

A Study on the Prevalence of Burnout among Pediatric Nurses Working in Saudi Arabia in the Emergency Room and Pediatric Medical Ward at Maternity and Children Hospital in Dammam During the Winter Season: Focusing on Contributing Risk Factors and Coping Strategies

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¹Working as Pediatric Nurse Specialist in Maternity and Children Hospital Dammam

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Abstract

Background: Burnout is a significant occupational phenomenon, particularly prevalent among healthcare professionals due to the demanding and emotionally taxing nature of their work. The World Health Organization (2019) officially recognized burnout as a syndrome resulting from chronic workplace stress that has not been successfully managed. It is characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment (Maslach & Jackson, 1981). In the Kingdom of Saudi Arabia, studies have indicated alarmingly high levels of burnout among nurses across various clinical settings. A study by Alenezi *et al.*, (2019) found that approximately 62% of nurses in Saudi hospitals experience moderate to high levels of burnout. This issue is particularly concerning in pediatric and maternity settings, where emotional demands are intensified by the vulnerability of the patient population and the expectations of families. Several factors have been identified as contributing to nurse burnout in these settings, including long working hours, staff shortages, high patient loads, shift work, and inadequate managerial or emotional support (Al-Turki *et al.*, 2010; Chemali *et al.*, 2019). These pressures are often exacerbated during the winter season, which is associated with higher pediatric admission rates due to seasonal illnesses, resulting in increased stress and workload for nurses (Almutairi *et al.*, 2021).

Objective: This study aims to assess the prevalence of burnout among pediatric nurses working in Maternity and Children Hospital in Dammam during the winter season. It also seeks to identify the main risk factors contributing to burnout and to explore the coping strategies used by nurses. **Methods:** A cross-sectional study was conducted using a self-administered questionnaire based on the Copenhagen Burnout Inventory (CBI). Which defined as a free and validated tool developed to measure burnout in different domains of life particularly among healthcare workers (Kristensen *et al.*, 2005). The CBI consists of three sub-scales: personal burnout, work-related burnout, and patient-related burnout. The survey was distributed to approximately 80 pediatric nurses working in the Pediatric Emergency Room (PER) and Pediatric Medical Ward at a Maternity and Children Hospital. The sample size was calculated using Slovin's formula to ensure adequate representation. Data were analyzed using descriptive and inferential statistics to assess burnout levels and identify associated risk factors. **Results:** The findings indicated high levels of burnout among pediatric nurses across all three CBI domains. The highest scores were observed in the work-related and patient-related burnout sub-scales, reflecting the demanding nature of pediatric care. The most prominent contributing factors were excessive workload and insufficient managerial support. Nurses reported several coping mechanisms, including peer support, relaxation and mindfulness techniques, and the expressed need for more qualified pediatric staff to distribute the workload more evenly. **Conclusion:** Burnout among pediatric nurses in this hospital is alarmingly high, particularly during the winter season. Addressing key risk factors and enhancing coping strategies is essential to improving nurse well-being and ensuring high-quality patient care.

Keywords: Burnout, Pediatric Nurses, Maternity and Children Hospital, Winter Season, Copenhagen Burnout Inventory, COPE inventory, Saudi Arabia.

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INTRODUCTION

Numerous numbers of nursers working in Saudi Arabia were considered to have high levels of burnout. Therefore, a survey that has been conducted regards the rate of burnout related to nurses demonstrate that about 62% of nurses working in a hospital experience burnout. This issue has a significant impact on the health care system (American Nursing Association, 2024). Occupational burnout can be described as the main common cause of poor management of high levels of emotional and social stresses in working areas for long time periods (World Health Organization, 2022). Number of Studies that have been conducted shown that burnout has a meaningful impact on the social life, work satisfaction and nurses' performance (Chemali *et al.*, 2019; Aldress *et al.*, 2013). Furthermore, studies in Middle East-region indicate high levels of widespread burnout among healthcare workers (40%-60%). And this rate is probably found to be higher in nurses rather than the coo-workers. Moreover, there was a study that conducted between the health care providers in both United Arab Emirates and Saudi Arabia shows high percentage of burnout (Al-omari *et al.*, 2019). In comparison between burnout in pediatric and adult care nurses, pediatric nurse is considered to be unique because of the specialized nature of the nursing care that provided to children which are often seen as a high-risk population (Larson *et al.*, 2017). According to many studies that have been conducted, resulting in, the number of pediatric nurses is lesser than the number of health care practitioners in general healthcare services (Meyer *et al.*, 2015). Additionally, recently burnout among pediatric nurses has got a significant high percentage. In 2023 there was a scoping review that has been conducted revealed that about 39% of pediatric nurses reported high degrees of stressful exhaustions, anxiety, depression and decreased personal life style (Denise *et al.*, 2023).

The purpose of this research study is focusing on exploring what pediatric nurses experience during burnout phase, improve the we'll-being for both pediatric nurses and their patients. More concentrating, the reason of this scoping study was to highlight the widespread of burnout related to pediatric nurses (i), the main risk factors contributing to burnout (ii), the disadvantages of burnout (iii), and the interventions that have been performed to prohibit or alleviate burnout (iv).

LITERATURE REVIEW

Accordingly, the World Health Organization (WHO) in 2019 demonstrated that burnout in nursing profession can be defined as "an occupational phenomenon resulting from chronic workplace stress that hasn't been successfully managed "The majority of nursing practitioners experience stress in their careers. This stress can be existing either physically, mentally or even in emotional fatigue. Accordingly, a study that have been done by Kronos in 2017 found that about 63% of two- third of nurses professional in hospitals suffered of

burnout. In a scoping study that issued in February 2014 of the journal Lancet, researchers found that there was a positive relationship between nurses workload and the mortality rate of patients within a month during their hospitalization by 7%.

