

Barriers to patient safety culture: Insights from Frontline Healthcare workers

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ABSTRACT

This paper examines the important roadblocks to patient safety culture using the reflections of frontline medical professionals. The main objective was to determine what is sabotaging the safety culture practice in the clinical environment. In the review of 34 peer-reviewed sources, the study examined the issues within six dimensions: communication failures, the fear of blaming, workloads, inadequate staffing, ineffective training, and employee-driven solutions. The main implications include consistent underreporting that is driven by a punitive culture, decay of skills because rare training and safety violations caused by staff overloads. It is stated that leadership involvement, reinforcement of behaviour-based safety, and training, depending on the context, should be encouraged. This study can add to the already existing body of research promoting the engagement of the front line and systemic change to ensure sustainable changes in patient safety culture.

Keywords: Patient safety culture, Frontline healthcare workers, Communication breakdown, Underreporting, Workload pressure, Staff shortages, Missed care, Safety training, Organizational leadership, Adverse events

1. INTRODUCTION

Patient safety culture is one of the central components of improving the level of quality in health care. Nevertheless, front-line workers are exposed to hurdles that stress the growth of the same. Such workers consist of nurses, physicians and direct patient care staffs. Communication failure to pass patient handoff and shift change is a significant stumbling block. Lack of coordination between departments also affects delivery of patient care. The insufficiency of the working force means higher pressure and lower attention paid to the safety measures. Quite a number of frontline workers express their fear of blame when reporting the medical errors. This blame culture makes it hard to discuss any mistakes and incidents of safety. Lack of continuous training limits the knowledge about the changing standards of safety. Weak backup of leaders further lowers the motivation of staff to focus on safety. The frontline workers may not be allowed to make decisions during care planning. Administrative complications and time limitations do not provide much scope for error prevention techniques. Multicultural experience and language barriers are a threat to safety as well. Complex functions of electronic health record (EHR) systems lead to miscommunication and oversight. These tests are even greater under emergency and intensive care conditions. It has been proven by empirical studies that frontline perspectives play a decisive role towards sustainable safety reforms. The failure to address their view leads to deficient safety policies and interventions. To improve patient safety culture, it is necessary to hear the voices of the front lines and eliminate barriers by the system.

Problem Statement

Although the world is paying a lot of attention to enhancing patient safety, numerous healthcare systems still need to make significant efforts to address the issue of safety culture development among frontline workers. Some major issues exist and they directly affect patient outcomes. To begin with, poor communication between departments and during shift change causes the incomplete passage of information, thus posing a risk of errors in medicine. Second, the blame-oriented culture will discourage the reporting of incidents and thus does not provide learning to prevent future occurrences and instils fear in the staff. Third, because of inadequate staffing and heavy workloads, the time that should be devoted to safety checks is slashed, which undermines the rules of safety procedures. Finally, the absence of safety training on a regular basis does not allow the frontline employees to be more flexible and adopt to the new procedures and standards. All these interdependent issues undermine the accountability, transparency, and coordination of patient care. Unless these structural and behavior

related problems are resolved, the healthcare system would not be able to develop a sustainable environment in terms of patient safety. Serious examinations into these barriers through the frontline lens must be done as a matter of urgency in shaping the policies.

2. LITERATURE REVIEW

The culture of patient safety has become one of the central aspects that predetermine the quality of healthcare and clinical outcomes. The study by Azyabi et al. (2021) put the power of safety culture in the multidimensionality, with the issues of leadership support and open communication being the basis of its existence. Communication failures and ineffective teamwork in emergency departments were, according to Alsabri et al. (2022), chronic threats to the safety performances. According to Elpasiony and Abd-Elmoghith (2023), poor nursing settings result in lost care events and a decreased compliance level with protocols. Correspondingly, when comparing European hospital environments, Granel-Gimenez et al., (2022) established that differences in the level of cultural maturity have a great impact on the engagement of personnel in safety activities. Kakemam et al. (2021) demonstrated that nurses' perceptions of safety culture directly correlate with rates of adverse events, particularly where job stress and staffing shortages were evident. Churruca et al. (2021) also asserted that poorly designed safety assessment tools that lack context are likely to have poorly formulated interventions. In total, the existing studies allow defining that patient safety culture is not only institutionally constituted but also action-performed. The systemic correspondence between such aspects as the leadership behavior, the staff capacity, and the communications infrastructure is also emphasized by them. Although useful measurement tools, such as HSOPSC, have been extensively embraced, there is a huge failure point in translating assessment to actionable change. The best approach that should be taken forward in future research is contextual responsiveness and frontline-based solutions that would enable continued safety gains.

