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Abstract

This study is conducted to explore how patient safety is being managed in public healthcare organizations. For the purpose senior doctors were interviewed and asked about patient safety measures and management in public sector hospitals. Results revealed that doctors are well aware of the concept of patient safety, they are making efforts to ensure patient safety and in particular, they take necessary steps for infection control in their organizations. It was also explored that they work in teams and have proper communication within their teams but lack of proper policies and their implementation are some of the reasons for occurrence of patient safety incidents and inconvenience, that patients face in public healthcare organizations. Based on the analysis, it can be said that systems in public healthcare organizations need improvement and revising patient safety policies is recommended.

Keywords: Patient Safety, Patient Safety Incidents, Adverse events, Healthcare Organizations

1. Background

Patient safety is defined as the prevention of harm caused by errors of commission and omission and some examples of patient safety incidents are medication error, patient fall, wrong surgery or adverse outcome of clinical procedures (Ren Jye, 2019; Asim et al., 2021). Patient safety has its basis in the practice and theory of medicine from its very origin as every healthcare professional knows Hippocrates' principle 'primum non nocere' (first, do no harm) and the ethics and practice of every physician should be based on this principle but in the early days of medical profession patient safety was not of the much concern for people (Bagnara & Tartaglia, 2007; Elahi et al., 2021).

Unsafe healthcare practices cause 3 million deaths worldwide per year, as well as costing \$606 billion in developed countries (Slawomirski & Klazinga, 2022; Khan et al., 2020). After the publication of landmark report "To Err is human" by US institute of medicine which estimated that 44,000–98,000 people lose their lives every year from medical errors in U.S. hospitals was the turning point in the field of medicine (Ehrnsperger, 2016). Before the publication of this report the most common topics of patient safety research were malpractice but after this the focus was moved to organizational culture (Stelfox, Palmisani, Scurlock, Orav & Bates, 2006; Ali et al., 2020).

Efforts to promote patient safety originated from studies in the 1990s designed to understand medical malpractice rather than improve health care, purpose should be to help patients (Stelfox et al. 2006). WHO (2002) asked its member states to pay the closest possible attention to the problem of patient safety and to establish and strengthen science-based systems necessary for improving patients' safety and quality of care.

Patient safety has progressed from being the subject of occasional publications to being the focus of dedicated issues and series in prominent medical journals (Wachter, 2010; Yasir et al., 2021).

A report by WHO (2019) estimated that globally one out of ten patients experienced safety issues while receiving hospital care and this represents the 14th cause of the global disease burden.

A report from the National Patient Safety Foundation stated that 15 years after the IOM released "To Err Is Human", the work to make care safer for patients has progressed at a rate much slower than anticipated and safety issues are far more complex than at the beginning they were considered (National Patient Safety Foundation, 2015; Rafique et al., 2020).

Hemmelgarn, Hatlie, Sheridan & Ullem (2022) discussed that now in U.S national language about patient safety has changed and they discourage leaders to use terms "error" or "medical harm" and to instead use terms like "unanticipated harm" or "patient safety event".

Marcus, Hermann & Cullen (2021) emphasized the significance of evaluation and measurement of patient safety event so that areas which are problematic should be highlighted and encouraged to improve their performance by adopting best practices or implementing interventions that have been shown to improve safety. This research is conducted to get complete information on how patient safety is being managed in healthcare organizations by healthcare practitioners.

2. Literature Review

Patient harm during healthcare is a leading cause of morbidity and mortality internationally (Jha, Prasopa-Plaizier, Larizgoitia & Bates, 2010; Asif et al., 2017). Over 150,000 lives are annually lost to preventable adverse events rooted in misdiagnosis, poorly skilled workforce, and communication breakdowns in hospitals (Akram, Azhar & Aman, 2022; Zafar et al., 2022). So, efforts to improve Patient Safety in healthcare organizations should be made. Patient Safety is an issue which require attention in the whole world not specifically in some countries whether they are developing or developed. Global Patient Safety Action Plan (2021-2030) strives to eliminate avoidable harm in health care with the vision of "a world in which no one is harmed in health care and every patient receives safe and respectful care every time, everywhere".