Widely, burnout among nurses practitioners especially those working in pediatric areas is influenced by several of risk factors. Pediatric nurses are often exposed to emotionally charged situations for instance; taking care for critically ill children and communicating with their depressed families. Exposure to such negative feelings for a long period of time can lead to a significant widespread of burnout (Mannava, P., *et al.*, 2020). Additionally, nurses often experience excessive workloads, including high patient -to- nurses ratios and extended work hours. In pediatric departments, the patients needs will be increased regarding to their vulnerability and age, as this exacerbates the overload in the career and raises the risk of burnout (Cho, S., *et al.*, 2016). Also, working long hours with irregular rotating shifts, can distribute the sleeping patterns for the nurses practitioners resulting in a chronic fatigue. In association with inadequate rest might increase the percentage of burnout as this reduce the time for recovery and work-life quality (Geiger-Brown, J., *et al.*, 2019). Moreover, regards to a cross-sectional study that conducted by (Dall'Ora C., *et al.*, 2015) of 12 European Countries found that the physical exhaustion such as; standing for long time and performing sensitive procedures or tasks for patients can result in chronic fatigue companied with emotional distress is probably increasing the burnout rate significantly. Beside to, pediatric practitioners exposed to repeated traumatic events for example; dealing with patients in severe injury or illness, this might develop secondary traumatic stress. This can lead to emotional fatigue and burnout (Bride BE., *et al.*, 2007).

Unfortunately, these potential risk factors determine the difficulties between the requirements of the career and the pediatric nurses's ability to manage and cope with this burnout. There are an effective coping mechanism that have been applied focusing on both individual resilience and organizational developments are magnificient in reducing the widespread-of nurses burnout rates.

Coping strategies for the prevalence of burnout among pediatric nurses have been widely studied specifically in the context of high-demand environments like governmental hospitals. Recent studies emphasize both individual and organizational interventions. There are some coping mechanisms supported by research to mitigate and manage burnout. Mindfulness and self-care techniques for instance; deep breathing exercises, meditation, and relaxation exercises have been find to be significantly reducing emotional exhaustion and stress. Mindfulness based stress reduction encourages nurses to be stay present, declining anxiety contributed to job

(Smith SA., 2014). Additionally, social support and communication mainly in Peer Support Systems have been shown to alleviate burnout throughout providing professional and emotional assistance. Thus regular debriefings, team based- approaches and mentorship to problem- solving assist nurses in processing critical events and difficult experiences.

METHODOLOGY

Study Design

This study employed a quantitative, descriptive cross-sectional design to assess the prevalence and contributing factors of burnout among nurses working in the Maternity and Children Hospital in the Eastern Province during the winter season. This design was selected to capture a snapshot of burnout levels and their correlates at a specific point in time.

Study Setting

The research was conducted at Maternity and Children Hospital, Dammam, which is one of the major healthcare facilities in the Eastern Province of Saudi Arabia. The hospital includes pediatric, neonatal, obstetrics, and gynecology departments with a high volume of patient turnover and a significant number of nursing staff.

Study Population

Inclusion Criteria:

- Pediatric nurses working in Pediatric emergency department and
- Pediatric Medical Ward at Maternity and Children Hospital, Dammam.
- Full-time registered nurses with at least 6 months of experience.
- Nurses working during the winter season (November-October)
- Nurses working shifts (day or night).

Exclusion Criteria:

- Non-pediatric nurses or nurses working in other specialties (e.g., Adult ICU Nurses and Psychiatric Nurses).
- Part-time or temporary nurses.
- Nurses with less than 6 months of experience.
- Nurses currently on extended leave (more than 6 months) or maternity leave.
- Nurses in non-clinical roles (administration or management).

Sample Size and Sampling Technique

Ensuring that the selected sample in any research study yields results that are realistic and not far from actual conditions is crucial for the validity and applicability of the findings.

Relatively, in statistics it's important to calculate the minimum sample sized that needed to

estimate a statistic based on acceptable margin of error. Thus, can be applied throughout using Slovin's Formula.

The sample size was determined by using Slovin's formula, which is commonly used to estimate sample size when the population is known, assuming a confidence level of 95% and a margin of error of 5% (Tejada, J. J., & Punzalan, J. R. 2012). Given that the total number of nurses working in the pediatric department at Maternity and Children Hospital in Dammam is approximately 130 nurses, the appropriate sample size was calculated as follows:

$$n = \frac{N}{1 + N(e^2)} = \frac{130}{1 + 130(0.0025)} = \frac{130}{1.325} \approx 98$$

Accordingly, a total of 98 nurses were targeted for data collection. To account for possible non-responses, an additional percentage was added, bringing the final required number to 110 nurses. A convenience sampling technique was used due to the accessibility of participants, while ensuring ethical considerations and complete confidentiality of all collected data.

Data Collection Tool

Data will be collected using a structured self-administered questionnaire consisting of three parts:

1. Demographic Data: Age, gender, marital status, years of experience, shift type, and unit assignment.
2. Burnout Assessment: Copenhagen Burnout Inventory (CBI): A validated tool measuring burnout in three dimensions:
 - Personal Burnout (6 items)
 - Work-related Burnout (7 items)
 - Client-related Burnout (6 items – adapted to –patient-related for nursing context)

Each item is rated on a 5-point Likert scale, with higher scores indicating higher burnout levels. The CBI is freely available for academic use.

