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Literature review: Improvement patient safety during the pandemic covid-19

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Abstract

Patient safety has been a major challenge for patient safety and healthcare systems over the past 20 years. In 1999 To Err Is Human by the Institute of Medicines raised public awareness about patient safety and described the potential for significant harm to patients. Evidence shows that despite concerted efforts to make health care safer unintentional harm by health care providers that seriously harms patients is still common. A 2016 study estimated that 140.400 deaths were caused by medical error in the United States making medical error the third leading cause of death in the United States and further emphasizing the need for improved patient safety. Healthcare systems around the world continue to take a treatable toll on patients. It is a preventable complication of care that accounts for 3.6% of acute hospital deaths in England. There are financial implications of poor care and negative outcomes. For example the UK Health Foundation says: Careful care is expensive. Unstable production systems; And costs can be reduced by providing reliable care. This review examines the goals of health reform and national efforts to create a culture of quality improvement and patient safety principles. And show how these principles can be applied to patient care and health care practice.

Keywords: Improving Healthcare Systems; Patient Safety; Healthcare Quality Improvement; Covid-19

1. Introduction

In 1999 the Institute of Medicine published a devastating report entitled To Err is Human: Making Health Care Safer which stated that 98.000 hospital patients die each year due to medical errors. The report is not to blame providers or hospitals but to make clear that poor care practices (and not bad people) are largely responsible for these fatal errors. Furthermore the report hopes to bring together health care providers regulators and patients on the needs of the country to create a culture of health and develop a system of care to improve the quality of health (1).

In a subsequent report, the Institute of Medicine published Crossing the Quality Chasm: A New Health System for the 21st Century, which described the institute's six aims for health care reform:

First, health care must be safe. "Primum non nocere" (first do no harm) should no longer be the sole burden of individual providers. Instead, hospitals must be held accountable for maintaining systems of care that ensure patient safety.

Second, health care should be effective. Health care providers must use evidence-based medicine and evidence based practice. Since the best science and clinical practices in medicine continue to evolve, every practitioner should be expected to participate in life-long learning through continuing medical education to remain up to date. Reliance on tradition and anecdotal personal experience should no longer be acceptable practice. The phenomenon of "illusory superiority"—otherwise known as the "Dunning-Kruger effect"—highlights that poor performers often lack the skills and knowledge to identify their own poor performance. Medical staffs and hospital leaders should ensure that all health

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care providers have the appropriate decision-making support tools, and leaders must be forever vigilant to assess and ensure that all patients in their facility are receiving evidence-based and guideline-directed care.

Third, care should be patient centered. "For the secret of the care of the patient is in the caring for the patient."10 High quality care needs to be respectful of the patient's values and receptive to the patient's input. All care decisions and therapeutic plans—including the rationale, risks, costs, and benefits—should be proactively explained to the patient. The "best possible outcome" is optimally decided through shared decision making by a highly competent care team and a well informed patient.

Fourth and fifth, care should be timely and efficient. Unnecessary delays and prolonged waiting times can be frustrating and dangerous for patients depending on their underlying medical conditions. In addition to caring for their patients' welfare, all care providers should be good stewards of valuable health care resources. After an attentive patient evaluation, any blood tests, diagnostic imaging, and invasive procedures should be tailored to confirm or refute the provider's differential diagnosis specific for that individual patient. Whenever possible, decisions and plans should avoid wasting valuable equipment and precious time.

Lastly and arguably most importantly, care must be equitable. The quality of care should not vary based on a patient's personal characteristics, gender, race, religion, geography, or socioeconomic status. Every person across the country should have access to high-quality value-based care.

For patient health outcomes WHO recommends several outcomes to assess safe maternal patient health care misdiagnosis practices. (WHO 2009). These outcomes were reported as outcomes and severity of patient harm according to the WHO review of patient health outcomes. This review therefore focuses on the following key outcomes: patient complications overall adverse patient events and medication errors. The goals proposed here can identify and identify structural barriers not only associated with better patient health outcomes in the hospital setting but also with better patient-related outcomes. There were many styles of prayer that originated with hospital ward nurses and were for nursing. There is a wide range of different formats in terms of structured handover such as SBAR ICCO Patient Centered Handover (PCH) and Simple Nursing Handover Format (NHF). According to Meth and Bass (2013) there are six types of content that typically make up the delivery process: Patient signs/impressions Development of adjustments for anticipated outcomes due to clinical procedures and/or treatment (2).

