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Improving the quality of patient service to reduce medical errors: A narrative review

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***Abstract*---**Medical errors occur worldwide. Lifestyle diseases are on the rise in developing countries like India, and with increased changes in lifestyle, the number of patient-doctor interactions will escalate. Hence, they should be armed with information on how to decrease the number of medical errors by increasing the provision of patient services. Profound factors leading to improved patient care include enhancing empathic and compassionate communication, improving electronic health records, embedding virtual reality to enhance patient engagement, drawing up guidelines for increasing patient understanding, and increasing physician responsibilities in patient management. We conclude that healthcare organizations need to start seeing patient care as a business and increase their investment in technology and human resources. Continuous education and audit of physicians should also be encouraged. There is also a need for collaborative research with healthcare organizations on how technology can be expanded. Policies and guidelines can also be drawn to teach these tips to clinician educators.

***Keywords*---**quality of patient service, medical errors, healthcare organizations.

1. Introduction to Patient Service and Medical Errors

In today's healthcare industry, it is important that healthcare organizations put an emphasis on service quality for their patients, given its direct correlation to clinical outcomes. Since the report "To Err Is Human," patient service has become synonymous with patient safety, and studies suggest that good patient service can result in fewer adverse events. In 2011, as part of the Affordable Care Act, a penalty for hospitals admitting specific "never events"—adverse events that should never happen in healthcare; continued displays of these adverse events are supposed to exemplify when a hospital is not operating safely. The idea to

publicly hold the providers accountable seems to be working, as such events have decreased since 2010. The concept is part of modern quality improvement initiatives, but it is not consistent across the industry.

It is estimated that as many as 80 out of every 10,000 hospital patients experience a medical error. This subsequently leads to a lower level of patient safety and has a marked effect on mortality and treatment-related disability worldwide. Policies and interventions have been developed to help in the reduction of dangerous medical mistakes; however, such initiatives fail to address the role of healthcare workers providing service in the hospital. Consequently, patients are not receiving safe or resolute care. In this paper, we will briefly discuss the duty of healthcare workers in service delivery, review patient service literature associated with the reduction of medical errors, and discuss present practices. We hope to spur the development of strategies to improve patient service; our aim is for healthcare professionals to create comprehensive patient service programs to increase patient safety as well as to reduce medical errors in the provision of treatment (and subsequent complications) to those seeking care. Historically, U.S. physicians who made mistakes were thought of as incompetent and removed from the practice of medicine. Together, these beliefs form the basis of the culture of blame. This paper explores these issues and furthers the notion that a comprehensive approach to patient service is important for minimizing such concerns in healthcare. (Kim et al.2018)(Gleeson et al.2)

2. Understanding the Impact of Medical Errors on Patient Outcomes

The nursing workforce is a crucial contributor to patient satisfaction, as well as patient health and well-being. The effect of modern healthcare facilities on patient care and safety has been shown to be profound. Medical errors can be harmful to the patient in many ways, whether tangible, manifesting as physical harm, or intangible, manifesting as emotional harm or breaches in patient trust or satisfaction. Both kinds of medical errors can have an impact on patient outcomes. Harmful effects of medical errors on patients and families include negative health outcomes and psychological impact on patients and family members, as well as overall patient satisfaction. The effects of adverse events on the cost and credibility of healthcare are also quite substantial.

Medication errors are a subtype of medical errors that require more intensive examination. Medication errors generally have a strong impact on patient outcomes. The rate of medication errors was found to be 20% in a pilot study conducted in an inpatient acute care setting, and of 246 medication administrations observed, 6.3% contained a medication error. Medication errors also lead to increased healthcare costs. Approximately 10%-20% of all medication administrations contain errors, with an overall 1.29 medication errors per patient per day. In the same study, pharmacist interventions led to 40% of the errors being corrected before reaching the patient. A study found that the most common types of medication errors in a hospital drug delivery system were incorrect administration technique (40%) and route error (40%). Revenue loss was found to be the highest cause of the medication errors' economic impact on hospitals. There were also other types of economic and social impacts, such as increased nursing staff time and increased litigation costs. All of the pediatricians in that

study believed that the medication errors would have a lasting social impact on both the healthcare organization and the doctors. (Manias et al. 2018)(Nurmeksela et al. 2018)(Nurmeksela et al.2018)

3. Strategies for Enhancing Patient Service to Reduce Medical Errors

This section presents a comprehensive overview of effective strategies aimed at improving patient service to minimize medical errors. It discusses training programs for healthcare professionals emphasizing communication, empathy, and patient-centered care. The importance of fostering a culture of safety within healthcare organizations is examined, promoting proactive error prevention measures. Additionally, it highlights the necessity of interdisciplinary collaboration among healthcare providers to enhance service delivery. These strategies include the implementation of standardized protocols and checklists to ensure consistent practices. Patient engagement and education are also discussed as vital components in empowering patients to contribute to their own safety. The section further advocates for continuous quality improvement initiatives as a means to sustain progress in service enhancement. Ultimately, this discussion underscores that strategic improvements in patient service can lead to significant reductions in medical errors.

