Internship
at
Primus Super Specialty Hospital, Delhi
From March 25th, 2022 to June 19th, 2022

Dissertation
on

COMPLIANCE TO FALL PREVENTION SAFETY BUNDLE BY NURSING STAFF

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INTERNSHIP REPORT

LEARNINGS FROM PRIMUS SUPER SPECIALTY HOSPITAL

INTRODUCTION : ORGANISATION PROFILE

Primus Super Speciality Hospital
• LIFE • HOPE • CARE

PSSH is a super specialty hospital which provides a wide range of medical services. It is particularly well known for Orthopaedic treatment and surgeries.

SERVICES PROVIDED


Outpatient Services


Inpatient Services


Numerous specialities


Diagnostics


Pharmacy


Blood Bank

Emergency Medicine

OBJECTIVES, ACTIVITIES AND LEARNING

Primus Super Speciality Hospital
•LIFE •HOPE •CARE

MY OBJECTIVES FROM INTERNSHIP

- To understand the basic functioning and the systems in a hospital
- Functions of different departments and their coordination
- Understanding differences between NABH 4th and 5th edition
- Apply principles of research to conduct a study/dissertation

KEY ACTIVITIES AND LEARNING

Active file audit
- Data collection
- Analysis
- Presentation of data

Prescription audit analysis
- Analysis
- Presentation of data

Daily audit of ICU
- Data collection
- Analysis
- Presentation of data

Departmental gap assessment and other
- Report writing
- Writing MOM and circulars
- Training activities
- Dissertation

DISSERATION

COMPLIANCE TO FALL PREVENTION SAFETY BUNDLE BY NURSING STAFF

INTRODUCTION

Increased Length of Stay (6 days on average)

Increased Costs (by $14,000 on average)

Psychological sequelae (for both patient and nurse)

Patient Fall

- Average: **3-5** falls per 1000 occupied bed days
- Maximum risk: **geriatric**, psychiatric patients

Consequences

- Physical injury: **30%-50%** cases
- Fractures: **1%-3%** cases

FALL PREVENTION METHODS

- Numerous strategies and methods available
- Shown to reduce patient fall incidence by 20%-30%
- Multicomponent strategy (bundles) > single component strategy

REVIEW OF LITERATURE

Author	Year	Study	Objective	Conclusion
Stephenson M. et al	2016	Cross-sectional	"To assess falls prevention practices in Australian hospitals and implement interventions to promote best practice."	Mean overall compliance: 50.4% Increased to 74.5% upon 2 follow ups
National Audit of Inpatient Falls – Royal College of Physicians (NHS)	2017	Cross-sectional	"To improve inpatient falls prevention and post fall care through audit and quality improvement"	Average compliance to fall prevention practices: 58%
Mitra M. et al	2019	Cross sectional	• "Patient Falls in a Multispecialty Tertiary Care Hospital in Kolkata: A Discussion on the Risk Factors and the Fall Reduction Strategies" • "To see the effect of the interventions done starting from June 2018 aimed towards intensifying the implementation of the Fall Prevention Program already existing in the hospital"	Decrease in fall rate by 44%
Morris R, O'Riordan S	2017	Systematic literature review	"Prevention of falls in hospitals"	Identifying risks and providing effective interventions where possible can reduce falls by 20–30%
Oliver D. et al	2004	Systematic literature review	"To identify all published papers on risk factors and risk assessment tools for falls in hospital inpatients. To identify clinical risk assessment tools or individual clinical risk factors predictive of falls, with the ultimate aim of informing the design of effective fall prevention strategies"	Small number of significant risk factors namely gait instability, agitated confusion, urinary incontinence/frequency, falls history and prescription of 'culprit' drugs (especially sedative/hypnotics)

