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Trauma Team Communication During Trauma Resuscitation: A Literature Review

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Trauma Team Communication During Trauma Resuscitation: A Literature Review

Paula Barney

A scholarly paper submitted to the faculty of

Brigham Young University

In partial fulfillment of the requirements for the degree of

Master of Science

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College of Nursing

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ABSTRACT

Trauma Team Communication During Trauma Resuscitation: A Literature Review

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Objective: This paper aims to discuss current literature on trauma team communication during trauma resuscitation to determine if key communication features emerge as having a positive impact on trauma team function.

Data Sources: Source data were obtained from CINAHL and MEDLINE databases.

Study Selection: Studies addressing trauma team communication during trauma resuscitation.

Data Extraction: Relevant studies were reviewed, and the following areas of each study were identified, abstracted, and analyzed: study population, study design, methods, results, and relevant implications for clinical practice.

Data Synthesis: Five major features of communication emerged as beneficial to trauma teams: sharing information, using clear communication, team leader strategies, role identification, and team briefings.

Conclusion: Trauma teams nationwide are tasked with stabilizing and treating severely injured patients. Their work is unpredictable and must be carried out quickly to improve patient outcomes. Effective team communication is imperative. Team members communicating to form shared understanding of patient status and care goals supports high-level team function. Clear communication is essential. Team members should use closed-loop communication when appropriate, use brief and direct statements, and limit noise in trauma rooms. Team leaders support trauma team performance by providing updates on patient status and plans of care and fostering a culture of collaboration between team leaders and team members. Team briefing and role identification, including that of one team leader, performed before patient arrival, allows trauma teams to participate in trauma activations with clear purpose and direction from the beginning.

Keywords: communication, patient care team, trauma team, trauma, team, trauma care, trauma resuscitation
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Trauma Team Communication During Trauma Resuscitation: A Literature Review

Background

Trauma is a significant cause of mortality in the United States, especially for younger Americans. For those aged 1 - 44 years, unintentional injuries are the number one cause of death. Before COVID-19 became a pandemic, unintentional injuries were the third leading cause of death in the U.S. overall (Centers for Disease Control and Prevention [CDC], National Center for Health Statistics, 2021). Unintentional injuries include motor vehicle crashes, unintentional falls, and unintentional poisonings (CDC, 2022).

Severely injured patients are treated and stabilized in designated trauma centers throughout the county to minimize mortality and morbidity caused by trauma (Murphy et al., 2018). Trauma centers are staffed with highly trained trauma professionals organized into trauma teams. Trauma teams are interprofessional, consisting of trauma surgeons, emergency providers, nurses, technicians, pharmacists, respiratory therapists, radiology technicians, laboratory technicians, and social workers (Raja & Zane, 2022).

Trauma team members must assemble quickly when emergency departments (EDs) are alerted to the imminent arrival of trauma patients by prehospital services. Information about patients’ injuries and time for preparation may be limited (Catchpole et al., 2014; Vuojärvi & Korva, 2020). Trauma teams are challenged by the unpredictability of patient factors and the speed with which their work must take place. They aim to stabilize patients as quickly as possible and facilitate timely transfers to definitive care (Vuojärvi & Korva, 2020).

Because trauma care requires rapid decision-making and intervention, miscommunication among team members can be especially detrimental (Rasmussen, 2019). In high-stress, high-stakes situations, effective communication positively affects patient care and outcomes (Raja &

In the sentinel work *To Err is Human*, the Institute of Medicine Committee on Quality of Health Care in America (2000) highlighted the need for healthcare systems to focus on error prevention to improve patient safety. The authors asserted that a significant driver for patient safety was the natural motivation of healthcare workers to provide safe care in alignment with the norms of their professions. The authors recommended that healthcare organizations implement practices at the level of direct patient care to improve safety. Healthcare organizations nationwide have followed these recommendations by adopting tenets of professional and national programs, such as Crew Resource Management (CRM) and Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS). These programs were specifically developed to enhance safety by improving teamwork and communication among healthcare workers at the level of direct patient care (El-Shafy et al., 2018).

Professionals in the aviation industry developed CRM to stop catastrophic accidents caused by human error (Wakeman & Langham, 2018). Crew members were taught to speak up when problems were recognized using this specialized training, no matter their current role, and communicate with each other in deliberate ways (Jacobsson et al., 2012; Wakeman & Langham, 2018). Studies have shown that implementing CRM principles in healthcare settings has improved teamwork and communication, thus, reducing mortality (Roberts et al., 2014; Wakeman & Langham, 2018).