In healthcare organizations, safety of patients and delivery of quality care should be the priority. It includes avoiding patient safety incidents and adverse events in healthcare organizations. An adverse event in healthcare refers to an unintended or unexpected negative outcome that occurs during the provision of medical care (Vaismoradi, Tella, Logan, Khakurel & Vizcaya-Moreno, 2020; Hydri et al., 2019).

Many factors affect patient safety in healthcare organizations. Khan, Noor & Tasawar (2020) discussed different components for patient injury and harm such as prescription of antibiotics without knowing the patient's under-lying condition or whether antibiotics will help the patient, administration of multiple drugs without relating to adverse drug reactions, poor communication between

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different healthcare providers or delays in receiving treatment. A systematic review by Jha et al. (2010) discussed that harms resulting from unsafe care include infections, incorrect medicines or procedures, missed or delayed diagnosis, falls, which are often preventable through targeted, well-designed and appropriately managed research to gain greater understanding of its causes and contributing factors especially in transitional and developing countries.

Geraedts, Krause, Schneider, Ortwein, Leinert, & de Cruppé (2020) also discussed that patient safety problems are in areas such as anamnesis/diagnostic procedures, medication, vaccination, injection, infusion, aftercare, outpatient surgery, and office administration and among these anamnesis/diagnostic procedures and medication were the areas most affected by patient safety problems. Healthcare workers should be careful and they should have proper communication with their patients to avoid such events. Patient safety is a field that focuses on safety in health care through the prevention, reporting and inquiry of medical error that may generate adverse effects on the patients and thereby reducing the harm caused by taking necessary measure (Abid et al., 2021; Aspden, Corrigan & Wolcott, 2004, Asif et al., 2023). Panagioti, Khan, Keers, Abuzour, Phipps, Kontopantelis & Ashcroft (2019) identified that the most common types of preventable patient harm were related to drugs, other therapeutic management, and invasive medical and surgical procedures.

Role of patient in patient safety is important, but several studies shed light on the fact that healthcare professionals should also show positive attitude for patient participation and they should encourage patients to participate in their safety related activities at hospitals (Leistikow & Huisman, 2018; Qaiser et al., 2021). Ocloo, Garfield, Franklin & Dawson (2021) in a systematic review identified that there is a need for patient involvement in their safety and the environment of the healthcare organization should support patient participation. A study by Busch, Saxena & Wu (2020) discussed strategies for patient involvement stated that patients who feel more empowered are more confident and participate more when they have to get involved in medical error related investigations. Patients and doctors are the main stakeholders in healthcare. Their involvement in policy making and suggestions is very important. World Patient Safety Day (WPSD) is observed annually on 17 September with an aim to raise global awareness about patient safety and it call for united action by all countries and international partners to improve patient safety. World Patient Safety Day is one of the 11 official global public health campaigns marked by the World Health Organization (WHO). Last year World Patient Safety Day (2023) theme was "Engaging patients for patient safety" with the slogan "Elevate the voice of patients".

Any healthcare organizations require an environment where there is transparency regarding error disclosure and error reporting is practiced for minimizing preventable adverse events. A very significant factor with is also highlighted by WHO (2021) is that error identification is very important in reducing errors that harm patients because it reduces the occurrence of errors, and learning from these errors could be done.

It has also been revealed that patients who experienced an adverse event had 7 to 8-day longer stays in hospitals, 2.5 times more early re-admissions, and 4.1 times higher mortality rates (Giesel, Khanam, Nghiem, Staines, Rosemann, Boes & Havranek, 2024). Therefore, these adverse events not only affect patients emotionally, and physically, but also financially and hence, they should be taken care of. All the relevant stakeholders should work together to control them. Organization management has a major role in creating good working conditions for the staff through maintaining organization safety culture in all aspects of patient safety (Hamdan, Elsayed, AlAbd & Razik 2019).

Keeping in view the discussion above, this study was conducted to examine how patient safety is being managed in public sector hospitals.

