International Journal on Science and Technology (IJSAT)



E-ISSN: 2229-7677 • Website: <u>www.ijsat.org</u> • Email: editor@ijsat.org

# Maternal Health Literacy: A Key to Positive Birth Journeys – A Mixed Analysis

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# Abstract

Health literacy is widely defined as "people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course." Despite the availability and accessibility of health information, considerable parts of the population still engage in risky health behaviour such as insufficient physical activity, unbalanced nutrition, and smoking. The woman's experience of care during childbirth is as important as an optimal clinical care to achieve desired outcomes of childbirth and labour according to the World Health Organization (WHO).

Title: "MATERNAL HEALTH LITERACY AND LABOUR EXPERIENCE OF POSTNATAL MOTHER AT INSTITUTE OF OBSTETERICS AND GYNAECOLOGY IN CHENNAI" – A MIXED METHOD STUDY."

**Objective:** To investigate Maternal health literacy during labour among postnatal mothers. To associate the maternal health literacy of postnatal mothers with selected demographic variable. To evaluate Labour experience of postnatal mother. To integrate the association between Quantitative and Qualitative findings.

**Materials and Methods:** In present study, researcher adopted Mixed method design by quantitative 60 samples and qualitative 6 sample using non-probability purposive and convenient technique. The tools include Socio-Demographic Data, Maternal health literacy tool and labour experience.

**Results:** The level of Maternal health literacy during pregnancy of postnatal mothers. In general,8.33% of them having inadequate, 21.67% of them are Problematic, 70% of them having sufficient level of literacy and none of them are having excellence level of maternal health literacy.



**Conclusion:** The study concludes the maternal health literacy has significance of labour experience in postnatal mothers but may differs by age, education, type of family.

Key words: Maternal health literacy, labour experience, Postnatal mothers.

# **INTRODUCTION:**

The ability of people to access, comprehend, evaluate, and apply health information to make decisions about healthcare, illness prevention, and health promotion in daily life to maintain or improve quality of life throughout life is known as health literacy. This definition is widely accepted. Compared to those who have an appropriate degree of health literacy, those with low health literacy had higher ER visits, longer hospital stays, worse healthcare outcomes, and lower use of preventative treatments.

The World Health Organization (WHO) states that in order to obtain desired outcomes from childbirth and labor, the woman's experience with care throughout childbirth is just as crucial as receiving appropriate clinical treatment. Nevertheless, 5–10% of labouring women have reported having a bad birthing experience, which could have long-term consequences for the mother's health. A stressful birthing experience has been linked to posttraumatic stress disorder, postpartum depression, and abnormal bonding with the newborn. A bad delivery experience can also result in a second hand fear of giving birth, a longer time between births, and a higher chance of needing a cesarean section (CS) in the future.

Research on the relationship between the duration of active labour and the experience of childbirth by mothers is scarce, and the findings of research are inconsistent. Prolonged labour was identified to be a risk factor for an unpleasant birthing experience in a small number of studies that examined the length of active labour in primiparous women, the majority of which did not account for potential confounders.

The significant socioeconomic variables influencing health status is the degree of literacy and health education. Health education is an upgradeable feature that can improve cooperation with the healthcare system, ways to communicate with health practitioners, and access to health information. Higher HL experience mothers are more likely to give birth to babies that are born at the proper weight and are at a lower risk of preterm delivery. one of the key socioeconomic factors influencing health status is the degree of literacy and health education.

# **MATERIALS AND METHODS:**

A Mixed , Explanatory Sequential Design was used to assess the level of Maternal Health Literacy and Labour Experience among Postnatal Mothers conducted at the Selected Tertiary care Hospital, Chennai, over four weeks. The study Population comprised those who met the inclusion criteria, including Primi Normal vaginal delivery mother and Primi Mother who are willing to participate . Mothers who are sick during the study period and Mothers who are under high risk were excluded. A Total of 60 Mothers were included in the study. Participant were selected using a Non-Probability Convenient and Purposive Sampling Technique to ensure feasibility and timely Data Collection. . Tools used were maternal health literacy inventory in pregnancy(MHELIP) scale and the ethical principles were followed accordingly. The data was coded, tabulated and analysed using both descriptive and inferential statistics.



# SAMPLE SIZE CALCULATION

• Sample size was calculated based on Mehrun Rostam etal

*\_et al.* previous study more than 5 times health care taken mothers Maternal health literacy mean of 39.3  $\pm$  6.40 with 95% confidence limit and 4% of relative precision using the following formula.

$$N = \frac{Z^2 \sigma^2}{\xi^2 \mu^2}$$
  

$$\sigma = \text{standard deviation} = 6.40$$
  

$$z = \text{confidence limit} = 1.96$$
  

$$\xi = \text{Relative precision} = 4\% \text{ of mean } 39.3 = 1.57$$
  

$$\mu = \text{Mean} = 39.3$$
  

$$N = \frac{1.96^2 \times 6.4^2}{1.57^2}$$
  

$$n = 60$$

# STATISTICAL ANALYSIS:

Data were processed via IBM SPSS Version 22 Demographic variables in categories were given in frequencies with their percentages. Maternal health literacy score was given in mean and standard deviation. Association between demographic variables and maternal health literacy score were analysed using Pearson chi-square test Simple bar diagram, Multiple bar diagram, Pie diagram, scatter diagram was used to represent the data. P<0.05 was considered statistically significant.