Likewise, TeamSTEPPS was developed for the healthcare industry through combined efforts from the Department of Defense and the Agency for Healthcare Research and Quality (AHRQ) to improve patient safety by enhancing collaboration and communication among
healthcare workers (Wakeman & Langham, 2018). Fundamental principles of TeamSTEPPS, such as team structure, communication, leadership, situation monitoring, and mutual support, are particularly relevant to trauma care (Agency for Healthcare Research and Quality, 2022).

**Objective**

This paper aims to discuss current literature on trauma team communication during trauma resuscitation and explore communication components that emerge as having a positive impact on trauma team function.

**Methods**

A search of the literature was conducted using CINAHL and MEDLINE databases. Limiters included English language and publication since June 2012. Keywords were communication, patient care team, AND trauma team. Fifty-four articles were obtained. A second literature search was conducted using keywords trauma and team or trauma team AND communication, which resulted in 267 articles.

Criteria for inclusion included research performed during simulated or live trauma resuscitation and research focused on communication among trauma team members during trauma care. Criteria for exclusion included research performed outside emergency departments, research on communication outside the healthcare team (e.g., with patients), research assessing the effectiveness of trauma team training, and instrument development or validation. After titles and abstracts were reviewed, full-text review was performed on 70 articles. Twenty articles were found eligible for inclusion.

**Results**
Five major features of communication emerged from the literature as being beneficial to trauma teams: developing shared awareness among team members, intentional use of techniques to promote clear communication, team leader strategies, role identification, and team briefings.

**Shared Awareness**

The concepts of the Shared Mental Model (SMM) and team situational awareness are often cited in trauma team communication literature. SMM is defined as a common understanding among team members of the tasks at hand and each person’s role in fulfilling those tasks (Evans et al., 2021). Team situational awareness is a collective understanding of a patient’s current status and plan of care (Evans et al., 2021). For this paper, shared awareness will be used to include both SMM and team situational awareness.

When trauma team members care for trauma patients, the development of shared awareness allows team members to coordinate actions and anticipate moves as they work to stabilize patients and treat life-threatening injuries (Johnsen et al., 2017). Developing shared awareness requires team members to share information unprompted and out loud. Team members, in essence, narrate their actions and observations as they progress through resuscitations for the benefit of other team members (Gundrosen et al., 2016; Johnsen et al., 2017; Sullivan et al., 2018).

**Benefits of Shared Awareness**

Trauma teams with members that implemented shared awareness during trauma resuscitations displayed higher-level performance (Briggs et al., 2015; Johnsen et al., 2017; Sullivan et al., 2018). Sullivan et al. (2018) found teams with members that provided information before, rather than after, being asked were higher-performing. Likewise, team leaders who offered updates more frequently and shared information without explicit requests positively
correlated with quality medical management (Johnsen et al., 2017) and the completion of primary surveys, an essential skill and prominent feature in trauma care (Briggs et al., 2015). Unprompted sharing of information contributed positively to team performance by allowing team members to spend less time asking for information and more time attending to patients (Johnsen et al., 2017).

Gundrosen et al. (2016) noted that study participants performed unrequested actions in response to out-loud observations during trauma resuscitations. A team member’s report of low blood pressure, for example, prompts the medication nurse to administer intravenous (IV) fluid at a more rapid rate without explicit instructions from the team leader. Shared awareness promotes seamless progression from observation to action during trauma resuscitations.

**Team Leaders’ and Team Members’ Roles in Shared Awareness**

Trauma team leaders are central to creating shared awareness. Trauma team members reported that team leaders created shared awareness by getting team members on the same page, defining roles, setting expectations, and addressing people by name when requesting tasks be performed (Raley et al., 2016). In addition, team leaders needed to synthesize and communicate patient findings to team members to reach shared situational understanding (Leenstra et al., 2016), and team members needed to speak up if they had questions or concerns and pay attention to situations as they evolved (Madani et al., 2018).

Most competencies exhibited by trauma team leaders during trauma resuscitations were related to situational awareness (Madani et al., 2018). Leaders’ ability to condense subjective and objective information into an accurate picture of patient status was paramount to successfully managing trauma patients. Team leaders depended on continual feedback from team members to gain this information. Team leaders then discussed assessments and evolving treatment plans
with team members. This back-and-forth sharing of information between team leaders and team members created shared awareness, supporting the goals of team leaders as well as the efficient performance of team members (Madani et al., 2018).

