"A study to assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"

By

Ms. Aleena Babu, Ms. Anjana K S, Ms. Arya Jayan, Ms. Devika Anil, Ms. Lisha Thomas, Ms. Nikitha Peter, Ms. Sandra Lukose, Ms. Sruthi S Nair , Mr.Yuvaraj T N and Mr. Munikrishna H.

Project Report Submitted

to

Sri Devaraj URS College of Nursing, Tamaka, Kolar as a part of curriculum requirement for the Degree of Basic B. Sc (N)

in

MEDICAL SURGICAL NURSING

Under the guidance of,

Dr. Zeanath Cariena J

Prof. & HOD of Medical Surgical Nursing

Sri Devaraj URS College of Nursing &

Chief Nursing Office

RLJH & RC Tamaka, Kolar-563 101

2023

DECLARATION BY THE CANDIDATE

We hereby declare that the project on **"A study to assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"** is bonafide and genuine research work carried out by Medical Surgical Nursing research group students under the guidance of Dr. **Zeanath Cariena Joseph,** HOD of Medical Surgical Nursing, Sri Devaraj URS College of Nursing, Tamaka, Kolar -563101.

Signature of the Candidates

1. Ms. Aleena Babu
2. Ms. Anjana K S
3. Ms. Arya Jayan
4. Ms. Devika Anil
5. Ms. Lisha Thomas
6. Ms.Nikhitha Peter
7. Ms. Sandra Lukose
8. Ms. Sruthi S Nair
9. Mr. Yuvaraj T N
10. Mr. Munikrishna H

Date:

Place: Tamaka, Kolar

CERTIFICATE BY THE GUIDE

This is to certify that the project entitled **"A study to assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"** is a bonafide research work done by Ms. Aleena Babu, Ms. Anjana K .S, Ms. Arya Jayan, Ms. Devika Anil, Ms. Lisha Thomas, Ms. Nikhitha Peter, Ms. Sandra Lukose, Ms. Sruthi S Nair, Mr. Yuvaraj T N, Mr. Munikrishna H in partial fulfillment of the requirement for the Degree of Basic B.Sc.(N) in the speciality of Medical Surgical Nursing.

Signature of the Guide

Dr. Zeanath Cariena J

Prof. & HOD of Medical Surgical Nursing
Sri Devaraj URS College of Nursing Chief Nursing Office
RLJH & RC Tamaka, Kolar-563 101

Date:

Place: Tamaka, Kolar

ENDORSEMENT BY THE HOD & PRINCIPAL

This is to certify that this project entitled **A study to assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"**is a bonafide research work done by Ms. Aleena Babu, Ms.Anjana K .S, Ms.Arya Jayan, Ms.Devika Anil, Ms.Lisha Thomas, Ms.Nikhitha Peter, Ms.Sandra Lukose, Ms. Sruthi S Nair, Mr.Yuvaraj T N and Mr.Munikrishna H, under the guidance of **Dr. Zeanath Cariena J, Prof. & HOD Medical Surgical Nursing & Chief Nursing Officer RLJH & RC** in partial fulfilment of the requirement for the degree of Basic B.Sc. Nursing.

Signature of the HOD

Dr. Zeanath Cariena J

Prof. & HOD Medical Surgical Nursing

Sri Devaraj Ur's College of Nursing

Chief Nursing Officer RLJH & RC

Tamaka, Kolar

Date:

Place: Kolar

Signature of the Principal

Dr. G. Vijayalakshmi

Professor and Principal

Sri Devaraj Ur's College of Nursing

Tamaka, Kolar

Date:

Place: Kolar

COPY RIGHT

DECLARATION BY THE CANDIDATE

We hereby declare that **Sri Devaraj URS College of Nursing Tamaka, Kolar shall** have the right to preserve, use and disseminate this dissertation/thesis in print or electronic format for academic/research purpose.

Signature of the students

1. Ms. Aleena Babu
2. Ms. Anjana K S
3. Ms. Arya Jayan
4. Ms. Devika Anil
5. Ms. Lisha Thomas
6. Ms.Nikhitha Peter
7. Ms. Sandra Lukose
8. Ms. Sruthi S Nair
9. Mr. Yuvaraj T N
10. Mr. Munikrishna H

Date:

Place: Tamaka Kolar

ACKNOWLEDGEMENT

*We raise our heart with profound gratitude to **God almighty** for showering his blessings on us by giving us the strength and wisdom for the successful completion of the study.*