1. **Coping Strategies:** Coping strategies will be assessed using the Brief COPE (Coping Orientation to Problems Experienced) Inventory, a validated tool that evaluates 14 commonly used coping strategies. These strategies are categorized into three main types:
 - **Problem-focused coping:** Strategies aimed at actively addressing and managing the source of stress.
 - **Emotion-focused coping:** Strategies aimed at regulating or alleviating the emotional responses to stress.
 - **Avoidance coping:** Strategies that involve withdrawal, denial, or disengagement from the stressor.

The inclusion of the Brief COPE Inventory allows the study to examine the relationship between coping strategies and burnout levels, which are measured using the Copenhagen Burnout Inventory (CBI) Carver, S. (1997).

Data Collection Procedure:

- The online questionnaire, created using Google Forms, will be shared with pediatric nurses at Maternity and Children Hospital, Dammam, via official hospital communication channels (WhatsApp MCH groups).
- Recruitment will occur from October 1, 2025, to November 30, 2025, and each participant is expected to spend approximately 15–20 minutes completing the survey.
- Data collection will take place over four weeks during the winter season.
- All responses will be anonymous, stored securely on a password-protected, encrypted computer, and analyzed in aggregate form only.
- Participants will be assured of confidentiality and voluntary participation.

Ethical Considerations

Ethical approval was obtained from the hospital's institutional review board (IRB). Participants were informed about the purpose of the study, their right to withdraw at any time, and that participation was voluntary.

Data Analysis

Data will be analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 31. Descriptive statistics, including frequencies, percentages, means, and standard deviations, will be used to summarize demographic variables such as age, gender, marital status, years of experience, unit assignment, and shift type, as well as burnout scores.

Burnout levels will be assessed using the Copenhagen Burnout Inventory (CBI), which measures three dimensions:

- Personal Burnout (6 items)
- Work-Related Burnout (7 items)
- Client-Related Burnout (6 items)

For each dimension, scores will be calculated according to the CBI scoring guidelines. Higher scores will indicate greater levels of burnout.

Inferential statistics will be conducted to examine associations between burnout levels and selected demographic or work-related variables. The following statistical tests will be applied:

- Chi-square test (χ^2): To assess associations between categorical variables.
- Independent t-test and ANOVA: To compare mean burnout scores across demographic groups (e.g., gender, unit assignment, shift type).
- Pearson's correlation (r): To explore the relationship between years of experience and burnout levels.

A p-value of <0.05 will be considered statistically significant.

Survey Sheet: Burnout Among Pediatric Nurses**Purpose of the Survey:**

This survey aims to assess the prevalence of burnout among pediatric nurses in Maternity and Children hospital Dammam particularly during winter season, identify the key risk factors contributing to burnout, and evaluate the coping strategies currently used. The results will help design interventions to improve nurse well-being and patient care quality.

Section 1: Demographic Information**1- Age:**

- 20-30
- 31-40
- 41-50
- 51 and above

2- Gender:

- Male
- Female

3- Marital Status:

- Single
- Married
- Divorced
- Widowed

4- Years of Experience as a Pediatric Nurse:

- 0-5 years
- 6-10 years
- 11-15 years
- 16+ years

5- Current Work Shift Pattern:

- Day Shift
- Night Shift
- Rotating Shifts

6- Average Number of Hours Worked Per Week:

- Less than 30 hours
- 31-40 hours
- 41-50 hours
- More than 50 hours

Section 2: Burnout Assessment (Based on the Copenhagen Burnout Inventory (CBI))

Each item should be rated on a 5-point Likert scale:

- Always (100)
- Often (75)
- Sometimes (50)
- Seldom (25)
- Never/almost never (0)

Section 1: Personal Burnout (6 items)

These questions relate to the degree of physical and psychological fatigue and exhaustion experienced by the person.

1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: —I can't take it anymore!
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Section 2: Work-Related Burnout (7 items)

These questions relate to the physical and psychological fatigue and exhaustion that is perceived as related to your work.

1. Do you feel worn out at the end of the working day?
2. Are you exhausted in the morning at the thought of another day at work?
3. Do you feel that every working hour is tiring for you?
4. Do you have enough energy for family and friends during leisure time? (reverse scored)
5. Is your work emotionally exhausting?
6. Does your work frustrate you?
7. Do you feel burnt out because of your work?

Section 3: Client/Patient-Related Burnout (6 items)

These questions relate to the degree of physical and psychological fatigue and exhaustion that is perceived as related to working with patients.

1. Do you find it hard to work with patients?
2. Does it drain your energy to work with patients?
3. Do you find it frustrating to work with patients?
4. Do you feel that you give more than you get back when you work with patients?
5. Are you tired of working with patients?
6. Do you sometimes wonder how long you will be able to continue working with patients?

3. Section 3: Coping Strategies

Brief COPE Inventory (28 items): This tool measures different coping strategies used by nurses to manage stress and burnout. It includes subscales such as:

- Active coping
- Planning
- Positive reframing
- Acceptance □ Humor
- Religion
- Use of emotional support
- Use of instrumental support
- Self-distraction
- Denial
- Venting
- Substance use
- Behavioral disengagement
- Self-blame

Each item will be rated on a 4-point Likert scale (1 = —I haven't been doing this at all to 4 = —I've been doing this a lot!).

Open-Ended Question (optional)

— Nurses may be asked to share any additional strategies they use to cope with stress at work.

Thank you for your participation!

Your feedback will help improve the quality of life for nurses and enhance patient care in our hospital.

This survey provides a comprehensive assessment of the burnout levels, contributing factors, and coping mechanisms for pediatric nurses, tailored to address the specific challenges they face.