3. Methods

A qualitative study was conducted in which interviews were done from doctors working at senior positions in four major public hospitals in South East Asia. The doctors selected for interviews had minimum ten years' experience and were working at senior positions, such as Head of departments, Senior Registrar, and on other administrative posts in public healthcare organizations. Interviews were conducted either in their offices, or in the relevant departments where they were on duty at that time. The duration for each interview was 25 minutes at least. Interviews helped us to explore in detail how doctors and leadership of healthcare organization manage patient safety in public healthcare organization. There was total thirteen questions in the interview including questions on how they define patient safety, whether they follow particular policies, and how they manage and measure patient safety, and if they actually have a culture of patient safety.

4. Results

Table 1 below describes the questions based on well-defined indicators of patient safety and their answers.

Table 1: Extracts from Interviews

Questions	Answers			
	Interviewer 1	Interviewer 2	Interviewer 3	Interviewer 4
1 What is your definition of Patient Safety?	It is a discipline that emphasizes safety in prevention, reduction, reporting and analysis of error.	Patient Safety is that patient should feel secure, their privacy should be taken care of and they should be given good healthcare facilities.	Patient Safety is to take care of patients regarding disease and management.	Patient safety is to do no harm to patients.

2	How do you ensure Patient Safety at your workplace?	We have a deep concern in prevention, reduction of patient safety incidents and in counselling of patients.	We ensure patient safety by taking patients as our responsibility.	We ensure patient safety by giving patients proper care, properly handling them, their diagnosis and treatment.	Patient Safety is ensured by accurate clinical assessment, no dangerous signs should be missed, correct dosage of medicine should be given.
3	What is the ratio/percentage of patient safety incidents in your organization and how you measure this?	There is no method of measuring patient safety incidents.	40 percent. There is no method of measuring patient safety.	Once in three months. There is no method of measuring this.	Small events thrice in a week and major events once in a month.
4	How often do you deliver (e.g., evidence-based interventions, system, design etc.) in order to control patient safety incidents?	We use visual aids, displaying wall papers etc. and also verbally.	There are no special interventions to control patient safety.	We work in teams and we ensure that all members are well-trained about patient safety.	There are guidelines which we follow.
5	How well do you learn from your mistakes?	By error analyzing system.	We learn from our mistakes by error analyzing system.	In case of an incident, it is inquired properly through a committee and patient is compensated.	There is no system of Reporting of Patient Safety Incidents, no Error Analyzing System.
6	Do you get regular feedback from your patients?	No	Yes	No	Yes
7	How a culture of safety (Teamwork, communication, working conditions, stress recognition) within employees is created at your workplace?	By teamwork, communication.	We work in teams and we have proper communication within our coworkers.	In our organization, we have proper communication within our teams.	We have a good culture of safety.
8	What role leadership plays to ensure patient safety in your organization?	Leadership plays a vital role in patient safety by communicating with patients regarding their safety.	Leadership guides us and supervises us to control patient safety incidents.	All the teamwork is done under the leadership.	Leadership plays its role in ensuring patient safety by taking regular rounds and visits individual patient separately.
9	Do you conduct regular training for your staff to raise awareness regarding patient safety?	No	Yes	Yes	No
10	In your organization do you follow WHO Safety Surgical Checklist in Operation Theatre	Yes	Yes	Yes	Yes

	before, during and after surgery?				
11	You have appropriate physical environment and equipment in your organization?	Yes	Yes.	Yes.	Basic things are appropriate but there is overcrowding.
12	What steps you take for Infection control? (Hand Hygiene policy, disposal of waste/hazardous waste)	Hand Hygiene, disposal of waste.	Hand Hygiene is taken care of and waste is properly disposed of.	All protocols are met for infection control.	Hand Hygiene is taken care of and disposal of waste and hazardous material is done.
13	How you treat emergency care patients? (Timeliness, quality, accessibility to health services, well designed emergency system, non-discriminatory access to all)	Well-designed emergency system, non-discriminatory access to all.	In emergency non-discriminatory access to health is given to everyone.	All type of emergency care patients have direct approach and are treated without delay and cost.	Emergency patients are given proper care. Their vital signs are checked.

