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EXPLORING THE EFFECTS OF HEALTHCARE TEAM DYNAMICS ON PATIENT CARE

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Abstract
The health care industry is one of the largest. According to estimates, 85% of people in the US alone have at least one health care encounter year, with at least 25% of those encounters involving four or nine visits.We seek to address this question in this narrative review by first providing an overview of the evidence from teamwork triumphs and failures, and then outlining the benefits of system redesign and efficient team training for staff and patient safety. The most important resource for the adaptable reactions and dynamic modifications required to handle new circumstances and uphold patient care is believed to be humans. Clinical professionals, administrative personnel, patients, and their loved ones must work together as a multidisciplinary team during a single visit. Various clinicians from various organizations frequently make multiple visits. Poor teaming methods and ineffective care coordination pose a risk to public health. We also outline possible directions for further study and point out chances to comprehend how evidence-based teamwork ideas are translated, shared, and applied in real-world settings.
Keywords: Health care, environments, collaboration, organizations

1. INTRODUCTION

Today, teams, not individuals, are in charge of healthcare. We have defined guidelines for team training based on thirty years of study on the behaviors of high-performing teams, which has been shown to have positive effects on staff wellness and patient safety. Here, situation awareness is the lens through which we examine team performance [1]. To treat patients safely and effectively, situation awareness must always be maintained. The dynamic process of recognizing environmental signs, deciphering their meaning, and forecasting potential developments is known as situation awareness. Active team participation can enhance situation awareness, information processing, and next-step planning in the setting of acute clinical treatment [2]. The notion of situation awareness at the team level, the conditions necessary to sustain team situation awareness, and the connection between shared mental models, team performance, and team situation awareness are all examined in this narrative review[11]. Our ultimate objective is to assist doctors in establishing the prerequisites for highly effective teams, which will ultimately enhance clinical care safety [4].

In addition to the therapeutic setting, context awareness also refers to the intricate interactions between organizational, psychological, and environmental elements that will affect the team's performance [3]. The preservation of adequate situational awareness is the most basic definition of situation awareness [6]. Inaccuracies in assessing the current state of affairs can quickly lead to poor mental models, poor comprehension, poor future event projection, and finally poor teamwork. Safety-II methods for enhancing teamwork usually seek to create robust systems where as many things as possible go right in order to transform positive results into greater ones. However, a dysfunctional culture, organizational structures or procedures, the physical workspace, and the team members themselves are among additional factors that can prevent healthcare teams from collaborating as effectively as they could [16]. It may be important to address these harmful structural and cultural pressures on collaboration in order to go forward with the beneficial Safety-II approaches. Effective communication among team members is crucial to effectiveness, despite the complexity and multifaceted nature of teamwork. However, this communication is not always straightforward.

2. REVIEW OF LITERATURE

Hierarchical team structures, individual power disparities, and organizational barriers such as dispersed, poorly defined, or ad hoc teams can all further impair communication and team effectiveness[5]. Despite the abundance of studies on effective teamwork, communication breakdowns are still a major cause of errors and near-misses in the medical field, accounting for 60–70% of serious patient incidents. The primary cause of sentinel events—serious adverse events that, in theory, should never occur yet cause significant patient suffering or death—is communication breakdowns, according to the Joint Commission's 2022 Report [8]. These sentinel episodes can be brought on by insufficient staff-to-staff communication of crucial information or by team members not having a sufficiently common understanding of the issue. For instance, better cooperation may be able to stop intubation errors, which are still an avoidable cause of mortality [10]. According to recently published guidelines on reducing oesophageal intubation, team communication is crucial to secure patient care[13].

Three meta-analyses, numerous reviews, and several new research papers now support the idea that team training can increase team performance effectiveness and, consequently, patient safety. If employees are satisfied with their workplace culture, they are more likely to participate in important cooperation activities like voicing problems or thoughts. Burnout and a scarcity of hospital employees are crises in many nations [12]. personnel' positive views of teamwork were positively correlated with their reported job satisfaction and work engagement, according to a study conducted on British NHS personnel [7]. Employee well-being, less burnout, and decreased turnover are all correlated with positive views of teamwork and communication. Examining the causes of the beneficial effects of effective teamwork on results brings us to the fundamental idea of situation awareness. The dynamic process of recognizing environmental signs, deciphering their meaning, and forecasting potential developments is known as situation awareness. Situation awareness in teams refers to understanding the roles and behaviors of other team members, assigning tasks efficiently, and knowing who may be relied upon at any time to deal with issues or crises.