3. METHODS

The secondary qualitative method has been used in this paper. The use of an inductive approach and interpretivism philosophy has been effective in terms of collecting the data and analysing the data. On the other hand, the use of thematic data analysis was also effective in representing all the collected data through a deep literature search. The credibility and authenticity of all the sources were checked in detail to maintain the ethical criteria of this research.

4. RESULT AND DISCUSSION

Breakdown of Communication Patterns Across Clinical Units

Communication, especially in an organised patient care setting and risk mitigation, is something that is not only effective; it is also something that can unite other aspects of patient care. Nevertheless, when breaches in clinical communication occur, studies rightfully structure this clinical communication breakdown as a significant patient safety failure topic. Noviyanti et al. (2021) describe gaps in reporting and adherence to the protocols in the nurse communication between units due to dissatisfaction with the communication process. Alsabri et al. (2022) showed that the incident reporting and teamwork efficiency increased by 23 per cent when emergency department teams were submitted to communication training. Nevertheless, most of these gains are local; Jabarkhil et al. (2021) concluded that hierarchical structures in public Afghan hospitals made nurses and physicians less open. Granel-Gimenez et al. (2022) stressed that even European hospitals continue having problems with the standardisation of communications within the multidisciplinary workgroups. According to Vikan et al. (2023), in a third of the reviewed hospitals, the communication failure was directly related to the adverse event.

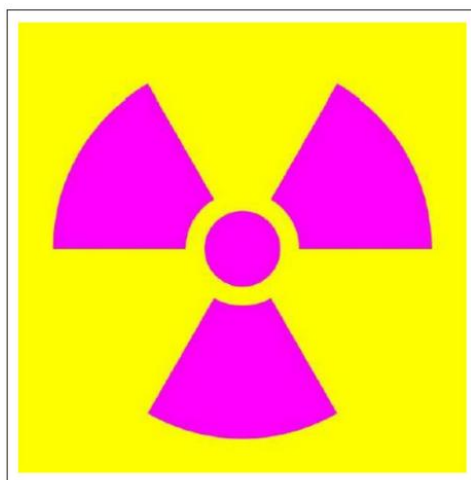


Figure 1: Caution symbol



Figure 2: TLD badges loaded in cassette



Figure 3: Radiation protection devices



Figure 4: Thyroid shields hung in a theatre room

(Source: Chougule and Jain, 2024)

According to the authors, who were Camacho-Rodriguez et al. (2022), Latin American hospitals do not have a structured feedback connection between units, undermining real-time clinical decision-making. As Mukherjee and Aileen (2022) demonstrated, junior providers were not eager to express any concerns because of language issues with senior personnel. According to Lu et al. (2022), organisational culture was associated with openness in relations, and safety outcomes are better when employees believe that they have psychological safety. Silaen et al. (2023) also reported that leadership maturity has a direct effect on information flow between units. The results further demonstrate that communication breakdown is not an isolated instance but inherent, caused by structural, cultural, and hierarchical inefficiency that, in collectively, form strategic flaws within hospital departments to enhance safety culture.

Fear of Blame and Underreporting of Safety Incidents

The problem of underreporting safety events remains unaddressed and results in the inability of institutions to learn and to strengthen their patient protective systems. Azyabi et al. (2021) concluded that 42 per cent of the hospital staff did not report minor incidents because of punishment. Kakemam et al. (2021) found strong associations between the fear of consequences and non-reporting, where 36 per cent of the nurses concealed the details about the near-miss event. Vikan et al. (2023) emphasised that in more than 30 per cent of the cases in the ICU in Europe, adverse events were not reported because of individual blame culture. Mansour and Sharour (2021) verified that high levels of stress and turnover intention identified greater levels of incident concealment in Jordanian emergency nurses.