*Our heartfelt thanks and gratitude to our research guide **Dr**. **Zeanath Cariena. J,** HOD of Medical Surgical Nursing, Sri Devaraj URS College of Nursing and Chief Nursing Officer RLJH & RC who deserve respect and gratitude for her constant guidance and encouragement in understanding the research subject which made this research journey easy and fruitful.*

*We thank **Dr. G. Vijayalakshmi**, Principal of Sri Devaraj URS College of Nursing, Tamaka, Kolar, for giving learning atmosphere and constant support to conduct the study.*

*We express our sincere gratitude to **Prof. Lavanya Subhashini**, Vice Principal, Sri Devaraj URS College of Nursing, Tamaka, Kolar, for the constant support and guidance during the research study.*

*We express our gratitude to **Dr. J. Krishnappa**, Medical Superintendent of RLJH &RC, Kolar, for giving permission for collecting the data.*

*Our special thanks to **Prof. Ravishankar, Statistician**, and Dept. of Community Medicine of Sri Devaraj Urs Medical College for his guidance and valuable suggestions in statistical analysis of the research data.*

*We express our sincere gratitude to all **HOD'S** of various department of Nursing and all Faculty of Sri Devaraj URS College of Nursing for their guidance, support and Valuable suggestions which helped us to complete the study.*

*We express our gratitude to **Mrs. Saritha V.,** Class coordinator, Sri Devaraj URS College of Nursing for guidance and support throughout our research work.*

*Our special thanks to Mrs. Gayathri K.V Associate professor and all the **subject experts** for their expert guidance in tool validation and suggestions in modifying the tool and nursing documentation app.*

*Our special thanks to the **Librarians** of Sri Devaraj Urs College of Nursing for their enriched support and help in providing the right resources of evidence of the study throughout in compilation of the literature.*

We extend our special thanks to computer operators of Sri Devaraj Urs College of nursing for helping in providing technical assistance.

*We extend our special thanks to **App Developer** for in artistic and creative development of the nursing documentation mobile app.*

*We express our sincere and deep sense of gratitude to all the **Study Participants** who have cooperated and participated in the study in giving information which enabled us to complete the research successfully.*

*We offer our gratitude to our **parents** for their constant support, prayer and inspiration for the successful completion of the research study.*

We express our sincere gratitude to our friends and well- wishers for their timely help and most of all for their prayers.

Thank you very much from all of us…!

ABSTRACT

BACKGROUND

Nursing documentation in Critical care units is Patient-Centred and important for quality assurance of the information contained in patient's charts is often used to evaluate the quality of service and the appropriateness of care delivered by nurses.[1] Nurses play a critically important role in ensuring patient safety while providing care directly to patients. From a patient safety perspective, a nurse's role includes monitoring patients for clinical deterioration, detecting errors and near misses, understanding care processes and weaknesses inherent in some systems, identifying and communicating changes in patient condition, and performing countless other tasks to ensure patients receive high-quality care.[12]

During the clinical experience, the investigators found that, most of the nursing staff working at critical care units was having moderate knowledge and skill in documentation procedure. Based on the clinical experience and the review of literature a quantitative quasi experimental one group pre and post-test designed study to assess the **Impact of Competency Based Teaching Programme on knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities** was conducted. The Study aimed to assess the effectiveness of competency-based teaching programme on safe patient outcomes by enhancing knowledge and skill of nursing staff on patient care documentation.

Methods:

The Quasi Experimental one group pretest- posttest Design with evaluative approach was used. A total of 220 staff nurses working at critical care units of RLJH&RC were selected for the study by using simple random sampling technique to collect the data. Data was collected by using structured knowledge questionnaire and observational checklist/ patient safety checklist/ care bundles.

The major findings of the study

Based on the objectives of the study the analysis was made by using descriptive and inferential statistics. The study findings revealed that**, m**ajority of staff nurses 121(55%), belonged to the age group below 25 years, only 29(18%) belonged to the age group 25-30 years. Majority 198(90%) of staff nurses were females and 22(10%) were males. Majority of

staff nurses 126(57%) completed B. Sc Nursing, and 17(8%) completed M. Sc. Nursing and above. Majority 78(36%) of staff nurses had the working experience 0-2 years, and 18(8%) had working experience of 8-10 years. Majority 114(52%) of the staff nurses worked in high dependency wards and 18(8%) worked in EMD.

The findings of the study revealed that in pre-test majority 198 (90%) of the staff nurses had poor knowledge, 15(7%) had average knowledge and 7(3%) had good knowledge. In post-test majority 186(85%) of staff nurses had gained knowledge and 34(15%) had average knowledge scores and none had poor knowledge.

