



## Research Article

### KNOWLEDGE REGARDING CHILDBIRTH AMONG PRIMI MOTHERS AT SELECTED HOSPITALS, NAGERCOIL

<sup>1,\*</sup>Jeyalakshmi.S, <sup>2</sup>Dr. Nesa Sathya Satchi, <sup>3</sup>Dr. Suguna T.C. and <sup>4</sup>Dr. Maya Gopal

<sup>2</sup>Professor Cum Principal, Apollo College of Nursing, Chennai, Tamilnadu, India

<sup>3</sup>Professor cum HOD OBG Dept, Sree Mookambika College of Nursing, Kulasekharam, K.K.Dist, Tamilnadu, India

<sup>4</sup>Consultant Obstetrician & Gynecologist, Dr.Jeyasekharan Hospital and Nursing Home, Nagercoil, K.K.Dist, Tamilnadu, India

Received 24<sup>th</sup> March 2025; Accepted 27<sup>th</sup> April 2025; Published online 30<sup>th</sup> May 2025

#### Abstract

**Background:** Childbirth is a normal physiological process in a woman's life, yet it is a life changing experience for the primigravida mothers. Boosting confidence regarding pregnancy and childbirth by enhancing knowledge is an important component of care. **Methods:** A quantitative research approach with a descriptive design was adopted. A total of 150 primigravida mothers were selected using a consecutive sampling technique. After obtaining informed consent, demographic data were collected, followed by an assessment of level of knowledge was done by using the Childbirth Knowledge Questionnaire. Data was analysed using descriptive and inferential statistics. **Results:** The study findings indicate that majority of the participants were graduates (64%), homemakers (60.7%), and from joint families (68%). Most participants were Hindus (41.3%), and 56% had a monthly family income between ₹20,001 and ₹40,000. Level of Knowledge assessment by using Childbirth Knowledge Questionnaire revealed that, majority of them had inadequate knowledge (68.7%) and 31.3% had moderately adequate knowledge. Statistical analysis showed no statistically significant association between selected maternal variables and knowledge scores of primi mothers ( $p>0.05$ ) except with employment status of mothers ( $p<0.05$ ) i.e. Knowledge score is significantly higher in employed mothers than the home makers. **Conclusion:** The study highlights that majority of primigravida mothers have inadequate level of knowledge about childbirth. Employment status plays a significant role in knowledge levels, with working mothers reporting higher knowledge. These findings emphasize the need of Childbirth classes to help expectant mothers to cope of with pregnancy, labor and postpartum period and have a positive childbirth experience and reduces maternal morbidity and mortality rates.

**Keywords:** Pregnancy, Knowledge, Primigravida, Childbirth, Antenatal Care

#### INTRODUCTION

Pregnancy and child birth is a natural and universal phenomenon. Pregnancy is an important period of life that the pregnant women have physiological, psychological & social changes in order to adapt to motherhood. "Make every mother and child count" reflects the need for today. In India, as per 2018-20 statistics, the maternal mortality is 97 per 100000 live births (NHM, 2025)<sup>1</sup>. In Tamil Nadu, as per 2023-24 statistics Maternal Mortality Ratio (MMR) has been dropped to 39.4 from 45.5 per one lakh live births. The Infant Mortality Rate (IMR) has been reduced from 8.2 per 1,000 live births to 7.7.<sup>2</sup> Female education is a strong predictor of the use of reproductive healthcare services but the extent and nature of relation between the two is not uniform across social setting. Every woman has the right to get best possible care during pregnancy, delivery and postpartum periods. Lack of knowledge and unpreparedness of women can lead to emergence of anxiety and complications followed by ever-increasing medical interventions. Evidence has also shown that participation in childbirth classes reduces anxiety about delivery and generates suitable response to pain. (Hassanzadeh *et al.*, 2019)<sup>3</sup>. The present study aimed to assess the level of knowledge about childbirth among primigravida mothers using the Childbirth Knowledge Questionnaire and to examine the association between maternal demographic factors and knowledge scores. The findings of this study can contribute to the development of targeted interventions aimed at improve the maternal knowledge and improving pregnancy outcomes. This study was conducted to assess the level of knowledge related to Childbirth among primimothers attending antenatal OPD at selected hospitals, Nagercoil.