**Shared Awareness Allows Shared Problem-Solving**

Trauma care requires continual problem-solving as patient injuries are discovered and patient responses to interventions become apparent. Shared awareness supports collective problem-solving as all team members are situationally aware and, therefore, able to assist in plan fulfillment. Team participants expressed they were more effective with every team member identifying potential problems during each trauma resuscitation (Raley et al., 2016).

In addition to expertise in treating traumatic injuries, trauma care requires knowledge of logistical procedures such as coordinating imaging studies and arranging interhospital transfers (Lapierre et al., 2019). It is also important to understand resource limitations for each trauma case (e.g., CT scanning unavailable), as limitations can significantly influence treatment plans (Madani et al., 2018). Team members can provide information regarding logistical procedures and resource limitations if they are kept apprised of evolving plans of care (Madani et al., 2018).

**Clear Communication**

Clear communication is crucial during trauma resuscitations when assessments and interventions are happening rapidly and simultaneously by multiple trauma team members (Jacobsson et al., 2012; Madani et al., 2018; Nolan et al., 2017). In these pressured moments, tasks must be completed “accurately and expeditiously” (El-Shafy et al., 2018, p. 62). Therefore, trauma team members utilize specific strategies to ensure clear and error-free communication (Calder et al., 2017; Härgestam et al., 2016; Vuojärvi & Korva, 2020).

**Closed-Loop Communication**
Closed-loop communication (CLC) is a tenet of TeamSTEPPS and CRM and is employed to prevent errors in communication in team settings (El-Shafy et al., 2018; Härgestam et al., 2013; Härgestam et al., 2016; Lapierre et al., 2019). CLC involves three steps: step one, call-out (CO), the initiator delivers a concise message to a single person; step two, check-back, the recipient repeats back the message received; step three, closing-the-loop, the initiator confirms the recipient heard the message correctly (El-Shafy et al., 2018). Not all three steps of CLC are used every time in trauma care. COs are often used alone as team members verbalize observations or notable changes in patients’ statuses without check-back or confirmation taking place afterward (Härgestam et al., 2013).

**CLC Saves Time.** When team members used CLC, there was a significant reduction in time taken to complete specific tasks (medication administration, placement of IV catheters, and obtaining blood samples) (El-Shafy et al., 2018). Similarly, CLC initiated by team leaders during simulated trauma was associated with an increased likelihood of deciding to go to surgery within 15 minutes (Härgestam et al., 2016). Moreover, trauma team members reported clear, directed instructions improved team efficiency (Vuojärvi & Korva, 2020).

**CLC Prevents Communication Errors.** Errors in trauma care are potentially devastating, not just for patients, but for team leaders and members. Trauma team leaders identified failure to obtain confirmation that a delegated task had been completed as a source of error in trauma care (Madani et al., 2018). Team members reported clear instructions, directed to a specific team member, prevented assignments from being left uncompleted (Vuojärvi & Korva, 2020). In addition, team members appreciated it when team leaders confirmed that instructions were correctly heard so they could complete instructions confidently (Lapierre et al., 2019). In addition, team members identified the use of CLC by team leaders as a way to prevent
communication breakdowns during trauma resuscitation (Lapierre et al., 2019; Leenstra et al., 2016).

**CLC is Used Minimally.** Although CLC is known to improve communication accuracy, CLC was not found to be used often in live and simulated trauma resuscitation (El-Shafy et al., 2018; Härgestam et al., 2013). El-Shafy et al. (2018) found that team leaders used CLC for only 26% of their orders, and Härgestam et al. (2013) found that less than three CLC cycles were completed per simulated resuscitation. Despite emphasizing the utility of CLC, trauma team members may have found the steps of CLC to be impractical for most exchanges during resuscitations (El-Shafy et al., 2018; Härgestam et al., 2013).

**Communication Style**

Communication style in trauma care cannot simply be defined by the use of CLC. Jacobsson et al. (2012) found communication between team leaders and team members to be variable and flexible throughout trauma resuscitations. Leaders most often used egalitarian styles, discussing plans and inviting input, but at times established themselves as decision-makers, assuming a more authoritarian style.