The findings of the study showed that in pre-test majority 102(46%) of the staff nurses had average practice scores, 29(13%) had good practice scores and 89(41%) had poor practice scores. In post-test Majority had 119(54%) of staff nurses had good practice scores and 101(46%) had average practice score and none had poor practice score.

The findings revealed that Competency-based teaching programme was found effective as the Mean difference is 3.92, Standard error is 0.16 and calculated paired t test is 10.28. Hence calculated value was more than tabulated value 1.96.

The study findings revealed that the Competency-based teaching programme was effective in improving the practice scores of Staff Nurses as mean difference is 2.05, Standard error is 0.004 and calculated paired t test is 2.06. The calculated value is more than the tabulated value 1.96. Hence, the stated null hypothesis is accepted.

RECOMMENDATIONS:

- The same study can be can be undertaken using true experimental design at different settings.
- The same study can be can be undertaken at different health care facilities.
- A comparative study can be conducted on documentation competency of nursing staff.
- Research may be undertaken to evaluate the impact of CBNE on safe documentation.

Conclusion

The study findings revealed that, the Competency-based teaching programme was effective in improving the practice scores of Staff Nurses on documentation of patient clinical data.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ANNEXURES

CHAPTER -1

INTRODUCTION

"If you didn't document it, you didn't do it."

Nursing documentation in Critical care units is Patient-Centred and important for quality assurance of the information contained in patient's charts is often used to evaluate the quality of service and the appropriateness of care delivered by nurses. Proper Nursing Documentation also establishes professional accountability, demonstrating a Nurse's Knowledge and judgment Skills, and it can help funding and resource management. Nursing documentation is also very important for legal regarding patient's records that can be used as evidence in court.[1]

Nursing documentation has been one of the most important functions of nurses since the time of Florence Nightingale because it serves multiple and diverse purposes. The intention of nursing documentation is to demonstrate that an organization maintains comprehensive written evidence of its planning, delivery, assessment and evaluation of patient's care.[2]

Documentation is an effective communicative tool between members of the treatment team which aims to transmit information necessary for safe and comprehensive care. The Nursing recording is an important document for protecting the legal rights of nurses and patients Quality assessment of the care provided.[3]

According to the American Nurses Association in 2018 assessment is the first standard of Nursing Practice Adequate assessment is essential in guiding interventions and evaluating the effect of care. Assessment includes gathering, validating and analyzing subjective (symptoms) and objective (signs) information about a patient's health status.[4]

Nursing Documentation skill is one of the important activities in nursing that reflects the details of Nurse-patient Interaction according to various studies, about 13 to 28 percent of nurses time is spent on this activity the Nursing Document contains details on the quality and continuity of care provided to the patient Nursing reports should include detailed information related to Nursing Assessment includes admission (Nursing Initial assessment, Ongoing assessment, Vital parameters, Nursing Care plan Handover of each shift communication chart and discharge.[5]

Nursing documentation is the written evidence of nursing practice and reflects the accountability of nurses to patients. Accurate documentation is an important prerequisite for individual and safe nursing care. It is a severe threat for the individuality and safety of patient care if important aspects of nursing care remain undocumented.[6]

Quality in nursing documentation holds promise to increase patient safety and quality of care. While high-quality nursing documentation implies a comprehensive documentation of the nursing process, nursing records do not always adhere to these documentation criteria. The aim of this quality improvement project was to assess the quality of electronic nursing records in a residential care home using a standardized audit tool and, if necessary, implement a tailored strategy to improve documentation practice.[7]

Nursing documentation is a crucial part of the nursing process as it the essential way of communication within the health care team regarding patient care. Nurses' knowledge about documentation is important as it a legal requirement and main responsibility of nursing staff.[8]

NEED FOR THE STUDY

Nursing documentation is the written evidence of nursing practice and reflects the accountability of nurses to patients. Accurate documentation is an important prerequisite for individual and safe nursing care. It is a severe threat for the individuality and safety of patient care if important aspects of nursing care remain undocumented.[9]

Documentation is an effective communicative tool between members of the treatment team which aims to transmit information necessary for safe and comprehensive care. The Nursing recording is an important document for protecting the legal rights of nurses and patients Quality assessment of the care provided.[10]

According to a survey done by WHO it has been shown that poor communication between health care professionals is one factor for medical errors There are also evidence indicating that nursing documentation has relationship with patient mortality [Although keeping a patient record is part of their professional obligation, many studies identified deficiencies in practice of documentation among nurses across the globe It has been reported that nursing records are often incomplete lacked accuracy and had poor quality. The challenges for documentation reported so far, include shortage of staff inadequate knowledge concerning the importance of documentation patient load, lack of in-service training and lack of support from nursing leadership.[11]

