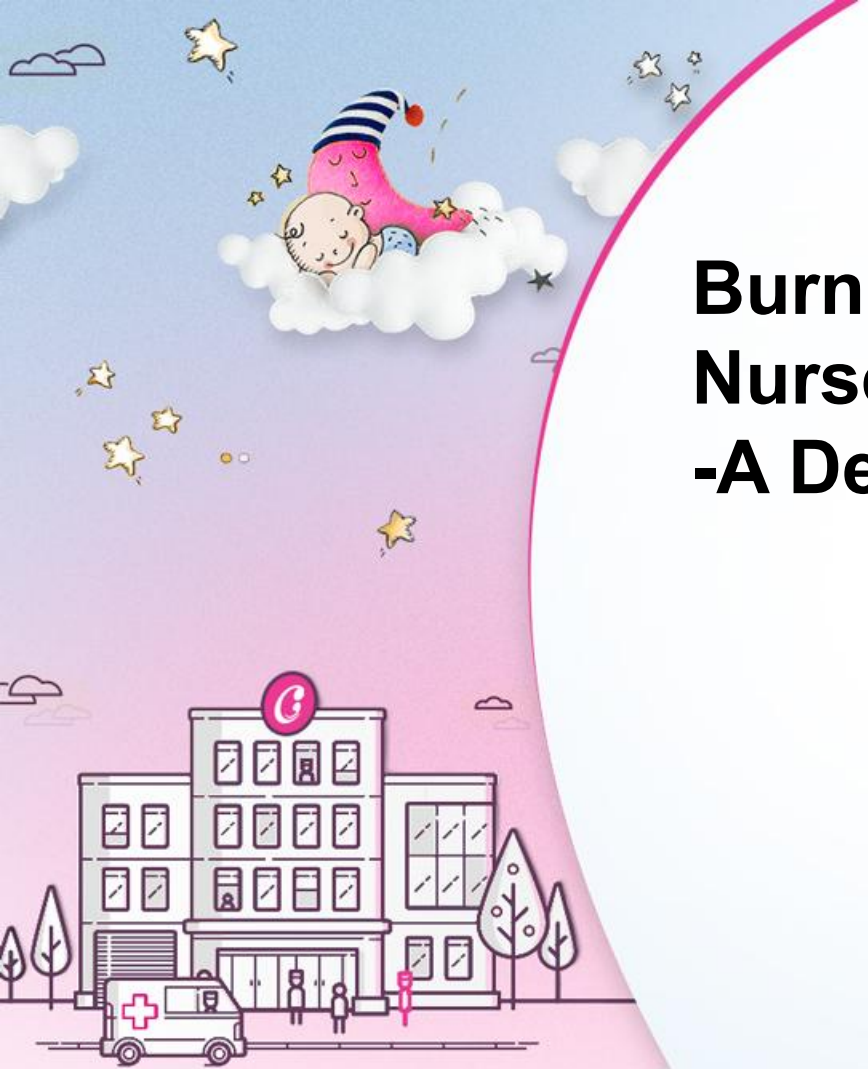

Burnout and Workload Among Nurses in a 24/7 Maternity Unit -A Descriptive Study

Submitted By-

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Introduction

Nursing Maternity Unit:

- Emotionally and Physically demanding.
- 24/7 Operations.
- High Patient acuity.
- Day and Night shift rotations.

All these factors contribute to *increased stress* and *burnout* among nurses.

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Maslach Burnout Inventory

A tool to measure burnout among professionals, especially in high-stress jobs like healthcare, teaching, and social work.

- In this project it helped to understand the mental and emotional stress levels of nurses working in a 24/7 maternity unit.

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Burnout Assessment

3 Subscales-

1. **Emotional Exhaution (EE):** Feeling emotionally drained or "burnt out" from work.

2. **Depersonalization (DP):** Feeling emotionally detached or less caring toward patients.

3. **Reduced Personal Accomplishment (PA):** Feeling less competent or that your work doesn't matter.