INTRODUCTION : REVIEW OF LITERATURE

Author	Year	Study	Objective	Conclusion
Singh I, Okeke J, Edwards C	2015	Observational study	"To compare the outcome of in-patient falls occurring in units with 100% single rooms and multi-bedded wards"	Significantly increased incidence of falls and fracture in a hospital design with SRs compared with a multi-bedded facility
Dionyssiotis Y	2012	Systematic literature review	"To analyse the importance of falls, risk factors for falls, and interventions to prevent falls"	The author supports a multidisciplinary rehabilitation approach that emphasizes both functional recovery and restoration of quality of life.
Turner K. et al	2020	Descriptive study	"To identify and describe the prevalence of specific hospital fall prevention implementation strategies"	• Hospitals were more likely to use leadership strategies (98%) but less likely to reward staff (40%) • Hospitals commonly used interdisciplinary falls committees (83%) but membership rarely included physicians • Education strategies were commonly used; 100% of hospitals provided fall education at staff orientation, but only 22% educated all employees (not just nursing staff)

INTRODUCTION :
RESEARCH QUESTION AND SPECIFIC OBJECTIVES

What is the compliance of nursing staff to fall prevention strategies and safety bundles in the IPD of Primus Super Specialty Hospital?

1

To know the **compliance percentage** of nursing department to fall prevention safety bundle in IPD ward in Primus Super Specialty Hospital in the month from 20.4.22 to 10.6.22.

2

To analyze the **reasons for non-compliance** of nursing department to fall prevention safety bundle in IPD ward in Primus Super Specialty Hospital in the months of from 25.4.22 to 10.6.22.

3

To **suggest recommendations** for improvements of compliance to fall prevention safety bundle in IPD ward in Primus Super Specialty Hospital based on above analysis

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STUDY FRAMEWORK

OBJECTIVE	INDICATOR	TOOL
To know the compliance percentage of nursing department to fall prevention safety bundle in IPD in Primus Super Specialty Hospital in the month from 20.4.22 to 10.6.22. (Quantitative)	• Percentage of compliance = Number of files with full compliance/ Number of total files audited * 100	• Daily audit checklist • Observation
To analyze the reasons for non-compliance of nursing department to fall prevention safety bundle in IPD in Primus Super Specialty Hospital in the months of from 25.4.22 to 10.6.22. (Qualitative)	• Answers and reasons discussed and received during brainstorming session	• Brainstorming session • Fishbone diagram • Observation
To suggest recommendations for improvements of compliance to fall prevention safety bundle in IPD in Primus Super Specialty Hospital based on above analysis	• Areas of maximum non compliance	• Pareto chart • Observation

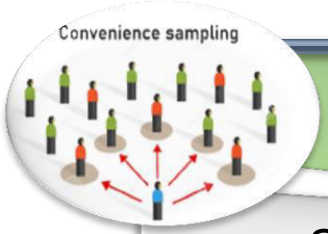
METHODOLOGY

STUDY DESIGN AND SETTING

- Cross sectional study
- Both quantitative and qualitative
- Set in Inpatient department (2nd floor ward, 4th floor ward, MICU, SICU, CCU)

SAMPLE SIZE

- 190 IPD active patient files audited over
- 5 files per day
- 5 days per week



SAMPLING TECHNIQUE

Stratified Random Sampling

5 random files from each IPD area on different days of the week

METHODS AND MATERIALS

MODE OF DATA COLLECTION

Daily audits, observation, interaction with patients and nurses

- Permission from higher authorities obtained
- Nursing department informed regarding the study and audit rounds
- No direct identification questions were asked from patients and nurses

COMPLIANCE PERCENTAGE TO FALL PREVENTION SAFETY BUNDLE

- Daily audit checklist
- 6 elements of fall prevention safety bundle:
  - Morse fall risk assessment
  - Patient's vulnerable status
  - Fall prevention education
  - Fall risk interventions
  - Past medication history of sedative use
  - Past surgical history
  - Patient and attendant orientation

