IDENTIFYING TEAMWORK REGARDING NEEDS OF THE MEDICAL EMERGENCY TEAM: NURSE'S PERSPECTIVES

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Abstract

Background: *Effective teamwork in Medical Emergency Teams (METs) is essential for delivering safe and efficient patient care. Inadequate communication and coordination among healthcare professionals, especially in emergency settings, often lead to compromised patient safety.*

Objective: *This study aimed to identify the teamwork-related needs of METs from the perspective of registered nurses, with a focus on communication, leadership, role clarity, and collaboration.*

Materials and Methods: *A quantitative cross-sectional study was conducted among 86 registered ICU nurses at the Punjab Institute of Neurosciences, Lahore. Participants were selected using purposive sampling. Data were collected using a structured questionnaire based on the Team Assessment Questionnaire (TAQ) and analyzed through SPSS v23 using descriptive statistics and ANOVA.*

Results: *The findings revealed high agreement among nurses on positive aspects of team identity, leadership, communication, and performance. However, areas such as constructive feedback and conflict resolution showed room for improvement. ANOVA results indicated no significant association between years of experience and perception of teamwork (p = 0.385).*

Conclusion: *Nurses perceive teamwork in METs positively but highlight the need for enhanced feedback mechanisms and conflict management. Targeted training programs and leadership development are recommended to strengthen collaboration and improve patient outcomes.*

INTRODUCTION

Teamwork within healthcare settings—particularly in Medical Emergency Teams (METs)—plays a crucial role in ensuring timely, safe, and effective patient care. METs, often composed of interdisciplinary healthcare professionals, respond to patients experiencing acute clinical deterioration. The efficacy of these teams hinges significantly on non-technical skills such as communication, coordination, leadership, and mutual support (Hosseini et al., 2022).

In high-stakes environments like emergency departments, the consequences of poor teamwork and communication can be critical. Evidence suggests that communication failures among healthcare professionals contribute to a substantial number of adverse events and patient safety incidents (Agency for Healthcare Research and Quality [AHRQ], 2021). The importance of improving teamwork was recognized in initiatives such as TeamSTEPPS, which

provides structured training to enhance team dynamics and patient safety outcomes.

Research shows that emergency nurses' perception of teamwork significantly influences the overall functionality and resilience of METs (Habibi Soola et al., 2022). Effective interprofessional collaboration not only improves patient outcomes but also enhances job satisfaction and reduces burnout among healthcare providers (Schmutz et al., 2019). However, in countries like Pakistan, where structured training and interdisciplinary collaboration are still evolving, there is limited evidence addressing MET-related teamwork from nurses' perspectives.

Hence, this study aims to bridge that gap by evaluating how nurses perceive the effectiveness and needs of teamwork within METs in a tertiary care setting. Understanding these perspectives is vital for designing targeted interventions to strengthen emergency response teams and ultimately improve patient safety.

1. Materials and Methods

This study employed a quantitative cross-sectional design to explore nurses' perceptions of teamwork within Medical Emergency Teams (METs). Conducted over a four-month period at the Punjab Institute of Neurosciences (PINS), Lahore, the target population comprised registered ICU nurses actively engaged in emergency care. A total sample of 86 nurses was selected from a known population of 110 using Yamane's sampling formula with a 95% confidence level and 5% margin of error. Non-probability purposive sampling was applied to recruit participants who had a minimum of two years of ICU or emergency experience. Physicians, anesthetists, and respiratory therapists were excluded to focus solely on nurses' perspectives.

Data were collected using a structured, modified version of the Team Assessment Questionnaire (TAQ), originally part of the Team STEPPS program. The tool included 43 items across seven domains—team foundation, functioning, performance, skills, leadership, climate, and identity—rated on a 5-point Likert scale. Demographic information was also collected. The TAQ demonstrated high internal consistency in prior studies.

Ethical approval was obtained from the Saida Waheed FMH College of Nursing. Informed consent was secured, and confidentiality was ensured throughout. Data were analyzed using SPSS version 23. Descriptive statistics and univariate ANOVA were used to assess relationships between teamwork perceptions and nurses' work experience, with significance set at $p < 0.05$.

