“Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L.Jalappa Medical Teaching Hospital Kolar”

By

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Rajiv Gandhi University of Health Sciences Bangalore Karnataka.

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In

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Under the guidance of

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2023

DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled**"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar** is a bonafide and genuine research work carried out by me under the guidance of Dr. Zeanath Cariena. J**,** Prof & HOD Dept. of Medical Surgical Nursing**,** Sri Devaraj Urs College of Nursing and Chief Nursing Officer at RLJH&RC Tamaka, Kolar.

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Signature of the candidate

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ABSTRACT

Title

"Effectiveness Of Simulation Based Training On Incident Reporting Competency Among Nursing Staff Working In R. L. Jalappa Medical Teaching Hospital Kolar"

Background and objectives

Introduction

Patient safety is a health care discipline that emerged with the evolving complexity in health care systems and the resulting rise of patient harm in health care facilities.

A study was undertaken to assess the "Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar."

Aim: The study aimed to assess effectiveness of simulation based training on incident reporting by measuring the knowledge & competency Level regarding among Nursing Staff.

Methods :

The quasi experimental one group pre and post test design was adopted for the study, The study was conducted in R. L. Jalappa Medical Teaching Hospital Kolar. The data was collected by using validated structured knowledge questionnaire and competency checklist among 250 Nursing Staff.The formal permission along with consent was taken from the participants before collecting the data The study participants were selected by simple random sampling method.The 250 Nurses ware grouped to 10

team and who fulfilled the criteria ware given pretest and simulation based Training was conducted. The post test conducted on 14 or 15th day after pretest

Results:

The study finding related that ,there is a significant important between the pre and posttest mean score of knowledge pretest is 16.08 and posttest is 24.2 and competency level pretest is 9.0 and posttest score is12.8 The compression of mean knowledge score is (8.12) competency (1.28) score ware statistically significant at $p<0.05$

Conclusion The Simulation based Training was effective is enhancing both of knowledge and competency level of Nursing Staff on incident reporting.

Key words: Incident reporting; Simulation Based Training; knowledge competency level;

LIST OF ABBREVIATION

Sl. No	Abbreviation
1.	H01: Null hypothesis one.
2.	H02:Null hypothesis two.
3.	H03: Null hypothesis three.
4.	H04: Null hypothesis four.
5	R,L,JH& RC: Jalappa Hospital and Research Center.
6	O1: Pre-test
7	X: Intervention
8	O2: Post-test
9	%: Percentage
10	f : Frequency

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CHAPTER - I

INTRODUCTION

All forms of health care services are impacted by the regional and global public health concern of patient safety. A patient's freedom from unwarranted injury or possible harm related to receiving medical attention is considered safety, which is one of the core components of health care. Making healthcare safe for patients and medical workers is the goal of patient safety[1].

One of the top suggestions made by the global health community is to instil a culture of patient safety in a healthcare facility. Reporting incidents has been seen as an essential component. Hospitals urge both mandatory and voluntary reporting because "Silence Kills" in healthcare. While an occurrence that has been thoroughly documented, examined, and freely discussed helps everyone at work comprehend the circumstances. Learn from the incident that occurred to avoid repeating the same mistakes in the future. While they can spot pharmaceutical errors, nursing interns are reluctant to report them. Even though it has flaws, incident reporting is more than simply the initial step in solving a current issue; it also involves learning from it to prevent its repetition[2].

Every professional will occasionally make blunders. Particularly in a challenging field like healthcare. Incident reporting is one of the primary methods for monitoring errors to stop their repetition. One of the cornerstones of safer potential risks is an incident reporting system (IRS), which warns personnel of potential system breakdowns in the business[3].

Finding the cause of an incident and preventing future recurrences are the goals of an investigation. The objective of any unexpected occurrence or close call is referred to as an incident, and the person or group in charge is known as the incident owner.

The study sought to determine the frequency of accidents and near-misses in New Zealand businesses, the proportion of these occurrences that are reported, and the variables that influence reporting. The majority of studies are under reported and decision-making theories were applied to incident reporting to analyse prior research and gather data on the factors influencing employees' decisions to report incidents[4].

India has a serious issue with incident reporting. India has a little more clearly stated that international corporations must comply with its contentious new reporting standards. 410 drug errors were discovered, according to a recent study on event reporting of the total of 6,705 charts. Transcription errors are the most typical error, and prescription errors account for 40% of all errors[5].

The selected research showed that the prevalence of falling ranged from 26 to 37 percent across diverse locations, with full injuries, vertigo, imbalance, poor vision, and fear of falling history. visible evidence of osteoarthritis Disability hearing Depression and impairment This study revealed that the older female population had a higher chance of falling[6].

Millions of individuals suffer injuries or pass away each year as a result of hazardous and subpar medical care. Numerous medical procedures and health care-related dangers are becoming important obstacles to patient safety and greatly increase the burden of injury from hazardous driving[7].

NEED FOR THE STUDY

Delivering high-quality, vital healthcare services requires a commitment to patient safety.[8]

Learning for yourself is a crucial first step in raising the standard of treatment and increasing patient safety. Vulnerabilities in the healthcare system can be greatly reduced with voluntary reporting. Events should only be reported if the data they contain have been properly analysed by knowledgeable persons. Organizations should emphasise what happens after incident reporting, but first, patient safety issues need to be clearly identified and prioritised so that they may be handled in accordance with their risk[9].

Clear policies, leadership, capacity, data to drive safety improvements, qualified health care workers, and effective patient involvement in their care are all required for the successful implementation of patient safety programmes[7].

The WHO and Joint Commission International are working together to promote the following six international patient safety goals in order to raise awareness of them and guarantee the delivery of safe treatment.

Goal 1: Accurately identify the patient

Goal 2: To enhance communication effectiveness

Goal 3 : Improve the safety of high alert drugs is the third goal.

Goal 4: To guarantee proper examination, proper process, and patient surgery.

Goal 5: To lower the risk of infections among healthcare professionals.

Healthcare professionals often adhere to protocols in order to increase patient well-being at every step of care, care workers routinely adhere to protocols that improve patient safety, such as preventing falls and medication errors and lowering re-admissions and infections[10].

Millions of individuals suffer injuries or pass away each year as a result of hazardous and subpar medical care. Numerous medical procedures and risks connected to health care are becoming important obstacles for patient safety and greatly increase the burden of harm from subpar treatment.[9]

Medication errors:

The annual cost of drug errors is estimated to be 42 billion US dollars worldwide.

Falls: Falls occur often among hospital inpatients, with an average of 2.3 to 7 falls per 1,000 patient-days. 4 to 6 percent of inpatient falls result in serious injuries, accounting for around 30 percent of all injuries. These severe fall-related injuries can result in fatalities, subdural hematomas, fractures, excessive bleeding, and other dangerous conditions.

Sentinel events:

According to 2020 figures, 794 sentinel incidents, including unintentional retention of a foreign object, suicide, delays in treatment, wrong-site surgery, assault, and fire, have occurred in hospitals.[11].

The World Health Organization has recently created a plan to prevent patient harm occurrences, and the Joint Commission recently announced National Patient Safety Goals (NPSGS), which represent new patient safety concerns, to assist healthcare facilities in providing safer, more equitable treatment[12].

Nursing leaders and educators are crucial in helping Nursing Staff acquire the knowledge, abilities, and attitudes necessary to report incidents. They serve as a role model for Nursing Staffs and can inspire them to complete their training to the highest standard. They must understand the proper incident reporting procedures[13].

Global Statistics

The joint commission has released its sentinel event data 2022 annual review on serious adverse events from Jan to Dec- 2022 A sentinel event patient safety event that result in death ,permanent harm. The Joint Commission reviewed 1,441 sentinel events in 2022.the most prevalent sentinel event Types ware; fall(42%),delay treatment (6%), unintended retention of foreign object(6%),wrong surgery (6%), suicide (5%). Most reported sentinel event occurred in hospital (88%) of all the sentinel events,20% ware associated with patent death ,44% with sever temporary harm and 13% with unexpected additional care /extended stay[14].

The nursing administrator or leader of tomorrow are today's nursing officers. Therefore, the investigator felt strongly that it was important to evaluate the level of knowledge and competence on incident reporting among Nursing Staff in order to protect patients and maintain a safe and secure there environment.[14]

Preliminary survey

Based on the available literature with gaps identified and the personal experience of the investigator most of the Nursing Staffs in preliminary survey conducted on 20 Nursing Staffs were found to have inadequate knowledge about incident reporting and action plan in the process patient safety.

Thus, the investigator, strongly felt the need to explore the level of knowledge and reporting competency on Incident reporting among Nursing Staff who are the corner stone in building safe therapeutic milieu and save life of individual patient in specific and Nations health as a whole.

CHAPETR-II

OBJECTIVES

This chapter explains on research problems, objectives operations definitions and conceptual framework.

STATEMENT OF THE PROBLEM.

"EFFECTIVENESS OF SIMULATION BASED TRAINING ON INCIDENT REPORTING COMPETENCY AMONG NURSING STAFF WORKING IN R. L. JALAPPA MEDICAL TEACHING HOSPITAL KOLAR."

OBJECTIVES OF THE STUDY

1.To assess the knowledge and competency level on incident reporting among Nursing Staff by using Structured Knowledge Questionnaire & Observational check list.

2. To evaluate the Effectiveness of Simulation Based Training by comparing pre and post test scores.

3. To determine the association between the competency level of Nursing Staff on incident reporting with selected sociodemographic variables.

NULL HYPOTHESES:

$H0_1$: There is a significant association between Knowledge scores of Nursing Staff with selected demographic variables.

$H0_2$: There is a significant association between the Competency levels of Nursing Staff with the selected sociodemographic variables.

$H0_3$: There is a statistically significant difference in the mean pre and post-test knowledge scores among Nursing Staff within groups.

$H0_4$: There is a statistically significant difference in the mean pre and post-test competency level among Nursing Staff within groups.

OPERATIONAL DEFINITIONS:

1.Effectiveness:

In this study effectiveness refers to the improved level of knowledge and competency skill of Nursing Staffs on incident reporting as measured by using Structured Knowledge Questionnaire and observational check list.

2.Simulation Based Training:

In this study Simulation Based Training refers to the pre-designed training module with real life scenario on incident reporting procedure which includes :

- ✧ The incident is promptly activated & communicated
- ✧ Quickly, during shift hours, and within 12 hours, a health care provider involved in Incident recorded.
- ✧ Reporting of incidents, location, time and date is recorded ,
- ✧ The incident's narrative description is given and documented .

- ✧ The concerned department takes immediate corrective action, which is documented in a fishbone diagram.
- ✧ The department head or direct supervisor does a quick root cause analysis, which is documented.
- ✧ The action plan is abandoned and recorded.
- ✧ Documented advice to avoid such an incidence in the future.

3.Competency level of Nursing Staff:

The competency level of Nursing Staffs in this study relates to the core professional activities done in reporting incidents as assessed by employing an observational checklist for the incidents as follows:

informational competence

Nature of incident specified

- ✧ Fall/slip, health related, connected to laboratory specimens, connected to radiology, Patient bed sore injury caused by clinical care.
- ✧ Medically relevant, delays/from, Surgery-related issues, incorrectly filled out consent forms, failure to obtain consent
- ✧ Sharps or needle stick harm to the patient, Employee injury, etc.
- ✧ (Multidisciplinary) Debriefing (time of response, total Number of causalities, action initiated)

4.Knowledge

It refers to the level of understanding of Nursing Staff regarding incident reporting as measured by the structured knowledge questionnaire.

5.Nursing Staff

In this study Nursing Staff refers to the registered nurses with educational credentials of GNM or BSc or P.B.B.Sc who are employed at R.L. Jalappa Medical Teaching College, Kolar.

6.Incident reporting:

In this study, "incident reporting" refers to the verbal or written reporting by a Nursing Staff in conjunction with a concerned health care provider of any event during the course of patient care that is incompatible with the deserved patient outcome as a regular function of the health care facility.

The incidents included are;

Medication errors, near-miss errors, falls and slips, surgical procedure-related, Infections or incident, needle sticks, information or consent-related incidents, and patient care device/facility-related incidents are the incidents that are included in this study.

Conceptual framework

Conceptual framework facilitates communication and provides the study based honest systematic approach to nursing, research, education, administration and practice . The conceptual framework selected for the study is CIPP evaluation model developed by Daniel. Leroy Stuffl Beam (1960) Focus of the theory is the Context evaluation, Input evaluation, Process evaluation, Product evaluation because what nurse do with and for

the evaluation is what makes the difference between nursing and any other health care professionals.

The theory defines and describes evaluation is the process for delineating obtaining and providing useful information for judging decision alternatives.

Conceptual framework for the present study is adopted CIPP (Contacts input process product) model

The focus of this model is to explain different types of evaluation;

- ✧ Formative - context, input, process
- ✧ Summative - product

In this present study, nursing staffs while ‘nurse’ is the research investigator. The Nursing Staff and research investigator come together and involve in collaborative process which consists of,

Context evaluation:

- ✧ Setting the scene in a localized natural context environment, accessible and arranged with all the logistics, as required.
- ✧ The study focused on evaluating the effectiveness of simulation based training on incident reporting which is measured on the competency checklist.

Input evaluation

- ✧ Assessment of needs reduced to manageable proportions
- ✧ Planning with purpose, objectives and hypothesis.
- ✧ In this study input refers to the development of appropriate research tool and Simulation based training or intervention.

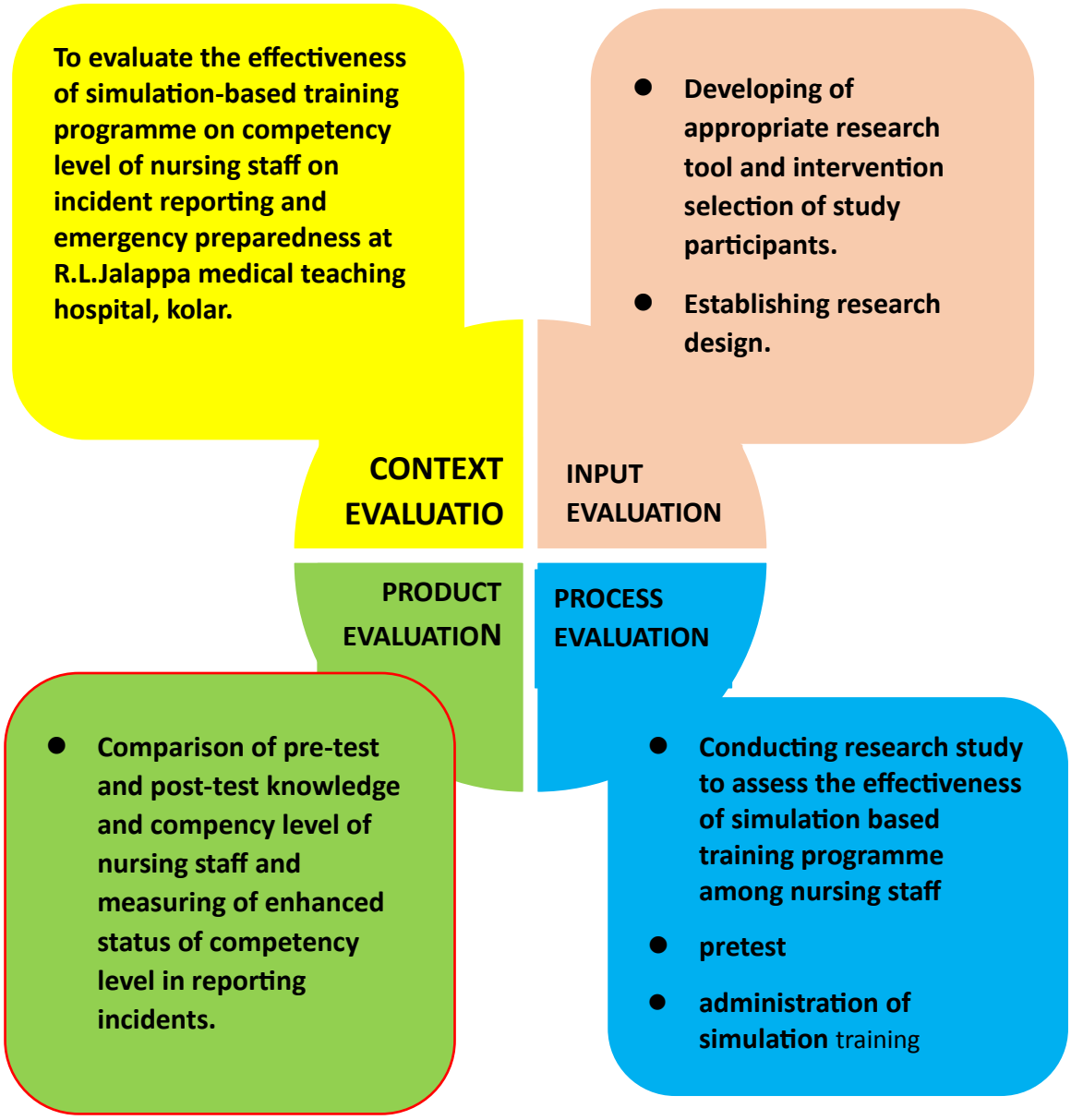
- ✧ Selection of study participants as per the selection criteria and sampling technique.
- ✧ Establishing research design and approach.

Process evaluation refers to;

- ✧ Exploring the key themes and patterns fostering Nursing Staff engagement and motivation.
- ✧ Conducting research study to assess the effectiveness of simulation based training among the Nursing Staff
- ✧ Conducting pretest on assessing knowledge and competency level.
- ✧ Administration of simulation based training on Incident reporting.
- ✧ Conducting post test after 14^{th} day of a demonstrating Simulation Based Training.
- ✧ **Product evaluation**
- ✧ Maintain a good balance of immediate and normal formative assessment
- ✧ Evaluate product
- ✧ This study include comparison of pre test and post test knowledge and competency level increases in post test

In this study Product evaluation refer to the enhanced level of knowledge and competency level on reporting health care related incidents by the Nursing Staffs as per the defined protocols and procedure of incident reporting and documenting.

Figure No. 1 - Conceptual frame work



Shcematic representation of conceptual frame work based on CIPP evaluation model by DANIEL LEROY STUFFL EBEAM (1960)

Summary

This chapter deals with the statement of the problem, objectives, assumption, hypothesis, operational definition and conceptual frame work.

CHAPTER III

REVIEW OF LITERATURES

A chapter deals with selected studies which are related to the objectives of the proposed study . An exploration of both research and non-research literature pertinent to the study was conducted. This endeavor assisted the investigator in cultivating a more profound understanding of the issue and acquiring knowledge about prior accomplishments in the field.

