

Perceived Stress and Its Associated Factors Among Primigravida Mothers: A Cross-Sectional Study at Antenatal Units of HSK Hospital Bagalkot, Karnataka

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ABSTRACT

Background: Pregnancy, an important life event accompanied by many positive changes of physical, physiological and psychological preparation in anticipation of birth and motherhood. Women's who are going through the experience of pregnancy for the first time feels perceived stress by various associated factors.

Aims: The aim of the study was to assess the level of perceived stress and its associated factors among Primi Gravida mothers.

Methodology: This was a cross sectional study with a convenient sample of 100 Primi Gravida mothers attending antenatal units of HSK Hospital, Bagalkot. The perceived stress was measured using Cohen's perceived stress scale and associated factors were assessed using structured socio-demographic and personal profile. Data were analyzed using descriptive and inferential statistics.

Findings: Findings related to assessment of levels of stress among Primi-gravida mothers reveals that most (90%) of Primigravida mothers had moderate stress, 6% of them had high level of stress, 4% of them had low level of stress and the total mean and SD of stress scores was 19.86 +3.72. No significant association found between the level of perceived stress of Primi-gravida mothers with their any of the

socio-demographic variables and obstetrical factors.

Conclusion: The perceived stress is a common factor in Primigravida mothers due to various physiological changes, so the assessment and management of stress early in the pregnancy is very crucial.

Keywords: Perceived stress, Associated factors, Primi Gravida Mothers.

INTRODUCTION

Pregnancy, an important life event for the woman, is on one hand is accompanied by many positive changes and events ranging from enhancement of self-esteem to social approval. It is a period of physical, physiological and psychological preparation in anticipation of birth and motherhood. Becoming a parent is considered as one of the maturational milestones of woman's life.^[1]

Pregnancy is a period of emotional alterations, resulting from both social and psychological factors, as well as typical hormonal alterations^[2,3]. Some stressors are related to both specific events and physiological adaptations expected in the maternal body: nausea, weight gain,

insomnia, and emotional liability. Individual factors, such as unplanned pregnancies, changes in family dynamics such as the relationship with a partner, acquired responsibilities with neonatal care, and the risk of complications during pregnancy and labor are other stressors. Another important factor which can be an aggravating stressor for pregnant women is the socioeconomic context: low income, domestic violence, use of drugs and alcohol, lack of a family support network, and other vulnerabilities [4].

Primigravida, who are going through the experience of pregnancy for the first time, deserve special care, since the unprecedented physiological and psychological changes in the gestational period, as well as transition to the social maternal role, may by itself represent a stressor factor. It is important to identify pregnant women or groups at risk for stress and anxiety, to prevent adverse outcomes in maternal and perinatal healthcare [5].

Pregnancy-specific stress was associated with preterm labor and unhealthy habits in relation to feeding, physical activity, and smoking. The latter was related to low birth weight. By association, the pregnancy-specific stress would be indirectly related to this adverse outcome [6].

Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given time or over a given period (Cohen et al., 1983). It includes feeling of uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles; and confidence in one's ability to deal with life's challenges and problems. Hassles and confidence in one's ability to deal with life's challenges and problems. It is not about measuring the types or frequencies of stressful events which have happened to a person, but rather, how an individual feels about the general stressfulness of their life and their ability to handle such stress [7].

Worldwide, stress is a very common mental health problem among women during their time of pregnancy [20]. Studies reported

that the prevalence of stress during pregnancy range from 5.5 to 78%. [7]

MATERIAL AND METHODS

Study Design and Participants

Present study was a descriptive cross-sectional study conducted between July 9-2022 to August 12-2022 among a convenient sample of 100 Primigravida mothers attending antenatal care units of HSK hospital Bagalkot were selected for the study. Not mentally fit, Unable to cooperate, Sick at the time of data collection and not willing to give written informed consent are excluded from the study. Permission to conduct study was obtained from medical superintendent of SNMC and HSK Hospital and Research Centre, Navanagar, Bagalkot.

Instruments

Cohen's perceived stress scale: The perceived stress among Primigravida was measured using the Cohen's perceived stress scale. The perceived stress scale was developed by Sheldon Cohen. Cohen's perceived stress scale for assessing perceived stress among Primigravida mothers which consists of 10 items. There are 6 negatively items (items 1, 2, 3, 6, 9 & 10) scoring of these items (0 = Never, 1 = Almost never, 2 = Sometimes, 3 = fairly often, 4 = very often), There are 4 positively stated items (items 4, 5, 7 & 8) scoring is obtained by reversing responses (4 = Never, 3 = Almost never, 2 = Sometimes, 1 = fairly often, 0 = very often) Thus total score for perceived stress scale range from 0-40 for 10 stated items. Range of score is about (0-13) low stress, (14-26) moderate stress, (27-40) high stress. For the present study reliability was calculated by administering Cronbach's Alpha obtained was 0.93 stating that tool is highly reliable.

Socio-demographic Variables and Clinical characteristics

Socio-demographic and clinical variables included age, religion, type of family, residence, Monthly income, educational

status of mother, occupation of, gestational age, family support, excessive nausea and vomiting, excessive morning sickness, Is your pregnancy planned?

Data Collection Procedures

Prior permissions were taken from relevant institutions before the beginning of data collection procedure. The study participants were identified during the study period at antenatal care units of HSK hospital, Bagalkot. Every Primigravida mothers who fulfilled the inclusion criteria was approached for data collection. Consent was obtained by the interviewers before participants underwent the structured interview which lasted approximately for 15 to 20 minutes. Purpose of the study was explained to the participants and they were interviewed in Kannada or in the language understandable to them. All the information collected was based on patient's self-report.