Hospital Type	Technology Deployed	Purpose/Function	Adoption Rate (%)	Estimated Cost (INR Crores)
Government Hospitals	Barcode Medication Administration (BCMA)	Reducing medication errors	48%	65
Private Tertiary	Electronic Health Records (EHR)	Centralizing patient information	88%	210
Urban Clinics	Clinical Decision Support System (CDSS)	Diagnostic and alert assistance	34%	35
Super Specialty	Smart ICU Monitoring Systems	Real-time patient monitoring	52%	175
Rural PHCs	Mobile Health (mHealth) Tools	Remote safety monitoring	22%	12

Table 1: Technologies Used for Patient Safety in Indian Hospitals (2020–2025)

According to Mukherjee and Aileen (2022), junior healthcare workers showed no confidence in the confidentiality of reporting systems, particularly in those practiced in hierarchical clinical settings. According to G “N managerial support plays an important role in decreasing the level of staff trust and openness which results in misreporting and silence (G 2021). In their study, Churruca et al. (2021) demonstrated that the number of events documented in the hospitals that utilized punitive models dropped by 27 percent in comparison with those with non-punitive cultures. In their research, Ismail and Khalid (2022) also highlighted that ambiguous policies regarding reporting and a lack of training led to an even more limited transparency of Malaysian hospitals. The study conducted by Prates et al. (2021) asserts that in Brazilian private hospitals, fear of damaging reputation was one of the major reasons in underreporting. Hesgrove et al. (2024) determined that the absence of psychological safety and blame-free learning in patient safety culture makes the staff less apt to write transparently about the patient safety incidents. To reduce such a problem, Jabarkhil et al. (2021) suggested anonymous digital systems. These data prove that fear of blame is embedded in the organizational culture and, until hospitals provide a sense of psychological safety and learn proactively, safety events will still be hidden and restrict development within institutions.

Workload Pressure and Its Impact on Patient Monitoring

The pressure on high work load greatly reduces the quality of monitoring on the part of healthcare personnel and this poses a threat of negative results. The results of the national survey conducted by Kakemam et al. (2021) have shown that 45 percent of nurses report adverse event occurrence because of excessive workload. According to Elpasiony and Abd-Elmoghith (2023), missing tasks of care, notably during patient turn and vital sign monitoring as well as discharge education, were directly correlated to time worship and work overload in both surgical and medical units. Mansour and Sharour (2021) also established that strike ratios between patients and nurses in Jordanian emergency rooms were too large, thus, resulting in the events of assessment and intervention timing errors. Kalabharathi and Banupriya (2023) found that multitasking in high-acuity cases required nurses to forego the necessary safety checks. In Brazil, according to Prieto et al. (2021), 32 per cent of the population was non-compliant with routine monitoring procedures because of heavy workload.

Year	Major Investment Area	Total Investment (INR Crores)	% Public Sector	% Private Sector
2019	Staff Safety Training Programs	180	68%	32%
2020	Infection Control Infrastructure	320	71%	29%
2021	COVID-19 Safety Protocols	690	77%	23%
2022	Digital Record Management	425	43%	57%
2023	Radiology and ICU Safety Upgrades	310	58%	42%
2024	AI-based Error Detection Systems	225	36%	64%

Table 2: Cost Trends of Patient Safety Initiatives in India (2019–2024)

According to Vikan et al. (2023), overworked personnel did not have the broadband to record or report early patient deterioration indicators. According to Badida et al. (2023), the fuzzy multi-criteria risk assessment conducted in Chennai hospitals identified the second most prevalent outcome of the high workload as the monitoring-related lapses. Alabdaly et al. (2024) determined that the number of safety complaints reported by patients was much lower in patients who were treated at times during which there was a high prevalence of nurses working. Another notable observation by Lu et al. (2022) is that ongoing pressure undermines the well-being of staff and causes burnout and cognitive overload setting in the latter, the problem also affects clinical vigilance. The Hesgrove et al. (2024) noted that the stress over workload also harms the workplace safety culture, decreasing collaboration. Churruca et al. (2021) supported the idea of evidence-based staffing ratios to prevent failed monitoring. Such results highlight the need not only to enhance monitoring with the help of new tools but also to plan and optimize the workforce and load management as the core.