During trauma resuscitations, team members’ communications were straightforward (Calder et al., 2017; Molin et al., 2021). Team members engaged in “brief and direct” exchanges, which contributed to team performance (Calder et al., 2017, p. 7). Pure-mode communications, when literal and practical meanings of speech are matched, was the predominant communication style during live trauma resuscitations (Molin et al., 2021). By contrast, mixed-mode communication, when literal and practical meanings do not match (e.g., asking a question when the intent is to advise), adversely affected teamwork, as manifested by lower task management scores (Jung et al., 2018).
**Noise**

A significant hindrance to clear communication during trauma resuscitation is noisy trauma rooms. Noise can be difficult to manage as many professionals must be present to assist with the complex care of trauma patients (Madani et al., 2018; Nolan et al., 2017) and assessments, interventions, and plan-making are happening simultaneously. Noise is a frequent problem in trauma care, and trauma team members described trauma rooms with “too much noise,” “too many people,” and “too much distraction” (Calder et al., 2017, p. 4).

In noisy environments, clear communication is difficult and team members may strain to hear what is being said to them directly and to other team members (Calder et al., 2017; Raley et al., 2016). Noise causes team leaders to speak loudly, situations to feel chaotic (Lapierre et al., 2019), and adversely affects team members’ ability to comprehend updates, respond quickly, and speak up to relay information (Raley et al., 2016).

Noise management is the responsibility of both team members and team leaders. Raley et al. (2016) found team members scored lowest in managing noise produced by themselves. Team members should speak when necessary for patient care but otherwise minimize talk and side conversations to avoid noise and distractions (Raley et al., 2016; Roberts et al., 2014). Team leaders should manage noise in trauma rooms by clearing out nonessential individuals (Madani et al., 2018) and reminding those present to avoid unnecessary talk (Roberts et al., 2014).

**Team Leader Strategies**

Team leaders are recognized as having a significant influence on trauma team function (Courtenay et al., 2013; Jacobsson et al., 2012; Kassam et al., 2019). Often, the role of team leader is filled by trauma surgeons or ED physicians (Burke et al., 2017; Jacobsson et al., 2012). Team leaders have the complex job of simultaneously responding to input from team members
and directing them (Murphy et al., 2019). Leadership style affects team culture and how comfortable team members feel offering input (Härgestam et al., 2013; Jacobsson et al., 2012). As such, team leaders should promote collaboration between themselves and team members to foster a culture of cooperation in trauma care (Courtenay et al., 2013; Johnsen et al., 2017).

**Team Leader Skills**

**Direct the Team.** Team leaders need to be proficient at directing team members toward shared objectives. Directing team members involves informing them of treatment and contingency plans early in the course of care (Madani et al., 2018) and coordinating actions for efficient team performance (Calder et al., 2017; Leenstra et al., 2016). If possible, team leaders should remain hands-off during trauma resuscitations and delegate interventions to other medical providers rather than perform them themselves. Delegating interventions keeps team leaders in optimal positions to maintain an overall view of resuscitations (Calder et al., 2017; Leenstra et al., 2016).

**Prioritize.** Trauma care requires team leaders to address emergent, urgent, and non-urgent issues. When describing their own responsibilities, team leaders reported that in addition to technical skills of identifying and treating injuries, trauma team leaders needed to demonstrate skill in prioritizing which conditions to address immediately and which to delay (Calder et al., 2017; Madani et al., 2018).

**Manage Communication.** Team leaders must manage communication to prevent errors (Leenstra et al., 2016). CLC is a helpful tool to prevent mistakes when requesting tasks or interventions. Interestingly, Härgestam et al. (2013) found when CLC was initiated by team leaders, as opposed to team members, there was an increased likelihood of timely decision-
making toward definitive care, suggesting when team leaders initiated communications teams functioned more optimally.

**Involve Team Members.** Team leaders must make decisions with input from team members (Madani et al., 2018). To promote an environment where team members feel comfortable offering input, team leaders should avoid intimidating behaviors, making collaboration less likely and errors more likely, and, instead, tactfully coach team members to further their development and autonomy (Leenstra et al., 2016).

**Display Calmness.** Team leaders play a significant role in setting the tone during trauma resuscitations. As such, displaying calmness and communicating with team members in a controlled manner are valuable skills for trauma team leaders to develop to minimize negative experiences for those present (Burke et al., 2017). Trauma resuscitations can become tense and stressful. Team leaders able to cope with this pressure were identified as more effective leaders (Madani et al., 2018).