The evaluation of pertinent literature is regarded as crucial throughout all stages of the research journey. Conducting a methodical and discerning assessment of significant published academic works, as well as unpublished scholarly printed resources and individual materials, constitutes the essence of the literature review.[15]

The literature for the present study is reviewed from the textbooks journals electronic resources articles and dissertations and will be organized under the following headings ;

1. The studies related to effectiveness of simulation based training among

    Nursing Staff

2. The studies related to nurse’ s competency on incident reporting

1. The studies related to effectiveness of simulation based training among Nursing Staff

A simulation-based training conducted at Karlstad University, Sweden on Building patient safety in intensive care nursing with the aim of measuring patient safety culture, team performance and effectiveness of simulation-based training among 220 Registered Nurses from ten Intensive Care Unit. The findings revealed that, patient safety culture measurements have the potential to identify areas in need of improvement, and simulation-based team training is appropriate to create a common understanding of structured work in teams.[16]

A simulation-based training conducted at Dessie comprehensive specialized hospital , Sweden on Clinical incident reporting behaviors and associated factors among health professionals with a mixed method study among 319 and 18 participants during March 1 - 30, 2020 revealed that, addressing the behavior of health professionals on reporting clinical incidents is crucial to create spontaneous knowledge from mistakes and enhance patient safety. Finally, study concluded that the clinical incident reporting behavior of the health professionals was very low. Therefore health professionals should be trained regularly on clinical incident reporting and the hospital should have standardized protocol on incident reporting system.[17]

A study related to the Nurse's competency on incident reporting was reviewed by examining the impact of nurse simulation based education programme on patient safety. the study aimed to explore the use of simulation as an educational approaches for hospital nurse ,enhance the quality and safety care. The review showed that, a a total of 26 articles selected described clearly that, simulation based education programme is more relevant in improving the patient safety culture among nurses.[18]

A study conducted among 1220 ICU Registered Nurses on simulation based training programme with a view to investigate patient safety culture and team performance by using simulation based training. The study findings reveled that, the overall level of perception among nursing staff was found to be positive. The study concluded that, patient safety culture in the ICU along with safety culture measurement have a potential to identify areas in need of improvement. The simulation taring was found more appropriate to create a common understanding structure work in terms of reporting patient safety.[19]

A quasi-experimental study conducted at, a university in Korea on Simulation-based training program on patient safety management among 44 newly recruited intensive care unit nurses, during -2023 revealed that, a simulation-based training program on patient safety management was applied to the experimental group (n = 22), while only the usual hospital training program was used for the control group (n = 22). A structured questionnaire survey was conducted with baseline test, post test, and follow-up test. Data were analyzed using a repeated measures anova. Finally, Study concluded, that, the experimental group showed significantly higher patient safety competency, knowledge, along with higher communication self-efficacy scores than the control group ($p < .05$) after the intervention and at four weeks after the intervention. Thus, the study concluded to conduct more of training with simulation to enhance critical thinking of health care providers.[20]

2. **The studies related to nurse's competency on incident reporting**

A quasi-experimental study conducted at, twelve wards of two Dutch general hospitals on prospective risk analysis prior to retrospective incident reporting and analysis as a means to enhance incident reporting behaviour: A quasi-experimental field study among 12 units of hospital revealed that, data from the incident reporting

and analysis system and from a questionnaire were used to assess between-hospital differences regarding the number of reported incidents, the spectrum of reported incident types, and the profession of reporters. Finally, Study concluded to carry out a prospective analysis to improve incident reporting behaviour. This study fills an important gap in safety management research regarding the order of the implementation of prospective and retrospective methods, and contributes to literature on incident reporting. This research also builds on the network theory of social contagion. The results might indicate that health care employees can disseminate their risk perceptions through communication with their direct colleagues[21].

A longitudinal quasi-experimental quantitative study conducted at geriatric, oncology, neurology and cardiology departments of a teaching general hospital in China on effect of a fall prevention strategy for the older patients: the study findings revealed that, among older patients who met the inclusion criteria. Structurally developed fall prevention intervention strategy for older patients was used on the Patient Engagement Framework. Patients in the intervention group were given this fall prevention strategy (N = 58), and those in the control group were given conventional measures. The following indicators were compared between the two groups after intervention: (a) number of falls; (b) Knowledge-Attitude-Practice (KAP) score; (c) Modified Fall Efficacy Scale score. The study concluded that after the implementation of an intervention strategy in older patients, the number of falls decreased from 3 to 0 the score of Knowledge Attitude and Practice and Modified Fall Efficacy Scale was promoted ($p < .05$).[22]

A prospective observational study conducted at a university level hospital on Incident reporting in post-operative patients managed by acute pain service among post-

operative patients for 3 years revealed that, all post-operative patients managed by Activation of Patient Safety were included in this observational study. A proforma was developed by APS, which included information about the type of incident, severity of incident, person responsible and suggestions to prevent the same incident in the future. Patients and medical staff were informed about the reporting system. Whenever an incident was identified, a proforma was filled out by Activation of Patient Safety resident and data entered in SPSS programme. Finally, Study concluded that, Incident reporting proved to be a feasible method of improving quality care in developing countries. It not only provides valuable information about areas which needed improvement and also suggestion for modification of patient care facilities..[23]

A descriptive qualitative study conducted at training and research hospital on Nurses with a view of implementing evidence- based fall prevention interventions. The findings revealed that, fall prevention interventions were introduced through the use of various training methods. Finally, Study concluded that the evaluation of the interventions were examined and three theme were extracted through analysis - effectiveness of training programme, barriers and suggestions. However, the investigators strongly recommended the module of patient prevention. [24]

A quasi-experimental design study conducted at one of the health insurance organization hospitals in Alexandria on Knowledge and performance before and after a training programme on patient fall among all nurses of different ranks working at four departments namely, orthopedic, medical, surgical, ICU unit. All the 284 general hospital affiliated with the Health Insurance Organization in Alexandria recommended to implement educational training program on enhancing nurses knowledge and performance regarding prevention of fall. Finally, Study

concluded, Education programme should be regularly, updated in view of changing knowledge and work practices[25]

A qualitative content analysis study conducted at, educational hospital of Zahedan University of Medical Sciences in Alexandria on Preventing the medication errors in hospitals among 16 nurses and 1 physician. The study participants were selected using a purposive sampling method who fulfilled the inclusion criteria. The maximum variation sampling technique was used for selecting the participants with different experience to collect data. The inclusion criteria included having a BSc degree and having 2 years' work experience. The COREQ checklist was used for the study report. Finally, Study concluded that, two themes were extracted to prevent medication errors were "acting professional" and "presenting technical strategies", respectively.[26]

A quantitative and qualitative assessment study conducted at Nagoya University Hospital on to predict fall events for older inpatients at a tertiary referral hospital among this study used electronic medical record (EMR) of inpatients aged ≥60 years. The study revealed that, on admission, the patients' background information and fall risk assessment were extracted retrospectively from the EMR. Fall events within 30 days of hospitalization were the outcome, which were prospectively recorded by the nurses. The association between fall risk assessment scores and the outcome as well as the C-statistics to was analyzed to examine on factors that influence the fall prevention and improved the implementation of training module. Finally, Study concluded, a total of 10,353 patients were included in the study. The number of fall event was 224, the hazard ratio (95% condense interval) for the fall risk assessment score was 1.30 (1.18–1.45) in multi variable Cox models. By adding the risk assessment scores, C-statistics of the multi variable models improved by 0.031.[27]

A prospective observational study conducted among six hospitals in Stockholm, Sweden on Hospital incident command groups' performance during major incident simulations revealed that, the objective was to assess associations between decision-making and staff procedure skills of the hospital incident command group. Finally, study concluded that, decision-making skills are correlated to staff procedure skills and overall HICG performance. Proactive decision-making skills had significantly lower means than reactive decision-making skills and are significantly correlated to staff procedure skills.[28]

A cross-sectional study conducted at Gondar University in comprehensive Specialized Hospital, Northwest Ethiopia Sweden on Incident Reporting Behaviour and Associated factors among Nurses concluded, that, majority of the participants had low reporting behavior. Thus, study concluded to develop a system which promotes incident reporting behavior without apprehension which is vital to patient safety.[29]

A comparative study of two hospital divisions conducted at the United Kingdom on Incident reporting systems a comparative study of two hospital divisions among 85 health care practitioners in general internal medicine, obstetrics and neonatology by using semi-structured interviews. The aim of the study was to assess incident reporting behaviour among medical professionals. Finally, Study concluded, The differences between the two divisions can be explained in terms of: a) the influence of litigation on practice, b) the availability or lack of inter professional training, and c) the introduction of the reporting system (top-down vs bottom-up approach). A model based on the findings portraying the influences on incident reporting and learning is provided. Implications for practice are addressed.[30]

A comparative study of two hospital divisions conducted at 15 different hospitals in Jordan on Awareness of reporting practices and barriers to incident reporting among nurses study among 308 nurses during November 2019 and July 2020 revealed that, This study aimed to investigate the level of awareness of incident reporting practices and identify the barriers that impact incident reporting among Jordanian nurses. Finally, Study concluded that, the current results provide empirical results about perceived incident reporting practices and perceived barriers to reporting frequently. Recommendations are made to urge nursing policymakers and legislators to provide solutions for those barriers, such as managing staffing issues, nursing shortage, nurses' empowerment, and fear of disciplinary actions by front-line nurse managers.[31]

A retrospective evaluation study conducted at England on National evaluation of harm associated with patient safety incident reports related to the provision of parental nutrition to patients, using a national incident reporting system study among 2242 incident reports revealed that, 1879 (83.8%) reported no harm, 309 (13.8%) low harm, 47 (0.02%) moderate harm, 4 (0.002%) severe harm and 3 (0.001%) deaths. The most reported age group, medication process, and error category were neonates (<28 days) ($n = 570/1923$, 29.6%), administration ($n = 1126/2242$, 50%), and omitted medication/ingredient ($n = 291/2242$, 13%), respectively. Content analysis of reports related to moderate/severe harm and death revealed patient age of <1 year, dependence on home PN (HPN), comorbidity and staff errors were found to be contributory factors. Finally, Study concluded that, low frequency of reports related to moderate or severe harm or death. More incidents were reported for neonates and during the administration processes. To reduce harm, systems/procedures that reduce errors in high-risk patients (eg, neonates, patients receiving HPN) the standard

protocol need to be established within organizations. Database limitations of voluntary reporting systems were recognized.[32]

An observational study conducted at US-based large healthcare organization with sites across multiple states on Increased Patient Safety-Related Incidents following the Transition into Daylight Savings Time. The changes in the number of SRIs from the week before and after the time change (either spring or fall) were modeled using a negative binomial mixed model with a random effect to correct for non-independent observations in consecutive weeks. Finally, Study concluded, Policy makers and healthcare organizations should evaluate delayed start of shifts or other contingency measures to mitigate the increased risk of SRIs during transition to DST in spring.[33]

A observational studies conducted among older adult at Johanna Briggs Institute. The Med-line embassy psyclnfo and proquest dissertation and theses were reviewd until-2020 The literature search yielded 3445 records. Twenty -two studies met the inclusion criteria of systematic review , and 19 studies in the systematic review 12 cress-sectional studies ,two case control studies,two cohort studies met more then 70% criteria in the respective risk factor of fall among older adult in India included socio-demographics factors, environmental factors, physical and mental health conditions, and medical intervention. Studies reporting uni national fall and not the risk fear of fall studies reported fall due to accidental or intentional action like shelf harm was excluded.[34]

Summary

Review of literature has enabled the investigator to establish the need for study. It includes primary and secondary sources. It has helped the investigator in understanding the impact of the problem.

Chapter-IV

RESEARCH METHOLODOLOGY

Chapter deals with the methodology selected for the study It includes research approach research design, setting, sample and sampling technique, development and description of the instrument for the data collection, development and description of the instruments for the data collection, development simulation training on "incident reporting" pilot study, data collection procedure and plan for data analysis.

Methodology of research indicates the the general pattern of organizing the procedure for empirical study together with the method of obtaining valid and reliable data for problem under investigation

The present study is aimed at evaluating the effectiveness of simulation-based training on knowledge and competency level among Nursing Staff regarding incident reporting

RESERCH APPROACH

The research approach for the study is quasi-experimental one group pre and post test design considered as it is more appropriated to measure the effectiveness of simulation-based training on incident reporting among Nursing Staff at R.L Jalappa Hospital and Research Center, Tamaka Kolar.

The selection of research approach is the procedure for conducting a research enquiry, The present study is aimed at determining the Effectiveness of Simulation-based training on incident reporting among Nursing Staff at RL Jalappa Hospital and Research Center, Tamaka Kolar.

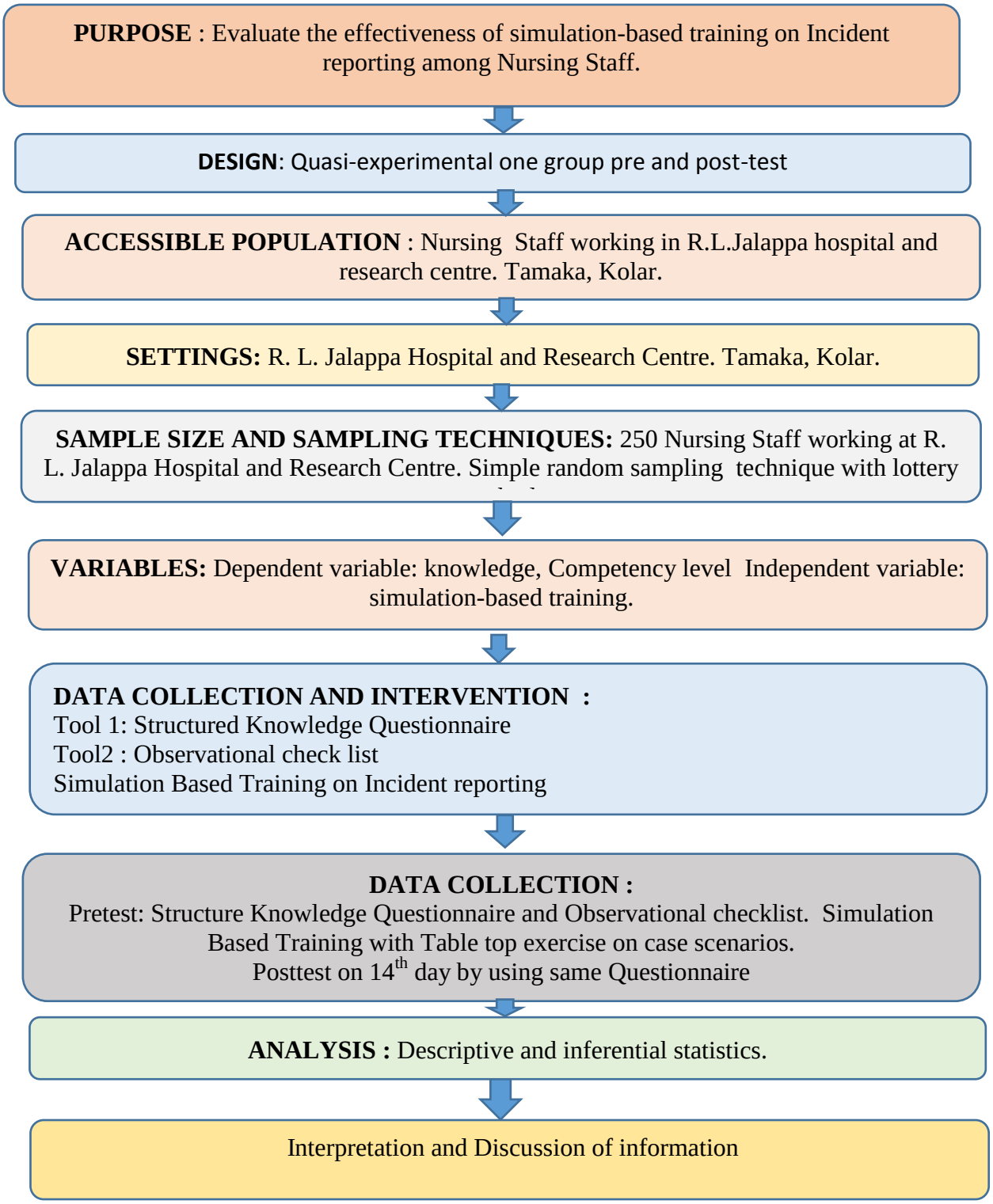
RESEARCH DESINING

The Term, research design refers to the researcher's overall interest for obtaining answers of the research questions or for testing research hypothesis

The research design selected for the study was quasi experimental one group pre and post-test design.

O_1	x	0_2
Pre-test	Intervention	Post-test

Figure No.2: Schematic representation of the study research design



Variables

Variables are qualities, properties or characteristics of persons things or situations that change or vary.

Independent variable

The independent variable in this study is simulation-based training on incident reporting among Nursing Staff.

Dependent variable

The dependent variable in this study is knowledge and competency level of Nursing Staffs.

Attributes variables

Attributes are those which are present in the research environment in the that many interfere with research finding .

In this study it refers to the selected variables like age, gender, qualification, designation, clinical year of experience, area of working and previous to training programme.

Setting of the study

The study conducted at R.L Jalappa Hospital and Research Center. It is a teaching hospital attached to Sri Devaraj Urs Medical college, which is the constituent institution of Sri Devaraj Urs academy of higher education and Research. The hospital is situated at Tamaka village, along the national high way and is 75 km from the state

capital, Bengaluru and 5km from Kolar city and 1125 beds, under one roof is Karnataka's biggest hospital. It also has one of the advanced critical and emergency care facilities. The hospital extensive infrastructure offers facilities comprising 17 modular operating tables 159 equipped intensive and High Dependency beds, fully computerized. Networked hospital information and NABH accredited hospital and NABL accredited clinical laboratories. The hospital also provides state of the art cardiology services.

Population

The population for the study includes all the Nursing staff employed at various health care facilities.

Sample and sample size

Sample refer to sub set of the population that is selected to participate in a particular study. The sample in this study refers to the Nursing Staff employed at R.L. Jalappa Hospital & Research Center.

The sample size consists of 250 Nursing Staffs who fulfill the inclusion criteria of the study.

Estimation of sample size

Sample size: n=1.962(1−p)($DEFF$)d2 n=1.96x1.96x0.5(1−0.5)20.05x0.05

n=1.96x1.96x0.5(1−0.5)20.05x0.05= 0.475

where 'p'=estimate of the expected proportion is assumed to be 0.5 'd'= desired level of absolute precision is assumed to be 0.05 'DEFF'=estimated design effect to be 2

Known population is 615

Calculated Sample is 223 and by considering 10% attrition rate a total of 250 sample will beincluded in the study.

Sampling technique

Sampling defines the process of selecting a group of people or other elements which with to conducted a study.

The sampling technique adapted for the present study is simple random technique with lottery method. The investigator cooled all the nursing staff list from the office of Chief Nursing Officer, and selected the Nursing Staff using lottery technique, a total 25 register numbers were picked each day of data collection.

Inclusion Criteria:

The Registered Nursing staffs who are;

1. Available at the time of data collection,
2. Willing to participate in the study.

Exclusion Criteria:

The Registered Nursing Staff those are not available at the time of data collection.

Selection and development of tool and simulation based training.

The data collection followed in this study involved the following procedure.

The structure interview schedule followed by using the Structured Knowledge Questionnaire and observational checklist on Incident reporting among Nursing Staff.

For the selection of items and preparation of the tool the following steps were taken.

1. Review of literature was conducted in the areas related to incident reporting Opinion and suggestions were taken from seven subject experts and necessary modification was adopted in the tool.

I. A Structure Knowledge Questionnaire and observational checklist on Incident reporting was prepared based on the objectives of the study as it was considered the best and most appropriate instrument to elicit the responses from study participants. The main strength behind developing the tool were;

- ✧ Review of related literature
- ✧ Based on the opinions and suggestions of experts.
- ✧ Discussions with colleagues and personnel in the clinical setting
- ✧ The following tools were developed to collected data.
- ✧ Tool -1: Structured knowledge Questionnaire
- ✧ Tool -2: Observational check list Simulation Based Training on Incident reporting

Description of the tool

Tool 1

A Structure Knowledge Questionnaire is organized as.

