PERCEPTION OF PAIN AND LEVEL OF ANXIETY AMONG PRIMIPARA & MULTIPARA MOTHERS IN THE FIRST STAGE OF LABOR ADMITTED IN THE LABOR ROOM.

1. **Pratibha Khosla,** Associate Professor, Department of Obstetrics and Gynecological Nursing, Sum Nursing College, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India; Email: pratibhakhosla@soa.ac.in (Corresponding author)

1. **Rojalin Dash,** MSc. Nursing Sum Nursing College, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India.

2. **Pravati Tripathy** Dean, Professor & Dean, Department of Obstetrics and Gynaecological Nursing, Sum Nursing College, Siksha 'O' Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India

----

ABSTRACT

Background: Childbirth is in essence a joyous moment, it puts the women to experience the extreme form of discomfort. The mother undergoes a wide range of pain in labor and expresses the correspondingly different extent of reactions to it. A woman's response to labor pain may be determinant of the conditions of her labor process, the setup of the birthing unit, her ethnicity, race, lifestyle and pre-pregnancy construct concerning a perception of pain & anxiety in primi and multi mothers and to compare the level of perception of pain & anxiety among both.

Objectives: We studied the level of perception of pain & anxiety in primi & multi mothers and compared the level of perception of pain & anxiety in primi & multi mothers to see the association between level of perception of pain & anxiety with other variables.

Methods: A comparative descriptive survey design was adopted and by non-probability convenient sampling technique 80 primiparas and 80 multiparas were sampled. A 3 point Wong-Baker rating face scale for pain assessment and modified 3 point Hamilton anxiety rating scale for anxiety level assessment was used.

Result: In both the groups 52.50% of primipara had severe pain and 10% of multiparas had severe pain in the first stage of labour. 70% of primipara had severe anxiety and 12.50% of multipara had severe anxiety in the first stage of labour. The difference in the degree of pain perception in primi and multi was significant at 'p' value 0.000316 & anxiety is <0.0001. None of the socio-demographic variables appeared to be related to the level of perception of pain & level of anxiety.

Key Words Pain, anxiety, labour.

INTRODUCTION

A woman's potential to adjust to the demands of pregnancy is unmatchable and the amount of difficulty she undergoes influences the result of gestation. [1] It is not unusual to have anxiety at the physical and emotional effects of pregnancy. [2] As distress and worry intensify, muscle tightness grows, hindering the

efficacy of contractions, rising aches and pains lead to further intensifying of fear and anxiety. [1]Addressing the agony of women in labor makes draws minimum attention in many developing nations that are battling to meet the United Nations Millennium Development Goals. [3] Many women describe it as the most severe pain they have experienced. Both the experience and perception of pain are considered as an individual response which makes it harder for the witness to quantify equitably. [4]A women's response to the discomfort of childbirth possibly is determined by the condition of her childbirth, the birthing unit, her societal perceptions about her childbirth, and the companion assessable to women at times of need and previous experience.In the childbirth time, women have stress, anxiety, discomfort, and severe pain. [5]The discomfort of childbirth is related to an automatic rise in blood pressure, oxygen consumption, and liberation of catecholamines all together may unfavorably influence uterine blood flow. [4]Around 25% of the primi women and 11% of multi women described childbirth as dreadful or intense discomfort.[6] Primigravida mothers face the first stage of labor with severe pain and discomfort. [7] Perception of pain is exceptionally distinctive and varies from one person to another however the severity of pain inducement is identical. [8]Labor discomfort is a distinctive and an aggregation of sensory and affective affair that vary from the acute or chronic pain of disease, trauma, or surgical or medical procedures. [9]A significant positive correlation was found between pain and tension from environmental factors in primiparous ($r=0.16$, $p<0.01$) and in multiparous ($r=0.22$, $p<0.05$) women.[5]A prolonged, discomfort during child birth could lead to an exhausted, frightened, and hysterical mother incapable of decision-making.[10] Women who had experienced severe life events in the first trimester of pregnancy had a 50% increased in rate of congenital abnormalities incranial – neural crest derived organ.[11] Evidence suggests that pregnancy, labor & the post natal periods are times of tremendous stress, anxiety emotional turmoil & readjustment.[12] Drugs and technology in birth, as in life, have proved to be poor substitutes for true, human attention.[7]