**Nurse Team Leaders**

Creating a novel role of “nurse team leader” was explored and found to benefit team function. Nurse team leaders improved communication and role identification and decreased feelings of intimidation among trauma team members (Clements et al., 2015). Nurse team leaders were also found to facilitate teamwork (Lapierre et al., 2019).

**Single Team Leader**

Team leaders, like team members, needed to be identified, especially when more than one medical provider was involved in patient care (Lapierre et al., 2019; Madani et al., 2018). Having more than one team leader confused team members. Team members did not know whom to address (Vuojärvi & Korva, 2020) and “who to listen to” (Lapierre et al., 2019, p. 316). When
team leadership was transferred to another person, clear communication of this transfer to the entire team was necessary (Vuojärvi & Korva, 2020).

**Role Identification**

Role identification emerged as a key feature in enhancing communication among trauma team members during trauma resuscitation (Lapierre et al., 2019; Vuojärvi & Korva, 2020). When trauma activations occur, several professionals, including some working primarily outside of EDs, report to trauma rooms in addition to the usual ED staff of nurses, technicians, and providers. Staff may be unfamiliar with each other’s names and fields of expertise (Burke et al., 2017). For example, nurses may not know which person the pharmacist is and, therefore, not know whom to address for medication requests or questions.

Trauma team members emphasized role identification as an area for improvement in trauma care because, in its absence, certain team members with valuable skills, were underutilized and unable to contribute fully to the team. This misstep led to unfulfilled expectations of team leaders and frustration for team leaders and team members alike (Burke et al., 2017). Trauma team members reported clarity of roles would have improved team efficiency (Vuojärvi & Korva, 2020).

Lack of clarity in role identification made it difficult for team members to plan and carry out tasks. Role assignment ensured all tasks were attended to and no one team member was overburdened (Vuojärvi & Korva, 2020). It was important for each team member to maintain their role during the resuscitation to prevent confusion (Lapierre et al., 2019).

Trauma team members felt role distribution and identification before patient arrival improved communication during trauma resuscitations (Lapierre et al., 2019). Team leaders,
ideally, initiate this process while staff are assembled and waiting for patient arrival. Early role identification supports team leader performance (Madani et al., 2018).

**Team Briefing**

Team briefings are performed in the few minutes trauma teams have between assembling in the trauma room and patient arrival. This one- to two-minute timeout allows team members to make introductions, share what is known about the patient, and discuss initial plans. Team briefings, often led by team leaders, have been shown to improve communication and trauma team function (Leenstra et al., 2016; Nolan et al., 2017; Steinemann et al., 2016).

Nolan et al. (2017) explored the concept of the “trauma time-out” (p. 170), similar to procedural time-outs implemented in healthcare settings to improve safety during procedures. Trauma time-outs are used to brief team members on prehospital reports, permit time for introductions and role assignments, and inform teams of initial priorities upon patient arrival. Researchers reported 75% or more of participants reported trauma time-outs improved teams’ understanding of incoming patients’ conditions, team members’ roles, and plans of care. Trauma time-outs were accomplished in less than five minutes, and often only one minute (Nolan et al., 2017).

Briefing of trauma teams before patient arrival was shown to promote agreement between nurses and physicians on immediate care priorities, resulted in higher leadership ratings and improved completion of clinical tasks. Ninety-seven percent of nurses agreed that briefing is important, but only 46% reported it was performed well (Steinemann et al., 2016).

Trauma team members highlighted the importance of discussing and developing strategies based on information obtained from prehospital reports and then sharing these
strategies with the rest of the team members to allow time to prepare for expected interventions (Leenstra et al., 2016).

**Discussion**

**Shared Awareness**

The most commonly addressed theme in this review is shared awareness. Without exception, all studies on shared awareness found its implementation among trauma teams beneficial and even crucial to high-level performance. Shared awareness is built by team members verbalizing data, observations, and updates to the team without prompting. Frequent information sharing is an especially important skill for trauma team leaders to exercise. Shared awareness allows trauma teams to coordinate actions, use collective problem-solving skills, leverage group situational awareness to form appropriately evolving plans of care, and provide information to assist with plan fulfillment.

