

Antecedents of Employee Attribution and Its Impact on Medication Safety Practices in Private Hospitals of Kolkata

Debattri Das¹, Arjama Halder², Tarpan Chakrabarty³

¹Assistant Professor, Department of Hospital Management, Guru Nanak Institute of Technology
Email : , debattri.das@gnit.ac.in, Kolkata, India

²Assistant Professor, Department of Hospital Management, Guru Nanak Institute of Technology,
Email : , arjama.halder@gnit.ac.in, Kolkata, India

³Assistant Professor, Department of Hospital Management, Guru Nanak Institute of Technology,
Email : , tarpan.chakrabarty@gnit.ac.in, Kolkata, India

ABSTRACT

Medication safety remains a critical concern in hospital settings, as medication errors continue to affect patient safety and the overall quality of healthcare delivery. Although prior studies have extensively examined clinical and technological determinants of medication safety, limited attention has been paid to human resource-related behavioral factors, particularly employee attribution. Drawing on attribution theory, this study aims to examine the antecedents of employee attribution and its impact on medication safety practices in hospitals through a secondary research approach. The study synthesizes existing empirical and conceptual literature to identify key organizational antecedents, including leadership support, organizational justice, training effectiveness, workload, and safety climate, and explores their influence on employee attribution among healthcare professionals.

A systematic review of peer-reviewed journal articles, reports, and published studies related to employee behaviour, healthcare management, and medication safety was conducted. Relevant literature was analyzed and thematically synthesized to develop an integrative framework explaining the relationship between organizational antecedents, employee attribution, and medication safety practices such as adherence to drug administration protocols, error reporting, and compliance with safety guidelines.

The findings highlight that positive employee attribution, shaped by supportive organizational and HR practices, plays a significant role in enhancing medication safety outcomes in hospital environments. This study contributes to the literature by conceptually linking attribution theory with medication safety and drug delivery practices. The proposed framework offers valuable insights for hospital administrators and policymakers to improve medication safety through strategic HR and organizational interventions.

Keywords: Technology-assisted drug delivery, patient outcomes, private hospitals, hospital management, medication safety, digital healthcare.

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INTRODUCTION

Medication safety is a fundamental aspect of healthcare delivery, directly influencing patient outcomes, treatment effectiveness, and overall hospital performance. Despite advancements in drug delivery systems, electronic prescribing, and clinical decision-support technologies, medication errors remain a persistent challenge in hospital settings. Errors related to prescribing, dispensing, and administration continue to compromise patient safety and impose significant financial and reputational burdens on healthcare organizations. Consequently, improving medication safety has become a priority for healthcare systems worldwide.

Existing literature on medication safety has predominantly focused on clinical procedures, technological interventions, and pharmacological safeguards. While these factors are undeniably important, growing evidence suggests that human and organizational elements play an equally critical role in ensuring safe medication practices. Healthcare

professionals' attitudes, perceptions, and behavioral responses to organizational policies significantly influence adherence to medication protocols and error-reporting practices. However, the behavioral mechanisms through which organizational factors shape safe medication practices remain underexplored.

One such behavioral mechanism is employee attribution, which refers to how employees interpret and assign causes to organizational actions, managerial decisions, and workplace outcomes. Rooted in attribution theory, employee attribution influences how healthcare professionals perceive responsibility, fairness, and support within their organizations. Positive attributions—such as perceiving management actions as supportive or system-oriented—can enhance motivation, accountability, and compliance with safety procedures. Conversely, negative attributions may lead to disengagement, blame-shifting, and reduced adherence to safety guidelines, thereby increasing the likelihood of medication errors.

In hospital environments, where medication administration involves high levels of complexity, time pressure, and interdisciplinary coordination, employee attribution becomes particularly relevant. Organizational factors such as leadership support, fairness in decision-making, adequacy of training, workload management, and safety climate shape how healthcare professionals interpret workplace events. These interpretations, in turn, influence critical behaviors related to medication administration, documentation, and error reporting. Understanding the antecedents of employee attribution is therefore essential for strengthening medication safety practices within healthcare organizations.

Despite the relevance of employee attribution in healthcare contexts, limited scholarly attention has been given to its role in medication safety and drug delivery practices. The existing research often treats human resource factors as peripheral variables rather than central explanatory mechanisms. This gap is especially evident in secondary research that integrates findings across human resource management, organizational behavior, and medication safety literature to provide a comprehensive theoretical understanding.

To address this gap, the present study adopts a secondary research approach to examine the antecedents of employee attribution and its impact on medication safety practices in hospitals. By systematically reviewing and synthesizing existing empirical and conceptual studies, this paper develops an integrative framework linking organizational and HR antecedents to employee attribution and medication safety outcomes. The study contributes to the literature by extending attribution theory into the domain of medication safety and drug delivery, and by offering actionable insights for hospital administrators seeking to improve patient safety through organizational and human resource interventions.