Section A

It consists of sociodemographic variables as Age, Gender, Qualification, Year of experiences, Clinical area of working, Designation, Exposure to training within six months.

Section B

It consists of questions related to incident reporting under the following sub titles; It includes

- Questions related to the type of incident reporting (6 items)
- Questions related to command and communication (3 items)
- Questions related to Documentation and debriefing (6 items)

Tool 2

Competency Based Observational Checklist on incident reporting:

Competency and Communication (3 items)

Reporting of different types of incidents (6 items)

Documentation and Debriefing (6 items)

PREPERATION OF BLUEPRINT OF THE TOOL:

Blue print on Structure Knowledge Questionnaires on incident reporting was prepared.

The questions were analyzed on the different domains of knowledge & skill, and is allotted as follows, under knowledge comprehension and problem solving.

SI.NO	**Knowledge domain**	**Comprehensio**n	**Problem solving**
1.	6,14,15,16,17,18,20,21, 22,24,25,26,27, 28	2,4,19,23,29	1,3,5,7,8,9,10,11,12, 13,14
Total	14(36%)	5(20%)	11(44%)

According to content area in blue print, adequate numbers of items were prepared in each area. Then the prepared items were subjected to content validation, pretesting and estimation of reliability.

The level of Knowlwdge : The grading of knowledge & competency level is categorized as below;

SI.No.	Category	Percentage
1	Adequate knowledge 23-30 scores	>76%
2	Moderately adequate knowledge 16-22 scores	51-75%
3.	Inadequate knowledge <15 score	≤50%

The competency level is graded as follows;

SI. No	Competency level	Score range
1	Poor	<7
2	Good	>7

CONTENT VALIDITY OF THE TOOL

Content validity is concerned with the sampling adequacy of items for the construct that is being measured. Content validity is relevant for both effective and cognitive measures.

The prepared tool along with objectives, blue print and criteria checklist was submitted to seven subject experts comprising four nursing experts, two from quality department as manager and one of the senior nursing administrator, One deputy. The tool was modified as per suggestion of the experts and final tool was constructed.

Reliability of the Tool

Reliability is the degree of consistency with which an instrument measure the attribute it intended to measure Reliability of the Tools of the study

Tool	**Stability/internal consistency test used**	**r value**
Structured Knowledge Questionnaire to assess the knowledge and competency level of nursing staff on simulation-based training on Incident reporting	Test re-test method spearman's brown prophecy	0.92 0.94
Observation checklist-stations	Interrater	r value
Station 1	Inter rater	0.94
Station 2	Inter rater	0.92
Station 3	Inter rater	0.84

Item analysis:

Questions with difficult index between 30% to 70% are accepted and with a discrimination value more than 0.25 to 0.35 was considered and few questions, options are modified

Development of simulation based training:

In this study Simulation Based Training refers to the pre-designed training module with real life scenario on incident reporting procedure which includes :

✧ The incident is promptly activated & communicated

- ✧ Quickly, during shift hours, and within 12 hours, a health care provider involved in Incident recorded.
- ✧ Reporting of incidents, location, time and date is recorded ,
- ✧ The incident's narrative description is given and documented .
- ✧ The concerned department takes immediate corrective action, which is documented in a fishbone diagram.
- ✧ The department head or direct supervisor does a quick root cause analysis, which is documented.
- ✧ The action plan is abandoned and recorded.
- ✧ Documented advice to avoid such an incidence in the future.

Ethical consideration:

The formal ethical clearance is obtained from the Institutional Ethics Committee. The formal permission was obtained the Medical Superintendent and the Chief Nursing Officer. Written informed concent is obtained from the study participants and reassurance of confidentiality of information was given to the study participant.

Pilot study

A pilot study is miniature or part of the actual study in which the instruments are administered to the subjects drawn from the population. It is a small-scale version on trial run, done in preparation for the major study. The purpose is to find out the feasibility and practicability of the study design, methods, and data collection tools.

The pilot study was conducted among one team of 25 Nursing Staff of Narayana Hrudhayalaya between 15/6/2023 to 29/6/2023 The time schedule for data collection was every day between 11am to 1pm. To find out the accessibility and feasibility for data collection. As per the suggestion given the second objective on development of simulation based training was deleted. Overall study was found to be feasible and the study instruments were found appropriate.

Data collection procedure

Data collection is the gathering of information needed to address a research problem. Study was conducted after obtaining approval of institutional ethics committee permission from Medical Superintendent of R.L.Jalappa hospital and research centre Tamaka. Kolar, The data was collected as follows.

Pre-Test

The consent was obtained from the study participants. The researcher collected the information on background characteristics and the knowledge and competency level among Nursing Staff was assessed by using self-administered Structured Knowledge Questionnaire. Nursing Staff were divided into ten teams (25 team) and each team was given scenario regarding the simulation on Surgical event, device or product event, patient protection event, environment event, care management event, criminal event, Incident reporting following the protocol the and all the Types of incidents how to report and time given for each station was 30 minutes and the Nursing Staff had taken 2 hours to complete all the incident reporting . Each day the researcher observed the one team between 11-1pm.

Competency of the Nursing staff were assessed by using an observational checklist for each station. The total score was obtained by adding up the individual item scores. The individual performance of Nursing Staff was assessed on Incident reporting which includes, five station and observational checklist to evaluate the Nursing Staff clinical performance which consists of incident reporting as medication errors, near-miss errors, falls and slips, surgical procedure-related needle sticks, consent-related incidents, and patient care device/facility-related incidents are the only incidents that can be reported for this study.

Post Test 1

The entire process of Pre-Test (phase-1) was repeated immediately after the intervention as a post-test which was conducted after 15 days to assess the knowledge and competency level of Nursing Staff on incident reporting.

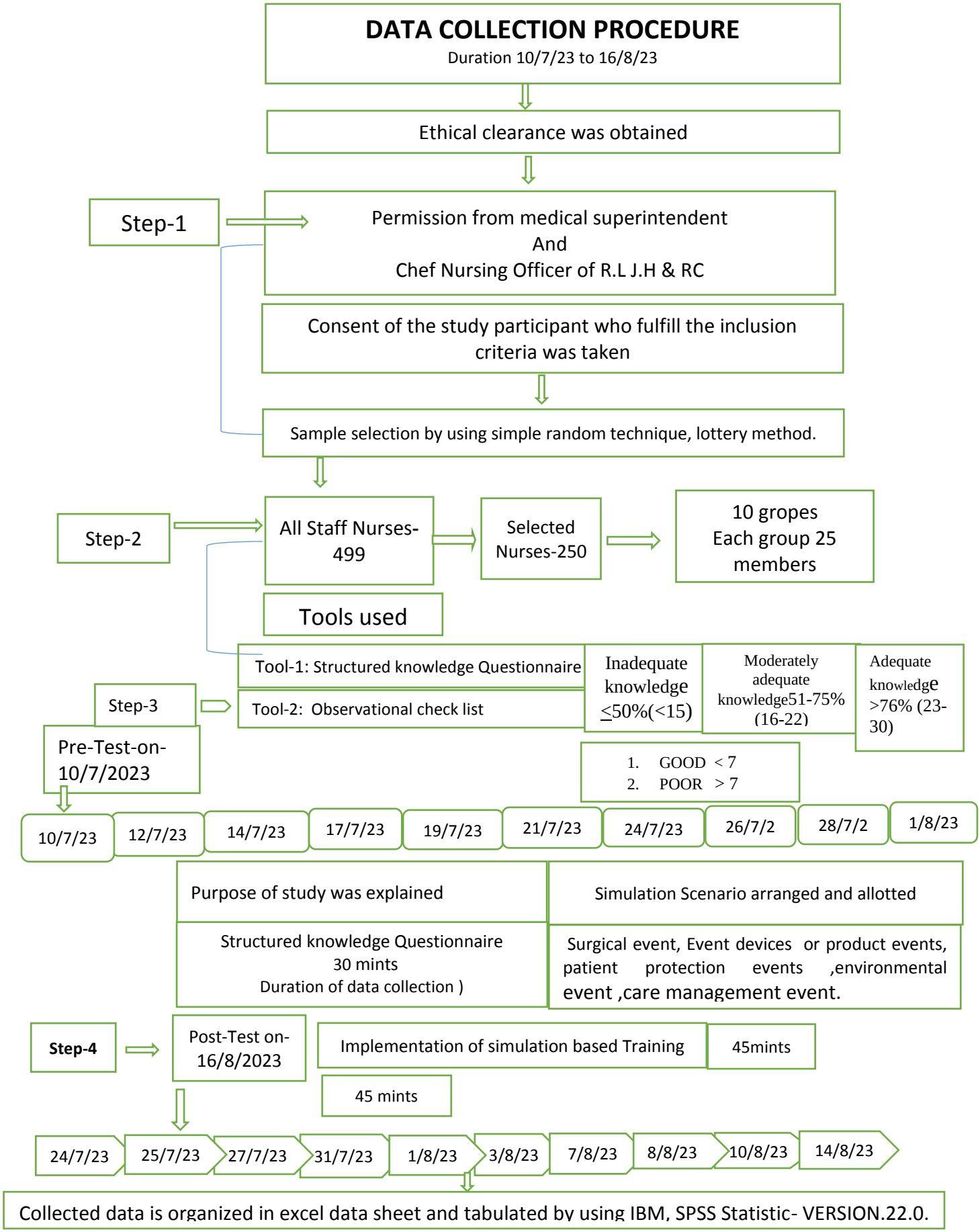


Figure No. 3 : Schematic representation of data collection procedure

Plan of data analysis:

The analysis of data requires a number of closely operations such as establishment of categories, the application of these categories to raw data through coding, tabulation, and then drawing statistical inferences.

The data obtained was analyzed by descriptive and inferential statistics to achieving the objectives of the study.

Statistical analysis of data

The data was analyzed by the following steps

- ✧ Organization of data in master sheet
- ✧ Frequencies and percentages were used for analysis of demographic characteristics
- ✧ Calculation of mean, standard deviation and mean percentage of pretest and post test knowledge score.
- ✧ Paired Test was used to find the relationship between the pretest and the post knowledge score.
- ✧ Application of chi square (x^2)test to find the association between demographic variables and knowledge off step of staff nurses on Incident reporting.

Summary:

The chapter has dealt with the research methodology adopted for the study. It included descriptions on research approach, design, setting, data collection, statistical tests applied for analysis and pilot study.

CHAPTER-5

SAMPLE SIZE ESTIMATION

THE SAMPLE SIZE ESTIMATION PROCESS

STATEMENT OF THE PROBLEM

Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working at R.L. Jalappa Medical Teaching Hospital Kolar."

Research approach: - Evaluative research approach.

Research design: - Quasi-experimental one group pre and post-test design.

Sampling technique: - Simple random sampling technique with lottery method.

Sample size: -The sample size consisted of a total of 250 Nursing Staff who are working in R L Jalappa Hospital & Research Canter Kolar.

Sample size estimation: -Sample size was estimated based on Incidence of Medication Error in Critical Care Unit of a Tertiary Care Hospital in 2021

Kapil G Zirpe et al.

For the present study 250 Nursing Staff were selected in R L Jalappa hospital and Research canter Tamaka, Kolar.

12/8/22

Signature of the Statistician

Asst.Professor, Statistics
Dept. of Community Medicine
SDUMC, Kolar-563103

CHAPTER-VI

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of the data gather to determine the effectiveness of simulation training on incident reporting among Nursing Staff data obtained from 250 Nursing Staff of R.L Jalappa Hospital and Research Center Tamaka Kolar. The data was processed and analyzed using descriptive and inferential statistics based on objectives and hypothesis formulated for the present study by using IBM SPSS version 20.22,0

OBJECTIVE OF THE STUDY

1.To assess the knowledge and competency level on incident reporting among Nursing Staff by using Structured Knowledge Questionnaire & observational check list.

2. To evaluate the effectiveness of Simulation Based Training by comparing pre and post test scores.

3. To determine the association between the competency level of Nursing Staff on incident reporting with selected sociodemographic variables.

NULL HYPOTHESIS:

ORGANIZATION OF THE STUDY FINDINGS

The analyzed data is organized and presented under the following sections:

SECTION-I

This section deals with the data pertaining to sociodemographic data of Nursing Staff which includes age, gender, qualification, clinical Area of working, Year of Experience, Designation, and exposure to training on incident reporting past six months of duration.

SECTION-II

This Section deals with the data pertaining to the findings of first objective of the study that is overall and area wise level of knowledge and competency among Nursing Staff on incident reporting.

SECTION-III

This section deals with the data pertaining to the findings of second objective of the study that is effectiveness of Simulation-Based training on incident reporting among Nursing Staff by comparing the pre and post-test knowledge and competency level.

SECTION-IV

This section describes the association of sociodemographic variables of study participants with level of knowledge and competency level among Nursing Staff on incident reporting.

SECTION-1: SOCIODEMOGRAPHIC VATIABLES OF NURSING STAFF.

Table-1: Distribution of Nursing Staff based on the sociodemographic variables.

N=250

SI. No.	SOCIODEMOGRAPHIC VARIABLES	Frequency	Percentage
1.	Age		
	a) <30years	**146**	**58.4**
	b) >30	104	41.6
2.	Gender		
	a) Male	60	24
	b) Female	**190**	**76**
3.	Qualification		
	a) Diploma	133	53.2
	b) Graduates	117	46.8
4.	Clinical area of working		
	a) General ward	**109**	**43.6**
	b) High dependency unit	99	39.6
	c) Emergency Medicine Department	14	5.6
	d) Intensive care unit	30	12
5.	Year of Experience		
	a) <1 year	20	8
	b) 1-2 years	65	26
	c) 2-3years	45	18
	d) >3 years	**120**	**48**
6.	Designation as		
	a) Jr. Staff Nurse	133	53.2
	b) Sr. Staff Nurse	117	46.8
7.	Previous training on incident reporting		
	a) Yes	70	28
	b) No	**180**	**72**

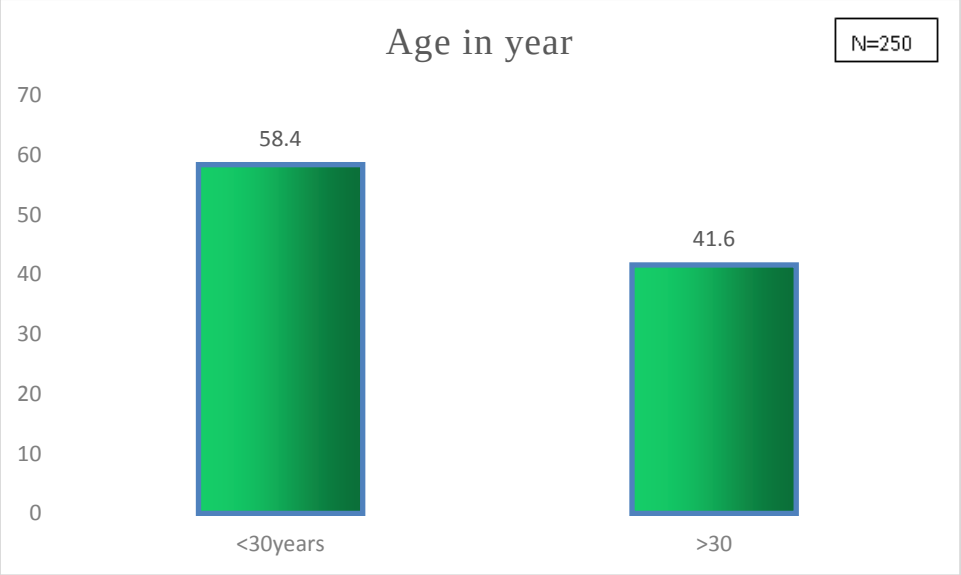


Figure No -4: Percentage Distribution of Nursing Staff according to Age in years.

The data presented in the table-1 and figure No -4: shows that majority 146(54.4%) of the Nursing Staff were found to be above 30 years of age and 104 (41.6%) were below the age of 30 years.

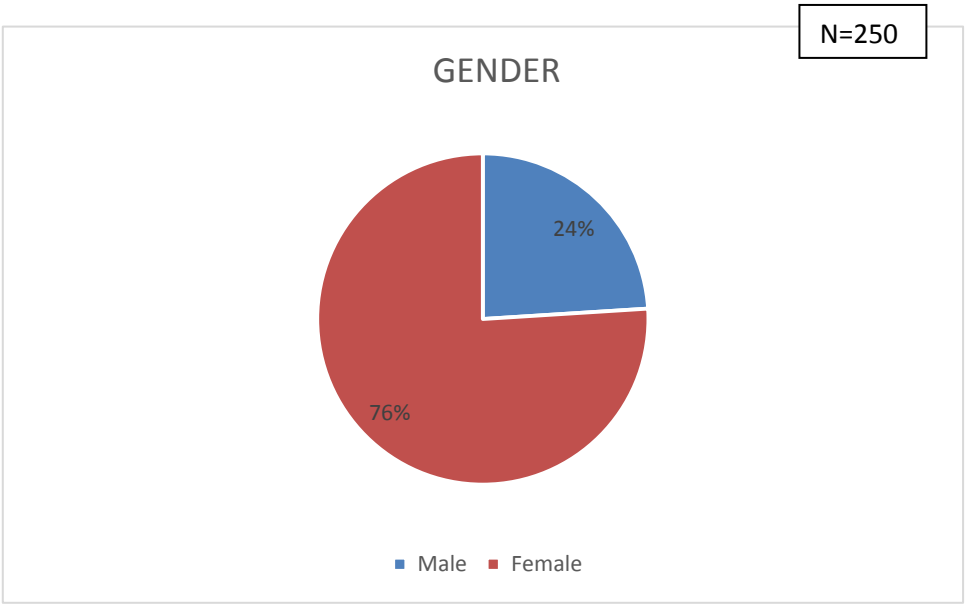


Figure No-5: Percentage Distribution of Nursing Staff according to the Gender.

The data showed in table 1and figure No- 5: reveals that the majority190 (76%) of the Nursing Staff were females and 60(24%) were males.

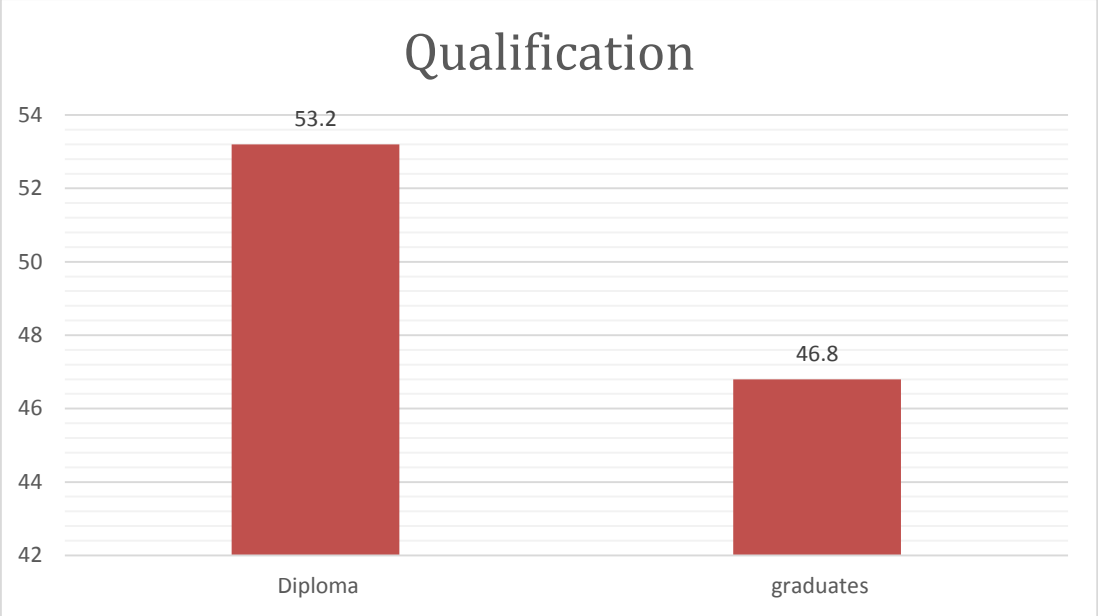


Figure No. 6: Percentage Distribution of Nursing Staff according to qualification.