Training for healthcare workers can help them prevent errors associated with the communication process. Interdisciplinary teams should disclose medical errors to the affected patients, families, and caregivers, share the results of root cause analyses, explain possible preventative measures, and apologize for the mistake. Cultivation of a resilient and just culture that fosters communication among healthcare workers can also improve safety. Endorsing proactive organizational measures for error avoidance is another important avenue to pursue. A team-based approach to patient care is ideal, linking healthcare teams with both inpatient and outpatient panels. Healthcare providers can be employed, trained, evaluated, and paid according to these strategies.

After an error or a near miss has occurred, a discussion involving all nursing staff members could help to elicit which reasons are frequently at work during these incidents. Unfortunately, standardized protocols are not in all medical institutions. Part of the policy could be the existence of checklists. By using checklists, the individual provider is assured that the management of the drugs is by consensus and not by individual choice. Checklists may prevent medical errors to a certain extent by their very existence, at least. In the medical management of patients, roundtable discussions or tumor conferences should not only be held to discuss the patients' medical or surgical management but also to meet risk managers to discuss at-risk misdiagnoses as well. The error is not only committed by one individual; conversely, it is generally the lack of communication between people that is at the root of the problem. The risk of committing a medical error can be greatly decreased by communicating and collaborating with different services and professionals. Patient involvement and education is a recent, and some feel, important approach to fighting errors. All of these approaches should be applied in concert, as there is no magic solution. Finally, continuous improvement is better than postponed perfection. The management of most medical institutions is aware of the paramount importance of offering a service

that meets the needs and desires of the patient. (Cook et al. 2018)(Lane-Fall et al. 2018)

4. Technological Innovations in Healthcare to Improve Patient Safety

Technological Innovations

Next, we can evaluate the positive impact of technological innovations on the quality of healthcare and the safety of receiving medical care, demonstrated by the reduction of medical errors. This aspect is essential in light of the growing role of technology in the successful management of healthcare systems. Technological advancements are substantially altering the way patients are cared for. Electronic health records have led to transitions, prompts, and checklists to decrease the incidence of patient injury and death. Telemedicine has also increased access to care through remote video visits, slowing the spread of deadly infections. Additionally, benefits have been recognized from improving data flow through electronic communication. Benefits have also been identified in decision-support systems guiding practitioners to follow evidence-based suggestions.

Furthermore, electronic prescribing is beneficial in reducing medication errors due to automation, safety alerts, and reference links to drug dosages. Wearable devices and remote monitoring have the potential to shift the focus of sick care to real-time monitoring of health. Patients can be alerted should they need to seek medical care or have medication adjusted. Telehealth technology has shifted the paradigm of direct provider-to-provider communication. For these developments to have the maximum effect, technology should be user-friendly. The burden of integration cannot disrupt the workflow, and sufficient training and instruction are necessary. There are concerns with increased reliance on technology. For example, patients can be overlooked in the electronic health records and telemedicine visits, leading to negative outcomes. The integration of various technologies is daunting and presents its own set of potential problems. New technology must be user-friendly, with sufficient training and instruction. In conclusion, in an ever-increasing tech-driven healthcare environment, increased attention to the use of technology to augment patient safety is paramount.

5. Conclusion and Future Directions

Medical errors occur worldwide. Lifestyle diseases are on the rise in developing countries like India, and with increased changes in lifestyle, the number of patient-doctor interactions will escalate. Hence, they should be armed with information on how to decrease the number of medical errors by increasing the provision of patient services. Profound factors leading to improved patient care include enhancing empathic and compassionate communication, improving electronic health records, embedding virtual reality to enhance patient engagement, drawing up guidelines for increasing patient understanding, and increasing physician responsibilities in patient management. We conclude that healthcare organizations need to start seeing patient care as a business and increase their investment in technology and human resources. Continuous education and audit of physicians should also be encouraged. There is also a need for collaborative research with healthcare organizations on how technology

can be expanded. Policies and guidelines can also be drawn to teach these tips to clinician educators.

Future research can also look into new technologies such as artificial intelligence and chatbots in revolutionizing medical education, determine the level of patient satisfaction after the use of an empathy module as a part of virtual reality in medicine, assess patient and physician perception of medical care and safety in rural and urban areas, determine the impact of using telemedicine on decreasing medical errors, and study the impact of changes in policy regarding family visits on the safety of patients. Governments can also try to take suggestions from medical-related activities as well as play a role in pushing for modification of policies. With sustained efforts in this direction, new patient care paradigms can replace the traditional blame game in healthcare, thereby enhancing patient health care. A change based on the positive approach, where patient safety and security are of utmost importance, is the future. Further evaluation of such approaches and technology, as well as drafting changes in policy, are the future areas of positive optimization.

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