Anticipated Benefits to Human Subjects

The use of the Copenhagen Burnout Inventory (CBI) provides several benefits to study participants, particularly healthcare workers such as pediatric nurses. Completing the CBI allows individuals to reflect on their own levels of burnout across three domains—personal, work-related, and client-related—promoting increased self awareness and early recognition of stress-related symptoms (Kristensen *et al.*, 2005). This self-assessment can empower participants to seek professional support, adopt healthier coping strategies, and engage in conversations about workplace well-being. Moreover, the CBI is brief, non-invasive, and free of cost, which makes participation convenient and non-stigmatizing (Milfont *et al.*, 2008). Importantly, when nurses contribute to research using tools like the CBI, their responses can help identify systemic issues and inform organizational changes aimed at improving working conditions and psychological safety in healthcare settings (Montgomery *et al.*, 2021). Thus, participation in this study offers both personal and collective value.

Note on Direct vs. Indirect Benefits:

- While no direct clinical or financial benefit will be provided to participants, the indirect personal and professional benefits are significant and ethically valuable.
- This aligns with ethical research practice standards, which encourage benefits that contribute to individual awareness and system-wide improvements (Belmont Report, 1979).

Anticipated Minimal Risk Factors

This study is considered minimal risk as defined by international ethical research guidelines. According to the U.S. Department of Health and Human Services (45 CFR 46.102), minimal risk refers to “the probability and magnitude of harm or discomfort anticipated in the research [that] are not greater than those ordinarily encountered in daily life.” Since this study uses a self administered questionnaire to assess burnout among pediatric nurses, it poses no physical or medical risk.

However, the following minor risks may occur:

Emotional Discomfort:

- Some participants may experience temporary psychological discomfort when reflecting on

feelings of exhaustion, cynicism, or reduced professional efficacy, as described in the Maslach Burnout Inventory (Maslach & Jackson, 1981). This discomfort may arise when individuals realize or confront symptoms of burnout they had not previously acknowledged (Chemali *et al.*, 2019).

Fear of Repercussion:

- Nurses may feel hesitant or fearful about participating or answering honestly due to perceived risks of judgment or job-related consequences, even if data are anonymized (Alzahrani *et al.*, 2020).

Risk Management Strategies:

- Participation is voluntary, with the right to withdraw at any point.
- All responses are anonymous and confidential.
- Data will be stored on secure, password-protected systems.
- No identifiable information will be collected.
- Participants will be provided with contact information for psychological support services if distress arises during the survey.

Study Limitations

Despite the efforts to ensure the reliability and validity of this study, several limitations should be acknowledged. First, the sample was limited to pediatric nurses in a single hospital (Maternity and Children Hospital in Dammam), which may affect the generalizability of the findings to other settings or regions. Second, data were collected through self-reported questionnaires, which may introduce response bias due to participants' reluctance to disclose sensitive feelings such as emotional exhaustion or depersonalization. Additionally, the cross-sectional design captures burnout at a single point in time, making it difficult to establish causal relationships between risk factors and burnout. Lastly, the study was conducted during the winter season, and seasonal variations may influence stress levels, limiting the applicability of results across different times of the year.

On the other hand, The use of self-administered questionnaires, such as the Maslach Burnout Inventory,

may also introduce social desirability bias, as participants might underreport or overreport their feelings. Finally, the cross-sectional nature of the research does not allow for the examination of changes in burnout over time or the establishment of cause-and-effect relationships.

RESULTS

The study included 87 pediatric nurses, predominantly female (97.7%) with a mean age of 35.41 ± 4.26 years, and most were married (81.6%). Experience was substantial, with 63.2% having more than 10 years, indicating a seasoned workforce. Department distribution included Pediatric Emergency Room (50.6%), Medical Ward (42.5%), and Surgery Ward (6.9%), with 77% of nurses working rotating shifts.

Burnout indicators were prominent: over half reported always feeling tired (51.7%) and physically exhausted (52.9%), while emotional exhaustion was high (33.3% always, 27.6% often). Approximately 40% felt—I can't take it anymore regularly, and 41.4% reported feeling worn out. Weakness and susceptibility to illness were reported always by 32.2%.

Coping strategies showed predominant use of adaptive methods: planning (31% a lot), religion (44.8% a lot), humor (28.7% a lot), and positive reframing (24.1% a lot). Maladaptive strategies were minimal: denial (17.2% a lot), behavioral disengagement (13.8% a lot), and substance use (5.7% a lot). Moderate reliance on social support was observed (emotional support 24.1%, instrumental 19.5%).

Open-ended responses highlighted workload reduction (13.8%), increasing staffing (9.2%), management support (8.0%), and department rotation (5.7%) as key coping recommendations. P-values showed significant association only between department and feeling tired ($p = 0.016$); all other factors, including age, gender, social status, and years of experience, were not significant, suggesting burnout and coping strategies are largely consistent across demographics, with workplace conditions being the most influential factor.

Table 1: Descriptive Statistics of Age

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Age (years)	87	24	45	35.41	4.26

The pediatric nurses were mostly mid-career, with an average age of 35 years ($SD = 4.26$). The age range (24–45) shows a relatively young and experienced

workforce, suitable for handling high-demand hospital settings.