The data presented in figure No-6: reveals that majority133 (53.2%) of Nursing Staff belonged to diploma programme whereas 117(46.8%) of them were graduates.

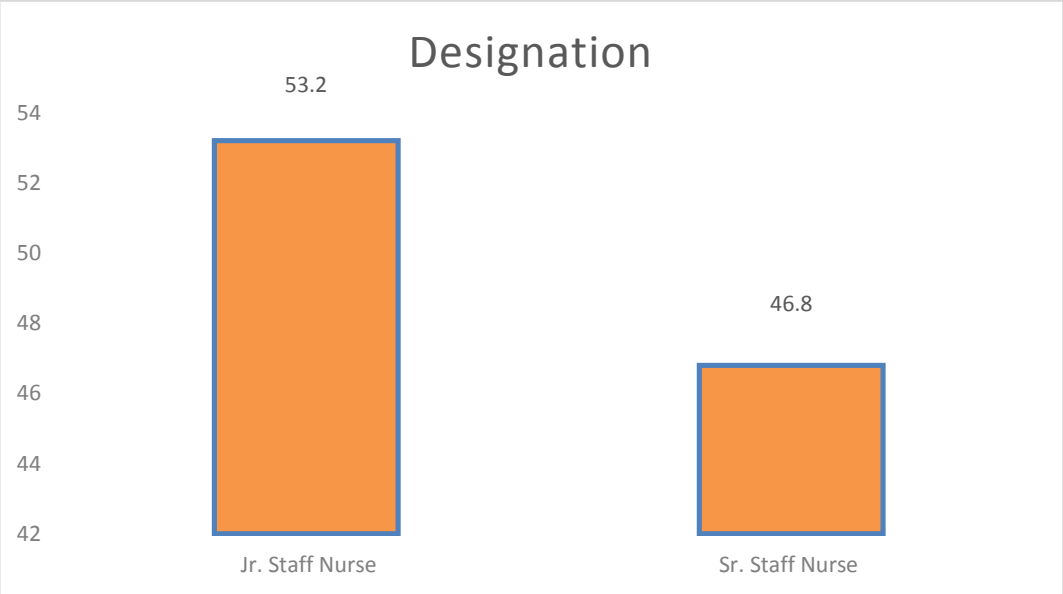


Figure No- 7: Percentage Distribution of Nursing Staff according to designation.Table -1& Fig. No- 7: shows that the majority 133(53.2%) of Nursing Staff were Juniors whereas115 (46.2%) of them belonged to Senior category.

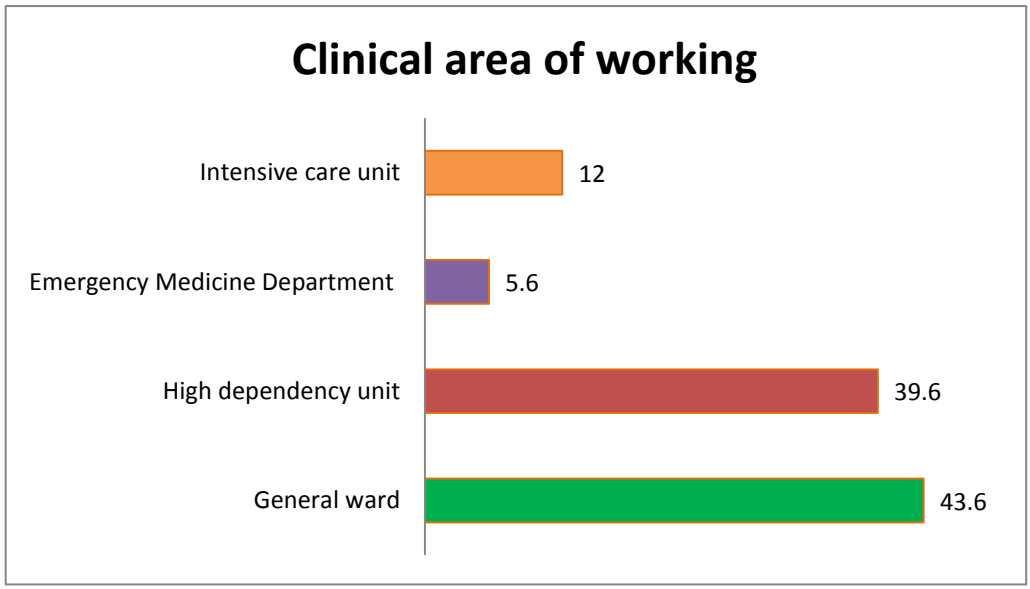


Figure No -8: Percentage Distribution of Nursing Staffs according to clinical area working.

Table -1 Figure No- 8: revealed that majority109 (43.6%) 0f Nursing Staff are working in general wards, whereas 14(5.6%) of them are working in Emergency Medicine department.

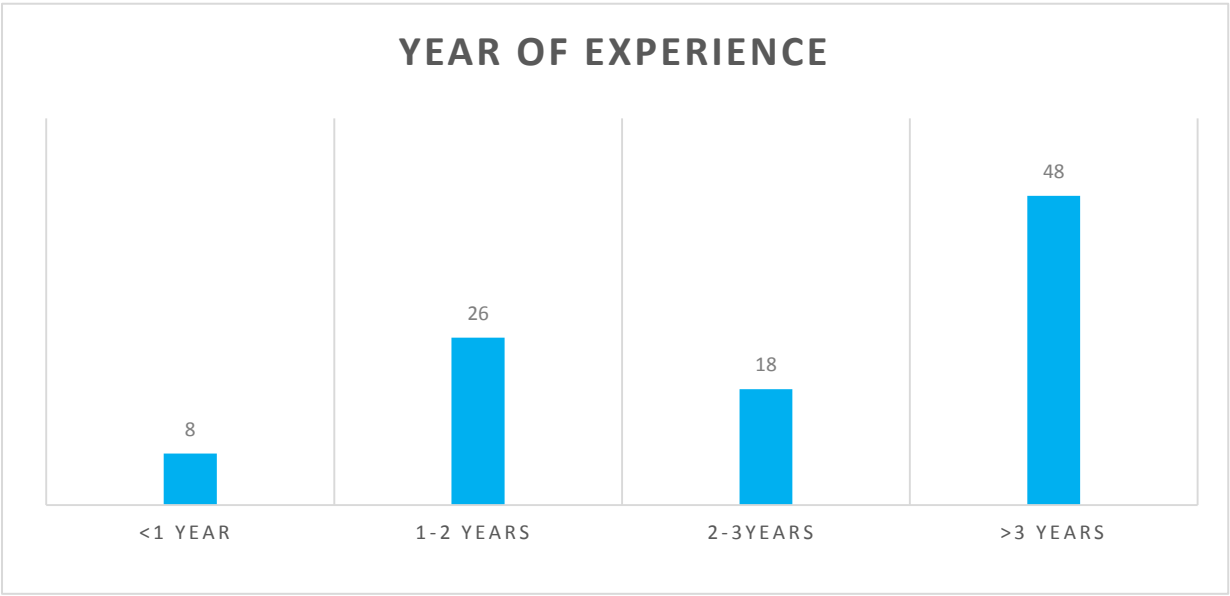


Figure No-9: Percentage Distribution of Nursing Staff according to Clinical year of experience

The figure No- 9: revealed that maximum 120(48%) had above 3years of clinical experience while 20(8%) of them had below 1 year of experience.

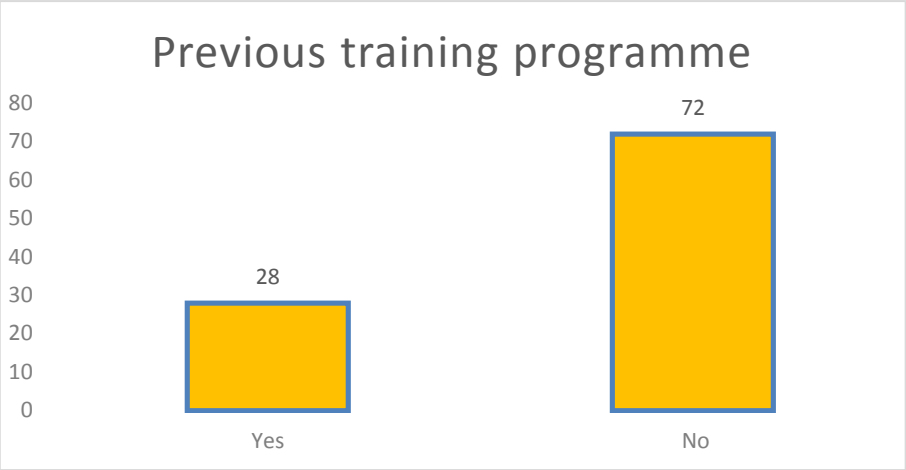


Figure No -10: Percentage Distribution of Nursing Staff according to their previous training

Figure No 10: revealed that majority180 (72%) of Nursing Staff undergone training, 70(28%) of them are undergone training within 6-month duration.

Section -II

Findings related to knowledge and competency level of simulation-Based training on incident reporting among Nursing Staff.

OBJECTIVE-1

To assess the knowledge and competency level on incident reporting among Nursing Staff. By using Structured Knowledge Questionnaire.

SECTION- A

Table 2: Distribution of pre and post-test level of knowledge scores Nursing Staff.

Sl. No.	Knowledge scores	Score range	Pretest		Post-test	
			f	%	F	%
1	Inadequate knowledge	≤50%(<15)	55	22	0	0
2	Moderately adequate knowledge	51-75% (16-22)	**134**	**53.2**	105	42
3	Adequate knowledge	>76% (23-30)	61	24.4	**145**	**58**

Table 2: Describes the frequency and percentage distribution of pretest level of knowledge regarding incident reporting among nursing staffs revealed that majority134 (53.2%) had moderately adequate knowledge 55 (22%) had inadequate knowledge and only145 (58%) of them had adequate knowledge.

Considering the implementation of Simulation-Based training the posttest level of knowledge among nursing staff, depicted that, majority 145(58%) of them belonged to adequate knowledge level while 105(45%) of Nursing Staff had moderately adequate knowledge and none of participants had inadequate knowledge scores on incident reporting.

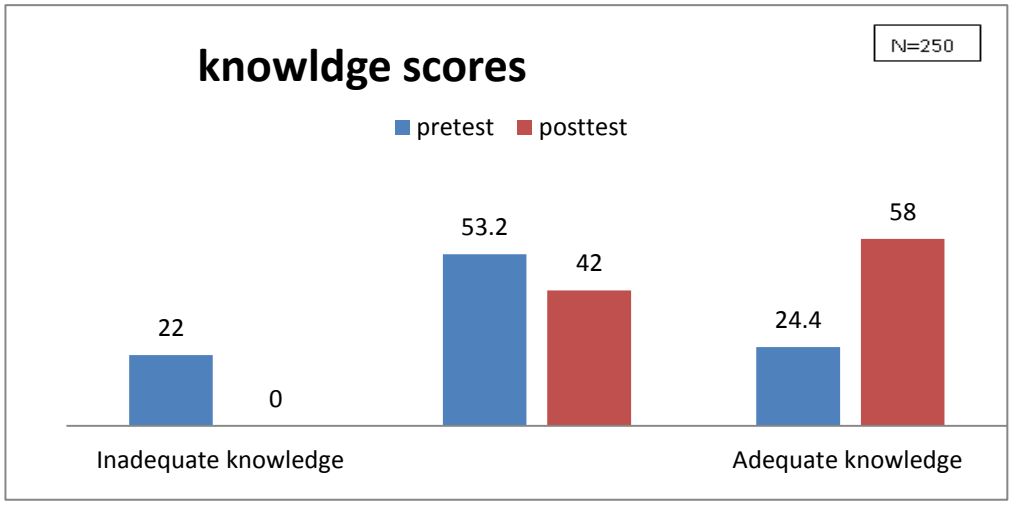


Figure No-11 : Percentage Distribution of Pre and post -tests knowledge scores

Section B: Area wise mean and standard deviation scores of knowledges and competency level on incident reporting among Nursing Staff.

Table 3: Distribution of area-wise knowledge of Pre and post-test Mean, Range, and Standard Deviation scores of among Nursing Staff.

Sl. No	**Area-wise competency level**	**Maximum scores**	**Pretest**			**Post-test**		
			Range	**Mean**	**Standard deviation**	**Range**	**Mean**	**Standard deviation**
1.	Activation and team	5	1-4	3.30	0.51	3-5	4.50	0.70
2.	Action plan	7	2-6	4.14	0.81	5-7	6.34	0.57
3.	Documentation and debriefing	3	0-3	1.58	0.64	1-3	2.0	0.85

Table 3 explains the overall area wise distribution of present post- test knowledge scores by area wise among nursing staff, showing that knowledge about incident reporting Activation ranged from a minimum of 1 to maximum of 4, with the mean knowledge score and SD being 3.30 and 0.51 respectively, action plan range is found to be 2-6 with a mean score and standard deviation 0f 4.14 and 0.83,reporting &documentation mean is1.58 and standard deviation 0.64 respectively

Section C: Distribution of pre and post-test level of competency score

Table 4: Distribution of Pre and Post-test Level of Competency on incident reporting among Nursing Staff.

N=250

SI. No	Competency level	Score range	Pretest		Post-test	
			f	%	F	%
1	Poor	<7	7	2.8	0	0
2	Good	>7	243	97.2	250	100

Table 4 Discusses the frequency and percentage distribution of pre-test level of competency regarding Incident reporting, indicating that Almost 7 (2.8%) of the Nursing Staff had a poor level of competency level and the remaining 243 (97.2%) had Good level of competency level whereas, in Post-test level of competency level scores, it's evident that, 250 (100%) of Nursing Staff had Good level of competency level and 0 (0%) had Poor level of competency level on incident reporting among Nursing Staff.

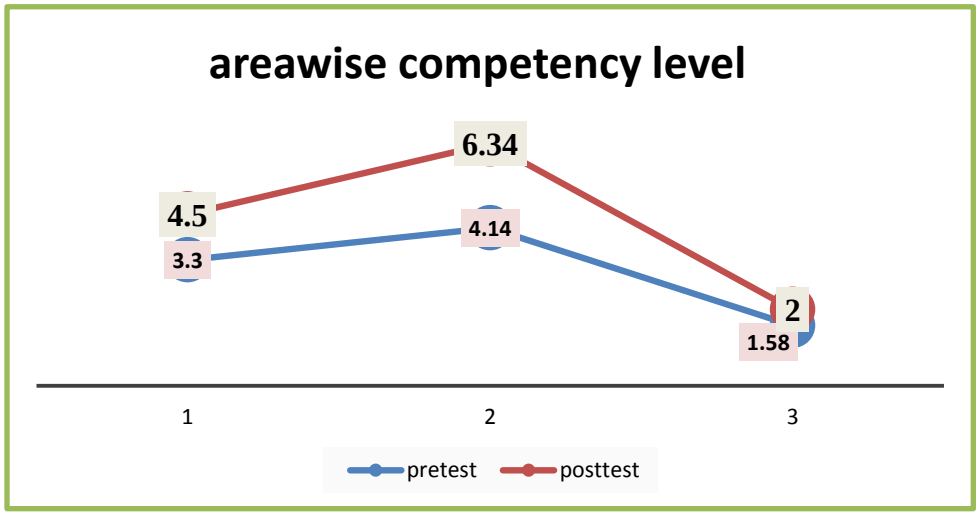


Figure No-12: area wise distribution of Pre and Post -test competency level.

Table 5: Comparison of Pre and Post-Test Scores differences on Knowledge, and competency level regarding the Effectiveness of Simulation-based training programme on incident reporting among Nursing Staff.

N=250

Variables	Pretest	Post-test	Enhancement	Paired t test & p value (sig)
	Mean± SD	Mean± SD		
Knowledge	16.08 ±2.4	24.2±1.2	8.12 ±2.7	**46.438* (<0.001)**
Competency level	9.0 ±.87	12.8 ±.79	3.8 ±1.22	**49.356* (<0.001)**

df=249 :*SS-Statistically significant at P<0.05

Table-5: Represents the Effectiveness of Simulation Based Training on Incident reporting among Nursing Staff comparing the differences between pre and post-test scores on knowledge and competency level among Nursing Staff, There was a significant improvement between the pre and post-test mean scores of knowledge with46.43 , whereas the competency mean score was enhanced to 3.8 ±1.22 , and the paired 't' test values with comparison of mean knowledge scores showed46.438&46.438 for competency level respectively and found to be statistically significant at P<0.05.

Hence, the stated null hypothesis Ho_3,Ho_4 is accepted and found to be true indicating a significant difference between pre and post-test knowledge, and competency level of Nursing Staff before

It is evident that, **Simulation-Based Training** was effective in improving the knowledge and competency level of Nursing Staff on incident reporting, and after the Simulation-based training.

SECTION IV: OBJECTIVE-III

Findings related the association between the demographic variable with the knowledge and the competency level of Nursing Staff on incident reporting.

Section A: Distribution of association between post-test knowledge, and competency level on incident reporting and the selected sociodemographic variables of Nursing Staff.

Table 6: Association between Post-Test Knowledge scores on incident reporting and the Selected Socio- Demographic Variables of Nursing Staff.

SI. No.	Demographic variables	Knowledge level		x^2 value	df	P VALUE
		Below median <22	Above median>22			
1	**Age**			2.63	1	.104737 NS
	a)< 30 years	90	61			
	b)>30 years	69	30			
2.	Gender			22.77	1	**.00001 SS**
	a) Male	12	48			
	b) Female	105	85			
3.	Qualification			27.95	1	**.00001 SS**
	a) Diploma	90	43			
	b) Graduate	40	77			
4.	Clinical area of Working			25.22	3	**.000014 SS**
	a) General ward	79	35			
	b) High dependency unit	35	64			
	c) Emergency Medicine Department	9	5			
	d) Intensive care unit	12	11			
5.	Year of Experience			0.02.	1	.869932 NS
	a) 1-3 years	75	55			
	b) >3years	68	52			
6.	Designation as			0.30.	1	.58202 NS
	a) Jr. Nursing staff	30	78			
	b) Sr. Staff Nurse	44	98			
7.	Previous training Programme on incident			0.76	1	.382562 NS
	a) Yes	42	28			
	b) No	97	83			

***SS-Statistically significant at P<0.05,**

Table-6 Iindicates the association between the post-test knowledge scores on incident reporting and the selected sociodemographic characteristics of Nursing Staff, revealed that the computed chi-square value for the Qualification 27.95 with df (1) and clinical area of working x^2 value was 25.22(3) and gender was 22.77(1), is statistically significant at P< 0.05. However, the other sociodemographic variables, such as age x2 value 2.63. df(1), Year of experience 0.02, Designation 0.026, Previous training0.76 were not statistically associated with the post-test level of knowledge scores because the computed chi-square value was less than the P value.