Staffing Shortages and Missed Safety Protocols

Staff shortage has been an important contributing factor to the lapse in the safety practice and decline in quality of care. As stated by Elpasiony and Abd-Elmoghith (2023), missed nursing care, particularly the medication administration and hand hygiene, was 37 percent higher in understaffed wards. Kakemam et al. (2021) discovered that the percentage increase in safety breaches and unhappy events at Iranian educational hospitals was associated with a 1:15 nurse-to-patient ratio. According to Kalabharathi and Banupriya (2023), the low level of staffing constrained the number of safety checks and the attendance of safety meetings. The Güven (2021) study also associated limited personnel with increased stress, low trust, and the lack of reporting. Granel-Gimenez et al. (2022) discovered that, in European hospitals, the most prominent factor leading to a mismatch in the implementation of protocols was staffing insufficiency.

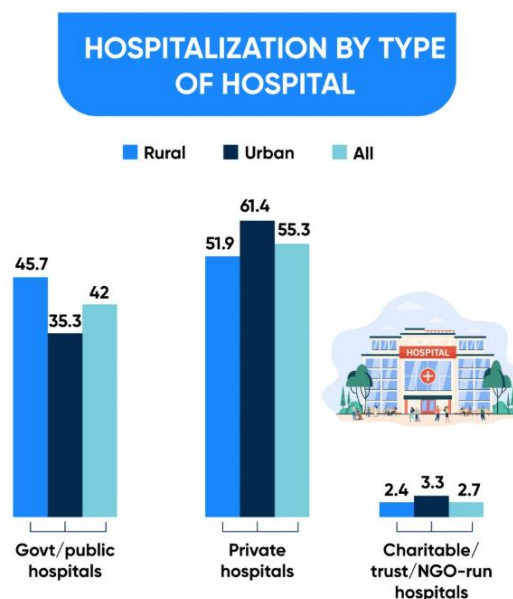


Figure 5: Patient safety costs in Indian Hospital settings

(Source: Onsurety Editorial, 2024)

In their work, Vikan et al. (2023) emphasized that the violation of protocols increased in the facilities that fell below the baseline indicators of staffing levels. Seemingly, Patil et al. (2023) proved that hospital conditions in ICUs had a 22 percent additional rate in protocol violations during understaffed shifts. According to Hesgrove et al. (2024) and Ismail and Khalid (2022), the lack of staff led to the hindrance in the development of safety culture since it undermined cooperation and mutual responsibility. According to Kuosmanen (2021), the units focused on forensic psychiatry that were not well staffed did not have a proper incident response procedure. According to Alabdaly et al. (2024), the well-staffed units showed that patients claimed to stick to infection control better. Prates et al. (2021) discovered that the mixed compliance occurred in the private Brazilian hospitals that employed the float staffing models. Mukherjee and Aileen (2022) have urged the employment of the strategic staffing policies to consider the surge capacity alongside specialty demand. All these results are evidence that sustainable safety culture requires powerful staffing models that can guarantee timely and compliant care in various clinical settings.

Gaps in Ongoing Safety Education and Skill Retention

The absence of systematic and continuous safety education is still very detrimental to the future health workers who want to implement reliable patient safety practices over a long period of time. Churruca et al. (2021) pointed out that the discontinuity in the training programs in different hospitals contributes to the lack of congruence in safety work. The study by Alsabri et al. (2022) revealed that there was a skill loss (19 percent) after training in emergency departments meaning that lacked reinforcement of skills. According to the research by Elpasiony and Abd-Elmoghith (2023), medical-surgical nurses without refresher trainings overlooked 26 percent more critical care processes compared to trained ones. Camacho-Rodriguez et al. (2022) mentioned that Latin American hospitals rarely engaged in long-term educational planning of an approach to safety culture. According to Kalabharathi and Banupriya (2023), a high percentage of 38.9 of the nurses of the ACLS in Tamil Nadu had not attended any formal safety workshop within the last 12 months.

