Priority in Patient Safety

Dr. Subhrojyoti Bhowmick, *MD , FISQua (UK) , FRPM*
Clinical Director,
Peerless Hospital & BK Roy Research Centre, Kolkata, India
ISQua Lucian Leape Patient Safety Fellowship 2019 winner
NABH Assessor for Hospitals and EC accreditation Program

Background of Patient safety

"First do no harm."

Hippocratic Oath

Patient Safety – the global context

Health Burden of unsafe care

Top 10 Leading cause of death and disability in the world

One in Ten Patient is harmed while receiving hospitals care in High Income countries

Million 2.6 Deaths annually due to adverse events in LMICs

Reference : WHO Patient safety report 2019

Indian scenario

- It is estimated that around 5.2 million injuries occur due to medical errors, resulting in around 3 million preventable deaths every year.
- For every 100 Hospitalization average 12.7 adverse events occurs.

Reference : Ashish Jha, BMJ Quality & Safety, Sept 2013

Adverse Medical Events types

- Delayed or missed diagnoses
- Medication errors
- Wrong side surgery
- Wrong patient surgery
- Equipment failure
- Patient identity
- Transfusion errors
- Mislabeled specimen
- Patient falls
- Time delay errors
- Laboratory errors
- Radiology errors
- Procedural error

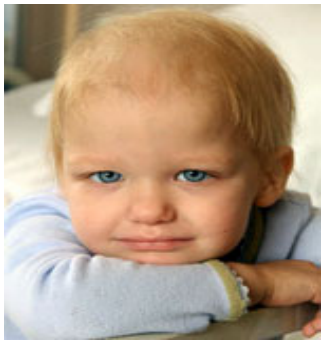
Reference : WHO Patient safety report 2019

Adverse Medical Events types

- Stage lll or lV pressure ulcers acquired after admission
- Lost, delayed, or failures to follow up reports
- Retention of foreign object following surgery
- Contamination of drugs, equipment
- Intravascular air embolism
- Failure to treat neonatal hyper bilirubinemia
- Wrong gas delivery
- Deaths associated with restraints or bedrails
- Sexual or physical assault

Reference : WHO Patient safety report 2019

Who are at greater risk ?



- Child < 16Yrs
- Aged > 65Yrs
- Physically Challenged
- Patients receiving urgent, life-saving care
- Patients undergoing high-risk surgeries
- Patients on multiple medications
- Patients with multiple medication allergies
- Non-Vernacular speaking patients
- Anyone being discharged from the hospital

Reference : WHO Patient safety report 2019

Patient safety priority areas : India

- Strengthening infection prevention and control programme
- Safe surgical care
- Safe childbirth
- Safe injections
- Medication Safety
- Blood Safety
- Medical device safety
- Patient safety research

Priority : Infection prevention and control program

- A national level strategic plan for infection prevention and control will be prepared by Ministry of Health & Family Welfare. This will have close linkage with related programs such as Antimicrobial Resistance Program and National Action Plan on Viral Hepatitis.
- Institutions which have successfully implemented infection prevention and control programs, will be identified and their best practices will be disseminated for evidence based learning and scaling up.
- Functioning of infection control committees at facility level be strengthened and development of standard operating procedures to be undertaken along with regular reporting of indicators.
- Infection Control activities in various national health programs will be integrated.
- A system for surveillance of Healthcare Associated Infections will be established in phased manner. Data of HCAI will be collected and analysed by the agencies responsible for patient safety reporting.

Reference : National Patient Safety Implementation framework, India (2018-2025)

Priority : Safe surgical care

- Safe surgery checklist will be adopted for secondary and tertiary care level hospitals to make sure that all elective and emergency surgeries are performed using safe surgery checklist.
- WHO 24X7 Emergency and essential surgical norms will be adopted in all healthcare facilities providing surgical care
- Appropriate sterilization practices will be adopted within National Trauma Care and National Burns program.
- Guidelines for surveillance and prevention on venous thromboembolism will be developed and implemented.