CHECKLIST

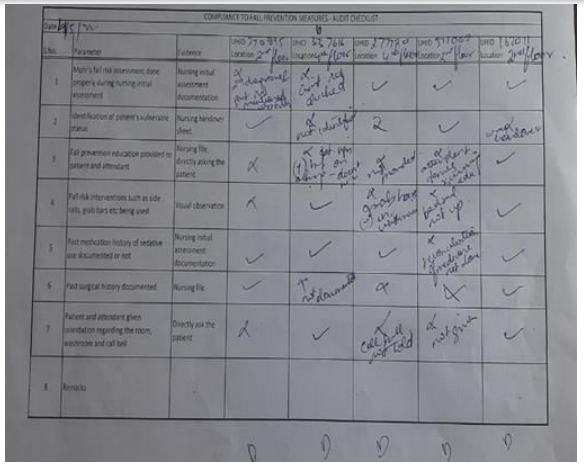
POSSIBLE REASONS FOR NON-COMPLIANCE

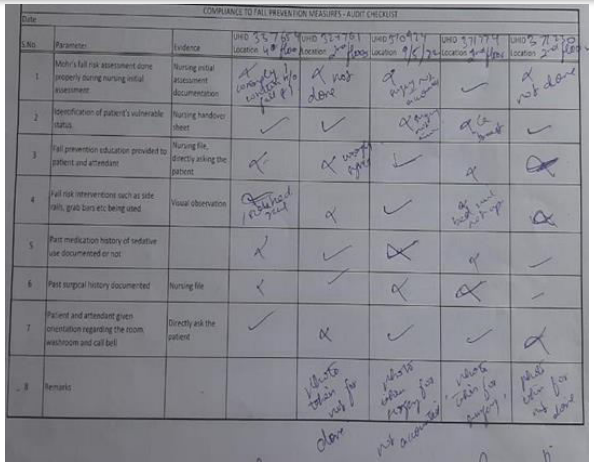
- Observation
- Brainstorming session:
  - Central open ended question : "*"What are the reasons for non-compliance to the fall prevention safety bundle, according to you?"*
  - 5 staff nurse; 2 experienced nurses, rest 3 fresher staff

DATA ANALYSIS

ANALYSIS USED FOR COLLECTED DATA

- MS Excel was used for analysis
- Use of functions and formulas like SUM, PIVOT amongst others
- For calculation
  - “1” for full compliance
  - “0” for non-compliance
- Formula
  - Number of files with full compliance/ Number of total files audited * 100





Daily audit for compliance to fall prevention safety bundle - Excel (Product Activation Failed)

NURSING COMPLIANCE TO FALL PREVENTION SAFETY BUNDLE - DAILY AUDIT DATA

DATE OF AUDIT	LOCATION	UHID	Mohr's fall risk assessment done properly during nursing initial assessment	Identification of patient's vulnerable status	Fall prevention education provided to patient and attendant	Fall risk interventions such as side rails, grab bars etc being used	Past medication history of sedative use documented or not	Past surgical history documented	Patient and attendant given orientation regarding the room, washroom and call bell	Remarks
3.5.22	2nd floor	234909	1	0	1	0	0	1	1	vulnerable status of patient not id side rail up, past surgical hist
3.5.22	2nd floor	371005	1	1	1	1	1	1	1	
3.5.22	2nd floor	370019	1	1	1	0	0	0	1	
3.5.22	2nd floor	369772	1	0	1	0	0	0	0	Mohr's fall risk assessment not don diagnosis not considered, photo tak not identified, wet floor obs
3.5.22	2nd floor	369177	1	1	1	1	1	1	1	
4.5.22	2nd floor	370895	0	1	0	0	1	1	0	secondary diagnosis and gait not c fall risk assessm
4.5.22	4th floor	337616	0	0	0	1	1	0	1	gait not checked, vulnerable status sign present but on asking patien receiving education, past surgical hi
4.5.22	4th floor	277780	1	0	0	0	1	0	0	grab bars not present in washroom patient
4.5.22	2nd floor	371008	1	1	0	0	0	0	0	attendant denies receiving educat reconciliation of medication not d given to patien
4.5.22	2nd floor	162011	1	0	1	1	1	1	1	wrong handover - non identificat
5.5.22	2nd floor	870421	1	1	0	1	0	0	1	