2.REVIEW OF LITERATURE:

2.1 Medication Safety in Hospital Settings

Medication safety is a critical dimension of patient safety and healthcare quality. It encompasses practices aimed at preventing errors during prescribing, dispensing, administration, and monitoring of medications. Previous studies have identified medication errors as a leading cause of preventable adverse events in hospitals, often resulting from complex workflows, high workload, inadequate communication, and system-level failures. While technological solutions such as computerized physician order entry, electronic medication administration records, and barcode medication administration systems have improved safety, research indicates that technology alone cannot eliminate medication errors. Human and organizational factors continue to play a decisive role in determining the effectiveness of medication safety practices.

2.2 Human Resource Factors and Medication Safety

Human resource-related factors such as staffing levels, training, leadership support, and organizational culture have been widely associated with patient safety outcomes.

Studies have demonstrated that inadequate training, excessive workload, and poor supervisory support negatively affect healthcare professionals' compliance with medication protocols. Conversely, supportive leadership, continuous training, and fair organizational practices contribute to safer medication administration and improved error-reporting behavior. These findings highlight that medication safety is not solely a clinical issue but also an organizational and behavioral concern that requires effective HR management.

2.3 Attribution Theory and Employee Attribution

Attribution theory explains how individuals interpret events and assign causes to behaviors and outcomes. In organizational contexts, employee attribution refers to employees' perceptions regarding the motives and intentions behind managerial actions, HR practices, and organizational decisions. Employees may attribute outcomes to internal factors (such as effort or competence) or external factors (such as management support or system constraints). Research in organizational behavior suggests that positive employee attribution enhances trust, commitment, and compliance, while negative attribution can result in disengagement, resistance, and counterproductive work behaviors.

2.4 Antecedents of Employee Attribution in Healthcare Organizations

The literature identifies several organizational antecedents that shape employee attribution, particularly in high-risk environments such as healthcare. Leadership support has been shown to influence how employees perceive organizational intent, especially during critical incidents. Organizational justice—encompassing distributive, procedural, and interactional fairness—plays a significant role in shaping attribution toward management decisions. Training effectiveness and clarity of communication further influence whether employees attribute errors to system failures or individual negligence. Additionally, workload and staffing adequacy affect employees' perceptions of organizational responsibility for errors, while a strong safety climate fosters system-oriented attribution rather than blame-oriented perspectives.

2.5 Employee Attribution and Safety-Related Behaviors

Prior research indicates that employee attribution significantly influences safety-related behaviors, including adherence to protocols, willingness to report errors, and engagement in preventive practices. Employees who attribute errors to system-level issues are more likely to participate in corrective actions and continuous improvement initiatives. In contrast, blame-oriented or negative attributions discourage error reporting and increase defensive behaviors. Although these relationships have been explored in general safety and organizational contexts, their application to medication safety practices in hospitals remains limited.

2.6 Employee Attribution and Medication Safety Practices

Empirical evidence linking employee attribution directly to medication safety practices is relatively scarce. Existing studies often examine safety culture, leadership, or HR practices independently, without explicitly considering attribution as a mediating or explanatory mechanism. However, emerging research suggests that healthcare professionals' interpretations of organizational support and fairness significantly influence their compliance with medication administration protocols and safety guidelines. This indicates that employee attribution may serve as a crucial behavioral pathway through which HR and organizational factors affect medication safety outcomes.

2.7 Research Gap

Despite extensive research on medication safety and growing interest in behavioral and organizational determinants of patient safety, limited secondary research has integrated attribution theory with medication safety literature. There is a lack of comprehensive frameworks that explain how organizational antecedents shape employee attribution and, in turn, influence medication safety practices in hospitals. Addressing this gap is essential for advancing theoretical understanding and guiding HR-driven interventions aimed at improving drug delivery safety.

3. OBJECTIVES:

To identify key organizational and human resource-related antecedents influencing employee attribution among healthcare professionals.

To review and synthesize existing literature on employee attribution within healthcare and hospital environments.

To analyze the relationship between employee attribution and medication safety practices, including adherence to drug administration protocols and error-reporting behavior.

To explore the role of employee attribution as a behavioral mechanism linking organizational antecedents and medication safety outcomes.

4. RESEARCH METHODOLOGY:

The present study adopts a secondary research methodology based on a comprehensive review and synthesis of existing literature to examine the antecedents of employee attribution and their impact on medication safety practices in hospital settings. A secondary research approach was considered appropriate as it allows for the integration of theoretical and empirical findings across multiple disciplines, including human resource management, organizational behavior, and healthcare safety, without direct data collection from respondents.