Reference : National Patient Safety Implementation framework, India (2018-2025)

WHO's Flagship Global Patient Safety Challenges

Second Challenge -2007

Safe Surgery Save Lives

Patient safety Priority : Safe childbirth

- Quality Assurance standards for maternal health care and assessment tools for labor rooms and maternity operation theater will be reviewed and updated based on latest evidences including respectful maternal care and natural birthing process
- Quality standards for labour room and OT will be expanded and reinforced at private health care facilities to ensure quality of intrapartum and post-partum care

Reference : National Patient Safety Implementation framework, India (2018-2025)

Patient safety Priority : Safe injections

- Vaccination of all healthcare providers against Hepatitis B in addition to waste handlers against tetanus to ensure occupational safety concerns among healthcare providers
- Strengthen the post-exposure prophylaxis (PEP) for needle stick injuries at all causalities/OTs and other intervention sites

Reference : National Patient Safety Implementation framework, India (2018-2025)

Patient safety Priority : Medication Safety

- Standard operating procedures for disposal of discarded/ expired drugs as per BMW rules 2016 will be developed.
- Adverse drug reaction surveillance will be strengthened and implemented across all public and private health care facilities with close coordination between state health departments, pharmacovigilance agencies, professional associations drug manufacturers and national vertical programs.

Reference : National Patient Safety Implementation framework, India (2018-2025)

WHO's Flagship Global Patient Safety Challenges : Current challenge

Third Challenge -2017
Medication without Harm

Patient safety Priority : Blood Safety

- Voluntary Non Remunerated Blood Donation will be promoted though improved donor selection, recruitment, retention and referral through an effective communication strategy and capacity building.
- Adverse donor and transfusion reactions surveillance will be implemented at all levels of care.
- Hospital transfusion committee will be constituted with standard composition and terms of reference and rational use of blood and blood products will be promoted.

Reference : National Patient Safety Implementation framework, India (2018-2025)

Patient safety Priority : Medical device safety

- Usage of non- mercury devices and equipment will be promoted.
- Availability of biomedical engineers will be ensured at health care facilities
- SOPs for utility; breakdown; monitoring of medical devices, restricting reuse of single-use purpose devices, clear policy on condemnation of equipment and SOPs of calibration for electronically operated medical devices will be developed and made available to health care facilities.

Reference : National Patient Safety Implementation framework, India (2018-2025)

Patient safety Priority : Safe organ, tissue and cell transplantation and donation

- Deceased donor programme will be reinforced and modified as necessary.
- Scale-up IEC for organ donation, training of personnel in addition to registration of organ retrieval centers.
- Dissemination of relevant information and ensure uniform implementation across region/state/ institutions/hospital/tissue banks on legislation (THOA), National Organ Transplant Programme (NOTP), National Organ and Tissue Transplant Organization (NOTTO), different SOPs, including for selection and safety of donors; allocation policies, and national registries.

Reference : National Patient Safety Implementation framework, India (2018-2025)

Patient safety Priority : Strengthen capacity for and improve patient safety research

- A repository of good quality research on patient safety and allied themes will be created at national level.
- This will be pursued through Indian Council of Medical research (ICMR) which is the nodal medical agency for research in the country.
- Studies will be conducted for estimation of the overall burden of unsafe care including point prevalent survey of hospital acquired infections.
- Research on different aspects of patient safety at country and state level will be prioritized

Reference : National Patient Safety Implementation framework, India (2018-2025)

Our patient safety Research work

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Original Research Article

Medication errors reported in a tertiary care private hospital in Eastern India: a three years experience

Subhrojyoti Bhowmick[1], Shubham Jana[1]*, Adrija Bandyopadhyay[1], Debarati Kundu[1], Meena Banerjee[2], Anupam Das[3], Sujit KarPurkayastha[4]

[1]Department of Clinical Research, [2]Department of Nursing, [3]Department of Quality Assurance and Medical Administration, [4]Department of Gastroenterology, Peerless Hospitex Hospital and Research Center Ltd., Kolkata, West Bengal, India

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***Correspondence:**
Mr. Shubham Jana,
Email: sjana9424@gmail.com