**Clear Communication**

Closed-loop communication (CLC) is employed to ensure communications are correctly understood and was helpful when used during medication administration, IV line placement, and obtaining blood samples (El-Shafy et al., 2018). Overall, however, CLC may have limited utility in trauma care and was found to be used infrequently (El-Shafy et al., 2018; Härgestam et al., 2013). While it is important to confirm medication dosages, successful IV placement, and blood tests ordered, all communication in trauma care may not require deliberate confirmation that messages were heard correctly. That said, four studies reported team members identified the lack of CLC usage as a potential source of error, missed assignments, and uncertainty (Lapierre et al., 2019; Leenstra et al., 2016; Madani et al., 2018; Vuojärvi & Korva, 2020). Therefore, trauma
team members and leaders need to discern which types of communications require CLC and which do not and be cognizant of the risks of misunderstandings.

To facilitate clear communication, exchanges during trauma resuscitation should be brief and direct. Also, team leaders and members need to minimize noise in trauma rooms by avoiding unnecessary talk and clearing the room of nonessential individuals.

**Team Leaders**

Team leaders have a significant impact on trauma team function and must be proficient in technical aspects of trauma care, such as injury identification and treatment, and nontechnical aspects, such as leadership and communication. Team leaders serve to centralize communication for trauma teams (Johnsen et al., 2017) by simultaneously responding to input from team members and directing team actions. In addition, team leaders foster positive atmospheres in trauma rooms by promoting collaboration between themselves and team members and maintaining calm and controlled communications. Nurse team leaders were found to positively influence trauma team function and could be considered in trauma centers that do not currently employ them.

Leenstra et al. (2015) referred to trauma team leaders delegating the performance of bedside interventions to other medical providers to maintain oversight of resuscitations. Of note, their study was conducted in academic hospital settings where residents, emergency physicians, and trauma surgeons are available to fulfill the role of trauma team leader. In such settings, trauma team leaders can defer specialized interventions to other medical providers. However, trauma team leaders may not have this option in hospitals with fewer resources.

**Role Identification**
Trauma teams include several professions, not all working primarily in EDs. Trauma team composition changes with each shift. Some team members, including team leaders, may not be familiar with everyone working on the team during trauma activations. This lack of familiarity impedes effective communication. To prevent this obstacle, role identification should take place before patient arrival. Early role identification allows team members to plan and carry out tasks and ensures no team member is overly burdened with tasks that could be more equally distributed. One medical provider should be identified as team leader to prevent confusion among team members regarding whom to address. To leverage the valuable skills of team members, team leaders should implement the practice of role identification.

**Team Briefing**

Team briefings, or trauma time-outs, allow trauma teams time to discuss important details before trauma patients arrive. These details can include patient information provided by prehospital staff, introductions and role assignments, and proposed initial plans of care. This short discussion contributes significantly to forming shared awareness among team members from the beginning and sets the stage for more smoothly run trauma activations.

**Limitations**

Seventeen studies were conducted during trauma resuscitations. Five were conducted during live trauma and 12 were conducted during simulation. Communication among trauma teams during simulated trauma may be different than during live trauma and may limit the relevance of results.

Nine studies were conducted in the U.S., eight in Europe, three in Canada, and one in Australia. One study was conducted in both the U.S. and Canada. Healthcare systems vary by country and trauma team composition may be dissimilar, affecting the generalizability of results.
Eleven studies were conducted in major trauma centers, three in lower level trauma centers, and six did not report trauma level. Eight out of the nine studies conducted in the U.S. took place in Level I trauma centers. Trauma team composition in trauma centers of lower designation may differ, although staff in these trauma centers care for trauma patients regularly. Trauma team leaders may not have other medical providers available to assist with intubation or specialized interventions so their role and responsibilities during trauma resuscitation may not be comparable to those of trauma team leaders in Level I trauma centers. This may also affect generalizability of review findings.

**Conclusion**

Trauma teams throughout the country are tasked with stabilizing and treating severely injured patients. Their work is unpredictable and must be carried out quickly to improve patient outcomes. Effective team communication is imperative. Team members communicating to form shared awareness supports high-level team function. Clear communication is essential. Teams should use closed-loop communication when appropriate, use brief and direct statements, and limit noise in trauma rooms. Team leaders support trauma team performance by providing frequent updates on patient status and plans of care and fostering a culture of collaboration between themselves and team members. Before patient arrival, team briefing and role identification, including that of one team leader, allows trauma teams to participate in trauma activations with clear purpose and direction from the beginning.
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