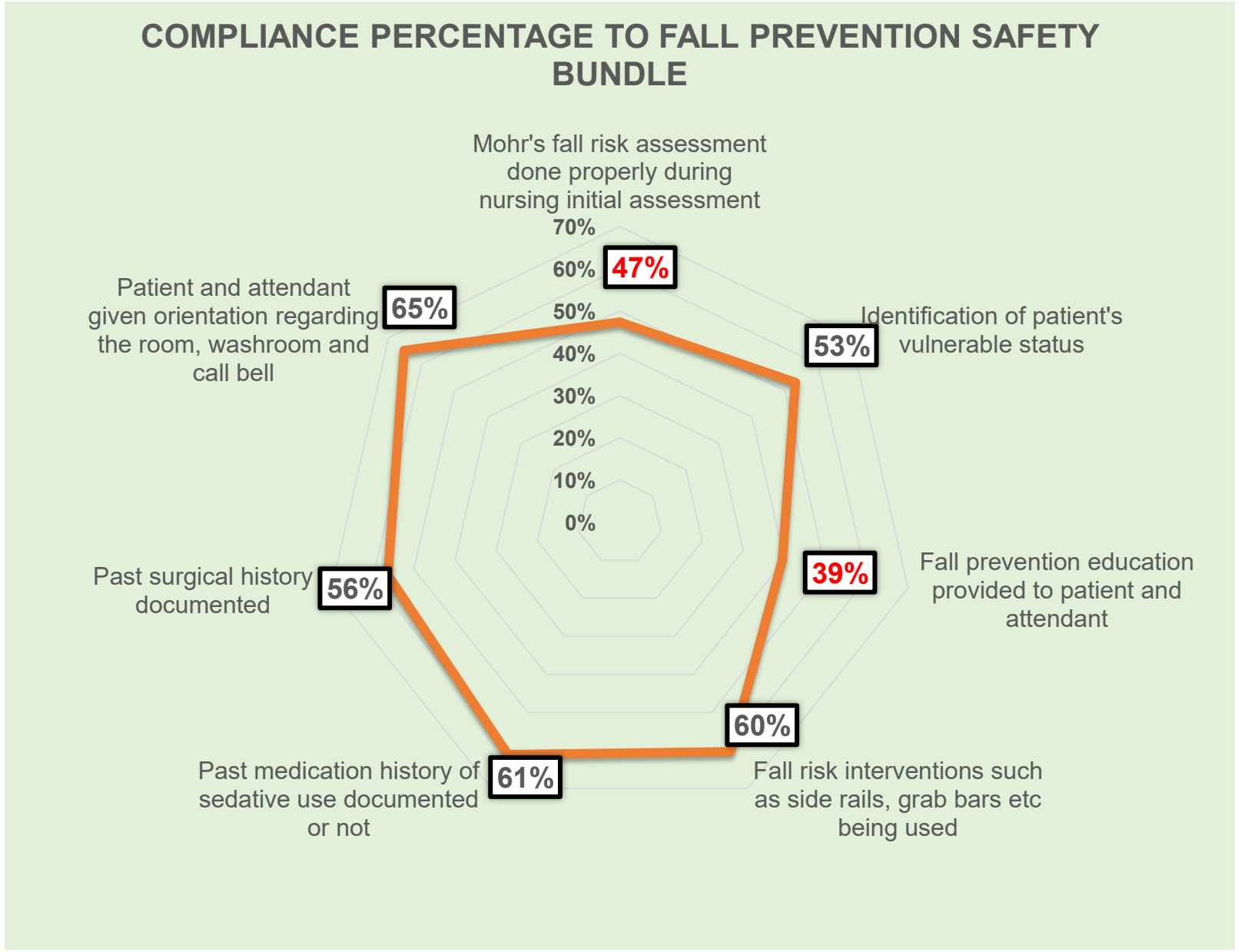
RESULTS: COMPLIANCE PERCENTAGE

COMPONENT OF SAFETY BUNDLE	TOTAL FILES AUDITED	NUMBER OF FILES COMPLIED	COMPLIANCE PERCENTAGE
Mohr's fall risk assessment done properly during nursing initial assessment	190	90	**47%**
Identification of patient's vulnerable status	190	101	**53%**
Fall prevention education provided to patient and attendant	190	75	**39%**
Fall risk interventions such as side rails, grab bars etc being used	190	114	**60%**