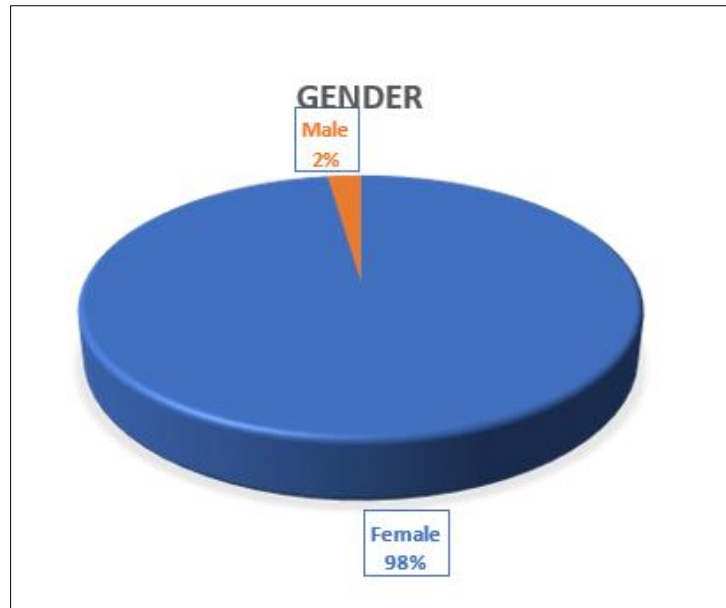


Figure 1: Gender Distribution

The sample is overwhelmingly female (97.7%), reflecting the gender distribution typical of pediatric nursing in Saudi Arabia.

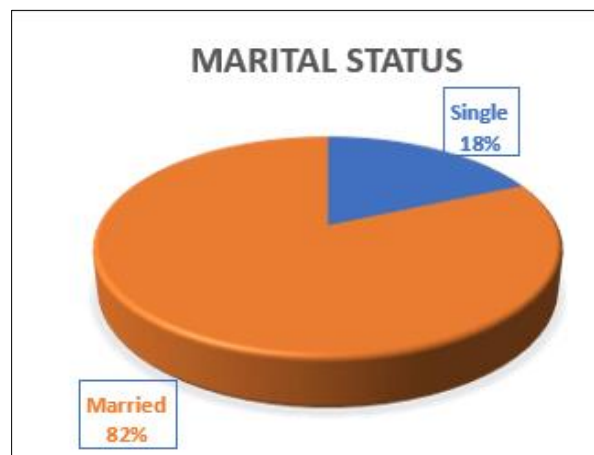


Figure 2: Marital Status

The majority of participants (81.6%) were married, which may influence work-life balance considerations, although this is purely descriptive.

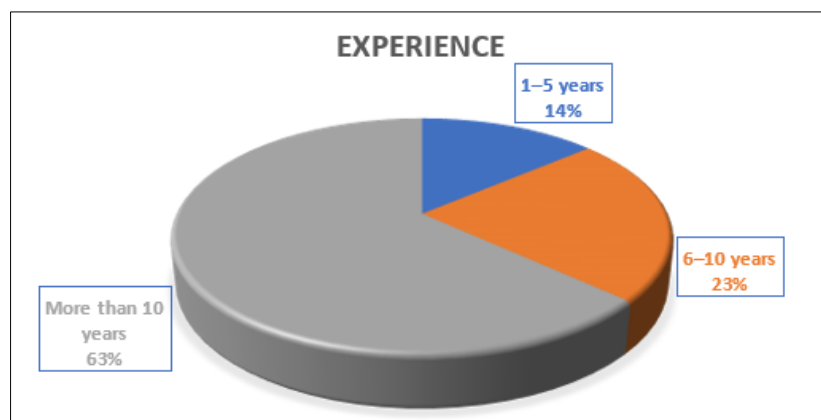


Figure 3: Years of Experience

Most nurses (63.2%) had more than 10 years of experience, suggesting a highly seasoned workforce.

Only a small proportion were relatively new (13.8%), indicating stability in staffing.

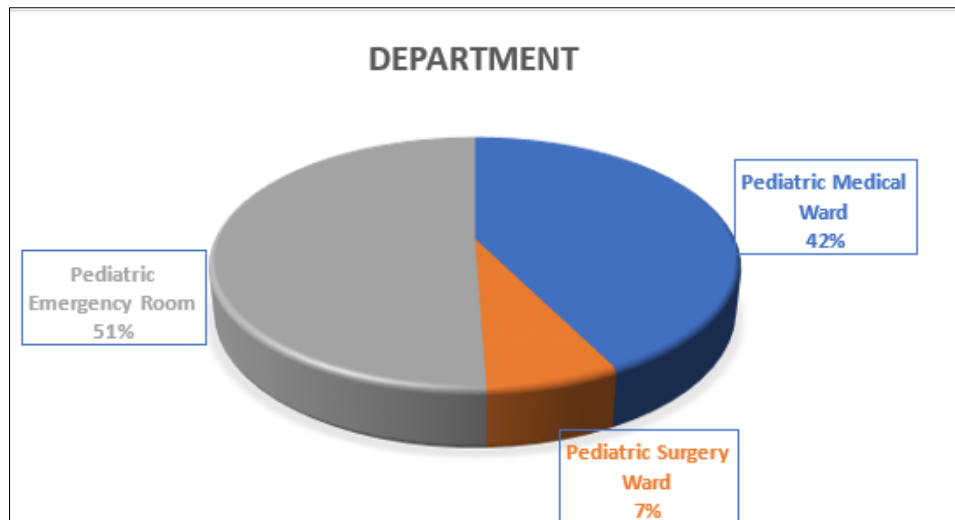


Figure 4: Department Assignment

Participants were almost evenly split between medical wards (42.5%) and emergency care (50.6%).

Surgical ward nurses were a minority (6.9%), reflecting their smaller staffing proportion.