In this study, the MBI helped analyze the stress and burnout levels among **39 nurses** in a busy maternity unit. By using this tool, the research could pinpoint which aspects of burnout were most common.

This will let hospital managers and administrators to better understand:

1. *Who is most at risk,*
2. *Which departments or shifts cause more stress,*
3. *And what work conditions need to be improved to reduce burnout*.

Objectives

- Assess burnout prevalence among nurses.
- Evaluate perceived workload.
- Explore the relationship between burnout and workload.

Problem Statement

- High prevalence of burnout suspected in 24/7 maternity units in India and insufficient empirical evidence correlating this burnout and workload.

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Literature Insights

- Burnout is associated with workload intensity (Maslach & Leiter, 2016).
- Maternity units involve emotional burden and unpredictability (Singh et al., 2022).
- Rotational shifts and night duties increase EE and DP (Garcia et al., 2015).
- Indian nurses face added stress from staffing gaps and poor support systems (Sharma & Rashmi, 2020).

Methodology

- **Design**: Descriptive Cross-Sectional Study
- **Setting**: 50-bed maternity hospital (Cloudnine, Bellandur)
- **Sample Size**: 39 nurses (Purposive sampling)
- **Tool**: Maslach Burnout Inventory (MBI) + workload questionnaire
- **Ethics**: Informed consent, anonymity, and hospital permission secured

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Questionnaire Structure

Section	Number of Items	Type of Data
1.Demographics	7	Categorical / Nominal
2.Workload Assessment	5	Quantitative / Subjective
3.MBI Burnout Scale	9 (3 per domain)	Likert Scale

Burnout Scoring Interpretation Table

Dimension	Low (Score Range)	Moderate (Score Range)	High (Score Range)	Interpretation
Emotional Exhaustion (EE)	0 – 3	4 – 7	8 – 12	Higher scores indicate greater emotional fatigue and burnout risk.
Depersonalization (DP)	0 – 3	4 – 7	8 – 12	Higher scores reflect increased emotional distancing or indifference toward patients.
Personal Accomplishment (PA)	0 – 3	4 – 7	8 – 12	Higher scores indicate stronger professional efficacy and lower burnout.

Findings

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Workload

1. Shift Length:

– 71.8% (28 of 39) nurses worked shifts longer than 9 hours, with 28.2% (11 nurses) regularly working over 12 hours per shift.

– Longer shifts were associated with higher reported emotional exhaustion.

2. Patient Load:

– 56.4% (22 of 39) nurses cared for more than 6 patients per shift, with some managing over 15 patients, especially in postnatal and general wards.

– NICU nurses typically managed fewer patients (1–5) but with higher acuity.

3. Overtime:

- 69.3% (27 of 39) nurses reported working overtime at least occasionally, 15.4% (6 nurses) worked overtime frequently or always.

4. Rest Breaks:

- 61.5% (24 of 39) nurses stated they rarely or sometimes received adequate breaks during their shifts, which contributed to fatigue and burnout symptoms.

5. Workload Perception:

- Nearly half (48.7%, 19 nurses) rated their workload as heavy or very heavy (4 or 5 on a 5-point scale).

6. Experience:

– Nurses with less than 3 years' experience reported higher emotional exhaustion and lower personal accomplishment compared to those with more experience.

7. Department:

– NICU nurses had the highest emotional exhaustion and somewhat lower personal accomplishment scores.

– Operating theater (OT) and labor/delivery room (LDR) nurses reported comparatively lower depersonalization and higher accomplishment.

8. Shift Type:

– Nurses on rotating shifts reported higher emotional exhaustion and less satisfaction with rest breaks compared to fixed day shift workers.

Burnout Levels

1. Emotional Exhaustion (EE):

- 69.2% (27 out of 39) nurses reported moderate to high emotional exhaustion, indicating frequent feelings of being emotionally drained and fatigued by their work.

- Nurses working in high-acuity departments like NICU generally reported higher EE levels compared to those in postnatal or antenatal wards.

