samples. Semi-structured interview was used to collect demographic data and stress level was assessed using stress scale. Mothers were explained about the purpose of the study and the psychological changes during pregnancy. The data were collected and analyzed. The study results show that there is a moderate to severe level of stress among the third trimester primigravida mother. This reveals there is a need for the stress assessment among the primigravida mother and non-pharmacological practices to reduce stress to improve fetal development and pregnancy outcome.

**Keywords:** Assess, primigravida, stress

### **Introduction**

Stress is a complex genetically determined pattern of response of the human physiology to a demanding situation. The element of perception indicates that human stress responses reflect differences in personality, as well as differences in physical strength or general health. (Glover V, 2010) <sup>[1]</sup>.

Pregnancy is the privilege of experiencing the gods miracle on earth. It is the stage of joyful anticipation which brings many changes in the body, the emotion and the family life. One can welcome these changes, but they can add new stress to the life which can have both beneficial and negative effects (Bryar NR, 2012) <sup>[2]</sup>.

Stress during pregnancy is common, but too much of uncoped stress can make the pregnancy risk for both the mother and the foetus. It causes sleeping problems, headache, loss of appetite or over eating, high blood pressure, premature fetus or a low birth weight baby etc. The causes of stress are different for every woman, but there are some common causes during pregnancy like nausea, vomiting, constipation, being tired or having backache. Changing hormones can also cause mood changes. If pregnant women work, it can also lead to stress (Broom N, 1999) <sup>[3]</sup>.

During third trimester the emotional reaction center on the ability and appearance of her body. A feeling of being overweight, less attractive, a decrease in sex interest, less tolerance level and wants the pregnancy to get over. The emotions reaction may increase when there is marital tension, stresses in life circumstances, difficulties in the pregnancy and conflicts around the pregnancy (Shaikh K *et al.*, 2013) <sup>[4]</sup>. The maternal- placental- fetal interaction that play important functional roles during development. If maternal stress signals are excessive in early pregnancy, cortisol can cross the placenta and inhibit fetal pituitary function. Increased cortisol can also effect fetal growth. (Janet A, 2012) <sup>[5]</sup>.

In addition excessive catecholamine production from the maternal adrenal can effect blood flow to the fetus and effect fetal growth.

Meanwhile placental CRH from the placenta enters the fetal circulation and stimulated fetal adrenal production of dehydroepiandrosterone increasing estrogen production, important for initiating parturition. (Hodnett ED and Fredericks S, 2007) [6].

Fernandus M *et al.*, (2010) conducted a study on "Coping mechanism used to relieve antenatal stress". Majority of 50.6% were using relaxation like watching television, newspaper reading, listening music, 8.6% were doing yoga, and 4% were using home remedies like are use to drink black tea along with ghee and they drink cumin water (jeera paani) [7]. Sandesh, P. *et al.* (2014) studied the prevalence of stress among pregnant women and found that 35 % of antenatal mothers were stressed during first trimester and 34.2% during third trimester. The prevalence of antenatal stress is rapidly increasing, which is associated with many maternal and fetal complications. Excessive stress in pregnancy can lead to potential problems in pregnancy and in their outcomes. Babies born to these mothers are preterm, low birth etc [8].

Goodman (2016) reported as many as 21% experience depression and 34% deal with an stress at some time during their lives. Women's mental health should be a primary concern by all women's health nurses because of higher prevalence of depressive, stress and anxiety disorders in women. Pregnancy specific anxiety may occur as the woman worries about the fetus, the delivery physical changes in her body and her maternal attitude towards the pregnancy and future body [9].

According to WHO, Majority 60% of the primigravida mothers were in the age of 23- 27 years, 20% were within the group of (18-22) years, 9.3% were the group of (28-32) years, 1.3% were the group of above 33 years. Majority of 42.6% had moderate stress, 34.6% had severe stress and 10% had mild stress. Majority of 78.6% stress related to fetal outcome family, 21.2% had stress related to physical changes and 10% due to lack of family support [10].

The purpose of the study [1] To assess the stress level among primigravida mothers in third trimester [2]. To determine the association of stress and other demographic variables among primigravida mother.

## Methods and Materials

A quantitative descriptive research design was conducted among 60 primigravida mothers at Koyambedu Urban Primary Health Centre. The samples who meet the inclusion criteria were selected by convenient sampling technique. The criteria for sample selection are antenatal mothers between 28 weeks to 38 weeks, primigravida mothers and mothers willing to participate in the study. The exclusion criteria for the samples are women with multiple pregnancy, maternal physical abnormality, psychiatric illness and fetal abnormality. The data collection period was done with prior permission from the medical officer. The investigator introduced and explained the purpose of study to the mothers and obtained the written consent.

The demographic data was collected for the mother. The stress scale was used to assess the stress level. The stress scale contains 31 statements, these statements were explained to the mother and asked to complete the questionnaire. The data were analyzed using descriptive and inferential statistics. The sample characteristics and level of stress were described using frequency and percentage. Chi square was used to associate the post-test level of stress with

the selected demographic variables.

## Results and Discussion

### Section A: Sample characteristics

The table 1 shows that, most of the primi gravida mothers 15(50%) were aged between 18 to 30 years, 11(36.7%) were educated upto secondary, 20(66.7%) were housewives, 22(73.3%) belonged to nuclear family and 16(53.4%) had a monthly income of Rs.5000 to 10000.

### Section B: Assessment of level of stress among primigravida mothers.

Most of them, 22(73.3%) had moderate stress, 6(20%) had mild stress and 2(6.7%) had severe stress (Table 1). The mean score of stress among primi gravida mothers was 74.10 with standard deviation of 15.63. The maximum score was 41.0 and the minimum score was 96.0.

**Table 1:** Frequency and percentage distribution of level of stress among primi gravida mothers. N = 30

Level of Stress	Frequency (f)	Percentage (%)
Mild Stress (31 to 62)	6	20.0
Moderate Stress (62 to 93)	22	73.3
Severe Stress (93 to 124)	2	6.7

The present study finding is supported by Lynn Fain U.S (2016) conducted a cross sectional study to assess the factors associated with antenatal psychological stress and describe the course of psychological stress during pregnancy on 1522 pregnant women and concluded that antenatal women reported 78% low to moderate level of stress and 6% high level of stress during pregnancy. Antenatal psychosocial stress during pregnancy is common and high stress is associated with multiple maternal factors that are known to contribute to poor pregnancy outcomes [11].

### Section C: Association of level of stress with selected demographic variables.

The table 3 shows that none of the demographic variables had shown statistically significant association with level of stress among primi gravida mothers.

## Conclusion

This indicates that there is a moderate to severe level of stress among primigravida mothers. Stress will have adverse effect on the pregnancy outcome hence there is a importance in managing the stress among primigravida mothers.

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## Authors Contribution

All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

## Conflicts of Interest

The authors declare no conflicts of interest.

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