#### MATERIALS AND METHODS

A quantitative descriptive research design was employed to assess knowledge level among 150 primigravida mothers at selected hospitals in Nagercoil. Participants who met the inclusion criteria were selected using consecutive sampling technique. The inclusion criteria included primigravida mothers between 28 to 32 weeks of gestation who were willing to participate in the study. Women with multiple pregnancies, maternal physical abnormalities, psychiatric illnesses, or fetal abnormalities were excluded from the study. Ethical clearance and formal permission were obtained from relevant authorities of selected hospitals in Nagercoil, Kanyakumari District. The investigator introduced the study, explained its purpose, and obtained written informed consent from the participants. Demographic data was collected, followed by an assessment of level of knowledge by using the Childbirth Knowledge Questionnaire. It consist of 30 multiple choice questions. Collected data was analysed using descriptive and inferential statistics. Frequency and percentage were used to describe sample characteristics and knowledge levels, while chi-square test was applied to determine association between knowledge level and selected demographic variables.

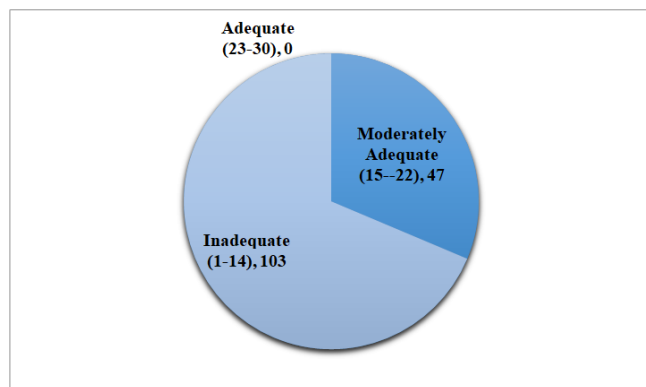
#### RESULTS AND DISCUSSION

Table 1 reveals that majority were graduates (64%) homemakers (60.7%), indicating a well-educated but largely non-working population. A significant proportion were identified as Hindu (41.3%) belonging to joint family (68%), suggesting strong family support systems. Most of the participants had a monthly family income between ₹20,001-₹40,000 (56%), reflecting a middle-income background. Additionally, majority of mothers (60.7%) were in their third trimester, specifically between 28-30 weeks of gestation.

\*Corresponding Author: Prof.Jeyalakshmi.S,  
PhD Scholar, Apollo College of Nursing, Chennai, Tamilnadu, India.  
Affiliated to The Tamil Nadu Dr.M.G.R.Medical University, Chennai.

**Table 1. Frequency and percentage distribution of background variables among primi mothers N=150**

Variables	f	%
<b>Age in Years</b>		
≤20	3	2.0
21-25	55	36.7
26-30	78	52.0
31-35	14	9.3
>35	0	0.0
<b>Education</b>		
No formal education	-	-
Primary & Secondary	-	-
Hr Secondary	11	7.3
Graduate	96	64.0
Post Graduate	43	28.7
Doctorate	0	0.0
<b>Employment</b>		
Employed	59	39.3
Homemaker	91	60.7
<b>Religion</b>		
Hindu	62	41.3
Christian	60	40.0
Muslims	28	18.7
<b>Family Type</b>		
Nuclear	48	32.0
Joint	102	68.0
<b>Residence</b>		
Urban	62	41.3
Semiurban	60	40.0
Rural	28	18.7
<b>Monthly Family Income in Rupees</b>		
≤10000	1	0.7
10001-20000	33	22.0
20001- 40000	84	56.0
Above 40000	32	21.3
<b>Gestational Age in Weeks</b>		
28-30	91	60.7
> 30	59	39.3

**Fig. 1. Percentage distribution of level of knowledge among primi mothers**

The findings from fig.1 indicate that, majority of them were had inadequate knowledge (68.7%) and 31.3% had moderately adequate knowledge. The mean knowledge score among the participants was 13.81, with a standard deviation of 2.029. The scores ranged from a minimum of 0 to a maximum of 30. This finding indicates that primi mothers have inadequate knowledge regarding childbirth. The study highlights the need of childbirth education during antenatal visits. The healthcare professional plays vital role in providing information and education regarding childbirth that improves the primimothers' knowledge and reduces the anxiety and improves the maternal outcome. The present study findings are consistent with the study conducted by Selvanayagi, V (2015)<sup>4</sup> with the aim to assess the knowledge on childbirth process among primigravida mothers in Salem polyclinic, Salem. The outcome of the study concluded that, 67.76% of them had poor