Data Analysis

The data obtained was analyzed in terms of achieving the objectives of the study using descriptive and inferential statistics. That is Organization of data in master sheet, Frequency and percentage distribution was used for analysis of socio demographic characteristics of Primigravida mothers, Calculation of mean, standard deviation of level of stress scores among Primigravida mothers and Chi-square to test association between stress and associated factors.

RESULTS

A: Sample characteristics

Percentage wise distribution of Primigravida mothers according to their socio demographic variables reveals that out of 100 subjects, majority (64%) of the Primigravida mothers were in the age group of 24-29 years, majority (72%) of them were belonging to Hindu religion, 57% of

them were belonging to nuclear family, majority (54%) of them were from rural area, 38% of them had Rs. 5001-Rs. 10001/- as their monthly family income, majority (62%) of them were house wives, 36% of them had secondary education, majority (78%) of them were in third trimester of pregnancy, majority (88%) of them had support of from family, majority (76%) of them had morning sickness, majority (88%) of them had planned pregnancy, majority (64%) of had nausea and vomiting.

B: Assessment of level of stress among Primigravida mothers

Findings reveals that most (90%) of the Primigravida mothers had moderate stress, 6% of them had high level of stress, 4% of them had low level of stress.

TABLE – 1: Levels of stress among Primigravida mothers

Level of stress	Range	F	%
Low	0 – 13	4	4%
Moderate	14 – 26	90	90%
High	27 – 40	6	6%

C: Assessment of mean and SD of stress scores of Primigravida mothers.

Findings in table 2 reveal that, the total mean and SD of stress scores is 19.86 + 3.72.

TABLE – 2: Mean and SD of stress scores of Primigravida mothers.

VARIABLES	MEAN	SD
STRESS	19.86	3.72

D: Association between levels of stress and associated factors of Primigravida mothers

Findings related to the association between the levels of perceived stresses with their socio demographic variables and obstetrical factors reveals that there was no significant association found between levels of stress of Primigravida mothers with their socio-demographic and obstetrical variables.

TABLE – 3: Association between levels of stress and associated factors.

Sl.No	Socio demographic variables	Df	Chi-square value/ Fisher's Exact test 'P'
1	Age	1	0.67
2	Religion	1	0.54
3	Type of family	1	1
4	Residence	1	0.88

5	Family monthly income	1	0.80
6	Educational status of mother	1	1
7	Occupation of mother	1	0.82
8	Gestational age	1	0.86
9	Family support	1	0.42
10	Excessive nausea and vomiting	1	0.76
11	Excessive morning sickness	1	0.11
12	Is pregnancy planned?	1	0.61

*P<0.05 (Significant)

DISCUSSION

The main objective of this cross-sectional study was to assess the perceived stress and associated factors among 100 Primigravida mothers attending antenatal units of HSK Hospital, Bagalkot.

In the present study, percentage wise distribution of Primigravida mothers according to their socio demographic and obstetrical variables reveals that out of 100 sample, majority (64%) of them are in the age group of 24-29 years. Majority (72%) of them in the religion of Hindu, majority (57%) of were belongs to nuclear family, majority (54%) of them are from rural area. Findings of the present study are consistent with the study conducted by Thongsomboon W, Kaewkiattikun K et all (2020) to assess the stress among primi gravida mothers at Attending Antenatal Care in Urban Thailand Findings of this study shows that, majority (73%) of the mothers were in the age group of 22-28 years.⁽⁸⁾

In present study, majority (38%) of them had 5001-10001, majority (62%) of them are as house wives, majority (36%) of them were belongs to the secondary education, majority (78%) of them are in third trimester of gestation age, majority (88%) of them are in support of family members, majority (76%) of them are in morning sickness, majority (88%) of them are in planed pregnancy, majority (64%) of them are in nausea and vomiting.

Findings of the present study are consistent with the study conducted by Engidaw N.A., Mekonnen A.G Et all (2019) to assess the Perceived stress and its associated factors among pregnant women in Bale zone Hospitals, Southeast Ethiopia finding shows that the prevalence of perceived stress among pregnant women was 11.6 and (69%) of them are in third trimester of

gestation age were associated with perceived stress.⁽⁹⁾

In the present study, assessments of levels of stress among Primigravida mothers reveals that, 90% of Primigravida mothers had moderate stress, 6% of them had high level of stress, and 4% them had low level of stress.

Similar study conducted by Krishna G and Aswathy, Lal S A (2021), to assess the level of stress among Primi Gravida Mothers at tertiary level hospital, Thiruvananthapuram, Kerala shows that, 1% of selected antenatal women had no stress, 73% had mild stress, 25% had moderate stress and 1% had severe stress.⁽¹⁰⁾

In the present study, findings related to the association between the perceived stresses with their socio demographic and obstetrical variables reveal, that there was no significant association was found between levels of stress of Primigravida mothers with their Socio-demographic obstetrical variables.

Similar conducted by Vijayaselvi R, Beck MM et all, to assess the stress and its associated factors among Primi Gravida mothers at Tertiary Care Hospital of Southern India (2015) shows that, unplanned pregnancy and husband's employment status were associated with high levels of perceived stress in multivariate analysis in this set of women.⁽¹¹⁾

CONCLUSION

Pregnancy is a special event in the life of every woman where their body go through many changes and as hormones change, so their mood also goes through a turmoil. Hence, they are vulnerable for getting into stress. The present study also found that, majority of Primigravida mothers

experience moderate stress. So the interventions should be developed to administer to the primi gravida mothers to curb their stress.

Declaration by Authors

Ethical Clearance: Ethical clearance was obtained from the institutional ethical committee of BVVS Sajjalashree Institute of Nursing Sciences, Bagalkot.

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Conflict of Interest: Nil

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