In UK's case patient safety is strictly regulated in the NHS. Many organizations set standards and monitor their work to ensure that their operations follow the norm. These regulators impose consequences even on managers who do not meet their standards. The National Agency for Quality of Care (CQC) the Commission for Excellence in Healthcare and Medicines the Agency for Healthcare Products Regulatory and Control (now NHS Improvement) and the NHS Litigation Committee (formerly the National Clinical Evaluation Service) are the main divisions of the Department of Health. A prestigious institution with an organizational role. In addition to regulatory agencies other government agencies are responsible for regulating health and medical professionals to ensure compliance with standards. The Health and Social Care Professional Standards Authority (PSA) oversees the legal entities that regulate health care professionals. Many health professionals such as dentists optometrists and midwives are managed by a separate PSA (nine regulatory agencies overseen by the PSA) which conducts audits monitors performance and reports to Congress. Organizations that have voluntary registration in healthcare and social care are also accredited according to the PSA standards. An exercise program has been introduced by this professional regulatory body to emphasize the physicians personal responsibility for patient safety (3).

Since being declared a pandemic by the World Health Organization on March 11, 2020 coronavirus disease (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has spread rapidly causing significant suffering worldwide. In the United States (US) alone there were 895,766 reported cases and 50,439 reported deaths as of April 26, 2020. In addition to the physical effects of COVID-19, the disease has also challenged the psychological resilience of many individuals and altered behavioral patterns. For instance, a study, which surveyed the Chinese public (from January 31, 2020 to February 2, 2020), found that 54% of respondents rated the psychological impact of the COVID-19 pandemic as moderate or severe. As people practice social distancing, self-isolation, and begin working remotely, the potential for injuries such as trauma due to motor vehicle collisions (MVCs) may decline considerably. The pandemic also affected to patient safety. Patient is most vurnerable groups in hospital. By improving safer culture to the workers, patient safety can well applied (4).

Although the importance of a patient safety culture has been widely discussed there is limited guidance on the practices that can lead to the development of a patient safety culture in health care settings. For example a root cause analysis may suggest that the safety culture needs to be improved. How can we achieve this goal? A review of potential strategies

concluded that there is little evidence to support the efficacy of interventions to improve patient safety culture in health care settings. The review concluded that leadership walks and multi-unit based programs were the most promising interventions. Furthermore leadership support for a safety culture is a key factor in achieving cultural change. A hospital attempted to develop an intervention to improve safety culture. The purpose of this report is to share the results of our efforts to improve the patient safety culture at our hospital the lessons learned about what went well and what can be improved in future efforts. This study is unique in that it provides a concrete example detailing a training programs efforts to improve and measure a hospitals safety culture (5).

2. Literature review

From the US health paradigm "Value must always be defined around the customer and creating value for patients in a well-functioning healthcare system must determine rewards for all other parties in the system. The value of health care is measured by outcomes rather than the quantity of services provided because value is based on outcomes rather than inputs. Shifting focus from quantity to value is also a central challenge." tell us healthcare services nowadays must reform to patient centered care and patient safety is one of the implementation.

Patient safety assessed from the patient arrives at hospital (at emergency room/polyclinic) until patient permitted to back home. Pandemic Covid-19 since March, 2020 is global healthcare challenge nowadays. Patient safety is one of most threatened aspect. Patient safety if not applied well and right can affected to quality services, patient satisfaction, work culture, workers engagement, and economic side effect. In other words, patient safety is multi factor problem. This article will show how to asses patient safety and take some points for improving patient safety during Covid-19 pandemic. There are many ways to improving patient safety, such as improving patient based structured hand over, preserving leadership resilience, exploit health technologies, improving by education & training, and monitoring the application on patient safety.

3. Material and methods

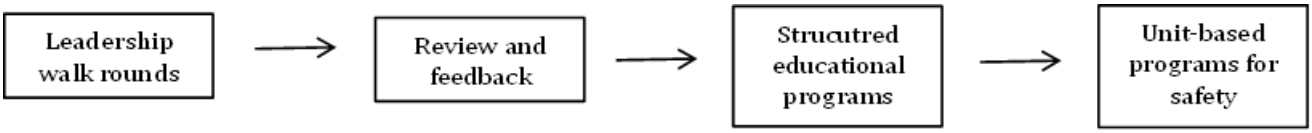
The study method was a literature study. The articles collected from Pubmed, SAGE Journal, BMJ Journal, PLOS One by Improving Healthcare Systems, Patient Safety, Healthcare Quality Improvement, Covid-19 as keywords. The articles reviewed in the discussion were published from 2017 to 2022. The results obtained 20 journals selected based on the criteria of exclusion and inclusion were finally taken 11 articles for review. The inclusion criteria are the article are maximum 5 years published by this year, analyze about patient safety, and discuss patient safety improvement. The exclusion criteria are journals published outside 5 years and did not discuss how to improve patient safety in hospital based care. The selected article is an open-access article that discusses strategic to improve patient safety in hospital.

