Chettinad Health City Medical Journal
Volume 15, Issue 2 - 2026, Pg. No. 25-31
Peer Reviewed & Open Access Journal

Research Article

A Descriptive Study to Assess the Knowledge and Attitude Regarding the Labour Care Guide (LCG) and its Implementation as a Decision-Making Tool Among Student Nurses in a Selected Nursing College of New Delhi.

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DOI: https://doi.org/10.24321/2278.2044.2026012

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How to cite this article:
Nazni, Khatoon N. A Descriptive Study to Assess the Knowledge and Attitude Regarding the Labour Care Guide (Lcg) and its Implementation as a Decision-Making Tool Among Student Nurses in a Selected Nursing College of New Delhi.. Chettinad Health City Med J. 2026;15(2):25-31.

Date of Submission: 2026-05-26
Date of Acceptance: 2026-07-07

A B S T R A C T

The WHO Labour Care Guide (LCG) marks a vital shift toward respectful, person-centered maternal care, replacing the traditional partograph. A descriptive study to assess the knowledge and attitude regarding Labour Care Guide (LCG) and its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi. Objectives: To assess the level of knowledge and attitude regarding Labour Care Guide (LCG) its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi. To disseminate the e-pamphlet regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool. A quantitative and non-experimental research approach with a descriptive design was used. The structured knowledge questionnaire & attitude scale was used for data collection from 19 to 26 November 2025. The tool and pamphlet were validated by 7 experts. Purposive sampling technique was used for the selection of 137 students (DGNM 3rd year, B.Sc. Nursing 3rd year and 4th year, Post Basic B.Sc. 1st year, M.Sc. Nursing 1st and 2nd year students) from Rufaida College of Nursing. The data was collected through structured and valid questionnaire and attitude scale through Online-mode (google form) and analysis were done by descriptive statistics in terms of frequency, percentage, mean, median and standard deviation. The study revealed that out of 137 student nurses, 9 (6.5%) students were had above average knowledge, 71 (51.8%) had average knowledge and only 57 (41.6%) had below average knowledge regarding Labour Care Guide (LCG). 42 (30.65%) shown positive attitude, 95 (69.34%) shown neutral attitude and none of them shown negative attitude regarding Labour Care Guide (LCG). Hence, targeted educational interventions are essential to enhance both cognitive competence and attitudinal disposition, ensuring high-quality maternal care.

Keywords: Labour Care Guide (LCG), Decision-Making Tool, Knowledge, Attitude, Student Nurses, E-Pamphlet

Introduction

"*The partograph: A line between safety and risk*"

Effective monitoring during labour is essential to protect the health and well-being of both the mother and newborn.[1] Despite global progress in increasing skilled birth attendance and institutional deliveries, the World Health Organization (WHO) has reported that maternal and perinatal outcomes have not improved consistently, owing primarily to disparities in the quality of intrapartum care.[2]

For more than four decades, the partograph has served as the main tool for labour monitoring. However, recent research has questioned several of its basic assumptions, including the expected rate of cervical dilation at 1 cm per hour, highlighting its frequent misuse and inconsistent application across different healthcare settings.[3] To address these concerns, the WHO introduced the Labour Care Guide (LCG) in 2020.[4] This innovative tool aims to reflect current scientific evidence, promote respectful woman-centred care, and support healthcare providers in making prompt decisions during labour.[5]

Unlike the traditional partograph, the WHO Labour Care Guide (LCG) focuses on structured and regular observations, sets clear clinical thresholds for action, and encourages shared decision-making while prioritizing the woman's comfort, dignity, and preferences. Studies from India indicate that the LCG not only improves the quality of monitoring in low-risk pregnancies but also helps reduce unnecessary interventions and enhances the overall childbirth experience.[3,6,7]

In the Indian context, several challenges remain. Research shows a significant gap between recommended intrapartum care standards and actual clinical practices, with non-evidence-based methods still widely used. Factors such as limited training, resource constraints, and misconceptions continue to affect adherence to WHO guidelines.[8] However, supportive interventions like mentorship programs and structured case-sheet implementation have demonstrated measurable improvements in nurses' knowledge, confidence, and performance during labour and delivery, especially in primary healthcare settings. [9]

Problem Statement

A descriptive study to assess the knowledge and attitude regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi.