As a result, the null hypotheses $H0_2$, which claimed that there is a substantial association between Nursing Staff knowledge, and competency level regarding incident reporting with sociodemographic characteristics, thus the stated research null hypothesis ($H0_1$) is accepted.

TABLE-7 Association between post-test competency level on incident reporting and selected socio-demographic variables of Nursing Staff.

N=250

SI. No.	Demographic variables	Competency level		x^2 value	df	P value
		below<13	above>13			
1.	Age			0.39	1	.529603 NS
	a) <30	90	56			
	b) >30	60	44			
2.	**Gender**			**11.02**	**1**	**.000901ss**
	a) Male	**20**	**40**			
	b) Female	**110**	**80**			
3.	Qualification			0.21.	1	.643467 NS
	a) Diploma	70	63			
	b) Graduates	65	52			
4.	Clinical area of Working			1.72.	3	.631417 NS
	a) General ward	70	39			
	b) High dependency unit	55	44			
	c) Emergency Medicine Department	9	5			
	d) Intensive care unit	18	12			
5.	Year of Experience			**9.87**	**1**	**.001678 SS**
	a) 1-3 year	80	50			
	b) >3years	50	70			
6.	Designation as			**36.58**	**1**	**0.00001SS**
	a) Jr. Staff Nurse	93	40			
	b) Staff Nurse	37	80			
7.	Previous training Programme on incident reporting			**4.51.**	**1**	**.033667 SS**
	a) Yes	30	40			
	b) No	104	76			

***SS-Statistically significant at P<0.05,**

Table -7 describes the association between the post-test level of competency level on incident reporting and selected socio -demographic variables of Nursing Staff the computed chi-square value for clinical area of working competency levels was 1.72 with df (3**) is statistically significant** at the generated Chi-square value, but when comparing the post -test level of competency with other socio demographics variables like age was 0.39 df(1) ,at p<.05,Gender was 11.02 ,.for the educational qualification

0.21, year of experience was 9.87, followed by designation 36.5823,and Previous training4.51, which is indicating that there was no statistically significant association between these variables at the level of competency level. l found statistically not significant at $p < .05$.

Summary

Chapter on data analysis and interpretation has dealt with the disruption of the Effectiveness of Simulation Based Training on Incident reporting among Nursing Staff comparing the differences between pre and post-test scores on knowledge and competency level among nursing staff, There was a significant improvement between the pre and post-test mean scores and is evident that, **Simulation-Based Training** was effective in improving the knowledge and competency level of Nursing Staff on incident reporting, and after the Simulation-based training.

Chapter-VII

DISCUSSION

The perspectives findings have been discussed with reference to research problem conceptual framework objectives, hypothesis and assumptions of the study present study is aimed evaluate the effectiveness of simulation training on incident reporting among Nursing Staff working in R.L.Jalappa Hospital and Research Center Tamaka Kolar.

The findings of the study discussed under the following headings .

1. The data pertaining to sociodemographic data of Nursing Staff
2. Overall and area wise level of knowledge and competency among Nursing Staff on incident reporting.
3. Comparison of pre and post test knowledge scores on differences on Knowledge on incident reporting.
4. Distribution of association between post-test knowledge, and competency level on incident reporting.

SECTION-1:

The data pertaining to sociodemographic data of Nursing Staff

The study consisted of study participants majority of whom 146 (58.4%) Nursing Staff were found to above 30 years and 104 (41.6%) were below the age of 30years. When we consider gender, majority 190 (76%) of the Nursing Staff were females and 60(24%) were males. Qualification of the majority 133 (53.2%) of Nursing Staff

belonged to diploma programme whereas 117(46.8%) of them were graduates. Designation of the majority 133(53.2%) of Nursing Staff were Juniors whereas115 (46.2%) of them belonged to Senior category. Considering the clinical area of working, majority 109 (43.6%) 0f Nursing Staff are working in general wards, whereas 14(5.6%) of them are working in Emergency Medicine department. The year of experience of maximum 120(48%) had above 3years of clinical experience while 20(8%) of them had below 1 year of experience. The majority of 180 (72%) of Nursing Staff undergone training, 70(28%) of them are undergone training within 6-month duration.

The similar study was conducted from April 14 to 29, 2015 in Gondar University Comprehensive Specialized Hospital. Of the total 423 nurses contacted to participate in the study, 378 returned the questionnaire for a response rate of 89.4%. Fifty-four percent of the participants were males. The mean (SD) age was 31.86 (9.65) years. Approximately 87% of the participants had a bachelor degree in nursing and nearly 44% of the participants served less than or equal to five years in the nursing profession. Most of the respondents (94.7%) were working as staff nurse. The mean (SD) working hours per week were 47.31 (10.59) hours.[35]

SECTIN II:

Overall and area wise level of knowledge and competency among Nursing Staff on incident reporting

The majority 134 (53.2%) study participants had moderately adequate knowledge 55 (22%) had inadequate knowledge and only 145 (58%) of them had adequate knowledge.

Considering the implementation of Simulation-Based training the post-test level of knowledge among nursing staff, depicted that, majority 145(58%) of them belonged to adequate knowledge level while 105(45%) of Nursing Staff had moderately adequate knowledge and none of participants had inadequate knowledge scores on incident reporting.

Related study was happened on the population were all register nurses and midwives working at a tertiary, public, teaching hospital in the outskirts of Madrid (Spain) and accessible by email(N= 139). The means score of majority 41.4 (5.0) study participants had moderately adequate knowledge 97.6 (5.3) had inadequate knowledge.[36]

SECTION-III:

Comparison of Pre and Post-Test Scores differences on Knowledge, and competency level regarding the Effectiveness of Simulation-based training programme on incident reporting among Nursing Staff.

The overall comparison of pre and post test knowledge score on incident reporting showed that majority of Nursing Staff had adequate knowledge in post test. The Effectiveness of Simulation Based Training on Incident reporting among Nursing Staff comparing the differences between pre and post-test scores on knowledge and competency level among Nursing Staff, There was a significant improvement between the pre and post-test mean scores of knowledge with 46.438 , whereas the competency mean score was enhanced to 3.8 ±1.22 , and the paired 't' test values with

comparison of mean knowledge scores showed 46.438 & 46.438 for competency level respectively and found to be statistically significant at P<0.05.

Hence, the stated hypothesis HO_3, HO_4 is accepted and found to be true indicating a significant difference between pre and post-test knowledge, and competency level of Nursing Staff.

It is evident that, **Simulation-Based Training** was effective in improving the knowledge and competency level of Nursing Staff on incident reporting and after the Simulation-based training.

This suggested that simulation based training on incident reporting is effective in increasing the knowledge of Nursing Staff.

Related study was happened on the population were all register nurses and midwives working at a tertiary, public, teaching hospital in the outskirts of Madrid (Spain) and accessible by email ($N = 774$). Overall reporting competence (OC) showed a significant increase of 7.96 points (95% CI 5.05–10.85; $p < .001$), going from 112.4 (*SD*: 10.4) points in pre test to 120.4 points (*SD*: 13.9) post test.[35]

SECTION-IV:

Distribution of association between post-test knowledge and competency level on incident reporting and the selected sociodemographic variables of Nursing Staff.

Indicates the association between the post-test knowledge scores on incident reporting and the selected sociodemographic characteristics of Nursing Staff, revealed that the computed chi-square value for the Qualification 27.95 with df (1) and clinical area of working x^2 value was 25.22(3) and gender was 22.77(1), is statistically significant at

P< 0.05. However, the other sociodemographic variables, such as age x2 value 2.631. df(1), Year of experience 0.026, Designation 0.0268, Previous training0.76 were not statistically associated with the post-test level of knowledge scores because the computed chi-square value was less than the P value.

As a result, the null hypotheses $H0_2$, which claimed that there is a substantial association between Nursing Staff knowledge, and competency level regarding incident reporting with sociodemographic characteristics, thus the stated research null hypothesis (HO_2) is accepted.

This results consists with study finding where there was no association found between the variables, Nursing Staff source of information and pre test knowledge score among nursing staff working in R.L.Jalappa Hospital and Research Center, Tamaka, Kolar.

Similar studies was conducted from April 14 to 29, 2015 in Gondar University Comprehensive Specialized Hospital. Training was significantly associated with the incident reporting behaviour of nurses. Nurses who had received training on incident reporting were more likely to report incidents than those who had not been trained (AOR = 2.96, 95% CI: 1.34, 6.26). Those who believed reporting helps a patient were more likely to report incidents than those who did not believe so (AOR = 3.08, 95% CI: 1.70, 5.59). Nurses who feared administrative sanctions were less likely to report incidents than those who did not fear administrative sanctions (AOR = 0.27, 95% CI: 0.12, 0.58). Similarly, nurses who feared legal penalties were less likely to report incidents than those who did not fear legal penalties (AOR = 0.09, 95% CI: 0.03, 0.21). Moreover, nurses who feared loss of prestige were less likely to report incidents than those who did not fear loss of prestige (AOR = 0.25, 95% CI: 0.12, 0.53)[37]

Summery:

This discussion chapter is dealt that statistical analysis regarding sociodemographic variables, relationship between the knowledge on incident reporting among Nursing Staff selected sociodemographic variables and supportive studies.

Chapter-IX

Conclusion

This chapter presents the conclusion drawn, implication limitation, suggestion and recommendations.

This study aimed to evaluate the effectiveness of Simulation Based Training on incident reporting. A quasi- experimental design is used for the study. The data was collected from 250 Nursing Staffs who are working in R.L Jalappa Medical Teaching Hospital kolar.

The conclusion drawn from the study were as follows:

The Nursing Staffs who are working in R.L Jalappa Hospital Medical Teaching Hospital Kolar Nursing Staffs had some knowledge on incident reporting. Findings showed that the majority of study participants who are working in R.L Jalappa Hospital belonged to the age group below 30 years and were females. The majority (53.2%) student participants had done their diploma in nursing The maximum study participants (48%) had more then 3 year.The majority (72%) Nursing Staffs were not under gone training on incident reporting

The study is based on Context, Input, process (CIPP) Evaluation model. It provides a schematic representation of conceptual framework for effectiveness of simulation based training on incident reporting. The CIPP includes gain knowledge, valid reliable simulation based training on incident reporting.

Regarding effectiveness of simulation based training , the over all comparison of pre and post -test knowledge score on incident reporting shows that majority of study participant had adequate knowledge in post-test The overall mean knowledge score is 46.438, whereas the competency mean score enhanced to 3.8± 1.22, and the paired 't' test values with comparison of mean knowledge scores showed 46.438 for competency level respectively and found to be statistically significant at $P< 0.05$.

Hence, the stated null hypothesis $H0_3$, $H0_4$ is accepted and found to be true indicating a significant difference between pre and post - test knowledge, and competency level of Nursing Staff before It is effective that, Simulation-Based Training was effective in improving the knowledge and competency level of Nursing Staff on incident reporting, and after the Simulation-Based Training.

Indicates the association between the post-test knowledge scores on incident reporting and the selected sociodemographic characteristics of Nursing Staff, revealed that the computed chi-square value for the Qualification 27.95 with df (1) and clinical area of working x^2 value was 25.22(3) and gender was 22.77(1), is statistically significant at $P< 0.05$. However, the other sociodemographic variables, such as age x2 value 2.63. df(1), Year of experience 0.02, Designation 0.02, Previous training 0.76 were not statistically associated with the post-test level of knowledge scores because the computed chi-square value was less than the P value.

As a result, the null hypotheses $H0_2$, which claimed that there is a substantial association between Nursing Staff knowledge, and competency level regarding incident reporting with sociodemographic characteristics, thus the stated research null hypothesis ($H0_1$) is accepted.

IMPLICATIONS

Incident reporting can be used to track trends and identify patterns in work place incident. by analyzing this data, companies can identify potential hazards and take steps to mitigate them this help to prevent future incidents and improve overall safety in the work place. Therefore, it is crucial for health administrators to provide front line personnel Incident reporting related education and training to advance their understanding application of incident reporting . Cause of incident reporting an incident report form is used form is used to provide a comprehensive record of unwelcome or undesirable occurrence that occurs within the workplace environment.

Nursing practice

The role of Staff Nurses in the health care industry is a vital aspect in society . They shoulder the responsibility of promoting patient safety and preventing incidents. Especially in emergency ward and critical care units, Nurses should concentrate on the safety of lives of Patients as patient and there relatives put their faith in them. Nurses have a responsibility for improving the image of their profession. For all to keep moving forward each individual nurse must be sufficiently committed to report on incidents.

Nursing education

The study Emphasis on the hospital safety manual more by adding information regarding the incident reporting Nursing Staffs can be trained on different types of incident reporting as medication errors near miss errors fall or slip surgical procedure related needle stick, consent and patient care device or facility related . So that they may safe guard the patients form catastrophes in hospitals .

Nursing administration

The nursing administrator can take a part in developing skill training to enhance the Nursing Staffs for future awareness in incident reporting and more certificate courses makes to train the Nursing Staffs.

It is imperative that nursing administrators support initiatives to enhance incident reporting. Delivering in-service training to the Nursing Staffs. They ought to design and coordinate plans that are economical . The administration should support creating simulation training and practice on the incident reporting. The nursing administrators can conduct seminar to Nursing Staff on current practice of patient safety codes.

Nursing research

The study has implications on Nursing research by conducting projects, trails best practices and playing a vital role in incident reporting . Nursing Staff who care individually for patients in various settings train them about incident reporting .

More and more research activity can be carried out the technology assistant methods in incident reporting .

LIMITATIONS OF THE STUDY

1. The study did not use any control group.
2. The generalization of the study finding she is not possible as sample of the study is smaller.
3. The study was limited to the Nursing Staffs employed at R.L. Jalappa Hospital and Research centre, Kolar .

RECOMMENDATIONS

A similar study can be replicated on a large sample in different settings .

1. A similar study can replicate with a control group.
2. A comparitive study can be conducted between two institutions.

Summary

This chapter highlighted on overall study, findings, implications, limitations and recommendation of the present study. The present study clearly indicated its importance in the nursing steps practice, administration, education and research. The researcher had strongly emphasized the necessary to meet with the information needs off Nursing Staffs which will provide the better outcome of the Nursing Staffs through gaining knowledge and competency in Incident Reporting.

Chapter VIII

SUMMARY

This chapter describes on the overview of research objective hypothesis analysis, interpretations, discussion, conclusion, its implications and recommendations.

The present study was conducted to evaluate the **"Effectiveness of Simulation Based Training on competency among Nursing Staff working in R.L.Jalappa Medical Teaching Hospital, Kolar"**.

Objective of the study

1. To assess the knowledge and competency level on incident reporting among nursing staff why using structured knowledge questionnaire and observational checklist .
2. To evaluate the effectiveness of simulation based training by comparing the pre and post test course
3. To determine dash association between the competency level half nursing staff on incident reporting with selected socio demographic variables.

Null hypothesis

$H0_1$: There is a significant association between Knowledge scores of Nursing Staff with selected demographic variables.

$H0_2$: There is a significant association between the Competency levels of Nursing Staff with the selected sociodemographic variables.

$H0_3$: There is a statistically significant difference in the mean pre and post-test knowledge scores among Nursing Staff within groups.

$H0_4$: There is a statistically significant difference in the mean pre and post-test competency level among Nursing Staff within groups.

Conceptual frame work

The conceptual framework used in the study was based on on the Context, Input Process, Product (CIPP) Evaluation Model The focus of this theory is the recommended as framework to systematically guide the conception, design, implementation,and assessment of service -learning projects, and provide feedback and judgment of the projects effectiveness for continuous improvement.

The review of related research and non research literature helped the investigator to develop the conceptual framework structured knowledge questionnaire, structured teaching program protocol and to plan for data analysis. The study was conducted at R.L Jalappa Medical Teaching Hospital, Kolar, from 10 July 2023 to 14 August 2023 and adopted evaluative approach with simple random sampling technique . Sample of the study consistent of 250 Nursing Staffs. The research design selected for the study is quasi experimental Simulation Based Training one group pre and post-test design the independent variable was Simulation Based Training and knowledge and competency level were dependent variable.

The tool developed and used for data collection was structured knowledge questionnaire . The tool was validated by 7 experts for content validity reliability and feasibility. The reliability of the tool was established by spearman's brown prophecy formula (reliability r=0.960)

Simulation Based Training on Incident Reporting was developed for the Nursing Staff based on review literature and the opinion of experts. It was prepared with a view to enhance the knowledge and competency level of Nursing Staff.

Pilot study was conducted in R.L Jalappa Medical Teaching Hospital, Kolar between 15/6/2023 to 29/6/202 to find out the reliability of the tool and Effectiveness of Simulation based Training on incident reporting in terms of enhancement of knowledge and competency regarding incidents reporting So as to decide their suitability for the final study. The investigator used simple random sampling technique to select the samples from the total population .

The pretest was administered by using structured knowledge questionnaire and competency observational checklist followed by Simulation Based Training. After 14 days post-test was conducted by using the same on knowledge and competency level for evaluating the Effectiveness of Simulation Based Training on incidents reporting.

The data gathered was analyst and interpreted according to objectives Descriptive statistics mean standard deviation and mean percentage were analyzed .

The inferential statistics as t test and test were included to test the null hypothesis at different levels of significance And the data obtained were presented in the tabular and graphical form .

Major findings of time study

The major findings of the study are presented in the following sections .

SECTION-1:

The data pertaining to sociodemographic data of Nursing Staff

The study consisted of study participants majority of whom 146 (58.4%) Nursing Staff were found to be above 30 years and 104 (41.6%) were below the age of 30 years. When we consider gender, majority 190 (76%) of the Nursing Staff were females and 60(24%) were males. Qualification of the majority 133 (53.2%) of Nursing Staff was to diploma programme whereas 117(46.8%) of them were graduates. Designation of the majority 133(53.2%) of Nursing Staff were Junior Staff Nurses whereas115 (46.2%) of them belonged to Senior category. Considering the clinical area of working, majority 109 (43.6%) of Nursing Staff were working in general wards, whereas 14(5.6%) of them were working in Emergency Medicine department. Regarding years of experience maximum 120(48%) had above 3years of clinical experience while 20(8%) of them had below 1 year of experience. The majority of 180 (72%) of Nursing Staff undergone training, 70(28%) of them are did not undergo training within 6-month duration.

SECTION II:

Overall and area wise level of knowledge and competency among Nursing Staff on incident reporting

The majority 134 (53.2%) study participants had moderately adequate knowledge 55 (22%) had inadequate knowledge and only 145 (58%) of them had adequate knowledge.

Considering the implementation of Simulation-Based training the posttest level of knowledge among nursing staff, depicted that, majority 145(58%) of them belonged to adequate knowledge level while 105(45%) of Nursing Staff had moderately adequate knowledge and none of participants had inadequate knowledge scores on incident reporting.

SECTION-III:

Comparison of Pre and Post-Test Scores differences on Knowledge, and competency level regarding the Effectiveness of Simulation-based training on incident reporting among Nursing Staff.

The overall comparison of pre and post test knowledge score on incident reporting showed that majority of Nursing Staff had adequate knowledge in post test. The Effectiveness of Simulation Based Training on Incident reporting among Nursing Staff comparing the differences between pre and post-test scores on knowledge and competency level among Nursing Staff, There was a significant improvement between the pre and post-test mean scores of knowledge with 46.43 , whereas the

competency mean score was enhanced to 3.8 ±1.22 , and the paired 't' test values with comparison of mean knowledge scores showed 46.43 & 46.43 for competency level respectively and found to be statistically significant at $P<0.05$.