2. Depersonalization (DP):

- Majority of nurses (71.8%, 28 out of 39) reported low depersonalization, showing they maintained empathy and did not often feel detached or callous toward patients.

- A smaller group (15.4%, 6 out of 39) showed higher depersonalization, often linked with heavier workloads and fewer rest breaks.

3. Personal Accomplishment (PA):

- 61.5% (24 out of 39) nurses reported high personal accomplishment, reflecting satisfaction with their care quality and a sense of professional efficacy despite workload pressures.

- Nurses with more experience tended to report higher PA scores.

Summary

Subsets	Percentage / Observation
Inadequate rest breaks	61.5% of nurses
Overtime work (at least occasionally)	69.3% of nurses
Patient load >6 per shift	56.4% of nurses
Work shifts >9 hours	71.8% of nurses
Moderate to high emotional exhaustion	69.2% of nurses
Low depersonalization	71.8% of nurses
High personal accomplishment	61.5% of nurses

Discussion

Aspect	Literature Review	Project Findings
Burnout Prevalence	Burnout is a major concern in 24/7 maternity nursing, with high rates of emotional exhaustion, depersonalization, and reduced accomplishment (Maslach & Jackson; Chirico et al., 2023).	High emotional exhaustion in 69.2% of nurses; 71.8% had low depersonalization; 61.5% had high accomplishment.
Workload & Shifts	Excessive workload, long/rotating shifts, and inadequate breaks increase burnout (Garcia et al., 2015; Cho et al., 2019)1. Night/rotating shifts worsen exhaustion.	69.2% worked rotating shifts; 56.4% worked >8 hours; 28.2% worked >12 hours; 38.5% managed >5 patients/shift.
Departmental Differences	High-acuity areas (e.g., NICU, labor wards) are associated with higher burnout due to emotional intensity and unpredictability (Singh et al., 2022; Nature Mental Health, 2024).	NICU nurses showed the highest emotional exhaustion; OT nurses reported lower burnout

Unique Findings:

Resilience and Accomplishment: Despite high workload and emotional demands, your study found that most nurses maintained high personal accomplishment and empathy, which is a positive indicator for workforce retention and patient care quality.

Interpretation of Burnout Scores:

The burnout scores were categorized as low, moderate, or high for each subscale of the Maslach Burnout Inventory.

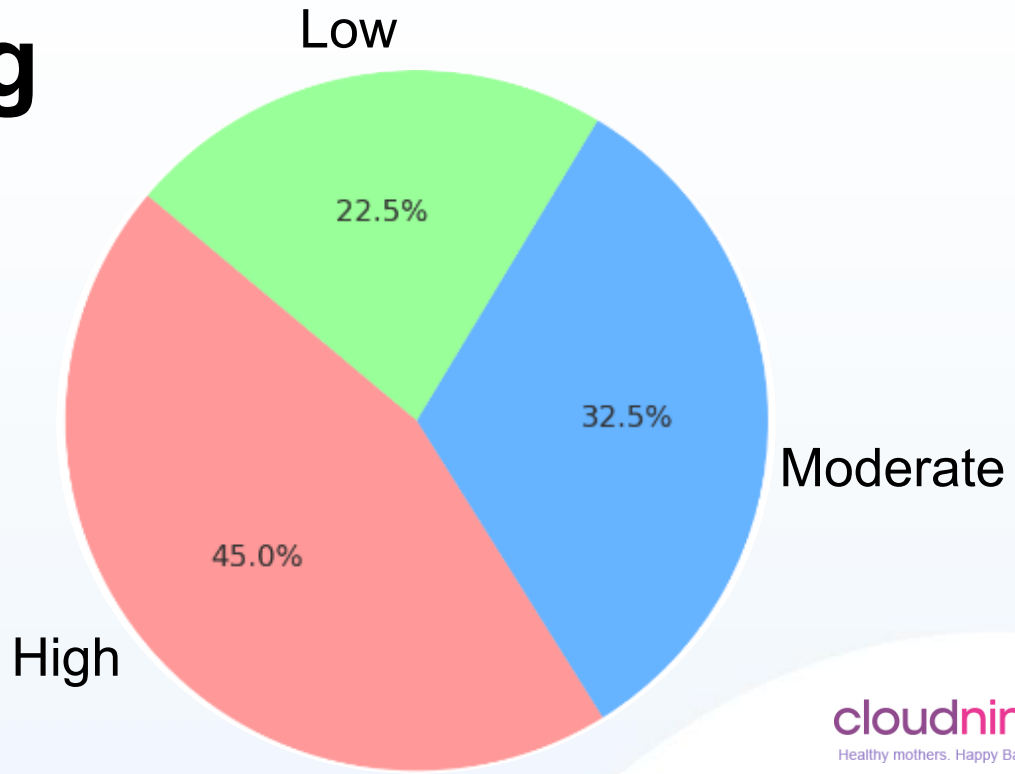
- Among the 39 nurses surveyed, 30.8% had high emotional exhaustion, 48.7% had moderate, and 20.5% had low.
- For depersonalization, the majority (61.5%) were in the low category, while 10.3% were high.
- In terms of personal accomplishment, 56.4% reported high scores, indicating that most nurses felt effective and satisfied in their roles.