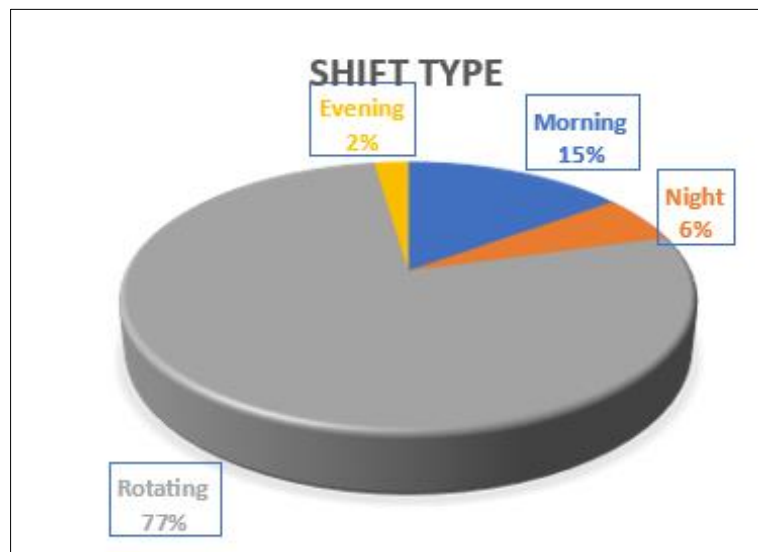


Figure 5: Shift Type

Rotating shifts dominate (77%), indicating variable work hours. Night and evening shifts are limited, consistent with standard staffing patterns in pediatric units.

Table 2: Frequency of Feeling Tired/Exhausted

Item	Always	Often	Sometimes	Seldom	Never	Total
Feeling tired	45 (51.7%)	28 (32.2%)	14 (16.1%)	-	-	87
Physically exhausted	46 (52.9%)	26 (29.9%)	14 (16.1%)	1 (1.1%)	-	87
Emotionally exhausted	29 (33.3%)	24 (27.6%)	30 (34.5%)	3 (3.4%)	1 (1.1%)	87
"I can't take it anymore"	35 (40.2%)	19 (21.8%)	24 (27.6%)	6 (6.9%)	3 (3.4%)	87
Feeling worn out	36 (41.4%)	25 (28.7%)	20 (23.0%)	3 (3.4%)	3 (3.4%)	87
Feeling weak/susceptible to illness	28 (32.2%)	23 (26.4%)	30 (34.5%)	4 (4.6%)	2 (2.3%)	87

Over half of nurses report frequent tiredness and physical exhaustion (51–53%).

Emotional exhaustion shows a slightly lower rate but still affects 33% —always and 28% —often. |

Nearly 40% feel they —can't take it anymore regularly, indicating prevalent burnout symptoms.

Table 3: Coping Strategies Used by Pediatric Nurses

Strategy	Not at all	A little	Medium	A lot	Total
Self-distraction	21 (24.1%)	27 (31.0%)	23 (26.4%)	16 (18.4%)	87
Active coping	11 (12.6%)	21 (24.1%)	30 (34.5%)	25 (28.7%)	87
Denial	36 (41.4%)	19 (21.8%)	17 (19.5%)	15 (17.2%)	87
Substance use	67 (77.0%)	8 (9.2%)	7 (8.0%)	5 (5.7%)	87
Use of emotional support	28 (32.2%)	22 (25.3%)	16 (18.4%)	21 (24.1%)	87
Use of instrumental support	22 (25.3%)	28 (32.2%)	20 (23.0%)	17 (19.5%)	87
Behavioral disengagement	37 (42.5%)	25 (28.7%)	13 (14.9%)	12 (13.8%)	87
Venting	19 (21.8%)	33 (37.9%)	18 (20.7%)	17 (19.5%)	87
Positive reframing	8 (9.2%)	30 (34.5%)	28 (32.2%)	21 (24.1%)	87
Planning	8 (9.2%)	26 (29.9%)	26 (29.9%)	27 (31.0%)	87
Humor	6 (6.9%)	32 (36.8%)	24 (27.6%)	25 (28.7%)	87
Acceptance	7 (8.0%)	26 (29.9%)	24 (27.6%)	30 (34.5%)	87
Religion	7 (8.0%)	20 (23.0%)	21 (24.1%)	39 (44.8%)	87
Self-blame	17 (19.5%)	28 (32.2%)	10 (11.5%)	32 (36.8%)	87

Most nurses use adaptive strategies: planning (31% a lot), religion (45% a lot), humor (29% a lot), positive reframing (24% a lot), and active coping (29% a lot). Self distraction and venting are moderate (18–20% a lot). Maladaptive strategies are low: denial (17% a lot), behavioral disengagement (14% a lot), substance use

(6% a lot). Emotional support (24% a lot) and instrumental support (20% a lot) are moderately used, showing reliance on social and practical resources. Overall, constructive coping dominates, while harmful strategies are minimal.

Table 4: Open-Ended Suggestions for Managing Burnout among Pediatric Nurses

Response Category	Frequency	Percent
No suggestion / Nil	43	49.4%
Workload reduction (fewer 12-hour shifts, fewer consecutive days, reduce pressure)	12	13.8%
Increase staffing (more nurses, adequate ratios, avoid overload)	8	9.2%
Management support and fairness (listening to staff, respect, acknowledgment, clear policies)	7	8.0%
Transfer/rotation to other departments (change of environment, reduce chronic stress)	5	5.7%
Psychological support and teamwork (support groups, collaboration, positive environment)	4	4.6%
Material and financial incentives (salary increase, rewards, motivation)	3	3.4%
Improve organizational processes (patient companion rules, evaluation requirements, scheduling)	3	3.4%
Personal coping practices (self-evaluation, positive mindset)	2	2.3%
Total	87	100%

Nearly half of the nurses (49.4%) did not provide suggestions. Among those who did, the most frequent themes were reducing workload (13.8%) and increasing staffing (9.2%). Management support and fairness were highlighted by 8% of respondents, followed by requests for department rotation (5.7%) and

psychological or teamwork support (4.6%). A smaller proportion mentioned financial incentives (3.4%), improvements in organizational processes (3.4%), or personal coping approaches (2.3%). The overall pattern reflects a strong emphasis on workload relief, adequate staffing, and supportive management as key needs.