Hence, the stated null hypothesis Ho_3, Ho_4 is accepted and found to be true indicating a significant difference between pre and post-test knowledge, and competency level of Nursing Staff.

It is evident that, **Simulation-Based Training** was effective in improving the knowledge and competency level of Nursing Staff on incident reporting and after the Simulation-based training.

This suggested that simulation based training on incident reporting is effective in increasing the knowledge of Nursing Staff.

SECTION-IV:

Distribution of association between post-test knowledge and competency level on incident reporting and the selected sociodemographic variables of Nursing Staff.

Indicates the association between the post-test knowledge scores on incident reporting and the selected sociodemographic characteristics of Nursing Staff, revealed that the computed chi-square value for the Qualification 27.95 with df (1) and clinical area of working x^2 value was 25.22(3) and gender was 22.77(1), is statistically significant at $P< 0.05$. However, the other sociodemographic variables, such as age x2 value 2.63. df(1), Year of experience 0.026, Designation 0.02, Previous training0.76 were not statistically associated with the post-test level of knowledge scores because the computed chi-square value was less than the P value.

As a result, the null hypotheses Ho_2, which claimed that there is a substantial association between Nursing Staff knowledge, and competency level regarding incident reporting with sociodemographic characteristics, thus the stated research hypothesis ($H0_1$) is accepted.

Summary

This chapter dealt with summary which includes objective, hypothesis, conceptual frame work and major findings of the study.

REFERENCE

1. World Health Organization. Report on the burden of endemic health care-associated infection worldwide: clean care is safe care. Geneva: WHO, 2011.accessed 23 January 2015.
2. Hindawi Publishing corporation Scientifica, Research Article Incident reporting Behaviours and Associated Factors among Nurses Working in Gondar University Comprehensive Specialized Hospital, Northwest Ethiopia. Volume 2016, Article ID6748301,
3. Alex Joseph, Dhasarathi Kumar, & M.Bagavandas, A review of epidemiology of fall among elderly in India, Indian Journal of Community Medicine: Official Publication ofIndian Association of Preventive & Social Medicine,2019 Apr-Jun
4. D.g.s. Buddika,asset management & vehicle management system for fonterra brands lanka (pvt) ltd, university of colombo school of computing 2018
5. Zirpe KG, Seta B, Gholap S, Aurangabadi K, Gurav SK, Deshmukh AM, Wankhede P, Suryawanshi P, Vasanth S, Kurian M, Philip E, Jagtap N, Pandit E. Incidence of Medication Error in Critical Care Unit of a Tertiary Care Hospital: Indian J Crit Care Med. 2020 Sep;24(9):799-803. doi: 10.5005/jp-journals-10071-23556. PMID: 33132563; PMCID: PMC7584841.
6. Joseph, A., Kumar, D., & Bagavandas, M. (2019). A Review of Epidemiology of Fall among Elderly in India. *Indian journal of community medicine : official publication of Indian Association of Preventive & Social Medicine*, *44*(2), 166–168.
7. https://www.who.int/news-room/fact-sheets/detail/patient-safety

8. Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. https://www.ncbi.nlm.nih.gov/books/NBK2652/ Vaismoradi M, Tella S, A Logan P, Khakurel J, Vizcaya-Moreno F. Nurses' Adherence to Patient Safety Principles: A Systematic Review. Int J Environ Res Public Health. 2020 Mar 19;17(6):2028. doi: 10.3390/ijerph17062028. PMID: 32204403; PMCID: PMC7142993.
9. Kohn LT: To err is human: building a safer health care system. Institute of Medicine;1999:1–11. http://books.nap.edu/openbook.php?isbn=0309068371
10. lume 13,2020,Komiya, Hitoshi & Imaizumi, Takahiro & SuzukAlireza Salar, Fatemeh Kiani,
11. Nasrin Rezaee, Preventing the medication errors in hospitals: A qualitative study, International Journal of Africa Nursing Sciences,Voi, Yusuke & Ando, Masahiko & Shiratori, Yoshimune & Nagao, Yoshimasa & Kuzuya, Masafumi. (2023). Quantitative and qualitative assessment to predict fall events for older inpatients at a tertiary referral hospital. 10.21203/rs.3.rs-2633592/v1.
12. Biswas I, Adebusoye B, Chattopadhyay K. Risk factors for falls among older adults in India: A systematic review and meta-analysis. Health Sci Rep. 2022 Jun 21;5(4):e637. doi: 10.1002/hsr2.637. PMID: 35774830; PMCID: PMC9213836.
13. Robyn P. Cant, Simon J. Cooper, Louisa L. Lam, Hospital Nurses' Simulation-Based Education Regarding Patient Safety: A Scoping Review, Clinical Biswas I, Adebusoye B, Chattopadhyay K. Risk factors for falls among older adults in India: A systematic review and meta-analysis. Health Sci Rep. 2022 Jun 21;5(4):e637. doi: 10.1002/hsr2.637. PMID: 35774830; PMCID: PMC9213836.

14. Authors- Ahsan Siddiqui, Minister of Health, Saudi Arabia**.** https://www.researchgate.net>3247
15. Texas A&M International University, Patient Safety Goals to Be Aware of in 2021,https://online.tamiu.edu/articles/msn/patient-safety-goals-in-2021.aspx
16. Wake AD, Tuji TS, Gonfa BK, Waldekidan ET, Beshaw ED, Mohamed MA, Geressu ST. Knowledge, attitude, practice and associated factors towards patient safety among nurses working at Asella Referral and Teaching Hospital, Ethiopia: A cross-sectional study. PLoS One. 2021 Jul 1;16(7):e0254122. doi: 10.1371/journal.pone.0254122. PMID: 34197548; PMCID: PMC8248719.
17. The Joint Commission Sentinel Event Data 2022 Annual Review
18. Mary Mckay DNP, ARNP, CNE a, Jill S. Sanko MS, ARNP, CHSE-A Simulation Based Adverse Event Reporting System: Development and Feasibility | Request PDF
19. Kessels-Habraken, M., De Jonge, J., Van der Schaaf, T., & Rutte, C. (2010). Prospective risk analysis prior to retrospective incident reporting and analysis as a means to enhance incident reporting behaviour: a quasi-experimental field study. *Social science & medicine (1982)*,
20. Su Jin Jung, Ju-Eun Song, Sun Hyoung Bae, Youngjin Lee, Seok Hyun Gwon, Jin-Hee Park,Simulation-based training program on patient safety management: A quasi-experimental study among new intensive care unit nurses, Nurse Education Today,Volume 126,2023,
21. Guo, Xiaobei & Wang, Ying & Wang, Lei & Yang, Xueke & Yang, Weimei & Lu, Zhihui & He, Mei. (2022). Effect of a fall prevention strategy for the older patients: A quasi- experimental study. Nursing Open. 10. 10.1002/nop2.1379.

22. Hasan SF, Hamid M. Incident reporting in post-operative patients managed by acute pain service. Indian J Anaesth. 2015 Dec;
23. Ayhan Oncu, Y., & Seren Intepeler, S. (2022). Nurses' view of implementation evidence-based fall prevention interventions: A qualitative study. *Journal of Nursing Management*, 30(1), 234–242. https://doi.org/10.1111/jonm.13480
24. Nagwa Younes Abou El Enein, Azza Saad Abd El Ghany, Ashraf Ahmad Zaghloul Knowledge and performance among nurses before and after a training programme on patient falls Open Journal of Nursing Vol. 2 No. 4 (2012) , Article ID: 25521 , 7 pages
25. Alireza Salar, Fatemeh Kiani, Nasrin Rezaee, Preventing the medication errors in hospitals: A qualitative study, International Journal of Africa Nursing Sciences,Volume 13,2020,
26. Komiya, Hitoshi & Imaizumi, Takahiro & Suzuki, Yusuke & Ando, Masahiko & Shiratori, Yoshimune & Nagao, Yoshimasa & Kuzuya, Masafumi. (2023). Quantitative and qualitative assessment to predict fall events for older inpatients at a tertiary referral hospital. 10.21203/rs.3.rs-2633592/v1.
27. Haraldseid-Driftland, C., Dombestein, H., Le, A.H. *et al*. Learning tools used to translate resilience in healthcare into practice: a rapid scoping review. *BMC Health Serv Res* **23**, 890 (2023). https://doi.org/10.1186/s12913-023-09922-6
28. Microsoft Word - Kappa plain tekst 26.10.2013 (diva-portal.org)
29. Yalew ZM, Yitayew YA. Clinical incident reporting behaviors and associated factors among health professionals in Dessie comprehensive specialized hospital, Amhara Region, Ethiopia: a mixed method study. BMC Health Serv Res. 2021 Dec

30. Engeda E. H. (2016). Incident Reporting Behaviours and Associated Factors among Nurses Working in Gondar University Comprehensive Specialized Hospital, Northwest Ethiopia. *Scientifica*, *2016*, 6748301. https://doi.org/10.1155/2016/6748301
31. Hewitt, T., Chreim, S., & Forster, A. (2016). Incident reporting systems: a comparative study of two hospital divisions. *Archives of public health = Archives belges de sante publique*, *74*, 34. https://doi.org/10.1186/s13690-016-0146-8
32. Kolla, B.P., Coombes, B.J., Morgenthaler, T.I. *et al.* Increased Patient Safety-Related Incidents Following the Transition into Daylight Savings Time. *J GEN INTERN MED* 36, 51–54 (2021). https://doi.org/10.1007/s11606-020-06090-9
33. Biswas I, Adebusoye B, Chattopadhyay K. Risk factors for falls among older adults in India: A systematic review and meta-analysis. Health Sci Rep. 2022 Jun 21;5(4):e637. doi: 10.1002/hsr2.637. PMID: 35774830; PMCID: PMC9213836.
34. Robyn P. Cant, Simon J. Cooper, Louisa L. Lam, Hospital Nurses' Simulation-Based Education Regarding Patient Safety: A Scoping Review, Clinical Simulation in Nursing, Volume 44, 2020,
35. Noyes J, Booth A, Moore G, Flemming K, Tunçalp Ö, Shakibazadeh E. Synthesising quantitative and qualitative evidence to inform guidelines on complex interventions: clarifying the purposes, designs and outlining some methods. BMJ Glob Health. 2019 Jan
36. Engeda EH. Incident Reporting Behaviours and Associated Factors among Nurses Working in Gondar University Comprehensive Specialized Hospital, Northwest Ethiopia. Scientifica (Cairo). 2016;2016:6748301. doi: 10.1155/2016/6748301. Epub 2016 Dec 28. PMID: 28116219; PMCID: PMC5225381.

37. The Second International Nursing Scholar Congress (INSC 2018) of Faculty of Nursing, Universitas Indonesia.
38. Salcedo-Diego, I., Ruiz-Antorán, B., Payares-Herrera, C., de Andrés-Gimeno, B., & Serrano-Gallardo, P. (2022). Nurses competence in the reporting of medication-related incidents: An intervention study. *Nursing Open*, 9, 2836–2846. https://doi.org/10.1002/nop2.988

ANNAXURE-A

ETHICAL CLEARANCE COMMITTEE CERTIFICATE

	SRI DEVARAJ URS COLLEGE OF NURSING TAMAKA, KOLAR – 563 103. INSTITUTIONAL ETHICS COMMITTEE	Format No.	IEC 01
		Issue No.	02
		Rev No.	01
		Date	01-09-2018

Ref.:No.SDUCON/IEC/97 /2022. **Date: 28/07/2022**

To
Mrs. Geetha G R
I year M.Sc Nursing (Med. Surg. Nsg.)
SDUCON,
Tamaka, Kolar-563103

This is to certify that the Institutional Ethics Committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has examined and unanimously approved the Topic: **"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R.L.Jalappa Hospital & Research Centre Kolar."** of Mrs. Geetha G R, under the guidance of Dr. Zeanath C.J, Sri Devaraj Urs College of Nursing.

Member Secretary
MEMBER SECRETARY
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

Chairperson
CHAIR PERSON
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

ANNEXURE-B

LETTER REQUESTING PERMISSION FOR CONDUCTING RESEARCH STUDY

LETTER REQUESTING PERMISSION FOR CONDUCTING RESEARCH STUDY

From
Mrs.Geetha G.R
2nd Year M.Sc. Nursing
Sri DevarajUrs College of Nursing
Tamaka, Kolar-563103.

To,
Medical Superintendent.
RLJH &RC,
Tamaka, Kolar-563103.

Forwarded Through
Dr. Zeanath Cariena .J
HOD of MSN
Research Guide
CNO at RLJH&RC,
Tamaka,
Kolar-563103.

Respected Sir,

Sub: Requesting Permission for Conducting Research Study-reg.

I Miss.Nasreen Taj, M.Sc. (N) 2nd Year (Medical Surgical Nursing Specialty) of Sri DevarajUrs College of Nursing, Tamaka, Kolar has selected the below mentioned topic for research project, as a partial fulfillment for M.Sc. Nursing Programme.

Title of the topic:

Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working at R. L. Jalappa Medical Teaching Hospital Kolar."

With regard to the above mentioned subject, I kindly request you to grant permission to collect the data for research study from Nursing Staffs working at RLJH&RC, Tamaka, kolar, So kindly consider this letter and do the needful.

Thanking You,
Geetha
Yours faithfully,

The sequest of Conducting Research on Nursing Staff can be considered
permitted

Head of the Department
Dept. of Medical Surgical Nursing
Sri Devaraj Urs College of Nursing
Tamaka, Kolar - 563 101

ANNEXURE-C

LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL AND INFORMATION BOOKLET.

From,
Mrs Geetha G,R
II year M.Sc. (N) Student
Sri Devaraj Urs College of Nursing
Tamaka, Kolar – 563101
TO

(Through the proper channel)

Respected Sir/ Madam,

Sub: Request for opinion and suggestions of experts for establishing content validity of research
Tool and Information Booklet-reg.

I **Miss. Geetha G.R** postgraduate student (Medical Surgical Nursing Specialty) of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has selected the below mentioned topic for my project, for the fulfillment of Masters of Nursing Degree.

TITLE OF THE TOPIC:

"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar"

With regards to the above may I kindly request you to validate the tool (Structured Interview schedule) and Information Booklet for its appropriateness and relevancy. I am, here with enclosing the objectives of the study, criteria rating scale for your reference. I would be highly obliged and remain thankful for your great help.

Thanking you
Yours Sincerely,
(Mrs Geetha G.Rj**)**
Enclosures:

1. Criteria rating scale.
2. Content validity certificate.
3. Self addressed envelope.

STRUCTURE KNOWLEDGE QUESTIONNAIRE RELATED INCIDENT REPORTING AMONG NURSING INTERNS

SECTION - A

SOCIO DEMOGRAPIC DATA

1) Age in years

a. 20 – 25

b. 26 – 30

2) Gender

a. Male

b. Female

3) Undergoing training Previously on incident reporting within 6-month duration

a) Yes
b) NO

if yes through----------

SECTION – B

STRUCTURED KNOWLEDGE QUESTIONNAIRE:

Dear participants The study aims to understand the level of knowledge of the nursing interns on activating hospital related medical incidents.please note:

a) kindly go through all the questions given with answer options

b) Tick the correct response/option

c) Answer all the questions.

d) your answers shall be kept confidential

e) each of your correct response is scored with the mark and wrong answer carries no marks (zero)

QUESTIONNAIRE RELATED INCIDENTS AND ITS TYPES

1. The best patient safety measure in health care setting is

a) Medical directed reporting
b) Incident reporting
c) Health care agency reporting
d) Accreditation agency reporting

2. Incident reporting a part of _____Improvement and safety

a) Quality
b) Care of patient
c) Prevent accident
d) None of the above

3. The types of incidents commonly occurring in the health care settings include all of the following except

a) Event related surgery
b) Event related device or product
c) Event related patient protection
d) Event related nurses and their family
e) Event related criminal acts

4. The incident reports are important because (Tick all that is applicable)

a) can be used in insurance claim.

b) Compensation awards

c) Document evidence to lawsuits

d) None of the above

e) All the above

5. A written or verbal reporting of any event in the process of patient care that is inconsistent with the diseased patient care outcome of health care facility is termed as (Tick all that is applicable)

a) Incident reporting

b) Near misses reporting

c) Unexpected event reporting

d) Awareness event reporting

6. **A relatively infrequent, unexpected incident related to system or process deficiencies which leads to major and enduring loss of function to an employer/patient/patient family/stakeholder is termed as**

a) Incident reporting

b) Near misses reporting

c) Unexpected event reporting

d) Awareness event reporting

e) Incident reporting

f) Near misses reporting

g) Unexpected event reporting

h) wareness event reporting

7. A relatively infrequent, unexpected incident related to system or process deficiencies which leads to major and enduring loss of function to an employer/patient/patient family/stakeholder is termed as

a) Near miss event

b) No harm events

c) Sentinel events

8. The Surgical Event or Incident includes all the below except

a) Surgery performed on Wrong Patient.

b) Surgery performed right site.

c) Surgery performed Wrong Procedure.

d) Surgery performed by anesthetist

9. While the patient is in Emergency department it has been found that patient has a hip fracture, patient was subsequently admitted and a surgical operation was proposed to the patient. Discussing all the risks and benefits to the patient and family before signing the consent is an example of:

a) Beneficence
b) non-Maleficence
c) Veracity
d) Patient advocate

10. device or product related event includes (Tick all that is applicable)

a) Patient death of serious disability associated with the use of contaminated drugs
b) Patient death of serious disability associated with the use of contaminated device/machine
c) Patient death due to failure or breakdown of a device or medical equipment
d) Patient death and discharge of wrong patient

11. The patient death of serious disability with a hemolytic reaction The administration of in compatible blood or blood products is a _____ type of incident

a) Criminal event
b) Care management event
c) Environmental event
d) Surgical event
e) Device/ product event

12. The medication error Includes all except

a) Emission error
b) Wrong site error
c) Dosage error
d) Wrong patient error

13. The example of criminal event in health care facility includes (Tick all that is applicable)

a) Death or significant injury of a patient or staff resulting from physical assault

b) Abduction of patient

c) An Electrical shock

d) Intravascular embolism Sexual assault on a patient with or on the permission of hospital.