Data for the study were collected from published secondary sources such as peer-reviewed journal articles, review papers, conference proceedings, and reports from recognized academic and healthcare institutions. Relevant literature was retrieved from well-established academic databases, including Scopus, Web of Science, PubMed, and Google Scholar. The search was restricted to studies published in English and focused specifically on hospital or healthcare environments to ensure contextual relevance to medication safety and drug delivery practices.

A systematic search strategy was employed using keywords such as employee attribution, attribution theory, medication safety, drug administration, patient safety, healthcare human resource practices, leadership, organizational justice, and safety climate. Boolean operators were used to refine the search results and eliminate irrelevant studies. The selection of literature was guided by predefined inclusion and exclusion criteria to ensure the quality and relevance of the reviewed studies. Only peer-reviewed research that addressed organizational or human resource factors, employee behavior, and medication safety outcomes in healthcare settings was included, while studies unrelated to healthcare or lacking methodological rigor were excluded.

The selected studies were analyzed using a thematic synthesis approach. Key concepts, patterns, and relationships related to organizational antecedents, employee attribution, and medication safety practices were identified and systematically compared across studies. This process enabled the integration of diverse findings and facilitated the development of an integrative conceptual framework explaining how organizational and human resource factors influence employee attribution and, in turn, medication safety practices in hospitals.

To ensure the reliability and credibility of the review, the quality of the selected literature was assessed based on clarity of objectives, theoretical grounding, research design, and relevance to the study context. Ethical considerations were addressed by ensuring proper citation of all sources and adherence to academic integrity standards. As the study relied exclusively on secondary data, no ethical approval was required. The scope of the research was limited to hospital settings and focused on understanding the role of employee attribution as a behavioral mechanism linking organizational antecedents to medication safety practices in healthcare delivery systems.

5. ANALYSIS AND DISCUSSION:

The analysis of the reviewed literature reveals a consistent and meaningful relationship between organizational antecedents, employee attribution, and medication safety practices in hospital settings. Studies across healthcare management and patient safety literature indicate that medication safety is not solely dependent on clinical competence or technological systems, but is strongly influenced by how healthcare professionals perceive and interpret organizational actions, policies, and managerial intentions. These perceptions, conceptualized as employee attribution, emerge as a critical behavioral mechanism shaping safety-related practices in drug administration.

The synthesis of prior studies highlights leadership support as a prominent antecedent of employee attribution in healthcare organizations. Supportive and transparent leadership has been repeatedly associated with positive employee interpretations of organizational intent, fostering a sense of trust and shared responsibility for patient safety. When healthcare professionals perceive leadership actions as supportive rather than punitive, they are more likely to attribute medication errors to system-level issues rather

than individual blame. This system-oriented attribution encourages adherence to medication safety protocols and promotes proactive error-reporting behavior, which is essential for improving drug delivery outcomes.

Organizational justice also emerges as a significant antecedent influencing employee attribution. The literature indicates that fair procedures, equitable distribution of resources, and respectful interpersonal treatment shape how employees interpret organizational decisions related to workload, performance evaluation, and incident management. In hospital environments, perceptions of injustice often lead healthcare professionals to develop negative attributions toward management, which may result in reduced compliance with medication guidelines and reluctance to report errors. Conversely, fair and transparent organizational practices promote positive attribution, strengthening accountability and reinforcing medication safety behaviors.

Training effectiveness and competency development are further identified as critical factors shaping employee attribution. The reviewed studies suggest that continuous, well-structured training programs related to medication administration enhance employees' confidence and reinforce the perception that organizations are committed to patient safety. Effective training reduces ambiguity in drug administration processes and supports internal attribution related to professional competence, while simultaneously reinforcing system-level support. This dual effect positively influences compliance with medication protocols and reduces the likelihood of administration errors.

Workload and staffing adequacy are repeatedly discussed in the literature as influential contextual factors affecting employee attribution. High workload, time pressure, and understaffing are commonly associated with negative attribution, where healthcare professionals perceive medication errors as unavoidable consequences of organizational neglect or resource constraints. Such external and negative attributions often undermine safe medication practices and increase the risk of errors. In contrast, studies indicate that adequate staffing and manageable workloads foster positive employee attribution, enabling healthcare professionals to engage more effectively in safety practices such as double-checking medications and following standard operating procedures. The safety climate within healthcare organizations also plays a vital role in shaping employee attribution and medication safety outcomes. A strong safety climate, characterized by open communication, non-punitive responses to errors, and shared safety values, encourages healthcare professionals to view medication safety as a collective responsibility. The literature suggests that in such environments, employee attribution shifts toward system improvement rather than individual blame, thereby enhancing adherence to medication safety guidelines and increasing error-reporting rates. This finding underscores the importance of integrating HR practices with broader organizational safety strategies.