Past medication history of sedative use documented or not	190	116	**61%**
Past surgical history documented	190	107	**56%**
Patient and attendant given orientation regarding the room, washroom and call bell	190	124	**65%**

Average compliance percentage:

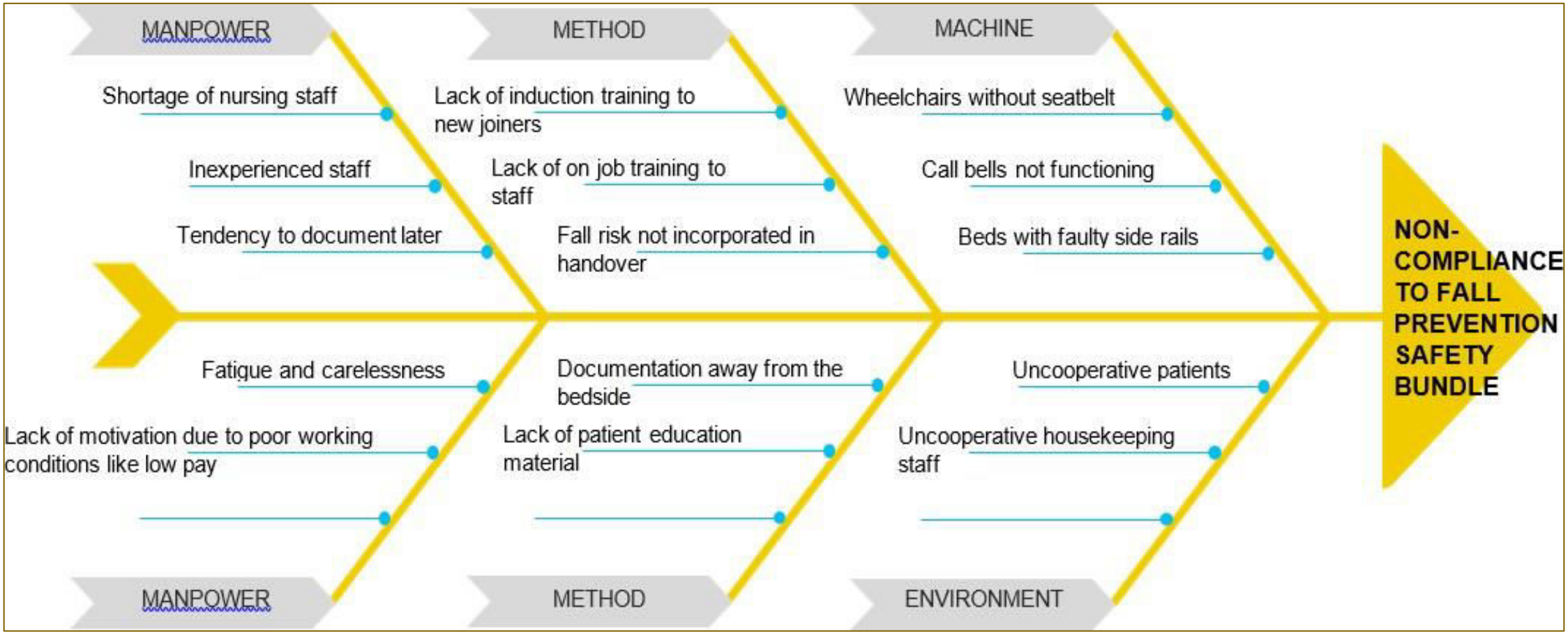
55%

RESULTS: COMPLIANCE PERCENTAGE



- Least compliance (39%):
  - Fall prevention education provided to patient and attendant
- Followed by (47%):
  - Mohr's fall risk assessment done properly during nursing initial assessment