14. The surgical event or incident includes

a) Wrong patient

b) Wrong body part

c) Wrong procedure

d) All the above

15. Any unexpected incident accident or situation that had the potential to cause herm to employee or damage to institution property but no harm or damage has occurred such incidents are termed as.

a) Awareness event

b) Near misses event

c) Adverse events

d) Unexpected events

16. The risks potential incidents that can happen in the line of duty must be recorded and communicated to all employees to be aware of risks and safety measures required to mitigate the risks is called as

a) Awareness event

b) Near misses' event

c) Adverse events

d) Unexpected events

17. The medication error is reported to

a) Nursing officer

b) Medical officer

c) Facility officer

d) Adverse drug reporter

e) Pharmacovigilance

18. All the employees must be educated to activate code blue in is the event of

a) Patient fall

b) Cardiac arrest

c) Respiratory arrest

d) Patient hypoglycaemia response

19. **The patient safety code for disasters is denoted by.**

a) Code brown

b) Code yellow

c) Code blue

d) Code orange

20. The incident report shall be submitted with in _____ hrs.

a) 48 hours

b) 72 hours

c) 12 hours

d) 24 hours

21. **The first information on incident shall be given to your**

a) Manager

b) Medical Superintendent

c) Consultant

d) Chief nursing officer

22. The incident record shall be documented in

a) mission register /form

b) census register/ form

c) incident register

d) incident reporting form

e) discharge register

f) handover register

23. The colour code for baby abduction is

a) Code Black

b) Code Red

c) Code Orange

d) Code pink

24. The acronym for IRC stand for

a) Incident Reporting Centre

b) Incident Reporting Commander

c) Incident root Centre

d) Incident Reporting Committee

25. The Creator of fish bone model in reporting incident is

a) Ishikawa

b) Maslow

c) Taylor

d) Hegel

26. The patient death or serious disability while cared for in hospital associated with ---------- is called environmental event.

a) Slip, trip or fall

b) Burn occurred from any source

c) An electrical shock

d) The use of restraints or bed rails

27. **Discharge of an infant to wrong mother/guardian is an example of**

a) Environmental event

b) Device or product event.

c) Surgical event

d) Patient protection event

28. The incident reporting shall include (Tick all that is applicable)

a) Date of the event

b) Location of the accident /event

c) Environmental conditions if applicable

d) Detailed description of the event

e) Full name of the people involved

f) Direction of action taken

g) Extent of damage

h) Survey on awareness of incident

i) Survey on encouraging improvement

29. One limitation of the cause-and-effect diagram is

a) Simple and easy to understand.

b) If may not be used to illustrate complex problem.

c) Promotes research in order to arrive at a conclusion.

d) Analyse a Situation.

30. **Elements of incident reporting includes**

a) The name of any witnesses.
b) description of the injuries
c) The exact location and /or address of the incident.
d) All of the above

ANSWER KEY

1.	b
2.	a
3.	d
4.	a
5.	a
6.	c
7.	c
8.	b
9.	a
10.	a,b,c.
11.	d
12.	b
13.	a,b,c,e.
14.	d
15.	d
16.	a
17.	e
18.	b
19.	a
20.	d
21.	d
22.	c
23.	a
24.	a
25.	a
26.	a
27.	d
28.	f
29.	a
30.	d

ANNEXURE-D

CRITERIA

Scoring Key:

Criteria rating scale for validating the content of the Knowledge among the Nursing Staffs Regarding Incident Reporting

Respected Sir/Madam,

Kindly go through the content and rate the content in the appropriate columns given and your expert opinion in the remarks column.

SL. NO	Item	Very Relevant	Relevant	Needs Modification	Not Relevant
Section – A Demographic Data					
1	Age				
2	Gender				
3	Undergone training				
Section – B Structured Knowledge Questionnaire on Incident Reporting					
SL NO	**Item**	**Very Relevant**	**Relevant**	**Need Modification**	**Not Relevant**
1					
2					
3					
4					
5					
7					
8					
9					
10					
11					
12					

13					
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30					

SRI DEVARAJ URS COLLEGE OF NURSING.TAMAKA, KOLAR.

Incident Reporting Table Top/Mock drill-checklist

Code No:

Simulation Scenario - I

Objectives:

Debriefing :- (Scenario, Logistic, Time line)

Total causalities:

Categorization of incidents type:

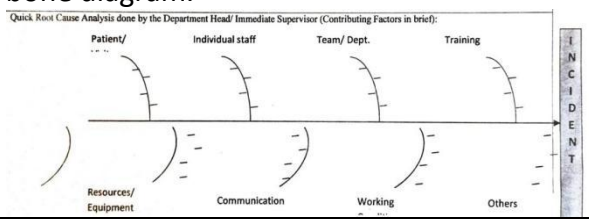
Started time: _____ Ending time: _____ Total time taken: _____

Logistic checklist:

SRI DEVARAJ URS COLLEGE OF NURSING.TAMAKA, KOLAR.

Incident Reporting Table Top/Mock drill-checklist

Observation checklist

SI NO	Assessment criteria	YES	NO	Not applicable
1.	Command and control			
a	Communication Activation of incident is done timely Immediately, with in shift hours, with in 12 hours			
2	Heath care professional involved in incident reporting is documented			
3.	Location is specified			
4	Date and time is recorded.			
5	The Incident occurred to patient, staff, visitors is specified and recorded			
6	The incident is Classified in documented. (near miss ,adverse event, sentinel event)			
7	Narrative Description of occurrence is specified. Documented (how the incident happened, be factual and specific.)			
9	Immediate corrective action is taken by the concerned department &documented in fish bone diagram. 			
10	Quick root cause is analysis done by the department head /immediate supervisor is documented			
11	The action plan are disused &documented			
12	Suggestion to avoid such incident in future specified & documented			
13	**Nature of incident specified**			
	Fall/slip (patient, staff, visitor)			
	Doctor related (not visited the patient, ect..)			

	Laboratory specimen related (incorrect labeling sample lost ect..)			
	Equipment related (damaged during transfer/use ect.			
	Clinical nutrition (assessment not done, nutrition Did not visit..)			
	Radiology related (contrast reaction, incorrect patient for procedure ect..)			
	Clinical care related bed sore injury to patient (Code blue not raised			
.	. Medication related(prescription error, drug reactions incorrect labeling)			
	delays/from (doctor visit ,OPD consultation ect.)			
	Surgery/ procedure related (incorrect patient/ site, site not marked ect.)			
.	Consent related (incorrect consent form/s used Consent not taken)			
	Needle stick/sharps injury (injury to patient .Injury to staff ect..)			
14	The completion of documentation is done is With in12hrs ,with in 24hrs , with in.>24hrs			
15	Debriefing (multidisciplinary) (time of response, total Number of causalities, action initiated)			

Observational checklist

Recommended suggestions: _____

SRI DEVARAJ URS COLLEGE OF NURSING.TAMAKA, KOLAR.

Incident Reporting Table Top/Mock drill-checklist

Observation checklist to assess the competency of Staff Nurses on Incident Reporting.

Purpose

1. To assess the knowledge and practice on Incident Reporting among Nursing Staff.

Instructions

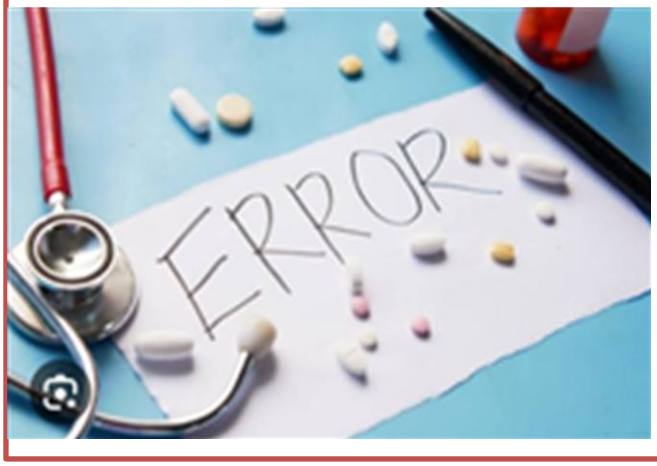
Dear participants, kindly consent for assessment competency.

The competency level of Staff Nurse by giving Simulation mock drill with scenario and time limit.

1. Scenario assessment.

Group 1 participant	
Scenario type	
Scenario name :	
Team members	
Date/time	

INCIDENT REPORTRLJH&RC



Title

"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar"

Investigator
Mrs.Geetha G R
II year M. Sc(N)
Sri Devaraj Urs college of Nursing
Tamaka, Kolar

Guided by,
Dr. Zeanath Cariena.J.
Prof & HoD of Medical Surgical Nursing,
Sri Devaraj Urs College of Nursing,
Chief Nursing Officer at RLJH &RC,
Tamaka, Kolar-563103.

42.0 POLICY ON NURSES ROLE IN REPORTING OF ANY SENTINEL EVENTS /UNTOWARD INCIDENTS

The following Sentinel events are identified and monitored,

1. Surgical events:

a. Surgery performed on the wrong body part, wrong patient and / or wrong procedure.

b. Retained instruments in patient, discovered after surgery / procedure.

c. Patient death during or immediately after surgery.

d. Anesthesia related event.

2. Devices or product events:

a. Patient death or serious disability associated with,

b. The use of contaminated drugs, devices, products supplied by the organization

c. The use or function of a device in a manner other than intended use

d. The failure or breakdown of a device or medical equipment

e. Intravascular air embolism

1. Patient protection events:

1. Discharge of an infant to the wrong person

2. Patient death or serious disability associated with elopement from the hospital Patient suicide, attempted suicide, or deliberate self-harm resulting in serious disability.
3. Intentional injury to a patient by a staff member, another patient, visitor or other
4. Any incident in which a line designated for oxygen or other medical gases delivered to a patient
5. Contains the wrong gas or is contaminated by toxic substances.
6. Nosocomial infection or disease causing patient death or serious disability.

1. Environmental events:

Patient death or serious disability while being cared for in hospital associated with:

a. A burn incurred from any source

b. A slip, trip or fall

c. An electric shock

d. The use of restraints or bedrails

2. Care management events:

a) Patient death or serious disability associated with a hemolytic reaction due to the administration of incompatible blood or blood products.

b) Maternal death or serious disability associated with labor or delivery in a low risk pregnancy.

c) Medication error leading to the death or serious disability of patient due to incorrect administration of drugs, for example:

a. Omission error
b. Dosage error
c. Dose preparation error
d. Wrong time error
e. Wrong rate of administration error
f. Wrong administrative technique error
g. Wrong patient error
h. Patient death or serious disability associated with an avoidable delay in treatment or response to abnormal test results.

3. Criminal events

d) Any instance of care ordered by or provided by an individual impersonating a clinical member of staff

e) Abduction of patient

f) Sexual assault on a patient within or on the premises of the hospital

g) Death or significant injury of a patient or staff member resulting from a physical assault or other crime that occurs within or on the premises of the hospital

REPORTING SENTINEL EVENT & ANALYSIS:

An Incident Report is submitted on paper.

- Any staff coming across a No harm and near miss event shall report on the incident form available at the Nursing station, Emergency Room to the Medical Superintendent.
- It is the responsibility of the concerned person or immediate supervisor to complete the details.
- The medical staff is notified immediately when the incident involves a patient.

a) If a patient or visitor is injured in a common area (i.e. sidewalks, stairwell, elevator, waiting Area, etc) the Security Department is responsible for completing Incident Report.

b) The employee identifying the sentinel Event, or the employee to whom the Sentinel Event is first Reported, is responsible for initiating the completion of the Incident Report Form prior to the end of their scheduled shift of duty.

c) Upon completion of the Incident Report form, the form is sent to the manager of the unit on Which the event occurred and the same is forwarded to the Medical Officer within 24 hours of the incident.

- A Sentinel Event Root-Cause Analysis is considered when an occurrence meets any of the following criteria:
- The occurrence involves an unanticipated death or major permanent loss of function.
- The occurrence is associated with significant deviation from the usual process (es) for providing Health care services or managing the organization.
- The event has undermined or has significant potential for undermining the public's confidence in the organization.
- Accreditation Coordinator coordinates the completion of a credible Root-Cause Analysis in conjunction with the department heads and staff of the involved area (s).

A thorough written summary of the Root-Cause Analysis of a Sentinel Event focuses

Primarily on organizational systems and processes The Root-Cause Analysis includes:

a. Determination of the direct or “proximate” cause of the Sentinel Event and the processes and systems related to its occurrence.

b. Analysis of the related systems and processes.

c. Analysis of special causes in clinical processes and common causes in organization processes.

d. Determination of appropriate risk reduction activities in order to minimize the likelihood of such risks in the future, or a determination that no such improvement opportunities exist.

e. Establishment of a plan to address identified opportunities for improvement or formulation of a rationale for not undertaking such changes.

f. Identification of who is responsible for implementation and how the effectiveness of the actions shall be evaluated.

When monitoring performance of specific clinical processes, certain events always elicit intense analysis. Based on the scope of services provided, intense analysis is performed on the following:

a. Confirmed transfusion reactions

b. Significant adverse drug reactions

a. c. significant medication errors and hazardous conditions. Hazardous conditions refer to any set of circumstances (exclusive of disease or condition for which the patient is being treated), Which significantly increases the likelihood of a serious adverse outcome?

An intense analysis is performed when the following events occur:

a. Major discrepancies, or patterns of discrepancies, between preoperative and post operative including pathologic diagnoses, including those identified during the pathologic review of specimens removed during surgical and invasive procedures;

b. Significant adverse events associated with anesthesia use.

Accreditation Coordinator forwards Incident Reports received to the appropriate areas by Variance type:

a. Environmental incidents involving falls or injuries, material safety handling or damage/lost patient Property is forwarded to the Safety committee, equipment malfunctions shall be forwarded to Bio-Medical, utility outages, pest control issues to Administrator, and needle stick injuries are forwarded to Infection Control Coordinator.

b. The Safety committee investigates patient outcomes, assignment of a Harm Score Distribution Classification; perform regulatory reporting, and identification of change that will lead to improved patient safety, or tracking and trending.

c. Medication Usage Variances (Adverse Drug Reactions, Medication Errors, and Narcotic & Psychotropic Substance/Narcotic Discrepancy) are forwarded to the Drug and Therapeutics Committee (DTC) Results are tracked and trended by the Pharmacy Therapeutics Committee.

d. The Accreditation Coordinator maintains the information of all Incident Reports received.

Harm Score Distribution for Incidents.

A classification will be applied to each incident report by the Accreditation Coordinator.

- No Harm

- Potential Harm/Injury

- Injury

- Near Miss

- Harmful Event/Sentinel Event

- Unknown

Definitions:

No Harm – an event occurring in which the patient is not injured, or otherwise harmed.

Potential Harm/Injury – an event in which a physician order was not followed or a medication was not administered.

Injury – physical harm, damage, or pain not otherwise classified as a Near Miss or Harmful Event/Sentinel Event.

Near Miss – an occurrence which did not affect the outcome, but for which the recurrence carries a significant chance of a serious adverse outcome.

Harmful Event/Sentinel Event – an unexpected occurrence involving death or serious physical or psychological injury, or the risk there of

Unknown – an event occurring in which the actual or potential risk of harm is unidentified

ANNEXURE-E

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool of Miss. Geetha G,R II year M.Sc. (N) student of Sri Devaraj Urs College of Nursing, Tamaka, and Kolar, who is undertaking a research project as a fulfillment of Master of Science in nursing degree on:**:**

"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar"

Date: Signature of Expert with Designation

Place:

ANNEXURE-F

INFORMED CONSENT FORM

Name of the investigator: GEETHAG,R SL_____No._____

Name of the Organization: R.L. Jalapa Hospital & Research Centre attached to Sri Deva raj Urs Medical Collage Tamaka, Kolar

Title of the study:

"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working in R. L. Jalappa Medical Teaching Hospital Kolar"

If you agree to participate in the study, we will collect information as per Performa from you or a person responsible for you or both.

You are invited to take part in this research study. You are being asked to participate in this study because you satisfy our eligibly criteria. The information in the given document is meant to help you decide whether or not to take part Please feel free to ask any queries.

I have read or it has been read and explained to me in my own language. I have understood the purpose of this study, the nature of information that will be collected and disclosed during the study. I had the opportunity to ask questions and the same has been answered to my satisfaction. I understand that I remain free to withdraw from this study at any time and this will not change my future care. I the undersigned agree to participate in this study and authorize the collection and disclosure of my personal information for presentation and publication.

Nursing interns/ signature Date:

Person obtaining consent and his/her signature: Date:

Principal investigator signature Date:

For any clarification you are free to contact the investigator:

Principal Investigator GEETHA G R Contact No.

ANNEXURE-G

EXPERTS ADDRESS

Dr.G.Vijayalakshmi
Principal of SDUCON.
Tamaka, kolar-563103.

Dr.Malathi.K.V
Prof & HoD
Community Health Nursing.
Tamaka, kolar-563103.

Mrs. Punitha
Prof& HoD
Department of OBG Nursing
Tamaka, kolar.-563103.

Mrs.Gayathri.K.V
Associate professor
Department of OBG nursing
Tamaka, Kolar.-563103.

Mrs.Jebamani H
Deputy Nursing Superintendent
R,L,J,H&R,C Tamaka, Kolar.
.-563103.

Mrs.sunitha
Quality manager
R.L.J,H &R,C Tamaka ,Kolar
-563103

Mrs.Roopa
Asistant manager
R.L.J,&R,C Tmaka
Kolar-563103

ANNEXURE –H

CERTIFICATE FROM STATISTICS.

CERTIFICATE FROM STATISTICS.

I hereby certify that I have provided statistical guidance in analysis to Mrs. Geetha G.R, II year MSc Nursing Student, for her research study titled as **"Effectiveness of Simulation Based Training on Incident Reporting Competency among Nursing Staff working at R.L. Jalappa Medical Teaching Hospital Kolar."**

Date: 18/8/2023

Place: Tamaka Kolar.