2. Results

Table 1. Background Characteristics of the Respondents

Variables	Categories	Frequencies	Percentages
Age	20 – 24	1	1.2
	25 – 29	45	52.3
	30 - 34	40	46.5
Sex	Male	4	4.7
	Female	82	95.3
Experience	2 – 5	73	84.9
	6 - 9	13	15.1

In total, the majority of respondents were aged 25 to 29 and 45 out of 86. Furthermore, 46.5% of the respondents were between 30 and 35 years of age, while only one was between 20 and 24 years of age.

ANOVA indicating the perception of Team Work with respect to Years of Experience

Table 2. Table indicating the audience experience along with mean and standard deviation

Variable	Categories	Frequencies	Percentages	Mean	Standard Deviation
Experience	2 – 5	73	84.9	1.15	.36
	6 – 9	13	15.1		

Table 2 presents the distribution of participants based on their years of professional experience along with the calculated mean and standard deviation. The majority of respondents (73 out of 86, or 84.9%) had between 2 to 5 years of experience, with a mean score of 1.15 and a standard deviation of 0.36, indicating a relatively consistent level of experience within this group. In contrast, a smaller portion (13 participants, or 15.1%) had 6 to 9 years of experience. Since the mean and standard deviation are primarily calculated for the dominant group, it reflects the central tendency and variability in perceptions of teamwork primarily from nurses with 2–5 years of experience. This indicates that the findings are largely influenced by early-career nurses.

Table 3. Table indicating the results on ANOVA test

	Sum of Squares	Df	Mean Square	F	Sig.
Mean Between Groups	0.08	1	0.08	0.76	0.385
Within Groups	9.24	84	0.11		
Total	9.33	85			

Table 3 presents the results of a one-way ANOVA test conducted to determine whether there is a significant difference in nurses' perceptions of teamwork based on their years of experience. The analysis revealed a between-group sum of squares of 0.08 and a within-group sum of squares of 9.24, with corresponding mean squares of 0.08 and 0.11, respectively. The calculated F-value was 0.76, and the significance level (p-value) was 0.385. Since the p-value is greater than 0.05, the result is not statistically significant. This indicates that there is no meaningful difference in the perception of teamwork among nurses with varying years of experience. In other words, nurses' views on teamwork within the medical emergency team were consistent regardless of whether they had 2–5 years or 6–9 years of experience.

3. Discussion

The current study revealed that nurses, regardless of their years of professional experience, shared similar perceptions about teamwork within Medical Emergency Teams (METs). The ANOVA results confirmed that there was no statistically significant difference in teamwork perception based on experience level (p = 0.385). This suggests that the quality of teamwork in emergency settings is not solely shaped by the length of professional exposure but rather by shared practices, team structure, and organizational culture.

Recent research supports these findings by emphasizing that collaborative behaviors and positive team dynamics can be cultivated through institutional support and structured teamwork interventions. For instance, Xie et al. (2021) found that perceived teamwork quality was strongly associated with leadership style and communication clarity rather than years of clinical experience. Likewise, Goh et al. (2020) highlighted that team effectiveness in emergency departments was significantly influenced by shared goals, mutual respect, and regular feedback, regardless of professional tenure. Additionally, a study by Kalisch et al. (2019) demonstrated that nurse teamwork scores remained consistent across experience levels when effective communication systems and supportive leadership were in place.

These findings reinforce the importance of prioritizing inter-professional collaboration, continuous team training, and inclusive work environments over relying on experience alone to foster strong teamwork within METs.

4. Conclusion

These results suggest that perceptions of teamwork are more closely tied to team culture, organizational practices, and training interventions than to individual experience alone. Therefore, improving team performance in emergency settings should focus on fostering a collaborative environment, providing structured team-based training such as Team STEPPS, and promoting open communication and leadership support. Strengthening these elements across all experience levels can enhance team functioning and

contribute to improved patient care outcomes in critical situations.

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