

# A Study to Assess Quality Assurance Practice in Labour Room Management Among Labour Ward Nurses at Tertiary Care Cemonc Centre in Madurai

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## ABSTRACT

A Descriptive Study to Assess Quality Assurance Practice in Labour room management among Labour ward Nurses at tertiary care CEmONG center in Madurai. To assess the level of Quality Assurance Practice in Labour room management among Labour ward nurses at Tertiary care CEmONC Centre in Madurai. To associate the level of Quality Assurance Practice in Labour room management among Labour ward Nurses with their selected social demographic variables. There is statistically significant association between level of Quality Assurance Practice in Labour room management among Labour ward nurses with their selected socio demographic variables. Non experimental research design was used 50 subjects selected by Non- probability (convenience) sampling technique. Labour room of Tertiary care CEmONC Centre in Madurai. Among 50 samples, majority of the subjects, 38 (76%), having good practices of Quality Assurance Practice in labour room management, while 12(24%) having moderate practices Quality Assurance Practice in labour room management. None of the subjects (0%) had poor practices Quality Assurance Practice in labour room management. The findings indicated that the Labour ward Nurses possess good Quality Assurance Practices and they are not significantly influenced by demographic factor and shows effectiveness of Institutional Protocols and Training systems.

**Keywords:** Quality Assurance Practice, Labour room management.

## INTRODUCTION:

Hospitals are the backbone of healthcare delivery systems, providing preventive, promotive, curative, and rehabilitative services. Labour rooms, as critical units, demand strict adherence to quality assurance (QA) practices to ensure maternal and neonatal safety. This study focuses on assessing QA practices among labour ward nurses in a tertiary care CEmONC centre in Madurai.

The importance of hospitals becomes more evident in specialized units such as labour rooms, where critical, time-sensitive interventions are frequently required. Labour rooms are dynamic clinical

environments where continuous monitoring, prompt decision-making, and coordinated teamwork are essential for safe childbirth. The quality of care provided in these settings significantly influences maternal and neonatal outcomes. Therefore, hospitals must maintain strict standards, protocols, and quality assurance practices to ensure patient safety, infection prevention, effective communication, and evidence-based interventions.

Tertiary care hospitals, particularly Comprehensive Emergency Obstetric and Newborn Care (CEmONC) Centres, serve as referral hubs for complicated obstetric cases from peripheral health facilities. They provide advanced services such as emergency caesarean sections, blood transfusion, neonatal resuscitation, and intensive monitoring. These facilities require well-established systems, adequate resources, and highly competent health professionals to manage life-threatening conditions. The efficiency and quality of services in such hospitals directly impact national health indicators, including maternal mortality ratio (MMR) and neonatal mortality rate (NMR).

In tertiary care CEmONC centres such as those in Madurai hold immense importance in delivering specialized obstetric and Newborn care. Evaluating the quality assurance practices within these hospital settings helps in enhancing service delivery, ensuring patient safety, and promoting positive maternal and neonatal outcomes. Hence, understanding the importance of hospitals and their role in quality assurance is fundamental to improving labour room management and strengthening the overall health-care system. A descriptive study to assess Quality Assurance practice on Labour Room management among labour ward nurses at a tertiary care CEmONC centre in Madurai.

## OBJECTIVES

- To assess the level of knowledge of nurses regarding existing QA practices.
- To associate the level of knowledge regarding QA practices with selected socio-demographic variables.

## HYPOTHESES

H1: A significant association exists between the level of knowledge regarding Quality Assurance practices and SOCIO-DEMOGRAPHIC VARIABLES.