Objectives

- To assess the level of knowledge regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi.
- To assess the attitude regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi.
- To disseminate the e-pamphlet regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool among student nurses in a selected nursing college of New Delhi.

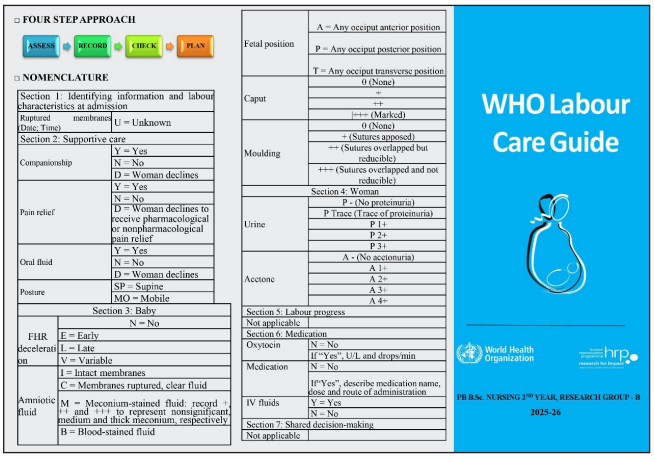

Figure 1.E-pamphlet of Labour Care Guide (LCG), Including four step approach and nomenclature

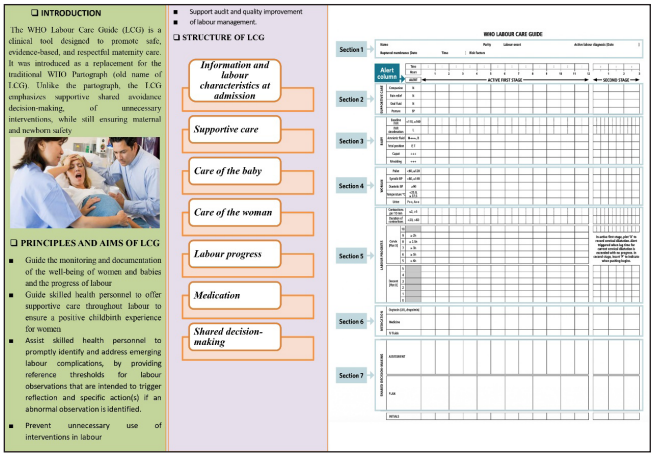

Figure 2.E-pamphlet of Labour Care Guide (LCG), Including Introduction, principles and aims of LCG, structure of LCG and sample of LCG

Inclusion criteria

- Student nurses enrolled in a selected nursing college in New Delhi.
- This study focuses only on knowledge and attitude regarding the Labour Care Guide (LCG).
- Normal vaginal delivery cases included in LCG.

ISSN: 2278-2044
DOI: https://doi.org/10.24321/2278.2044.2026012

- Only selected demographic variables such as age, year of the study, previous clinical exposure and prior training on LCG were considered
- People who were eligible to assess the awareness regarding the Labour Care Guide (LCG) and its implementation as a decision-making tool.
- People who were willing to participate in the study.

Exclusion criteria

- This study does not include staff nurses, midwives or students from other institutions.
- Other demographic factors that may influence knowledge and attitude were not included.
- The study excluded students who are not studying obstetrics and gynecological nursing.
- People who were not interested to participate in the present study.

Result

Analysis and interpretation of demographic data of selected nursing college students in terms of academic distribution, age, regarding deliveries attended, clinical experience, common way participants gained knowledge.

The data presented in Table 1 and figure 3, represents demographic characteristics of the study participants. Data about the demographic profile shows the following:

- Academic distribution shows that the largest group of participants were B.Sc. Nursing 3rd / 4th year i.e., students 50 (36.5%). Following closely are the DGNM 3rd Year students, who account for 47 (34.3%) of the sample. Post Basic B.Sc. Nursing 1st year students represent 30 (21.9%), while M.Sc. Nursing students form the smallest academic subgroup at 10 (7.3%).
- Age of the participants shows that the most respondents, 110 (80.3%), were falling into the 21–30 years age category. A smaller portion of the sample 23 (16.8%), is aged between 18–20 years, while participants between 31-40 years represent only approximately 2 (1.46%) of the total population and above 40 years were 2 (1.46%).
- Regarding deliveries attended, the largest segment of participants i.e.,41 (29.9%) has attended more than 10 deliveries, followed by 38 (27.74%) who had attended 1–5 deliveries. About 32 (23.36%) had attended 6–10 deliveries, while 25 (18.25%) reported not attending any deliveries.
- Despite the clinical experience, a significant majority of the participants i.e., 97 (70.8%) described their clinical experience as being in the "Foundational stage" (no hands-on yet). Nearly one-fourth of the participants 32 (23.36%) had less than 2 years of clinical experience. A small proportion 5 (3.65%) reported 2–5 years of experience, while only 2 (1.46%) had more than 5 years of clinical experience.
- The most common way participants gained knowledge about the Labour Care Guide (LCG) was through workshops or classroom lectures i.e., 67 (48.9%). Clinical training and mentorship served as the primary source for 49 (35.8%) of the respondents. Self-study source for 10 (7.3%) and other miscellaneous sources for 9 (6.57%) accounted for the remainder of the knowledge acquisition.