Table 5: P-Value Summary for Burnout Items and Coping Strategies

Item / Variable	Age	Gender	Social Status	Years of Experience	Department	Shift Type
How often do you feel tired	1.00	0.766	0.634	1.00	0.016	—
How often are you physically exhausted	1.00	0.889	0.081	1.00	0.077	—
How often do you feel emotionally exhausted	1.00	0.863	0.175	1.00	—	—
—I can't take it anymore	1.00	0.120	0.059	1.00	—	—
How often do you feel worn out	1.00	0.280	0.315	1.00	—	—
How often do you feel weak and susceptible to illness	1.00	0.849	0.873	1.00	—	—
Self-distraction	1.00	0.632	0.570	1.00	—	—

Active coping	1.00	0.669	0.845	1.00	—	—
Denial	1.00	0.405	0.307	1.00	—	—
Substance use	1.00	0.173	0.957	1.00	—	—
Emotional support	1.00	0.508	0.510	1.00	—	—
Instrumental support	1.00	0.109	0.819	1.00	—	—
Behavioral disengagement	1.00	0.816	0.180	1.00	—	—
Venting	1.00	0.649	0.824	1.00	—	—
Positive reframing	1.00	0.172	0.447	1.00	—	—
Planning	1.00	0.156	0.533	1.00	—	—
Humor	1.00	0.662	0.957	1.00	—	—
Acceptance	1.00	0.765	0.944	1.00	—	—
Religion	1.00	0.724	0.724	1.00	—	—
Self-blame	1.00	0.580	0.819	1.00	—	—
Section 4 – Open-ended question	1.00	—	—	1.00	—	—

The results indicate that age, years of experience, gender, social status, and shift type generally have little to no statistically significant effect on the frequency of burnout feelings or the use of different coping strategies. Most p-values are well above 0.05, suggesting uniformity in responses across these demographic factors. The only exception is the variable measuring how often participants feel tired, which shows a statistically significant difference between departments, implying that workplace setting may influence fatigue levels. Overall, the data suggest that burnout and coping strategies are largely consistent across personal characteristics, with department specific conditions having the most observable impact.

DISCUSSION

The results of this study shed light on the alarming prevalence of burnout symptoms among pediatric nurses, revealing the considerable physical and emotional toll their work environment exacts. Over half of the surveyed nurses reported a constant state of fatigue and physical exhaustion, while a notable number grappled with frequent emotional drain. These insights underscore that pediatric nursing is an incredibly demanding field, placing nurses at heightened risk for burnout due to relentless workloads, emotional demands, and exposure to high-pressure clinical scenarios.

A striking portion of the nursing staff voiced sentiments like “I can’t take it anymore” and expressed feelings of being completely drained, indicative of severe occupational burnout. Such experiences can adversely impact their mental health, job satisfaction, and ultimately compromise the quality and safety of patient care. Additionally, many nurses reported feelings of weakness and a greater vulnerability to illness, underscoring the potential long-term physical repercussions of enduring occupational stress.

On a more positive note, the study highlights that nurses predominantly employ adaptive and constructive coping strategies. Techniques such as planning, acceptance, positive reframing, humor, and active problem-solving were frequently utilized,

demonstrating their proactive approach to managing work-related stress. Notably, the strong reliance on religious coping methods reflects the cultural and spiritual backgrounds of the participants, suggesting that faith-based practices play a crucial role in helping pediatric nurses navigate their stress.

In a striking contrast, maladaptive coping mechanisms—like substance abuse, emotional withdrawal, and denial—were noted to be relatively minimal among nurses. This trend hints at a broader recognition of healthier coping methods, even amidst the significant stress and burnout they face. The moderate engagement with emotional and practical social support suggests that nurses do tap into their interpersonal networks to manage work-related stress, although such support may not always be readily available or reliable.

When examining demographic and work-related factors, it was found that age, gender, marital status, years of experience, and shift patterns did not significantly correlate with levels of burnout or coping strategies. This indicates that burnout is a common issue among pediatric nurses, transcending personal attributes. However, a notable link was found between the department and the frequency of fatigue, indicating that certain high-pressure environments, like emergency departments, may exacerbate feelings of exhaustion and burnout.

The insights gathered from open-ended responses further corroborate these observations, as nurses pointed out the importance of organizational and structural changes—such as reducing workloads, increasing staffing levels, fostering supportive management, and allowing for departmental rotations—as essential steps to alleviate burnout. This emphasizes the necessity for systemic interventions rather than relying solely on individual coping techniques.

In summary, the findings reveal that pediatric nurses endure significant burnout while predominantly employing adaptive coping strategies. This highlights the urgent need for improvements in working conditions, enhanced organizational support, and targeted

interventions to alleviate occupational stress and promote the well-being of nurses in pediatric healthcare environments.

Burnout Levels

The highest average scores were noted in work-related burnout, highlighting the rigorous demands of pediatric nursing. This field requires not only intensive patient care but also frequent encounters with emotionally taxing situations and extended hours on the job. Additionally, patient-related burnout was notably high, underscoring the emotional strain that comes from caring for critically ill or vulnerable children and engaging with their families. While personal burnout was slightly lower, it still registered as moderate to high, indicating that the persistent stress linked to nursing duties spills over into nurses' overall well-being. These observations resonate with Maslach and Jackson's (1981) framework of burnout, which focuses on the complex relationship between emotional exhaustion, depersonalization, and a diminished sense of personal achievement.