RESULTS: REASONS FOR NON-COMPLIANCE



Majority of the reasons were related to **manpower** and **method/processes**

RESPONSES PAGE 37

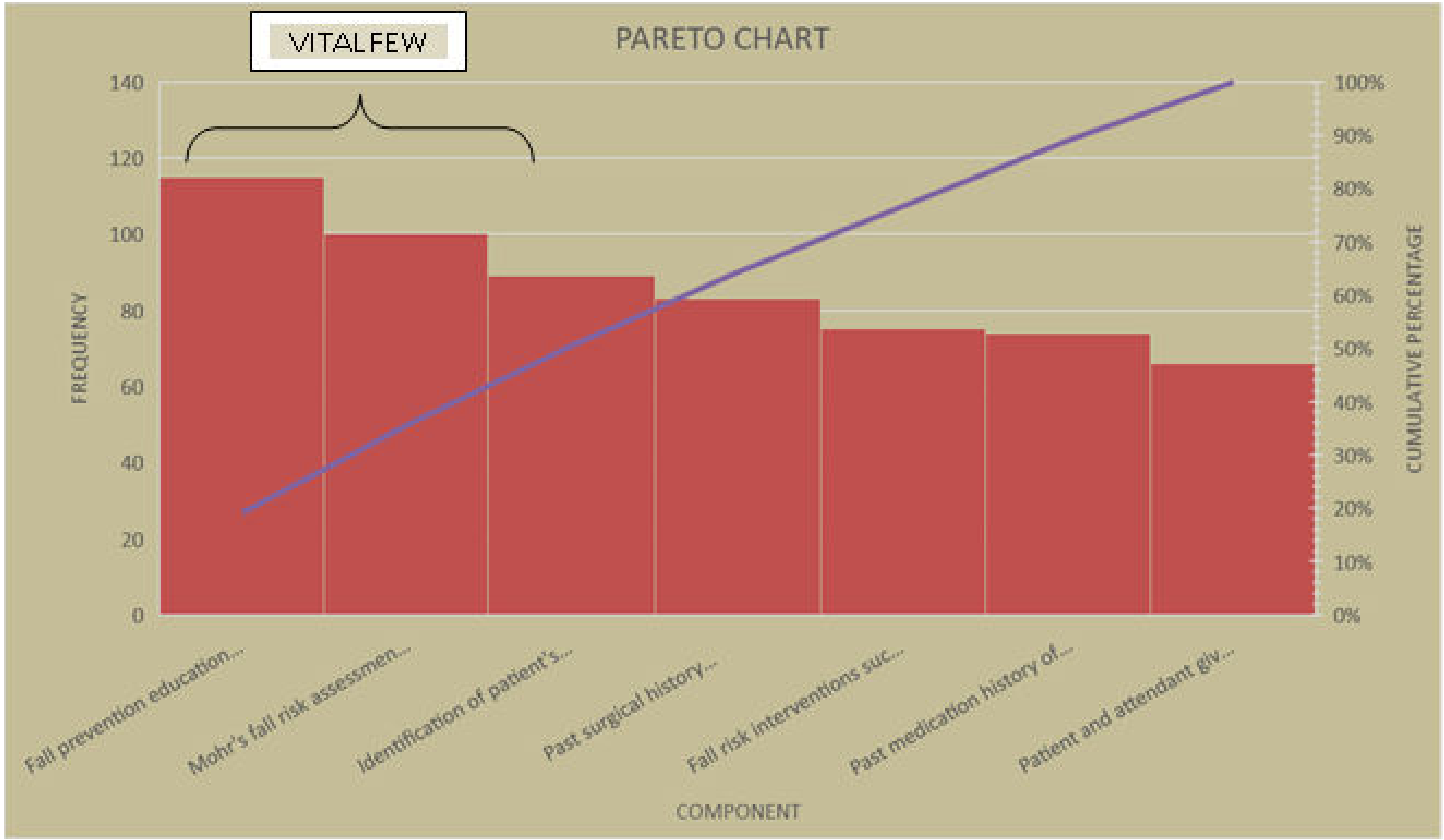
DISCUSSION

COMPONENT	MOST COOMONLY OBSERVED NON-COMPLIANCE
Morse fall risk assessment done properly during nursing initial assessment (47%)	• Improper documentation in terms of secondary diagnosis • Error in assessment of the gait of the patient • Proper history taking was not done from the patient • Incorrect scoring and totaling • No documentation
Identification of patient's vulnerable status (53%)	• Inability to correctly identify vulnerable patients • Lack of knowledge regarding criteria for vulnerable patients • Lack of identification mark for vulnerable patients • Correctly identified during initial assessment, however, error in correct documentation during handover
Fall prevention education provided to the patient and attendant (39%)	• Education not provided when documentation done away from bedside • Patient not told about their fall risk and factors leading to fall • Lack of documentation for the same

DISCUSSION

COMPONENT	MOST COOMONLY OBSERVED NON-COMPLIANCE
Fall risk interventions such as bed rails, grab bars etc. being used (60%)	• Lack of proper resources • Wheelchairs without seat belts • Lack of grab bars in washrooms of in 2nd floor ward • Call bell not functioning properly • Bed rail upright on one side only
Past medication history of sedative use documented or not (61%)	• Nurses focused on diabetes and hypertension, but did not document any other medications • General issues in reconciliation of medication • Hospital has ongoing program for medication management
Past surgical history documented or not (56%)	• Lack of communication between doctors and nurses • Improper history taking • Not documented anywhere in nursing file (initial assessment, nursing care plan and nursing notes)