#### **ETHICAL CONSIDERATIONS:**

Ethical approval was obtained from the Institutional Ethics Committee, Madras Medical College (IEC-MMC Approval and permission was granted by the Director of IOG, Chennai. Informed consent was obtained from all participants and the Rights and Confidentiality of Participants were safeguarded.

#### **RESULTS:**

#### Socio Demographic Characteristics:

The mean age of the mothers was 24-29 years and slightly more mothers were Hindu(60.07%). Half were graduate mothers(45.4%) and service mothers. Most mothers earned more than 10,000(62.1%) and lived in semi Urban Areas (45.5%). The majority of mothers get information from friends and family(45.5%) and they visit three and above(100%). Most of the mothers were Non Consanguineous marriage(83.33%) and distance of health facility less than 30 minutes(100%).

# LEVEL OF MATERNAL HEALTH LITERACY



Table 1 shows the level of maternal health literacy score among postnatal mothers. 8.33% of them not having inadequate knowledge, 21.67% of them are having problematic level of knowledge score and 70.00% of them are having sufficient level of knowledge score.

Level of score	Number of postnatal mothers	%
Inadequate	5	8.33%
Problematic	13	21.67%
sufficient	42	70.00%
Excellent	0	0.00%
Total	60	100.0%

**Table 1: Level of Maternal Health Literacy** 

Table 1 shows the level of maternal health literacy score among postnatal mothers. 8.33% of them not having inadequate knowledge, 21.67% of them are having problematic level of knowledge score and 70.00% of them are having sufficient level of knowledge score.

# ASSOCIATION BETWEEN LEVEL OF MATERNAL HEALTH LITERACY SCORE AND POSTNATL MOTHERS DEMOGRAPHIC VARIABLES

The Analysis shows the association between level of Maternal health literacy score and Primi mothers demographic variables. 24-29 years, joint family, semi urban mothers are having more knowledge score than others. Statistical significance was calculated using chi-square test.

# NARRATIVE ANALYSIS TO STUDY THE LABOUR EXPERIENCE OF POSTNATAL MOTHERS Emotional Reactions to Delivery and Labor:

Fear and Anxiety: Many participants talked about how they felt scared or anxious before going into the birthing room or having procedures done. They concern when the physicians touched her, for example, showed that some people were afraid of the pain or the medical processes involved.

Intensity of Pain and Coping Mechanisms: Every participant described experiencing pain to differing degrees, and several discussed their various approaches to reducing it. During labour, methods including breathing exercises and various birthing positions were mentioned as beneficial.

Support and Reassurance: The participants' experiences were influenced by the availability of family or medical personnel for emotional support. One participant, for example, noted how important it was to have her mother by her side in the early stages of labour .

# **DISCUSSION:**

The present study Explored the Maternal Health Literacy and Labour Experience of Postnatal Mothers while Association with Socio Demographic Characteristics.



# MATERNAL HEALTH LITERACY:

This study identified sufficient level of maternal health literacy with no individuals achieving excellent level of maternal health literacy. The result aligned with Sysavanh Phommachanh(2021) findings performed a Cross sectional study to analyze Maternal health literacy on mother and child health care.

#### Associate the Maternal Health Literacy of postnatal mothers with selected demographic variable.

The study observed a significance to 18-23 years mothers and graduate mothers and Service mothers are having more level of score than others. These findings aligned with Fahimeh Ghotbizadeh(2023) Women with sufficient and excellent literacy were meaningfully better in having earlier and more frequent antenatal care, earlier folic acid consumption, and exercise before and during pregnancy, pregnancy alarm sign awareness, neonatal birth weight, and breastfeeding.

# LABOUR EXPERIENCE:

The study Highlighted Lydia Aziato (2017)Women in this study experienced pain during labour rated as mild, moderate and severe and the pain was felt at the waist area, vagina, lower abdomen and the general body. The women expressed labour pain through crying, screaming and shouting. They prayed to God to help reduce the severe pain.

# IMPLICATION AND RECOMMENDATIONS

The findings underscores the vital concern in the field of Nursing practice, Nursing Administration, Nursing Education and Nursing Research. Social factors which are integrated with health status are considered crucial in pregnancy morbidity. Mothers with a developed level of health literacy (HL) experience a lower risk of preterm delivery. The study can motivate postnatal to explore labour experience. The research report can be kept in the library for reference of nursing personnel and other health care professionals. Future studies should explore a comparative study to assess the maternal health literacy among urban and rural postnatal mothers can be conduct.

#### **CONCLUSION:**

The Importance of Health Literacy in mothers in developing health in family and society and role of structured education in enhancing the level of Health Literacy in mothers, and also considering Health Literacy being related to pregnancy outcomes, health and teratogenic behaviours during pregnancy, the necessity of education in large scales using various methods in pregnant women to enhance pregnancy cares and neonates weight birth is comprehended more than ever.

Conflict of Interest-None

Source of funding-Self Funding

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