4. Results and discussion

Many method tries to improving patient safety in hospital care, from articles reviewed we conclude some points:

4.1. Leadership Rounds

The hospital director begins a safety-focused driving tour with other hospital leaders. Monthly tours are conducted to visit various locations within the hospital. The director takes the opportunity to monitor the care provided in the hospital and to discuss patient safety and improvement issues with front-line staff. Principal member companies attended the first workshop. The director of the institute and his team sit at the table to prevent other groups from freely sharing their concerns. Executive leadership is provided by a senior member of the NCPS teaching team (5).



4.2. Patient Centered Structured Hand Over

Medication errors have also been reduced when structured delivery is implemented. These results echo other reviews that treatment-related events decrease after implementation of structured handover in specialized settings that implement accurate and unambiguous medication information transfer. Common side effects measured in this review include operating errors nursing errors and inappropriate line care (eg peripheral lines). When standard submissions are provided that refer to the channel in the Berlow communication model for transfer between source and receiver

unnecessary test maintenance delays will be widespread and standardized to reduce the incidence of duplication of work and inappropriate maintenance. Minimizes avoidable length of hospital stay and avoids side effects.

I-SBAR, Kaiser Permanente (Shahid & Thomas, 2018)	Introduction
	Situation
	Background
	Assessment
	Recommendation

A brief overview of the main advantages of bedside delivery namely direct visualization of pre diagnose and a single patient focus. During pre diagnose nurses can diagnose patients quickly reducing the risk of complications. Bedside births allow nurses to observe patients directly rather than relying solely on verbal reports from game nurses (2).

Electronic device for cutting and delivery. Dissociation or transfer communication process of transferring patient-specific information from one caregiver team to another or from a caregiver to a patient or family member for the purpose of ensuring patient care. Continuity and security. Disruptions in patient information delivery have been found to be a leading cause of police incidents in the United States. The E-Logout application is a tool used standalone or integrated with electronic medical records to ensure structured transfer of patient information during HCP transfers. Two systematic reviews that evaluated the results of electronic tools to support physician shifts between shifts found that most studies found that the use of electronic tools resulted in fewer omissions of critical patient information and deliveries and improved delivery processes. It was concluded that it was reported to be improved. Few low-quality studies evaluated time-patient outcome measures (6).

4.3. Exploit Health Technologies

Table 1 Health information technologies on patient safety

Health information technology	Summary of evidence
Computerized physician order entry	Reduction in the rate of medication errors
Electronic sign out/hand off tools	Improved handover process and fewer omissions of critical patient information
Bar code medication administration	Reduction in medical errors and adverse drug reactions
Clinical Decision support	Improvement in process adherence, medication ordering, vaccination, lab ordering, and clinical outcomes
Patient data management systems	Reduction in charting time, increasing the time spent on direct patient and reducing the occurrence of errors
Automated medication dispensing	Reduction of medication errors in critical care unit
Telemedicine - Telemonitoring	Improved clinical outcomes for patients with certain chronics disease
Telemedicine - virtual visits	As effective as face to face care with regard to specific clinical outcomes
Electrical Medical Record	Improved guideline adherence, reduction in medication errors, reduction in adverse drug reactions, and no significant impat on mortality

Computerized physician order entry involves the use of electronic or computer-assisted entry to enter medical orders including physician orders using a computer or mobile device platform. Inspection Procedures and Consultation. Computerized physician order entry systems are commonly combined with clinical decision support systems (CDS) that serve as error prevention tools by guiding prescribers on preferred dosing routes and dosing frequencies (6).