3. MATERIALS AND METHODS

Cognitive function is directly impacted by stress. Stress can improve performance by focusing the mind and attention up to a certain extent, but after that, it starts to negatively impact performance. Tunnel vision is characterized by a tendency to ignore contradicting cues or evidence in favor of concentrating on a limited number of environmental cues, particularly those that support the presumptive diagnosis, which results in a loss of situation awareness, according to research on the cognitive effects of stress [14]. A doctor may struggle to understand or assimilate the volume of important information when under stress. A restricted number of diagnostic alternatives will be evaluated, a strategy that isn't functioning may not be revised, and the patient may be harmed since only some indicators will be noticed and responded to while others will be disregarded. Team situation awareness is crucial in this situation [9].

Health care providers collaborate to accomplish a common objective in the operating room. This calls for team situation awareness in addition to individual scenario awareness. The most recent PUMA guidelines for preventing esophageal intubation serve as an excellent example of this, as they explicitly require the team to continuously monitor critical patient data and openly discuss information throughout the process, including the view of the vocal cords. The two most important tactics in clinical emergencies are managing workload and keeping situation awareness. The cornerstone of an effective team atmosphere Before anything goes wrong, awareness can be raised by, for example, holding a briefing to ensure that everyone is aware of the patient's condition and any potential issues, as well as by defining each team member's roles and responsibilities in light of their diverse backgrounds and areas of expertise.

4. RESULT AND DISCUSSION

Negative circumstances have been found to be impacted by the silence of others. The healthcare hierarchy, self-doubt, the fear of a negative reaction, and the perceived division of responsibilities among various professional groups are well-known obstacles to speaking up. Techniques that encourage graded assertiveness are one of the suggested remedies, but there isn't much proof that these tactics work[15].

Table1:DemographicDetailsofStudySubjects

Parameter	**Numberofresponses(%)**
What are the effects of electronic health records on team communication?	

How do healthcare teams prioritize patient-centered care?	180(8.8)
What role does feedback play in improving team dynamics and patient care?	215(10.6)
How do healthcare teams manage patient handoffs and transitions?	485(23.9)
What are the effects of team training programs on patient care?	561(27.7)
How do healthcare teams collaborate with other healthcare professionals?	510(25.1)
What is the impact of team diversity on patient care and outcomes?	170(8.3)
How do healthcare teams communicate with patients and families?	227(11.1)
What are the effects of burnout on healthcare team dynamics and patient care?	478(23.4)
How do healthcare teams handle high-pressure situations?	578(28.3)
What role does trust play in healthcare team dynamics and patient care?	501(24.5)
How do team dynamics influence the adoption of evidence-based practices?	86(4.2)
What are the benefits and challenges of interdisciplinary healthcare teams?	96 (6.7)
How do healthcare teams prioritize tasks and manage workload?	180(8.8)
What is the impact of team leadership on patient care and outcomes?	215(10.6)
How do healthcare teams manage conflicts and disagreements?	485(23.9)
What are the effects of hierarchical structures on team dynamics and patient care?	561(27.7)
How does team cohesion influence patient satisfaction?	510(25.1)
How do communication patterns among healthcare team members impact patient outcomes?	74(3.65)
What role does teamwork play in reducing medical errors?	350(8.6)
What role does trust play in healthcare team dynamics and patient care?	442(10.9)
How do team dynamics influence the adoption of evidence-based practices?	963(23.7)
What are the benefits and challenges of interdisciplinary healthcare teams?	1139(28)
How do healthcare teams prioritize tasks and manage workload?	1011 (24.9)
What is the impact of team leadership on patient care and outcomes?	160(3.9
How do healthcare teams manage conflicts and disagreements?	350(8.6)

What are the effects of hierarchical structures on team dynamics and patient care?	442(10.9)
How does team cohesion influence patient satisfaction?	963(23.7)
What role does emotional intelligence play in team dynamics and patient care?	1139(28)
How do healthcare teams navigate ethical dilemmas?	1011 (24.9)
How do healthcare teams foster a culture of safety?	160(3.9
What are the effects of team dynamics on patient engagement?	350(8.6)
How do healthcare teams collaborate with patients and families in care planning?	442(10.9)

Those in charge of leadership are accountable for making sure team members express their concerns. By utilizing the team members' collective knowledge and experience, inclusive leadership can enhance performance and is suggested as a means of establishing psychological stability. Senior employees may foster an atmosphere where employees feel appreciated and included in decision-making, which will encourage them to share their thoughts, worries, and observations.