5. Discussion

Patient Safety is a very crucial issue, and it requires great attention. In this research, an effort was made to explore how patient safety is being managed at public hospitals and how it can be improved. Our study findings revealed some important Patient Safety Indicators being practiced in the hospitals which are highlighted in this research and are discussed below:

5.1. Doctors have adequate knowledge about what Patient Safety is

When doctors were asked “What is their definition of Patient Safety?” Interviewer one replied: “Patient Safety is the prevention, reduction, reporting and analysis of errors.” Interviewer two answered: “Patient safety is that patients should feel secure and their privacy should be taken care of”. Third replied that “Patient Safety is to take care of patients regarding disease and management”. Fourth interviewer answered that “Patient safety is to do no harm to patients”. All the doctors have adequate knowledge about what is Patient Safety.

5.2. Ensuring a safe working environment and the safety of procedures and clinical processes

One of the organized activities suggested by WHO (2023) to reduce and avoid harm in health system is “ensuring a safe working environment and the safety of procedures and clinical processes”. It is revealed during interviews that all doctors whether they belong to different hospitals, they are making their efforts in “ensuring patient safety at their workplace”. According to them (interviewer one), they have a deep concern in prevention, reduction of patient safety incidents and in counselling patients. Interviewer two answered: “We ensure patient safety by taking patients as our responsibility”. “We ensure patient safety by giving patients proper care, properly handling them, their diagnosis and treatment”, interviewer three said. “Patient Safety is ensured by accurate clinical assessment, no dangerous signs should be missed, correct dosage of medicine should be given” (interviewer four).

5.3. Healthcare-associated infections

“Healthcare associated infections” is one of the common sources of patient harm explained by WHO (2023) as they result in extended duration of hospital stays, long-standing disability, increased antimicrobial resistance, additional financial burden on patients, families and health systems, and avoidable deaths. When doctors were asked about what steps they take to control healthcare associated infections, interviewer four replied: “Hand Hygiene is taken care of and disposal of waste and hazardous material is done to control infections”. Stated by interviewer three that: “All protocols for infection control are met”. Other interviewers also replied positively about controlling infections in healthcare organizations.

5.4. Teamwork and communication

In most of the organizations, employees were having “good safety climate” i.e., teamwork, communication etc. Some of the answers are, Interviewer one: “We maintain safety culture by working in teams and by good communication”. Interviewer two: “We work in teams and we have proper communication within our coworkers”, “In our organization, we have proper Communication within our teams”, stated third interviewer. Improving Teamwork and communication is also one of the organized activities suggested by WHO (2023) to avoid and reduce patient harm in healthcare organizations.

5.5. Governance and monitoring policies

The major failure in the healthcare system of Pakistan is lack of governance and monitoring policy in public sector hospitals, infrastructure and absence of equality also has weakened the healthcare system in Pakistan (Ali, Ahmad, Danish, Zahid, Israr &

Farooq, 2021). There is a need to review policies regarding patient safety and implementation of those policies should be assured in healthcare organizations.

6. Conclusion

After interviewing senior doctors and observing the functions in healthcare organizations, it has been discovered that doctors are well aware of the concept of patient safety. They are playing their role by taking care of patients and their hygiene. They also take proper steps for infection control. The question arises then what are the reasons behind these Patient Safety Incidents? So, it is concluded that our healthcare organizations need new policies and patient-friendly system. Policies in healthcare organizations should be revised and their implementation should be monitored. It is the most important thing. Policies and guidelines should not remain in papers, their practical usage is necessary to ensure Patient Safety in healthcare organizations.

6.1. Limitations

As it has been discussed earlier in this study also that to improve patient safety, patients' view point should be taken, their suggestions and feedback is actually important because they have gone through the experience of being treated in public healthcare organizations and the difficulties, they have faced they know about them. So, their perspective should have also been taken about their visit and services they have been provided. Due to time and some other constraints this part has been missed in this study.

6.2. Ethical Considerations

Permission was taken from all the doctors before interview and their consent was taken. Time and place of the interview was also set before to avoid inconvenience.

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