Nurses play a critically important role in ensuring patient safety while providing care directly to patients. While physicians make diagnostic and treatment decisions, they may only spend 30 to 45 minutes a day with even a critically ill hospitalized patient, which limits their ability to see changes in a patient's condition over time. Nurses are a constant presence at the bedside and regularly interact with physicians, pharmacists,

families, and all other members of the health care team and are crucial to timely coordination and communication of the patient's condition to the team. From a patient safety perspective, a nurse's role includes monitoring patients for clinical deterioration, detecting errors and near misses, understanding care processes and weaknesses

Inherent in some systems, identifying and communicating changes in patient condition, and performing countless other tasks to ensure patients receive high-quality care.[12]

Nursing documentation is the record of nursing care that is planned and delivered to individual patients by qualified nurses or other caregivers under the direction of a qualified nurse Nursing documentation is the principal clinical information source to meet legal and professional requirements It is a vital component of safe, ethical and effective nursing practice whether done manually or electronically Nursing documentation should fulfil the legal requirements of nursing care documentation.[13]

The statistics from the developed countries showed that in 74% of cases the errors of health care providers reported to judicial authorities. Documentation is one of the most important practices in Nursing. It sounds that nothing can reflect the total amount of nursing care giving to the patients as documentation does.[14]

Studies from South Africa and Ugandan reported deficiency in attitudes, knowledge and practice behaviours. The studies done in Kenya and Ghana also evidenced lack of standardized method and insufficient information of nursing documentation In Ethiopia, inadequacy of data collection with lack of quality was found to be a problem The objective of the study was to assess nursing documentation practice and

associated factors of nursing documentation practice in public hospitals of Tigray, Ethiopia.[15]

The World Health Organization (WHO) vision for patient safety is "A world where every patient receives safe healthcare, without risks and harm, every time, everywhere" (WHO, 2017) p. 4). In this vision, it is stated that, until recently, patient safety research has primarily focused on the hospital setting rather than primary care. The WHO strategy "Safer primary care" focuses on nine improvement areas: patient engagement, education and training, human factors, administrative errors, diagnostic errors, medication errors, multimorbidity, transitions of care, and electronic tools (WHO 2012). These focus areas are all relevant to the context of patient safety and documentation.[16]

A preliminary survey was undertaken by the investigators on 30 patient case files, in selected wards on Nursing Care Documentation. The survey focused on nursing care documentation on initial and ongoing assessment along with the handover. The survey revealed that 30% of the documents related to initial assessment were found to be incomplete 46.7%, the ongoing assessment documentation was not specific to the patient complains in 56.6% of the case files. Further, it was noted that handover documentation was evident in all the case files (33.4%), but the documentation was same in 86% of the patient case files without any focus on patient priorities. [17]

Thus, based on the review of literature, preliminary survey findings and the experiences of the investigators this study is designed to enhance the competency & knowledge level of nursing staff for positive patient outcomes.

STATEMENT OF PROBLEM

"A study to assess the Impact of Competency Based Teaching Programme on knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities of R.L. Jalappa Medical Teaching Hospital Kolar with a view to develop mobile app on Nursing Care Documentation. "

OBJECTIVES OF THE STUDY

1. To assess the knowledge regarding nursing care documentation by using Structured Knowledge Questionnaire.
2. To assess the documentation skill on nursing care documentation by using checklist.
3. To evaluate the effectiveness of competency based teaching programme by comparing pre and post test score.
4. To evaluate patient Safety outcome by reviewing the patient case file by using checklist
5. To determine association between knowledge and skill level of nursing staff on patient care documentation with selected demographic variables.
6. To develop Mobile app on Nursing Care Documentation.

HYPOTHESIS

H_{01}: There will not be significant statistical difference between the pre and post-test knowledge and skill scores of Staff's Nurses with regard to Nursing care documentation.

OPERATIONAL DEFINITIONS

Impact of Competency Based Teaching Programme:

In this study impact of competency-based Teaching Programme refers to the effect of competency based training programme in bringing a positive change in the knowledge and skill level of nursing staff in patient care documentation.

Documentation Knowledge:

In this study knowledge level refers to the of understanding that influences the nursing staff in documentation of patient care.

Documentation Skill:

In this study documentation skill refers to the ability of the nursing staff in effectively writing and reporting the patient care activities performed based on assessment and regular monitoring of the patient.

Nursing Care Documentation:

In this study Nursing Care Documentation refers to all the nursing care activity record which begins from the admission to discharge or transfer out of the patients as initial assessment, on-going assessment, shift handover, transfer inn and out, counseling and patient communication notes.