Electronic Nurse Documentation (END) can be useful too. This systematic review found limited evidence for the effectiveness of END interventions to promote or improve quality of care and patient safety in acute stage hospitals. Although the END shows some positive results the results are determined by the small number of studies reviewed and the potential risk of bias due to uncertainty about the methodological quality of the studies. not the enemy. Insufficient reporting of methods across studies further impairs the ability to draw strong conclusions from the evidence. Most of our review studies have been described as quality improvement projects and due to the lack of evidence on the effects of END on quality control and patient safety further studies are needed in the context of evaluating broader interventions for quality improvement. account. rationale. Define a feasibility study and a final evaluation study of the intervention component (7).

4.4. Video Monitoring

Staff response to the video monitoring system has been strongly favorable. In response to an online staff survey, 81% of respondents indicated either a generally or strongly favorable reaction to the video monitors. Respondents interpreted the prompt "Are the video monitors intrusive?" in varied ways. A total of 91% of respondents felt it was not intrusive, 4% indicated they felt the monitors were a privacy intrusion, and 5% answered that the monitors were physically intrusive and took up too much space in the patient rooms (presumably they were referring to the mobile units and not the permanent ceiling mounted cameras) (8).

Table 2 Are the video monitors intrusive**?**

91%	Not intrusive
4%	Privacy intrusive
5%	Physically intrusive

Although anecdotal accounts of successful programs abound high-quality peer-reviewed evidence regarding the effectiveness of various forms of hospital-based multidisciplinary treatment for children is in its infancy. Current research institutions incorporating these beads in the context of unit-based sweating show generally positive effects on health and other targeted outcomes although the evidence is of low quality in many studies. There is sufficient evidence to justify a broader assessment of benefits compared with hospital interventions. More rigorous studies particularly more controlled and longitudinal studies adopting and reporting on implementation fidelity are needed to accurately assess the extent to which the design and implementation of cohort programs improve patient safety clinical quality and influence other measures of interest. Health problems.

5. Conclusion

To ensure an effective management system patient safety should not be seen as a matter of leadership and management but rather a systemic factor. Therefore the involvement of physicians and patients is critical to the success of patient safety initiatives. A systems approach is critical when redesigning a healthcare system for safer care. Medical errors are deeply rooted in the health care system; For example other publications have shown that the interrelationships and interdependencies between health professionals working under pressure of resources and performance are important and mistakes can occur. There are also budget constraints that affect service quality and patent safety. The report also highlights that health system managers worldwide are facing financial constraints as a result of the global economic recession; This means less staff due to savings. The approach taken to deal with a limited budget is to try to do more with less which can jeopardize patient safety if not planned carefully. Advances in medicine have made patient care more complex which increases the risk of medical errors. Implementation in developing countries differs in many ways including the role of parliaments and the allocation of funds to the health care sector. But we believe that the Libyan healthcare system can benefit from the worlds wealth of experience in patient safety.

This study reviews the literature of improving of patient safety especially in Covid-19 pandemic. There are many ways to reach that goals: leadership rounds, using a effective hand over, technologies application, and video telemonitoring.

Compliance with ethical standards

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Disclosure of conflict of interest

We have no conflicts of interest to disclose.

Reference

[1] MacGillivray TE. Advancing the Culture of Patient Safety and Quality Improvement[CME]. Methodist DeBakey Cardiovasc J. 2020 Jul 1;16(3):192.

[2] Bukoh MX, Staff N, Ng TFGH, SIAH CJ, National University S. A systematic review and meta-analysis on the structured handover interventions in improving patient safety outcomes.

[3] Elmontsri M, Almashrafi A, Dubois E, Banarsee R, Majeed A. Improving patient safety in Libya: insights from a British health system perspective. Patient Saf.

[4] Boserup B, McKenney M, Elkbuli A. The impact of the COVID-19 pandemic on emergency department visits and patient safety in the United States. Am J Emerg Med. 2020 Sep;38(9):1732–6.

[5] Basson T, Montoya A, Neily J, Harmon L, Watts BV. Improving Patient Safety Culture: A Report of a Multifaceted Intervention. J Patient Saf. 2021 Dec;17(8):e1097–104.

[6] Alotaibi YK, Federico F. The impact of health information technology on patient safety. Saudi Med J. 2017 Dec;38(12):1173–80.

[7] McCarthy B, Fitzgerald S, O'Shea M, Condon C, Hartnett-Collins G, Clancy M, et al. Electronic nursing documentation interventions to promote or improve patient safety and quality care: A systematic review. J Nurs Manag. 2019 Apr;27(3):491–501.

[8] Cournan M, Fusco-Gessick B, Wright L. Improving Patient Safety Through Video Monitoring. Rehabil Nurs. 2018 Mar;43(2):111–5.