Signature of the Statistician

12/8/2023

Name & Designation

Asst. Professor, Statistics
Dept. of Community Medicine
SDUMC, Kolar-563103

ANNEXURE –H

Master Sheet

samples	1)AGE	2)GENDER	3)Qualification	4)Area of working	5)years of experience as a Register Nurse.	6)designation as	7)Undergone training within six months of duration.
1	24	a	a	b	a	a	b
2	32	a	c	b	c	c	b
3	29	b	c	a	b	d	b
4	30	a	b	a	d	e	a
5	26	b	a	d	b	e	a
6	29	a	b	b	d	e	a
7	25	a	a	b	a	e	a
8	35	a	a	b	b	e	a
9	36	a	b	b	c	e	a
10	38	a	b	a	d	e	a

11	36	b	b	a	c	d	b
12	40	b	d	b	c	h	b
13	30	a	a	b	d	c	b
14	32	a	a	b	b	c	b
15	26	a	b	b	c	c	b
16	28	b	a	d	a	c	b
17	29	a	a	d	d	c	b
18	30	a	b	b	d	c	b
19	25	a	a	b	b	c	b
20	28	a	a	b	d	d	b
21	36	b	c	d	b	d	b
22	36	a	b	d	d	c	b
23	40	a	b	d	d	g	b
24	32	a	b	b	d	c	b
25	28	b	b	b	b	c	b
26	29	a	c	b	d	c	b
27	25	b	c	b	d	d	b
28	24	a	c	a	d	d	b

29	25	a	a	a	d	c	b
30	32	b	b	a	d	c	b
31	26	a	b	a	c	c	b
32	28	a	c	b	d	d	b
33	25	b	b	b	b	d	b
34	25	a	c	d	d	d	b
35	35	b	a	d	d	d	b
36	36	a	b	e	d	c	b
37	38	b	b	b	d	c	b
38	40	a	c	b	b	g	b
39	25	b	b	e	d	d	b
40	25	a	b	e	d	d	b
41	25	a	c	e	b	c	b
42	25	a	a	a	a	c	b
43	28	a	b	a	d	c	b
44	29	a	c	a	d	d	b
45	30	a	a	a	d	d	b
46	25	a	b	a	b	d	b

47	26	a	c	a	d	d	b
48	28	b	a	c	d	c	b
49	36	a	b	b	d	d	b
50	40	a	b	b	b	d	b
51	32	b	c	b	c	d	b
52	28	a	c	b	c	d	b
53	29	a	b	b	d	c	b
54	30	a	b	c	d	c	b
55	24	b	b	c	b	c	b
56	32	b	c	e	d	e	a
57	29	a	a	a	d	c	b
58	30	a	b	a	d	c	b
59	26	a	a	a	b	d	b
60	29	a	c	a	d	c	b
61	25	a	a	a	d	c	b
62	35	a	b	a	d	c	b
63	36	a	c	a	b	c	b
64	38	a	b	a	c	d	b

65	36	a	c	e	c	d	b
66	40	b	a	e	c	d	b
67	30	b	c	a	d	c	b
68	30	a	b	a	c	c	b
69	32	a	b	e	d	c	b
70	26	b	b	c	c	c	b
71	28	a	c	c	d	d	b
72	29	b	c	c	d	d	b
73	30	a	c	a	d	d	b
74	25	a	a	a	d	d	b
75	28	a	c	a	d	d	b
76	35	a	c	e	c	d	b
77	36	b	a	e	c	d	b
78	36	a	c	a	c	d	b
79	32	b	c	a	b	f	a
80	28	a	a	a	d	d	b
81	29	b	b	e	d	b	b
82	30	a	b	a	d	b	a

83	24	b	c	c	c	c	b
84	30	a	c	a	d	d	b
85	32	b	b	a	d	d	a
86	26	a	c	a	c	c	b
87	28	a	a	a	c	d	b
88	29	a	b	a	d	d	a
89	25	a	c	a	d	d	b
90	35	a	a	a	d	d	a
91	36	a	b	a	d	d	b
92	38	a	c	a	d	c	a
93	40	a	b	e	d	f	a
94	29	b	c	a	d	c	b
95	30	b	a	a	c	c	a
96	30	b	b	a	c	b	a
97	26	a	c	a	a	b	a
98	28	b	b	e	d	b	b
99	29	a	b	a	d	d	a
100	30	b	b	a	c	d	b

101	25	a	b	a	d	d	b
102	26	a	c	a	b	d	b
103	28	a	c	a	c	c	b
104	36	b	b	e	d	c	b
105	40	b	c	e	d	c	b
106	32	a	a	e	d	b	b
107	28	a	b	a	d	b	b
108	29	b	c	a	d	b	b
109	30	b	b	a	d	d	b
110	24	a	c	a	a	d	b
111	32	a	b	e	c	c	b
112	29	b	b	e	c	c	a
113	30	b	b	e	c	c	b
114	26	b	b	a	c	c	b
115	29	a	c	a	c	c	b
116	25	a	c	a	c	c	b
117	35	a	c	e	d	b	b
118	36	a	a	a	a	b	b

119	38	a	b	a	d	b	b
120	36	a	c	a	c	d	b
121	40	a	a	a	d	d	b
122	30	a	b	a	d	e	a
123	32	a	c	e	d	d	b
124	26	a	a	a	d	c	b
125	28	a	b	a	d	c	b
126	29	b	b	e	a	c	b
127	30	b	c	a	c	c	b
128	24	a	c	c	d	c	b
129	30	a	c	a	d	d	b
130	32	a	b	a	d	d	b
131	26	a	c	a	c	c	b
132	28	a	a	a	c	d	b
133	29	a	b	a	d	d	b
134	25	a	c	a	d	d	a
135	35	a	a	a	d	d	b
136	36	a	b	a	d	d	b

137	38	a	c	a	d	c	b
138	40	b	b	e	d	f	a
139	29	a	c	a	d	c	b
140	30	a	a	a	c	c	b
141	30	b	b	a	c	b	b
142	28	a	b	a	d	b	b
143	29	a	c	a	d	b	b
144	30	a	b	a	d	d	b
145	24	b	c	a	a	d	b
146	32	b	b	e	c	c	b
147	29	b	b	e	c	c	b
148	30	a	b	e	c	c	b
149	26	a	b	a	c	c	b
150	29	a	c	a	c	c	b
151	25	a	c	a	c	c	b
152	35	a	c	e	d	c	b
153	36	b	a	a	a	b	c
154	38	a	b	a	d	b	b

155	36	a	c	a	c	d	b
156	40	a	a	b	d	d	b
157	36	a	a	a	a	b	b
158	38	a	b	a	d	b	b
159	30	b	b	b	b	b	b
160	26	b	a	b	d	c	b
161	28	a	b	b	c	d	b
162	25	b	c	a	a	e	a
163	28	a	b	b	c	e	a
164	32	b	a	a	b	d	b
165	28	b	a	a	d	c	b
166	29	b	a	a	b	c	b
167	30	a	a	b	c	c	b
168	24	b	b	b	a	c	b
169	26	b	b	b	d	d	b
170	29	b	a	b	d	d	b
171	25	b	b	d	a	d	b
172	35	a	b	d	d	f	a

173	38	a	d	a	d	e	a
174	26	b	c	a	d	c	b
175	28	b	a	a	a	c	b
176	29	b	b	a	d	c	b
177	30	b	c	b	b	c	b
178	25	b	a	b	d	a	b
179	36	a	c	b	d	c	b
180	32	b	b	b	d	c	b
181	28	b	b	b	d	d	b
182	24	b	c	f	d	a	b
183	32	b	c	f	d	c	b
184	29	b	b	c	d	c	b
185	25	b	c	c	b	c	b
186	35	b	b	c	d	d	b
187	36	b	c	c	d	d	b
188	38	b	a	c	d	d	b
189	30	b	c	e	d	e	a
190	26	b	c	c	d	d	b

191	28	b	c	e	a	c	b
192	25	b	c	a	d	a	b
193	28	b	b	a	d	c	b
194	32	a	b	e	c	d	b
195	28	b	b	a	b	c	b
196	29	b	c	a	c	c	b
197	24	b	b	a	d	c	b
198	26	b	b	a	d	c	b
199	29	b	a	a	c	c	b
200	25	b	b	c	c	c	b
201	38	b	b	a	c	c	b
202	40	b	b	a	c	c	b
203	26	b	b	a	d	d	b
204	28	b	b	a	d	c	b
205	29	b	b	a	c	c	b
206	30	b	c	e	b	c	b
207	25	b	c	e	c	c	b
208	36	b	a	e	d	c	b

209	32	a	c	e	c	c	b
210	28	b	b	e	b	c	a
211	24	b	b	a	c	c	b
212	32	b	c	a	c	b	b
213	29	b	c	a	c	c	b
214	25	b	a	e	c	c	b
215	35	a	b	e	c	c	b
216	36	a	c	e	c	c	b
217	38	a	a	e	c	c	b
218	30	b	a	a	c	d	b
219	26	b	b	e	c	c	b
220	28	b	c	e	c	c	b
221	25	b	a	e	c	c	b
222	28	b	b	e	c	c	b
223	32	b	b	a	a	d	b
224	28	b	c	e	a	d	b
225	29	b	a	e	d	d	b
226	30	b	b	e	d	d	b

227	24	b	c	e	d	e	a
228	25	b	c	a	d	b	b
229	26	b	b	a	c	b	b
230	28	b	a	a	c	b	b
231	29	b	b	a	a	b	b
232	26	b	b	a	d	d	b
233	28	b	b	a	d	c	b
234	29	b	b	a	c	c	b
235	30	b	c	a	b	c	b
236	25	b	c	a	c	c	a
237	36	a	a	e	d	c	b
238	32	a	c	e	c	c	b
239	28	b	b	e	b	c	b
240	24	b	b	a	c	c	b
241	32	b	c	a	c	b	b
242	30	b	a	a	c	d	b
243	26	b	b	a	c	c	b
244	28	b	c	e	c	b	b

245	25	b	b	e	c	c	b
246	28	b	b	e	c	c	b
247	32	a	b	a	a	d	b
248	28	b	c	e	d	d	b
249	29	b	a	e	d	d	c
250	30	b	b	e	d	c	b

Pre test knowledge scores

samples	**Q 1**	**Q 2**	**Q 3**	**Q 4**	**Q 5**	**Q 6**	**Q 7**	**Q 8**	**Q 9**	**Q 10**	**Q 11**	**Q 12**	**Q 13**	**Q 14**	**Q 15**	**Q 16**	**Q 17**	**Q 18**	**Q 19**	**Q 20**	**Q 21**	**Q 22**	**Q 23**	**Q 24**	**Q 25**	**Q 26**	**Q 27**	**Q 28**	**Q 29**	**Q 30**	**Total**
1	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
2	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
3	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
4	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
5	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
6	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	1	0	0	1	1	1	0	1	1	21
7	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	1	1	0	1	1	0	0	0	1	20
8	1	0	0	0	0	1	0	1	0	1	0	0	1	0	0	1	1	0	1	0	1	0	0	1	0	0	1	1	1	0	13
9	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
10	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
11	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
12	0	1	0	0	1	1	1	1	0	0	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0	1	1	0	0	0	17
13	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
14	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	0	1	0	1	0	1	0	0	1	19
15	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
16	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11

17	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
18	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
19	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
20	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
21	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
22	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
23	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
24	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
25	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	0	1	0	0	1	0	1	0	1	19
26	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
27	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
28	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
29	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
30	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
31	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
32	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
33	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
34	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
35	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18

36	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
37	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
38	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
39	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
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41	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
42	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	1	0	1	1	0	0	1	1	0	0	1	20
43	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
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45	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
46	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
47	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
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49	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
50	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
51	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
52	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
53	1	0	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	1	0	0	1	0	0	1	0	1	1	1	19
54	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13

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56	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
57	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
58	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
59	1	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	0	0	0	0	13
60	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
61	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
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188	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
189	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
190	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
191	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
192	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
193	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
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197	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	11
198	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	1	1	16
199	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	1	1	17
200	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18
201	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	1	0	1	0	1	0	1	1	0	0	13
202	0	1	0	1	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	11
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207	1	1	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	19
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226	1	0	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	16
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235	0	1	1	0	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	1	0	1	0	1	0	0	1	0	1	1	18
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238	1	0	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	17
239	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	1	16
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245	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	1	1	1	0	1	0	0	0	1	0	1	0	0	16
246	0	1	0	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	15
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249	1	1	0	1	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	17
250	0	1	0	0	1	1	1	1	0	0	1	0	1	0	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	1	18

Pre test Competency Based Observation Score

samples	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14	q15	total
1	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	9
2	1	1	0	1	1	0	0	1	1	0	1	1	1	1	1	11
3	1	1	0	0	1	1	1	0	1	1	1	0	0	0	1	9
4	0	1	1	1	0	0	1	1	0	0	1	1	1	1	0	9
5	0	1	1	0	1	1	1	0	1	1	0	1	0	1	0	9
6	1	0	1	1	1	0	1	0	1	0	1	0	1	0	0	8
7	1	1	1	0	0	1	0	1	1	0	1	0	0	1	1	9
8	1	0	1	1	1	1	0	1	0	1	0	1	1	0	1	10
9	0	1	1	1	0	1	1	1	0	1	1	1	0	0	1	10
10	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	9
11	1	1	0	1	1	0	0	1	1	0	1	1	1	1	1	11
12	1	1	0	0	1	1	1	0	1	1	1	0	0	0	1	9
13	0	1	1	1	0	0	1	1	0	0	1	1	1	1	0	9

14	0	1	1	0	1	1	1	0	1	1	0	1	0	1	0	9
15	1	0	1	1	1	0	1	0	1	0	1	0	1	0	0	8
16	1	1	1	0	0	1	0	1	1	0	1	0	0	1	1	9
17	1	0	1	1	1	1	0	1	0	1	0	1	1	0	1	10
18	0	1	1	1	0	1	1	1	0	1	1	1	1	0	0	10
19	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	9
20	1	1	0	1	1	0	0	1	1	0	1	1	1	1	1	11
21	1	1	0	0	1	1	1	0	1	1	1	0	0	0	1	9
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26	1	0	1	1	1	1	0	1	0	1	0	1	1	0	1	10
27	0	1	1	1	0	1	1	1	0	1	1	1	1	1	0	11
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29	1	1	0	1	1	0	0	1	1	0	1	1	1	1	1	11
30	1	1	0	0	1	1	1	0	1	1	1	0	0	0	1	9

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47	1	1	0	1	1	0	0	1	1	0	1	1	1	1	1	11

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Post test knowledge scores

samples	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20	Q 21	Q 22	Q 23	Q 24	Q 25	Q 26	Q 27	Q 28	Q 29	Q 30	Total
1	1	1	1	1	1	1	1	0	1	1	0	0	1	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	24
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236	0	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	26
237	0	0	1	1	1	1	1	0	1	1	0	0	1	0	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	22
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Post test Competency Based Observation Score

samples	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	q11	q12	q13	q14	q15	total
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2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
3	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	12
4	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	12
5	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	12
6	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	13
7	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	13
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13	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	13
14	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	13
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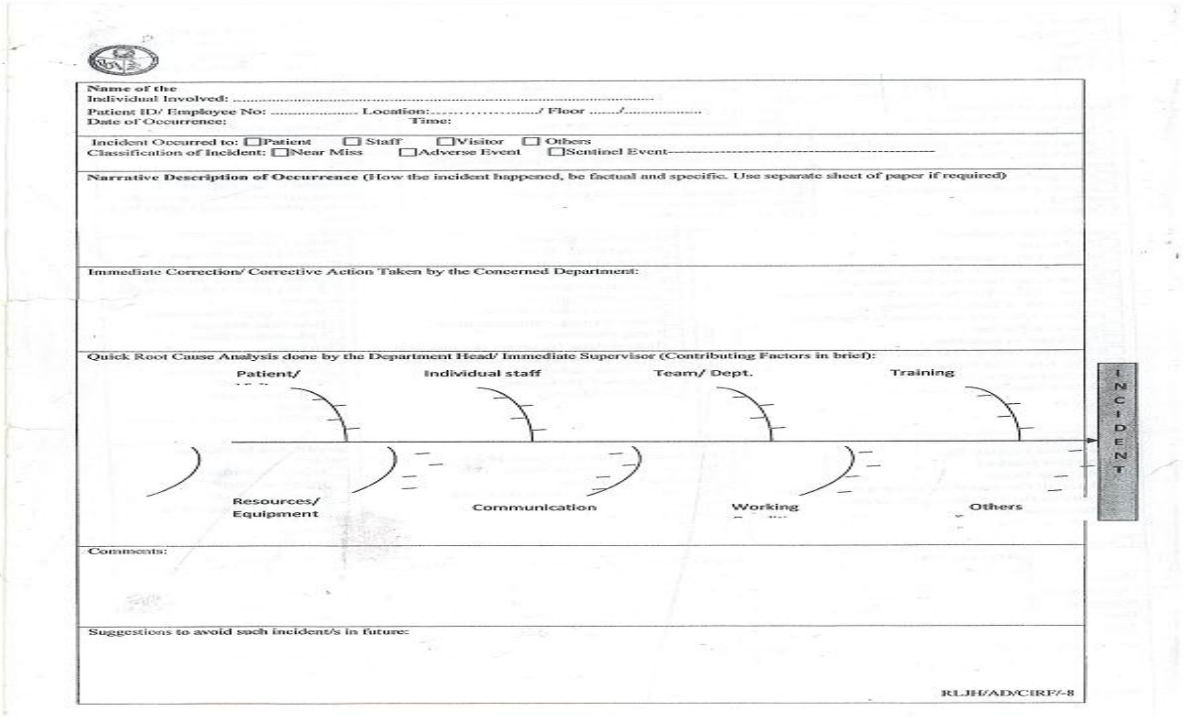
Fish Bone Incident Report



Name of the Individual Involved: .....
Patient ID/ Employee No: ..... Location:...../ Floor ...../.....
Date of Occurrence: Time:

Incident Occurred to: ☐Patient ☐Staff ☐Visitor ☐Others
Classification of Incident: ☐Near Miss ☐Adverse Event ☐Sentinel Event

Narrative Description of Occurrence (How the incident happened, be factual and specific. Use separate sheet of paper if required)

Immediate Correction/ Corrective Action Taken by the Concerned Department:

Quick Root Cause Analysis done by the Department Head/ Immediate Supervisor (Contributing Factors in brief):

Comments:

Suggestions to avoid such incident/s in future:

RLJH/AD/CIRF/-8

Nature of Incident (There can be more than one appropriate column/ chain of incidents, please tick all of them):

Fall/ Slip
☐Patient
☐Staff
☐Visitor

Doctors Related
☐Not visited the patient
☐Doctor not authorized, seen the patient
☐Second opinion not facilitated
☐Referred doctor not informed the change in treatment plan
☐Others (specify).....

Laboratory Specimen Related
☐Incorrect Labeling
☐Incorrect Sample Collection
☐Sample Lost
☐Others (specify).....

Equipment Related
☐Equipment Malfunction
☐Equipment Accessories Missing
☐Damaged During Transfer/ Use
☐Unavailability of Equipments/ Instruments
☐Oxygen unavailability
☐Suction facility unavailable/ not working
☐Others (specify).....

Clinical Nutrition
☐Nutritional assessment not done
☐Nutritionist did not visit
☐Wrong food against nutritional requirements
☐Clinician not consulted while prescribing the diet
☐Food borne disease suspected
☐Clinician not informed the specific nutritional requirement
☐Others (specify).....

Radiology Related
☐IV Contrast Reaction
☐Incorrect Patient for Procedure
☐Preparation Inadequate/ not done
☐Need for patient preparation not informed to the Patient/ Staff
☐Wrong patient identifier used (wrong name, wrong UHID No)
☐Others (specify).....

Clinical Care Related
☐Bed Sores
☐Refusal of Treatment
☐Leaving Against Medical Advice
☐Orders not/ Incorrectly Carried Out
☐Orders given by Unauthorized Personnel
☐Violation of Patient Privacy
☐Sudden Changes in Patient's Condition
☐Injury to Patient
☐Transfusion Reaction
☐Could not reach 111/ call not picked up
☐Code Blue Not Raised
☐No Response to Code Blue
☐Others (specify).....
Surgeon

Medication Related
☐Prescription Error
☐Error in the HIS prescription
☐Unavailability
☐Incorrect Storage
☐Dispensing Error
☐Delay in Administration
☐Error during Administration
☐Drug Reactions
☐Incomplete/ Incorrect documentation
☐Contaminated/ Expired Medicine
☐Incorrect Labeling
☐Improper Packaging
☐Others (specify).....

Delays in/ from
☐OPD Consultation
☐Ambulance arrangement
☐Lab/ Imaging Reports
☐CT/ PET CT/NMD/ MRI Reports
☐Radiology Procedures
☐Medical Record
☐Medicines from Pharmacy
☐Drug Mixing Room
☐Surgery/ Procedure
☐Doctors Visit
☐Discharge ary
☐Others (specify).....

Surgery/ Procedure Related
☐Incorrect Patient/ Site
☐Site Not Marked
☐PAC Not Done
☐Material/ Consumable/ Drug not available
☐Injury to Patient During Procedure
☐Others (specify).....

Consent Related
☐Incorrect Consent Form/s Used
☐Incomplete Consent Form
☐Consent Not Taken
☐Consent Given by Unauthorized Personnel
☐Others (specify).....

Needle Stick/ Sharps Injury
☐Injury to Patient
☐Injury to Staff
☐Injury to Visitor
☐Splash of Hazardous Material
☐Others (specify).....

☐Incident Not Listed Above (specify)

	Reported By	Supervisor (/Equivalent)	Department Head	Form Received by
Name				
Designation				
Signature				
Date				
Time				

Investigation Started On: Completed On: Reviewed by Concerned Audit Committee on:

Investigated Started at : Completed On:

Photos


REDMI NOTE 10 PRO
21/08/2023 08:54


REDMI NOTE 10 PRO
21/08/2023 08:38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