Collectively, the reviewed studies support the proposition that employee attribution serves as a mediating link between organizational antecedents and medication safety practices. While prior research has often examined leadership, training, or safety culture independently, this review highlights that their influence on medication safety is largely dependent on how employees interpret and assign meaning to these organizational practices. By integrating attribution theory with medication safety literature, the analysis provides a deeper understanding of the behavioral pathways through which HR and organizational factors affect drug delivery safety in hospitals.

The discussion further indicates that addressing medication safety challenges requires a shift from purely technical solutions to a more holistic approach that incorporates behavioral and organizational dimensions. HR-driven interventions that promote positive employee attribution—such as supportive leadership, fair organizational practices, effective training, and a strong safety climate—can significantly enhance medication safety outcomes. These findings align with contemporary healthcare management perspectives that emphasize system-based approaches to patient safety and underscore the relevance of employee attribution as a critical construct in medication safety research.

6.FINDINGS:

The findings of this secondary research indicate that employee attribution plays a significant role in shaping medication safety practices in hospital settings. The synthesis of existing literature reveals that organizational and human resource-related factors consistently influence how healthcare professionals interpret organizational actions and assign responsibility for workplace outcomes, particularly in high-risk environments such as medication administration.

The review identifies leadership support as one of the most influential antecedents of employee attribution. Studies consistently report that when hospital leadership demonstrates commitment to patient safety through supportive supervision, open communication, and non-punitive responses to errors, healthcare professionals develop positive attributions toward management. Such positive attributions are associated with improved adherence to medication safety protocols, increased willingness to report medication errors, and greater engagement in preventive safety practices.

Organizational justice emerges as another critical finding influencing employee attribution. The literature indicates that fair decision-making processes, transparent performance evaluations, and equitable workload distribution contribute to favorable employee interpretations of organizational intent. In hospital contexts, perceived injustice is linked to negative attribution, which often results in reduced compliance with medication guidelines and reluctance to disclose errors. Conversely, fair organizational practices promote accountability and reinforce safe medication behaviors.

The findings further highlight the importance of training effectiveness in shaping employee attribution. Studies reviewed demonstrate that continuous and role-specific training related to medication administration enhances healthcare professionals' confidence and reinforces perceptions of organizational support. Effective training programs are associated with positive attribution and improved compliance with drug administration protocols, thereby reducing the likelihood of medication errors.

Workload and staffing adequacy are also found to have a substantial impact on employee attribution and medication safety practices. High workload, understaffing, and time pressure are frequently associated with negative and external attribution, where healthcare professionals perceive medication errors as outcomes of organizational shortcomings rather than individual actions. Such attribution patterns are linked to increased error rates and compromised safety practices. In contrast, adequate staffing and manageable workloads foster positive attribution and support consistent adherence to medication safety procedures.

Another key finding relates to the role of safety climate in hospital settings. The literature consistently suggests that a strong safety climate encourages system-oriented attribution and collective responsibility for medication safety. Hospitals with a positive safety climate demonstrate higher levels of error reporting, better compliance with safety guidelines, and improved medication administration practices.

Overall, the findings indicate that employee attribution serves as a critical behavioral mechanism linking organizational antecedents to medication safety outcomes. The review highlights that improvements in medication safety are more likely to be achieved when organizational and HR practices foster positive employee attribution. These findings emphasize the need for healthcare organizations to integrate human resource strategies with patient safety initiatives to enhance drug delivery safety and reduce medication-related risks.

7.CONCLUSION:

This study examined the antecedents of employee attribution and their influence on medication safety practices in hospital settings through a secondary research approach. The review and synthesis of existing literature demonstrate that medication safety is not solely determined by clinical expertise or technological interventions, but is significantly shaped by organizational and human resource-related factors that influence healthcare professionals' perceptions and interpretations of workplace practices. Leadership support, organizational justice, training effectiveness, workload management, and safety climate emerge as key antecedents shaping employee attribution in healthcare organizations.

The findings highlight that positive employee attribution encourages adherence to medication administration protocols, proactive error reporting, and engagement in preventive safety practices, thereby contributing to improved medication safety outcomes. Conversely,

negative attribution, often arising from perceived organizational neglect or unfair practices, undermines compliance and increases the risk of medication errors. By integrating attribution theory with medication safety literature, this study provides a deeper understanding of the behavioral mechanisms through which organizational practices influence drug delivery safety in hospitals.

The study contributes to both theory and practice by emphasizing employee attribution as a critical explanatory construct in medication safety research. The proposed integrative framework offers valuable insights for hospital administrators and policymakers to design HR-driven and organizational interventions aimed at fostering positive employee attribution and strengthening medication safety practices. Ultimately, addressing behavioral and organizational dimensions alongside technological solutions is essential for enhancing patient safety and healthcare quality..

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