## METHODOLOGY

**Research Approach:** Quantitative, **Design:** Non-experimental descriptive design **Setting:** Labour room of a tertiary care CEmONC centre in Madurai, **Population:** Labour ward nurses, **Sample Size:** 50 nurses selected through convenience sampling **Tool:** Structured QA Practice Checklist (24 items across infrastructure, infection control, monitoring, emergency preparedness, patient safety, and quality improvement), **Scoring:** Good practice ( $\geq 75\%$ ), Moderate practice (50–74%), Poor practice ( $< 50\%$ ), **Validity & Reliability:** Tool validated by experts; reliability assessed by test-retest ( $r=0.7$ )

## Descriptin of tools

**SECTION-A:** Distribution of subjects according to their selected socio-demographic variables among Labour ward staff nurses at tertiary care CEmONC centre in Madurai.

**SECTION-B:** structured quality assurance practice- checklist

PART I: infrastructure & environmental quality

PART II: Infection Prevention & Control Practices

- PART III: Monitoring & Documentation Practices
- PART IV: Emergency Preparedness & CEmONC Services
- PART V: Nursing Care & Patient Safety
- PART VI: Quality Improvement & Supervision

**Scoring interpretation**

Yes = 1      No = 0

Total number of items = 24

**Interpretation Criteria:**

Good practice: ≥ 75% (19–24),

Moderate practice: 50–74% (13–18),

Poor practice: < 50% (1–12)

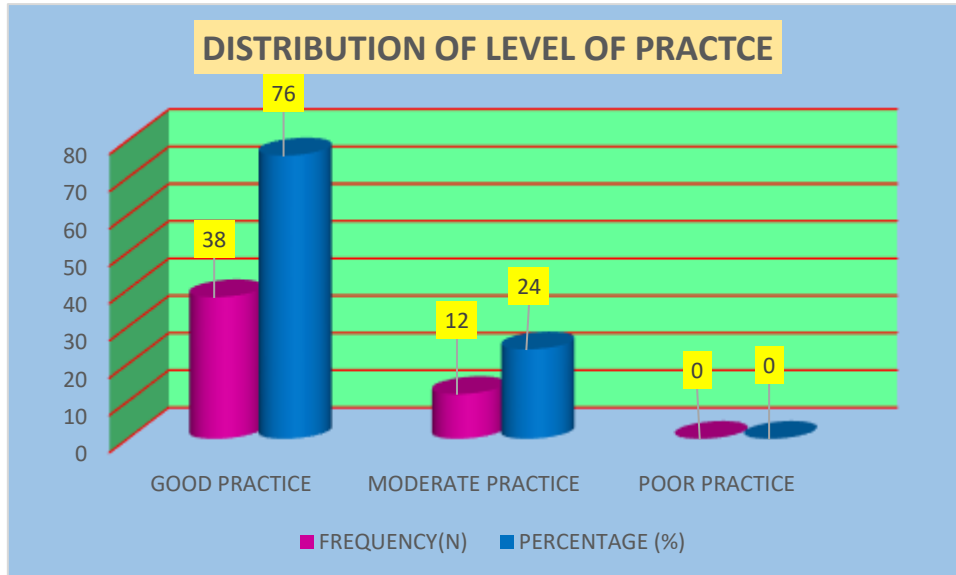
**DATA ANALYSIS**

**Table 1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF SUBJECTS ACCORDING TO THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES AMONG LABOUR WARD STAFF NURSES AT TERTIARY CARE CENTRE IN MADURAI.**

n = 50

S.NO	SOCIO-DEMOGRAPHIC VARIABLE	FREQUENCY (N)	PERCENTAGE (%)
<b>1</b>	<b>Age in years</b>		
	21-25years	3	6
	26-30 years	2	4
	31-35 years	17	34
	36- 40	10	20
	>40	18	36
<b>2</b>	<b>Educational qualification</b>		
	GNM	32	64
	B.sc Nursing	9	18
	P.B.B.Sc. Nursing	7	14
	M.Sc., Nursing	2	4
<b>3</b>	<b>Year of experience in labour room</b>		
	< 1-3 years	3	6
	1-3years	26	52
	4-6 years	7	14
	>6 years	14	28
<b>4</b>	<b>Previous training on labour room management / CEmONC</b>		
	yes	44	88
	No	6	12