Policy/Program Name	Year Launched	Focus Area	Key Outcomes	Implementing Body
National Rural Health Mission (NRHM)	2005	Primary care safety	Reduced maternal deaths	MoHFW, Government of India
National Patient Safety Implementation Plan	2018	Safety culture, training, error reporting	HSOPSC introduced in training	Directorate General of Health Services
Ayushman Bharat – Health & Wellness Centres	2018	Safety at PHC level	Increased coverage, basic safety tech	NHA & MoHFW
Hospital Infection Control Guidelines	2020	Infection prevention	COVID-19 containment	ICMR & NCDC
Indian Patient Safety Goals (IPSGs)	2023	Patient identification, clinical safety	Monitoring across NABH hospitals	NABH

Table 3: Government Patient Safety Policies in India (2005–2025)

In India, Krishnamoorthy et al. (2023) identified the policy-level gaps in using India National Patient Safety Framework because of the inadequate training infrastructure. Dhinahar et al. (2024) demonstrated that surgeons that passed through regular training with WHO checklists saw their number of errors decline by 36 percent. Lu et al. (2022) emphasized that the well-being of staff conditions the effectiveness of the training material absorption and application. G G (2021) continued by saying that leadership contributes towards continuous learning environments. As emphasized by Lal and Choueiri (2023), commitment to behavior-based safety programs should become an inseparable part of everyday processes and cannot be perceived as the one-time intervention. Hesgrove et al. (2024) associated a lack of refreshing skills with the poorer indicators of safety at the workplace. Unless hospitals can develop built training pipelines, Vikan et al. (2023) cautioned that they cannot help but end up with a shallow compliance experience of deep skill erosion. These results point to the overall necessity of sustained, situationally-wide, and practice-embedded safety education in an attempt to guarantee sustainable changes in the clinical performance.

Frontline Suggestions for Strengthening Safety Culture

The frontline health workers are always willing to offer concrete measures to enhance patient safety culture, depending on the challenges they face day-to-day. Ismail and Khalid (2022), in a cross-sectional review study, revealed that 62 percent of staff in Malaysia advocated the use of open-door policies as a means of enhancing communication between them and the

leaders. According to Silaen et al. (2023), participatory leadership greatly boosted nurse engagement with safety procedures because the empowerment of nurses facilitated collaboration between them. The study conducted by Zaitoun et al. (2023) stressed that the development of clinical competence as a result of a simulation-based training may lead to the enhancement of patient safety. Jabarkhil et al. (2021) suggested the use of anonymous digital incident reporting as the strategy to minimize fear of blame. Elpasiony and Abd-Elmoghith (2023) emphasized the importance of investing in improved staffing and resources assignment to avoid missing care. Lal and Choueiri (2023) claimed that behavior-based safety should be proposed as an organizational value, not as a task that should be fulfilled in accordance with regulations. Lapses in communication could be amended, as Noviyanti et al. (2021) suggested, with the help of real-time feedback loops. Patil et al. (2023) proposed that the enhancement of ICU workflow could be made to enhance monitoring practices during high-load shifts. Radiological safety education and the provision of protective gear became the voice of Chougule and Jain (2024). Giri et al. (2023) determined that nursing input into the administration of IV treatment decreased medication errors. Krishnamoorthy et al. (2023) suggested aligning the policies with the realities of facilities in the area. Mukherjee and Aileen (2022) advised that leadership training should be adopted to decrease vertical barriers to safety. In their article, Granel-Gimenez et al. (2022) found that the adoption of frontline ideas when institutionalized saw compliance increase by 31%. Another aspect which led to the connection between psychological safety and more innovation in safety practices is the study conducted by Lu et al. (2022). According to Hesgrove et al. (2024), workplace and patient safety cultures should be synchronised with the ultimate goal of improving them holistically.

5. CONCLUSION

This study points to significant obstacles to the patient safety culture through the lens of frontline medical personnel. The results indicate that breaches in communication, the fear of being blamed, a shortage of personnel, and insufficient continuing education greatly impair safety practices. Although extensive early actions are set out to measure the culture of safety, the sustainability and immediate basis is meagre. Safety needs to be enhanced by a commitment to systemic frontline feedback and ongoing reinforcement of skills, and through open communication. Evidence-based interventions and contextual solutions should be incorporated in long-term culture transformation. This paper confirms the need to pursue inclusive people-oriented approaches to healthcare that place a primary emphasis on patient outcomes and staff well-being.

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