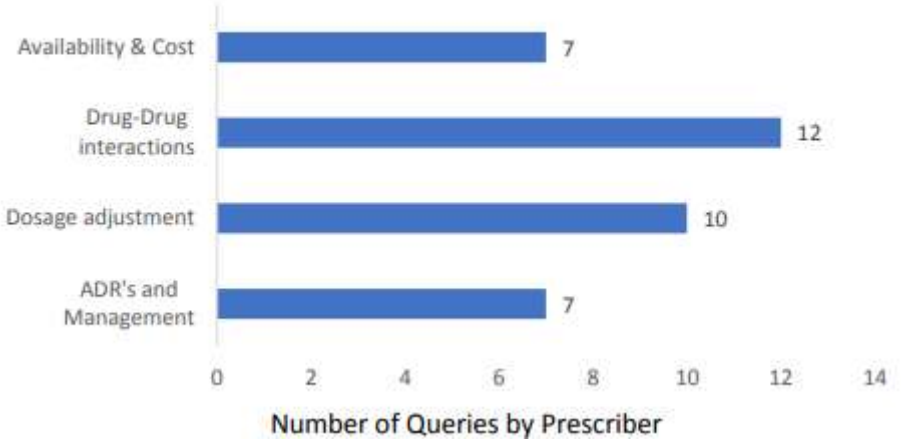

Figure 1: Information Sought by Prescriber

No one may notice the worsening circumstances or proclaim a crisis in a "slow burn," which is a crucial event that develops gradually. They can be preoccupied with the established monitoring parameters, look for proof to back up the current strategy, and overlook other background activity.

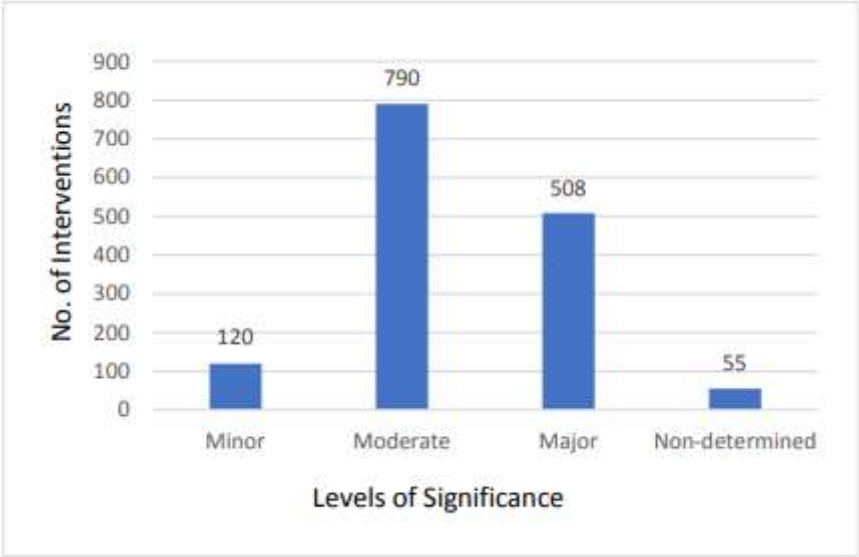

Figure 2: Significance of Pharmacist Interventions

Especially at the team level, if excellent situation awareness is not achieved, the team may have diverse understandings and assumptions. As a result, tasks could be repeated or omitted in the operating room.

Figure 3: Level of Decision Making by Pharmacist

Nakarada-Kordic and colleagues, for instance, discovered that team members generally agreed 87% of the time regarding when important activities should be completed in the operating room during surgery and 70% of the time regarding who should complete them. Only 39% of the time, however, were specific tasks agreed upon. Given the required specializations of team members, we would not anticipate that their mental models would be the same. Nonetheless, the very frequent incidence of communication breakdowns in clinical teams also indicates that there is still a great deal of room for development through improved mental model alignment.

5. CONCLUSION

6.

Much work has been done to show that team training increases patient safety. Simulation studies' evaluations might restrict their applicability to real-world situations, while real-world studies run the danger of confounding variables due to the various impacts on patient or organizational outcomes. We have an issue with teamwork and communication, and it is still largely unresolved, according to a new editorial in the BMJ. In addition to activities that go beyond urging healthcare workers to perform better, new study might examine the underlying societal,

organizational, and cultural factors that contribute to the development of shared situation awareness. Our patients have a right to expect optimal collaboration from medical personnel, as it is crucial for patient safety. High-functioning teams require team situation awareness, which is made possible by psychological safety and succinct, unambiguous communication. It is not a choice; providing high-quality healthcare requires interdisciplinary team training. It might also demonstrate a company's commitment to providing patients with the greatest team-based care available.

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