Findings related to the assessment of the knowledge of Labour Care Guide (LCG) and its implementation as a decision-making tool

Data summarized in Table no 2, 3, and fig 4 reveals the knowledge scores of students, i.e., 9 (6.5%) students were having above average knowledge regarding Labour Care Guide (LCG), 71 (51.8%) students having average knowledge and only 57 (41.6%) students were having below average knowledge regarding Labour Care Guide (LCG).

Table 3, shows that Possible range of score 0-25, range of obtained score 1-21, mean 9.73, median 10, mode 10 and standard deviation 4.56 of knowledge score regarding Labour Care Guide (LCG) and its implementation as a decision-making tool.

Finding related to assessment of the attitude of the student nurses regarding Labour Care Guide (LCG) and its implementation as a decision-making tool.

The data in table 4 and fig 5, shows that 42 (30.65%) had positive attitude, 95 (69.34%) had neutral attitude and none were had negative attitude regarding Labour Care Guide (LCG).

Figure 1.Frequency and percentage distribution of study participants computed according to the demographic variables

(n=137)

S.No	Sample Characteristics	Frequency (n)	Percentage (%)
Academic Program			
1.	DGNM 3rd year (including non-responses)	47	34.31%
	B.Sc. Nursing 3rd / 4th year	50	36.50%
	Post Basic B.Sc. Nursing 1st year	30	21.90%
	M.Sc. Nursing 1st / 2nd year	10	7.30%

ISSN: 2278-2044
DOI: https://doi.org/10.24321/2278.2044.2026012

Age (Years)			
2.	18–20 years	23	16.79%
	21–30 years	110	80.29%
	31–40 years	2	1.46%
	Above 40 years	2	1.46%
Deliveries Attended			
3.	None	25	18.25%
	1–5 deliveries	38	27.74%
	6–10 deliveries	32	23.36%
	More than 10	41	29.93%
Clinical Experience			
4.	Foundational (No hands-on yet)	97	70.80%
	Less than 2 years	32	23.36%
	2–5 years	5	3.65%
	Above 5 years	2	1.46%
Knowledge Source			
5.	Workshops/Classroom Lecture	67	48.91%
	Social media/Clinical Mentorship	49	35.77%
	Self-Study (WHO manual)	10	7.30%
	Other	9	6.57%

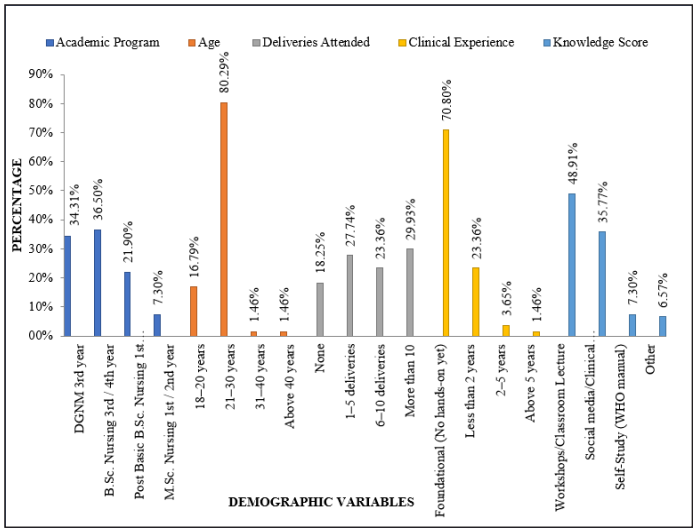

Figure 3.A bar Diagram showing the percentage distribution of various demographic characteristics of the study subjects