**Figure 1: FREQUENCY AND PERCENTAGE DISTRIBUTION OF LEVEL OF PRACTICE IN LABOUR ROOM MANAGEMENT AMONG LABOUR WARD STAFFS NURSES AT TERTIARY CARE CEmONC CENTRE IN MADURAI**



Out of the 50 sample, 38 (76%) staff nurses had good level of practice, 12 (24%) staff nurses had moderate level of practice, 0 (0%) staff nurses had poor level of practice. This indicates that majority of the staff nurses possess good practice, and none of them fall under poor practice category, reflecting a satisfactory level of competency in labour room management.

**SECTION-B: STRUCTURED QUALITY ASSURANCE PRACTICE CHECKLIST**

**Table 2: ASSOCIATION OF LEVEL OF PRACTICE REGARDING QUALITY ASSURANCE PRACTICE IN LABOUR ROOM MANAGEMENT AMONG LABOUR WARD NURSES AT TERTIARY CARE CENTRE IN MADURAI.**

S. NO	SOCIO-DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE						CHI-SQUARE (X <sup>2</sup> )	DEGREE OF FREEDOM	'P' VALUE
		Poor practice		Moderate practice		Good practice				
		f	%	f	%	f	%			
<b>1</b>	<b>Age</b>							5.735	8	0.676 NS
	21-25 yrs	0	0	2	4	1	2			
	26-30 yrs	0	0	1	2	2	4			
	31-35 yrs	0	0	5	10	12	24			
	36-40 yrs	0	0	2	4	8	16			
	Above 40 yrs	0	0	4	16	16	32			
<b>3</b>	<b>Educational Qualification</b>							0.745	6	0.993 NS
	GNM	0	0	8	16	26	52			
	B.Sc Nursing	0	0	2	4	7	14			
	PBBsc.Nursing	0	0	2	4	5	10			
	Msc Nursing	0	0	0	0	2	4			
<b>4.</b>	<b>Years of experience in labour room</b>							3.058	6	0.801

	<1-3 yr	0	0	1	2	2	4			NS
	1-3 yrs	0	0	3	6	23	46			
	4-6 yrs	0	0	5	10	2	14			
	>6 yrs	0	0	7	14	7	14			
<b>5.</b>	<b>Previous exposure of any In service training on labour room management/CEmONC</b>							0.326	2	0.849 NS
	Yes	0	0	10	20	34	68			
	No	0	0	2	4	4	8			

## FINDINGS

Majority of nurses demonstrated good QA practices (76% good, 24% moderate, none poor).

- Strong compliance in infrastructure, infection control, monitoring, documentation, and emergency preparedness.
- Minor gaps identified in surface disinfection, postnatal observation, and feedback mechanisms.
- No significant association between practice levels and socio-demographic variables (age, education, experience, training).

## DISCUSSION

The findings highlight that nurses possess adequate knowledge and practice of QA protocols, supported by institutional training and supervision. The absence of significant associations with demographic variables suggests standardized implementation of QA practices across the workforce.

## CONCLUSION

Labour ward nurses at the tertiary care CEmONC centre in Madurai demonstrate satisfactory QA practices, ensuring safe maternal and neonatal outcomes. Institutional support, training, and standardized protocols play a crucial role in sustaining quality care.

## IMPLICATIONS

- **Nursing Practice:** Continued adherence to QA protocols, regular monitoring, and simulation-based training.
- **Nursing Administration:** Strengthen policies, ensure staffing adequacy, and conduct periodic audits.
- **Nursing Education:** Integrate QA practices into curricula and organize refresher courses.
- **Nursing Research:** Conduct larger, comparative, and interventional studies to explore further determinants of QA.

## RECOMMENDATIONS

- Expand study to multiple centres for generalizability.
- Explore additional variables such as workload and organizational support.
- Strengthen monitoring mechanisms like audits and peer reviews.
- Develop mentorship programs for newly recruited nurses.

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