knowledge, whereas 32.24% of them had average knowledge on childbirth process. The present study findings are consistent with a descriptive study conducted by Lalchungnungi *et al.* (2021)<sup>5</sup> to assess the Knowledge and Anxiety Level on Labour Process among Primigravida Mothers in a Selected Hospital, Guwahati, Assam. The study finding shows that majority i.e. 53% had inadequate knowledge, 44% had moderately adequate knowledge and only three (3%) had adequate knowledge on labour process. The present study findings are consistent with a descriptive study conducted by Savithri K (2020)<sup>6</sup> with, the aim to explore the experience of a small group of first-time mothers giving birth in hospital. This article focuses on the preparation for the birth undertaken by these women in Esra Hospital in Hyderabad city, Telangana state. The study concluded that, 83.3%(50) primi mothers were having inadequate knowledge regarding child birth preparation, 16.7%(10) were having moderate knowledge regarding child birth preparation. Table 2 reveals that, there is no statistically significant association between selected maternal variables and knowledge scores of primi mothers ( $p > 0.05$ ) except with employment status of mothers ( $p < 0.05$ ) i.e. Knowledge score is significantly higher in employed mothers than the home makers.

**Table 2. Association between selected maternal variables and knowledge scores of primi mothers (N=150)**

Variables	n	Mean	SD	F/ t Value	p value
<b>Age in Years</b>				1.567	0.200
≤ 20	0	-	-		
21 to 25	3	15.33	1.528		
26 to 30	55	14.09	2.205		
31 to 35	78	13.67	1.905		
> 35	14	13.14	1.916		
<b>Education</b>					
No Formal Education	0	-	-		
Primary & Secondary	0	-	-	0.804	0.450
Higher Secondary	11	13.73	1.421		
Graduate	96	13.96	2.067		
Postgraduate	43	13.49	2.074		
<b>Occupation</b>				2.032	0.044
Employed	59	14.22	1.762		
House wife	91	13.54	2.152		
<b>Family Type</b>					
Nuclear	48	13.67	2.417	-.578	0.564
Joint	102	13.87	1.828		
<b>Residence</b>				0.636	0.531
Urban	62	13.98	2.076		
Semiurban	60	13.78	1.805		
Rural	28	13.46	2.380		
<b>Monthly Family Income</b>				1.038	0.357
≤ 10,000	0	-	-		
10,001 – 20,000	34	14.09	2.454		
20,001 – 40,000	84	13.60	1.784		
≥ 40,000	32	14.06	2.139		
<b>Gestational Age (Weeks)</b>				0.049	0.961
28-30	91	13.81	1.897		
> 30	59	13.80	2.234		

\*Adjacent categories were clubbed for the computation of F/ t test.

## Conclusion

It can be concluded that the primi mothers have poor knowledge on childbirth process, where we as health personnel need to disseminate the education programmes on various methods to improve the knowledge on childbirth process which will ultimately help the mothers to reduce their fear and anxiety during labour process through which the co-operation of the mothers during delivery will be enhanced and the maternal and newborn complications such as morbidity and mortality rates will be reduced.

**Acknowledgement:** We would like to extend our gratitude to the authorities of Dr. Jeyasekharan Hospital and Nursing Home and Caroline John Hospital, Nagercoil. We thank all participants of this study for their whole hearted co-operation.

**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.

**Acknowledgement:** Authors would like to appreciate all the study participants for their co-operation to complete the study successfully.

## REFERENCES

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=2112476>
2. <https://www.tnpsctheruvupettagam.com/currentaffairs-detail/mmr-in-tamil-nadu-2024?cat=tamilnadu-news>.
3. Hassanzadeh R, Abbas-Alizadeh F, Meedya S, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M. Assessment of childbirth preparation classes: a parallel convergent mixed study. *Reproductive health*. 2019 Dec;16:1-7.
4. Selvanayagi V. A study to assess the knowledge on childbirth process among primigravida mother at Salem Polyclinic Tamil Nadu. *International Journal on Current Research [Internet]* 2015 July; 7 (7). <https://www.journalcra.com/article/studyassess-knowledgechildbirthprocessamong-primigravida-mothers>.
5. Lalchungnungi, Rikynti Nongkynrih, Knowledge and Anxiety Level on Labour Process among Primigravida Mothers in a Selected Hospital, Guwahati, Assam: A descriptive study, *International Journal of Health Sciences and Research*, Vol.11; Issue: 9; September 2021(pages 164- 171), DOI: <https://doi.org/10.52403/ijhsr.20210925>
6. Savithri K, A descriptive study to assess the levels of knowledge regarding child birth preparation among primi mothers volume -10 | issue - 4 | april - 2020 | print issn no. 2249 - 555x | doi: 10.36106/ijar- Indian Journal Of Applied Research.

\*\*\*\*\*