Figure 2.Frequency and percentage distribution of knowledge score of student nurses regarding Labour Care Guide (LCG) and its implementation as a decision-making tool

(n=137)

Category of knowledge	Frequency	Percentage
Below average (0-8)	57	41.6%
Average (9-17)	71	51.8%
Above average (18-25)	9	6.5%

ISSN: 2278-2044
DOI: https://doi.org/10.24321/2278.2044.2026012

Figure 3.Possible range of score, range of obtained score, mean, median, mode and standard deviation of knowledge score regarding Labour Care Guide (LCG) and its implementation as a decision-making tool

(n=137)

Possible range of score	Range of obtained score	Mean	Median	Mode	Standard deviation
0-25	1-21	9.73	10	10	4.56

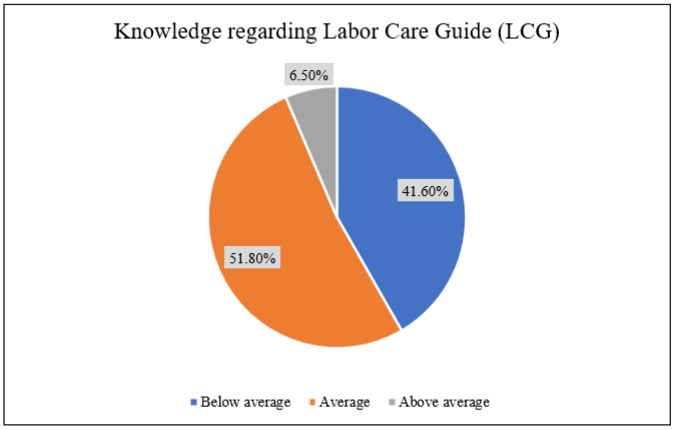

Figure 4.A pie diagram showing the percentage distribution of knowledge score on Labour Care Guide (LCG) and its implementation as decision-making tool

Figure 4.Frequency and percentage distribution of attitude score of students regarding Labour Care Guide (LCG) and its implementation as a decision-making tool in 5-point Likert scale

(n=137)

Category	Score Range	Percentage	Frequency per data	Percentage per data
Positive Attitude	94 – 125	≥ 75%	42	30.65%
Neutral Attitude	63 – 93	50–74%	95	69.34%
Negative Attitude	25 – 62	< 50%	0	0%

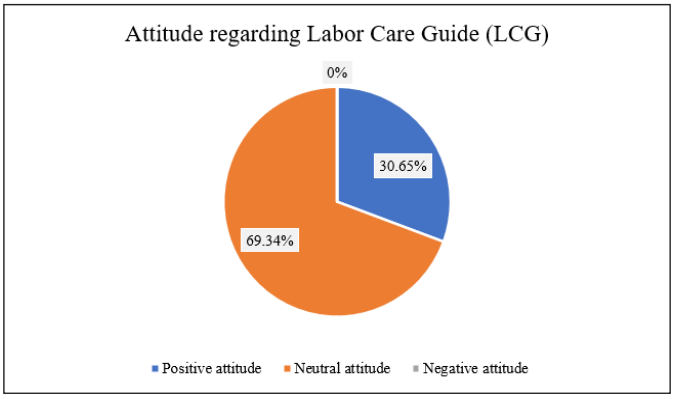

Figure 5.A pie diagram showing percentage distribution of attitude score regarding Labour Care Guide (LCG) and its implementation as decision-making tool

Discussion

Selvi TP, Alex R, et al., (31-12-2024), the study was aimed to assess the effect of structured teaching program on Labour Care Guide (LCG) among staff nurses at a selected hospital Perinthalmanna, Kerala. The objectives of the study were to assess the knowledge regarding Labor Care Guide (LCG) among staff nurses, to find out the effect of structured teaching program on knowledge regarding Labour Care Guide (LCG) among staff nurses and to find out the association between the pretest knowledge levels regarding Labour Care Guide (LCG) with their selected demographic variables. A quasi-experimental research