METHODS

A cross-sectional survey approach with non-experimental comparative descriptive design studied the perception of pain and level of anxiety of women in the first stage of labor both primi and multi 80 from each group by Non-probability convenient sampling technique, in labor room of IMS & SUM Hospital, Bhubaneswar, among primi & multi mothers admitted in their first stage of labor excluding women who had unbearable pain with screaming and with any complications during the antenatal period, measured pain by the Wong-Baker faces pain rating scale similarly for anxiety, and Hamilton anxiety rating scale, was adopted. The survey instrument was a three-part questionnaire, Part 1 had questions on parity, age, education, occupation, history of medical or surgical illness, living with spouse & number of children. Part 2 was Wong-Baker faces pain rating scale pain perception by 3 point pain face rating scale, the scale is a three-point rating scale, it contains five different faces which denotes a 0-10 score. Face 1 has no pain

with a score of 0. Face 2 hurts just a little bit with a score of 1-2. Face 3 hurts a little more with a score of 3-4. Face 4 hurts even more with a score of 5-6. Face 5 hurts a whole lot with a score of 7-8. Face 6 hurts as much as possible with a score of 9-10. The investigator merged the pain face score as 1-4: mild pain with score '1', 5-8: moderate pain with score '2', 9-10: severe pain with score '3'.The investigator observed the face appearance & select the appropriate score for the perception of pain. The reliability of the tool confirmed at 0.87 through Cronbach's coefficient estimation. Data were collected during the first stage of labor for both groups. Part 3 was a Measurement of the level of anxiety by Modified Hamilton 3 point Anxiety Rating Scale. The original Hamilton anxiety rating scale consists of – items of psychological, physiological & behavioral symptoms, here it is modified & 14 sub-sections are kept with a total of 69 items. It is the scale to assess the level of anxiety where a total of fourteen questions which has several subdivision are & the respondent has to respond to the severity of anyone response.The combined outcome is divided under mild, moderate & severe category where 1-14 score denotes mild anxiety, 15-28 score denotes moderate anxiety & 29-42 score denotes severe anxiety. The data were analyzed by using SPSS version 21. The baseline characteristics were analyzed in terms of objectives of the study using percentage, mean and SD,comparative & inferential statistical technique such as mean, standard deviation, unpaired 't' test & chi-square.

RESULTS

The maternal characteristic as analyzed demonstrated (42.50%) of the primiparas are between 20-25 years of age, the majority (90%) of multiparous women are of more than 26 years of age. 52.50% of primipara perceived severe pain & 10% of multiparas perceived severe pain in the first stage of labor as per Wong-Baker faces pain rating scale. 70% of primipara have severe anxiety & 12.50% of multipara have severe anxiety in the first stage of labour as per Modified Hamilton Anxiety Rating Scale.

Table 1 Level of pain among primipara & multipara women

Pain Face Scale	Primipara (n=80)			Multipara (n=80)		
	Mild	Moderate	Severe	Mild	Moderate	Severe
	5%	42.50%	52.50%	5%	85%	10%

Table – 2 Level of anxiety among primipara & multipara women

Modified Hamilton Anxiety Rating Scale	Primipara			Multipara		
	Mild	**Moderate**	**Severe**	**Mild**	**Moderate**	**Severe**
	0%	30%	70%	0%	87.50%	12.50%

Table 3 Comparison of mean, standard deviation by 't' test on the perception of pain among the groups using unpaired 't' test

PainFace Scale	Primipara Mean ± SD	Multipara Mean ± SD	Unpaired 't' test	df	p value
	2.475± 0.598	2.05± 0.388	3.77	188	0.000316**

p value <0.001 ** extremely significant

Table 4 Comparison of mean, standard deviation on level of anxiety among the groups using unpaired 't' test

Modified Hamilton Anxiety Rating Scale	Primipara Mean± SD	Multipara Mean± SD	Unpaired 't' 't' test value	df	p-value
	29.2± 5.607	23.5± 4.132	5.18	188	0.0001*

p value <0.0001 *significant

None of the demographic variables neither in primipara nor in multipara are associated with the level of perception of pain during the first stage of labor, likewise, there was no association of the demographic variables neither in primipara nor in multipara are associated with the level of anxiety during the first stage of labor.