Patient and attendant given orientation regarding room, washroom and call bell (65%)	• Patients complained that call bells were not functioning properly • Mostly observed in 4th floor ward

RECOMMENDATIONS: PARETO CHART



CALCULATION TABLE

RECOMMENDATIONS: EXTENSIVE TRAINING PROGRAM

- Both induction training and regular on job training
- Training sessions to include:
  - Importance of fall prevention safety bundle
  - All elements in detail
  - Vulnerable status of patients (criteria)
  - Detailed session on Morse fall risk assessment
  - Importance of involving patient and attendant in the program by providing them education and knowledge
  - Importance of past surgical history and sedative medication in fall risk

RECOMMENDATIONS: PATIENT EDUCATION MATERIAL

- To be attached with nursing initial assessment
- Should be in an easy to tear format
- Will act as ready guide for the patient
- Will serve as reminder to nurses to provide patient education (Poka Yoka Technique)
- Signature should be obtained from patient/attendant once education material is handed over

CONCLUSION

Objective 1

- Average compliance percentage: 55%
  - Least compliance in Patient Education followed by Mohr's Fall Risk Assessment

Objective 2

- Majority reasons for non-compliance due to manpower and the methods/processes followed

Objective 3

- Primary recommendations:
  - Extensive training program
  - Patient education material
- Secondary recommendations:
  - Incorporation in handover
  - Surprise audits
  - Preventive and corrective maintenance for equipment

LIMITATIONS

1. Short study duration
2. Small sample size
3. Studies the compliance of only the nursing staff
   - Successful fall prevention approach requires compliance and participation from doctors, patients, housekeeping staff.

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THANK YOU