- When examined by shift length, a higher proportion of nurses working more than 12 hours reported high emotional exhaustion compared to those working shorter shifts.

- Nurses in the NICU and those with less than three years of experience also tended to have higher burnout scores.

These descriptive findings suggest that while *emotional exhaustion is common*, most nurses maintain **positive attitudes** towards patient care and their own professional efficacy.

Overall burnout Level among Nurses



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Recommendations

1. **Staffing and Workload Management**
   - Optimal nurse-to-patient ratios: 1:4 (general care) and 1:2 (high-acuity settings)
   - Shift duration limits: Maximum 8-10 hours with mandatory rest after consecutive night shifts
   - Buffer staffing: Maintain 10% additional staff for contingencies

Evidence Base:

- *Each additional patient beyond the 1:4 ratio increases burnout risk by 23% and adverse outcomes by 7%*

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2. Break and Overtime Policies:

- Mandatory breaks: 30 minutes every 6 hours + two 15-minute relief periods
- Overtime cap: Maximum 8 hours per week per nurse
- Compliance monitoring: Monthly audits with documented rest periods

Supporting Evidence:

- *Nurses working >10 hours daily are 2.5× more likely to experience emotional exhaustion*

3. Mental Health Support Systems

- Regular screening: Bi-annual assessments using validated tools (DASS-21, GHQ-12)
- Stress management: Quarterly workshops and confidential psychological support
- Peer networks: One mental health ambassador per 20 nurses

Impact:

- Mental health interventions reduce nurse burnout by 30-40%

4. Recognition and Retention Strategies

- Performance recognition: Quarterly "Nurse Impact Awards" for top 10% performers
- Integrated assessments: Include personal accomplishment in performance reviews
- Incentive programs: Additional leave for high-performing, low-burnout nurses

Outcome:

- Recognition programs increase job satisfaction and reduce attrition by 21%

5. Institutional Policy Integration

- Burnout surveillance: Annual MBI surveys with >85% response rate
- Quality indicators: Integrate burnout data into Quality Assurance metrics
- Policy alignment: Adopt ISO 45003 Occupational Health Guidelines

Demonstrated Benefits:

- *Organizations using burnout data in decision-making reduce turnover by 18% and improve patient satisfaction by 12%*

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Implementation Timeline

Phase	Duration	Key Actions
Phase 1	0-3 months	Policy development, staff training
Phase 2	3-6 months	Program implementation, monitoring
Phase 3	6-12 months	Evaluation, refinement, sustainability

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Thank You

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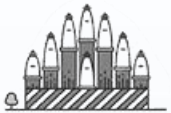

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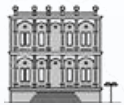

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