DISCUSSION

In this study, an attempt has been made to contrast the perception of pain and level of anxiety among primipara and multipara mothers during the first stage of labor. The present research outcomes have shown the variation among primipara and multipara mothers during the first stage of labour. It was found that 5% of primipara & 5% of multipara women perceived mild pain whereas 42.50% of primipara perceived moderate pain & 85% of multiparas with moderate pain. Whereas 52.50% of primipara & 10% of multipara had severe pain in the first stage of labour. The result revealed that majority of primipara got severe pain whereas the majority of multipara got moderate pain, similarly   "A narrative inquiry into women's perception and experience of labour pain", conducted by Amofo Evelyn Asamoah et. al, found out that prior the childbirth, women recognized childbirth as an excruciating event anticipated to be tolerated. [3] None of the women had mild anxiety but, 30% of primipara & 87.50% of multipara had moderate anxiety. About 70% of primipara had severe anxiety & 12.50% of multipara had severe anxiety in the first stage of labor as per Modified Hamilton Anxiety Rating Scale. It is revealed that the majority of primipara had severe anxiety & the majority of multipara had moderate anxiety in the first stage of labour, Zar et.al (2001) conducted a study on fear of childbirth among 77 nulliparous & 85 multiparous women. [13] The outcome of the survey featured that women giving birth for the first time who were new in the situation of childbirth had elevated level of phobia of during antenatal period than women who had given birth earlier. It was noticed that women with an increased phobia of labor have higher general trait anxiety than those with a moderate level of fear of childbirth.

Hence it is inevitable to mention that perception of pain and level of anxiety among the experienced and first time pregnant differ but the fact remains that perception of pain may differ but the level of pain experienced doesn't differ much so to say labor is established as a painful process and just to ease the women we can provide positive pregnancy and positive childbirth experience.[8-13]

Conclusion

The nurse-midwives have a major role in providing safe & effective nursing care to enhance positive childbirth experience and in the reduction of perception of pain & level of anxiety. Perception of pain & level of anxiety can be reduced in the first stage of labour with some effort, if the attending midwives & students are adequately taught about intra-natal care & counseling to the patient then the maternal morbidity will be less due to severe pain & anxiety during 1st stage of labor. Support from a midwife or family member or closed one has a greater effect on the perception of pain & level of anxiety. Importance should be given to carry out a clear nursing assessment on the perception of pain & the factors influencing the level of anxiety in the first stage of labor. Proper psychological preparation of primi and multi mothers for going through the journey of labor & adequate preparation on part of midwives to care women in

labor can reduce the pain perception & anxiety level in the first stage of labor. With the development of knowledge, skills, and following prescribed protocols the perception and anxiety of women about labor and childbirth can be reduced.

References

1. Hofberg K, Ward MR. Fear of pregnancy and childbirth. Postgrad Med J. 2003;79(935):505–10.

2. Hall S, Hinic K. The Relationships Among Perceived Stress, Birth Satisfaction, and Breastfeeding Self-Efficacy in Early Postpartum Women. 2015.

3. Ampofo EA, Caine V. A narrative inquiry into women's perception and experience of labour pain: A study in the western region of ghana. Int J Africa Nurs Sci 2015;3:86–93

4. Ebirim LN, Buowari OY, Ghosh S. Physical and Psychological Aspects of Pain in Obstetrics; Intech Open 2012.

5. Manizheh P, Leila P. Perceived environmental stressors and pain perception during labor among primiparous and multiparous women. J Reprod Infertil. 2009;10(3):217-223.

6. Lowe NK. Parity and Pain During Parturition J Obstetric, Gynecologic Neonatal Nursing 1987; 16: 340-346

7. Lundgren I, Dahlberg K. Women's experience of pain during childbirth. Midwifery, 1998; 14(2), 105–110.

8. Leeman L, Fontaine P, King V, Klein MC, Ratcliffe S. The nature and management of labor pain: part II. Pharmacologic pain relief.. 2003; 15; 68(6): 1115-20.

9. Callister LC, Khalaf I, Semenic S, Kartchner R, Vehvilainen-Julkunen K. The pain of childbirth: perceptions of culturally diverse women. Pain Management Nursing : Official Journal of the American Society of Pain Management Nurses. 2003;4(4):145-154

10. Durante CDEM, Parto TDE, Em P, Posi D, Dolor ES, Mujeres CDE, et al. The pain and behavior of women during labor and the different positions for childbirth. Rev Esc Enferm 2011; 45: 557–64.

11. Vivette Thomas G.O' Connor, Effects of antenatal stress & anxiety. British J Psychiatry 2002;180: 389 – 391.

12. Nilvér H, Begley C, Berg M. Measuring women's childbirth experiences: a systematic review for identification and analysis of validated instruments. BMC Pregnancy Childbirth. 2017;17(1):203.

13. Siswi Wulandari and Ajunnisa,"THE EFFECT OF CONSUMPTION STRAWBERRY JUICE AGAINSTLEVEL OF HAEMOGLOBIN IN THIRD TRIMESTER OF PREGNANT WOMAN", International Journal of Medical Research and Pharmaceutical sciences, 3(12), 2016, pp 76-82

14. Zar M, Wijma K, Wijma B. Pre- and Postpartum Fear of Childbirth in Nulliparous and Parous Women. Scandinavian Journal of Behaviour Therapy, 2001; 30(2), 75–84.