ABSTRACT

Background: Medication errors (MEs) can cause significant harm to patients. The MEs identified through reporting processes currently report only a fraction of the actual number of MEs. Data about MEs is limited in India, especially from eastern and north-eastern parts of India. The objective of this study was to analyse the various types of Medication errors reported in a tertiary care private hospital in Eastern India. The aim was to determine the various factors associated with these errors and steps to be taken to reduce the MEs in this healthcare setup.
Methods: We carried out a prospective passive surveillance study over the course of 3 years (2016-2018) on 50,822 admitted patients after obtaining approval from the Institutional Ethics Committee. A detailed root-cause analysis was performed for every reported error by a team of healthcare quality professionals and clinical pharmacists along with a clinical pharmacologist followed by appropriate preventive and corrective actions.
Results: In our study, a total number of 88 medication errors were reported from a sample size of 50,822 (0.0017%). 61 of the reported MEs were administration errors (69.3%). Higher preponderance of medication errors was seen in male patients (53.1%) in comparison to female patients (46.9%).
Conclusions: In this study gross under-reporting of MEs were observed which is in line with previously published studies in India. The reasons reported for gross under-reporting can function as an effective tool to ensure improved reporting of MEs and implementation of mitigation strategies.

Our patient safety Research work

Original Article

Prescription Audit Study from a Tertiary Care Private Hospital in Kolkata, India

Subhrojyoti Bhowmick, Shubham Jana[1], Saksham Parolia[2], Anupam Das[3], Protim Saren[4]

Departments of Academics, Quality and Research, [1]Clinical Research and Academics, [3]Medical Administration and Quality Assurance and [4]Quality Assurance, Peerless Hospitex Hospital and Research Center Ltd., Kolkata, West Bengal, [2]Department of Pharmacy Practice, Manipal College of Pharmacy, Manipal, Karnataka, India

Abstract

Introduction: Prescription writing is an important aspect of safe medication practices. Prescriptions should adhere to best practices mentioned in the World Health Organization guidelines and the National Accreditation Board for Hospitals and Healthcare Providers guidelines. **Aim:** Evidence about prescription audit study conducted in developing countries like India is scarce, especially from the Eastern part of the country. Hence, the current prescription audit study was conducted in a tertiary care private hospital in Eastern India in the city of Kolkata. **Materials and Methods:** This study presents an assessment of the quality of prescribing practice in a tertiary care private hospital in Kolkata. Six thousand four hundred and six medicine cards (6406) of inpatients were prospectively analyzed for the duration of 6 months. **Results:** The audit revealed that only 69.24% of medicine cards had captured drug allergy, 99.53% had mentioned the route of administration, 99.85% had dose strength, 99.89% had mentioned the frequency of dose, and only 75.35% had mentioned the indication/diagnosis of patients. Surprisingly, 90.75% of medicine cards had an error-prone abbreviation which was an issue of major concern. **Conclusions:** The audit report was shared with the clinicians every month along with regular training of good prescribing practices, which improved the quality of prescribing practice. Regular prescription audit followed by dedicated clinical pharmacology team along with constant communication with clinicians can improve the quality of prescriptions in long run.

Keywords: Medicine cards, National Accreditation Board for Hospitals and Healthcare Providers guidelines, prescribing indicators, prescription audit, World Health Organization guidelines

Introduction

Inclusion criteria

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Subhrojyoti Bhowmick[1], Shubham Jana[2], Saksham Parolia[3], Anupam Das[4], Protim Saren[5]

[1] Department of Academics, Quality and Research, Peerless Hospitex Hospital and Research Center Ltd., Kolkata, West Bengal, India

Summary

- Medical Errors are common entity in health care including India
- Govt. of India has identified key patient safety priority areas
- Patient Safety activities include development of SOPs, identification, reporting and analysis of the medical errors
- Goal is to develop a culture of patient safety and "fault tolerant" health care system
- India specific Patient safety research and evidence based patient safety activities will be the way forward

To conclude…

We must always remember that **“there are no biologically safe drugs**; there are only **safe physicians, nurses and pharmacists”**.

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Email
drsubhro@gmail.com
Mobile : +91-9830204863
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B.K.ROY RESEARCH CENTRE
Thank You