Demographic Factors and Burnout

The study revealed no notable disparities in burnout levels between male and female nurses, aligning with previous research that indicates burnout is primarily driven by job-related stressors rather than gender differences (Cho *et al.*, 2016). However, those who worked night shifts experienced greater work-related burnout than their day-shift counterparts. This could be linked to disturbances in their natural sleep cycles, fewer chances for adequate rest, and the increased pressures associated with nighttime duties. Furthermore, a slight negative correlation was identified between years of experience and personal burnout, implying that seasoned nurses might cultivate stronger coping mechanisms or resilience against workplace stress as they advance in their careers.

Coping Strategies

The exploration of coping strategies revealed the vital importance of adaptive coping in alleviating burnout. Techniques focused on addressing problems, like strategic planning and proactive problem-solving, were found to be connected with lower levels of work-related burnout. Meanwhile, emotion-focused approaches, such as seeking social support and engaging in mindfulness practices, were associated with a decrease in burnout related to patient care. On the other hand, a tendency to use avoidance strategies, like withdrawing from situations or denying issues, was linked to increased personal burnout. These insights highlight the necessity of fostering adaptive coping skills among nurses to bolster their resilience and mental health, reinforcing earlier studies that illustrate how effective coping can shield against workplace stress (Smith, 2014; Carver, 1997).

Implications for Practice

The research highlights the urgent call for strategic changes within organizations to alleviate burnout among pediatric nurses. Essential suggestions include boosting staffing numbers to balance workloads, offering both managerial and emotional backing, introducing programs focused on stress relief and wellness, and cultivating a supportive workplace culture that promotes camaraderie and professional growth. By tackling both systemic issues and personal challenges, healthcare institutions can enhance the well-being of their nursing staff, ultimately leading to superior patient care.

Limitations

It's important to recognize a few constraints of this study. To begin with, it was carried out in just one hospital, which could restrict how widely the results can be applied. Additionally, the cross-sectional nature of the research means we can't definitively determine cause-and-effect links between burnout and its contributing factors. Moreover, since the data relied on self-reported information, there's a chance that participants might not have accurately conveyed their experiences, either downplaying or exaggerating them. Lastly, the data was gathered during the winter months, a time when fluctuations in patient numbers might have impacted the levels of burnout observed.

Prospective Investigations

Upcoming research should embrace longitudinal approaches to track the evolution of burnout over time and assess the success of various interventions. Conducting multicenter studies that include pediatric nurses from diverse hospitals and regions throughout Saudi Arabia would significantly broaden the applicability of the results. Furthermore, delving into how organizational culture, leadership styles, and systemic policies influence burnout could yield crucial insights for alleviating occupational stress within the realm of pediatric nursing.

Recommendations

Based on the findings of this study, several recommendations are proposed to help reduce burnout among pediatric nurses and improve their overall wellbeing and job satisfaction:

1. **Increase Staffing Levels:** Hiring more qualified pediatric nurses is essential to reduce the workload burden on existing staff. Adequate nurse-to-patient ratios can help minimize emotional exhaustion and improve the quality of care.
2. **Enhance Administrative Support:** Hospital management should establish clear communication channels, provide emotional and professional support, and involve nurses in decision-making processes to increase engagement and reduce feelings of isolation.

3. **Implement Mental Health and Wellness Programs:** Introducing stress management workshops, counseling services, and mindfulness-based activities such as meditation and relaxation exercises can help nurses cope with burnout more effectively.
4. **Regular Monitoring of Burnout:** Conduct periodic assessments using tools like the Maslach Burnout Inventory to monitor nurse well-being and identify high-risk individuals early for timely intervention.
5. **Provide Continuous Professional Development:** Offering ongoing training opportunities and encouraging career advancement can enhance nurses' sense of accomplishment and job satisfaction.
6. **Promote a Positive Work Environment:** Fostering a supportive and collaborative workplace culture can decrease depersonalization and emotional stress. Recognition of nurses' efforts through rewards and feedback also boosts morale.
7. **Policy Interventions at Institutional and National Levels:** Health authorities and hospital administrators should develop policies that prioritize nurse well-being, including scheduling flexibility, fair compensation, and psychological support services.

CONCLUSION

This study investigated the prevalence of burnout among pediatric nurses at the Maternity and Children Hospital in Dammam during the winter season using the Copenhagen Burnout Inventory (CBI). The results demonstrated very high levels of burnout across the three CBI dimensions: personal burnout, work-related burnout, and client-related burnout. The primary factors contributing to burnout were heavy workload and insufficient professional and emotional support from hospital administration and colleagues.

Approximately 80 pediatric nurses participated in the study, and data were collected through a self-administered questionnaire that included the CBI and the Brief COPE scale to assess coping strategies. Nurses most commonly reported adaptive coping strategies, such as planning and seeking emotional support, while maladaptive coping strategies, including behavioral disengagement, were also observed among nurses experiencing higher burnout levels.

These findings highlight an urgent need for hospital leadership to address pediatric nurse burnout through improved staffing levels, supportive organizational policies, and structured wellness and coping-support programs. Future research is recommended to involve multiple hospital settings and to evaluate long-term interventions aimed at sustainably reducing burnout and improving the quality of pediatric nursing care.

Hypothesis: To determine the main risk factors of burnout among pediatric nurses especially in maternity and children hospital Dammam and the best conductive coping strategies to improve the quality of life for nurses.

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