ISSN: 2278-2044
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design was used to study 50 staff nurses from a selected hospital at Perinthalmanna, selected by purposive sampling technique. The data was collected by using structured knowledge questionnaire on Labour Care Guide (LCG). Pretest was conducted and the same day itself planned teaching program given to the staff nurses regarding Labour Care Guide (LCG) and post-test was done after one week. The data collected was analysed to achieve the objectives of the study and to test the research hypotheses. The results revealed that in pretest most of the subjects had average knowledge (62%),30 % had poor knowledge whereas only 8% had good knowledge regarding Labour Care Guide (LCG) where is in the post-test 100% of them having good knowledge and none of them are having poor and average knowledge. The range, mean, median and standard deviation of pretest was 12, 8.92, 9.5 and 3.45 respectively. The range, mean, median and standard deviation of post-test was 5, 16.78,17, and 1.36 respectively. The present study shows: A significant association was found between knowledge level and age as well as years of experience of staff nurses and, no significant association was found between educational qualification and knowledge level, as the calculated χ^2 value was 2.91 with a p-value of 0.0877.[10] The present study regarding LCG shows majority of study subject i.e., 6.5% had above average knowledge ,51.8% had average knowledge and 41.6% had below average knowledge about Labour Care Guide (LCG).

Lawrence A, Levis L, et.al., (November 2008), the study is to assess the effects of encouraging women to assume different upright positions (including walking, sitting, standing and kneeling) versus recumbent positions (supine, semi-recumbent and lateral) for women in the first stage of labour on length of labour, type of delivery and other important outcomes for mothers and babies. This includes 21 studies with a total of 3706 women. Where they searched the Cochrane Pregnancy and Childbirth Group's Trials Register (November 2008). They used Randomized and quasi-randomized trials methods described in the Cochrane Handbook for Systematic Reviews of Interventions for carrying out data collection, assessing study quality and analysing results. A minimum of two review authors independently assessed each study. Overall, the first stage of labour was approximately one hour shorter for women randomized to upright as opposed to recumbent positions (MD -0.99, 95% CI -1.60 to -0.39). Women randomized to upright positions were less likely to have epidural analgesia (RR 0.83 95% CI 0.72 to 0.96). There were no differences between groups for other outcomes including length of the second stage of labour, mode of delivery, or other outcomes related to the wellbeing of mothers and babies. For women who had epidural analgesia there were no differences between those randomized to upright versus recumbent positions for any of the outcomes examined in the review. Little information on maternal satisfaction was collected, and none of the studies compared different upright or recumbent positions.[11] According to the present study findings the of subject 42 (30.65%) were having positive attitude, 95 (69.34%) had neutral attitude and 0 none were having negative attitude.

Vogel JP, Pingray V, et.al, the present study evaluates the usability, acceptability, and feasibility of the WHO Labour Care Guide (LCG), a next-generation partograph designed to enhance woman-centered labour monitoring (2021). Purposive sampling technique was used in 12 health facilities in Argentina, India, Kenya, Malawi, Nigeria, and Tanzania. Doctors, midwives, and nurses trained on the LCG applied it during labour management, with 136 participants providing feedback via surveys and focus group discussions. Mixed-methods evaluation combined quantitative ratings of satisfaction and usability (using validated scales) with qualitative framework analysis of focus group discussions. Result: One hundred and thirty-six practitioners applied the LCG in managing labour and birth of 1,226 low-risk women. The majority of women had a spontaneous vaginal birth (91.6%); two cases of intrapartum stillbirths (1.63 per 1000 births) occurred. Practitioner satisfaction with the LCG was high, and median usability score was 67.5%. Practitioners described the LCG as supporting precise and meticulous monitoring during labour, encouraging critical thinking in labour management, and improving the provision of woman-centered care.[12] The present study regarding LCG shows Regarding deliveries attended, the largest segment of participants 41(29.9%) has attended more than 10 deliveries, followed by 38(27.74%) who had attended 1–5 deliveries. About 32(23.36%) had attended 6–10 deliveries, while 25(18.25%) reported not attending any deliveries.

Acknowledgement

We would like to place on record the hard work and the tireless efforts in data collection and compliance of the group research project of Post Basic B.Sc. Nursing 2nd Year students, Batch 2025-2026, of Rufaida College of Nursing, Jamia Hamdard, namely, Md. Gulfraz Danish, Ms. Jen Jasmin Ekka, Mr. Gaurav Singh Chauhan, Ms. Grace Prathna Elyas, Ms. Ismat Jamal, Ms. Kalden Dolkar, Ms. Khushboo Kumari, Ms. Mehzabi Khatoon, Ms. Muskan Kumari.

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ISSN: 2278-2044
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