Safe Patient Outcomes:

In this study safe patient outcome refers to the effect of nursing care documentation on preventing harm and adverse event or incident to patient by prompt assessment, documentation and reporting of patient care activities on care-bundles.

Nursing Staff:

In this study Nursing Staff refers to the Registered Nurses with the qualification of GNM, B. Sc. Or P. B. BSc. Nurses who all working in Acute Health Care Facilities of R. L. Jalappa Hospital, Kolar.

Acute Health Care Facilities:

In this study Acute Health Care Facilities refers to all the clinical units of R. L. Jalappa Hospital where patients with acute or life threatening conditions are admitted with lifesaving facilities.

Mobile App: Mobile app is an Electronic Mediated application which is systematically designed & organized set of Nursing Care Documentation which focuses on:

a. Nursing initial assessment
b. Ongoing assessment
c. Handover
d. Transfer-in & transfer-out
e. Patient progress notes
f. Physiological parameters monitoring
g. Discharge and counselling information.

SUMMARY

This chapter has explained in detail on the need for the study statement of research problem, objectives, operational definition and the hypotheses of the study which helped the researcher to gain in-depth insight into the research study.

CHAPTER - 2

REVIEW OF LITERATURE

This chapter describes in detail on the studies reviewed related to the research project. A book is a medium for recording information in the form of writings or images typically composed of many pages bound together and protected by a cover. A literature review is a compilation of significant writings relevant to the field of research. This chapter offers a logical discussion of previous research on the research issue, including what is known, what is uncertain, and what is challenged.

The literature to the current study will be reviewed from the textbook, journals, electronic resources, and articles.

For the present study the literature of review is organized and present under the following headings:

1. Studies related to effectiveness of training programme on Nursing care documentation and its outcome
2. Studies related to knowledge and practice on nursing care documentation.
3. Studies related Patient Safety Outcome with Nursing Care Documentation

1. Studies related to effectiveness of training programme on Nursing care documentation and its outcome

A Quasi experimental longitudinal study with a difference-in-differences design was conducted in Vietnam on effectiveness of a standard clinical training programme in new graduate nurses. Total of 280 new graduate nurses completed a self-administered questionnaire. The intervention group consisted of 206 respondents (those having participated in standard clinical training) and the control group (those that didn't receive training) of 74. Differences in mean increases in competency scores between the intervention and control groups were estimated. The effect size of the intervention was estimated by calculating Cohen's d. A generalized linear model was employed to identify the factors associated with mean increases.[19]

A quantitative descriptive cross-sectional study conducted in Ethiopia on nursing documentation practice and associated factors among nurses in public hospitals. 317 participants were included in the study. Simple random sampling techniques were used for the selection of hospital for the study. The study participants were selected based on the lottery method and A structured self-administered questionnaire was developed to collect data regarding nursing documentation practice and its associated factors. The result of this study shows that practice nursing care documentation was inadequate (47.8%). Inadequacy of documenting sheets AOR=3.271, 95% CI (1.125, 23.704), inadequacy of time AOR=2.205, 95% CI (1.101, 3.413) and with operational

Standard of nursing documentation AOR=2.015, 95% CI (1.205, 3.70) were significantly associated with practice of nursing care documentation. To conclude, more than half of nurses were not documented their nursing care.[20]

A qualitative study was conducted in Shiraz University on In-service training of nursing staff. In the first stage, the Grounded Theory was adopted to explore the process of training 35 participating nurses. The sampling was initially purposeful and then theoretically based on emerging concept. Data were collected through interview, observation and field notes. Moreover, the data were analyzed through Corbin-Strauss method and the data were coded through MAXQDA-10. In the second stage, the findings were employed through 'Walker and Avants strategy for theory construction so as to design an optimal model for in-service training of nursing staff. To conclude, poor organizational settings might hinder the successful implementation of empowering education model, which can be promoted through participation of the senior managers.[21]

A Retrospective record review was conducted on "Effect of standardized nursing language continuing education programme on nurse's documentation of care" in University College Hospital, Ibadan. The study assessed the documentation of nursing care before, during and after the Standardized Nursing Language Continuing Education Programme (SNLCEP).It evaluates the differences in documentation of nursing care in different nursing specialty areas and assessed the influence of work experience on the quality of documentation of nursing care with a view to provide information on documentation of nursing care. A total of 270 nursing process booklets formed the sample size. From each ward, 90 booklets were selected in this order: 30 booklets before the SNLCEP, 30 booklets during SNLCEP and 30 booklets after SNLCEP. The study concluded that the SNLCEP had a significant effect on the quality of documentation of nursing care using Standardized Nursing Languages.[22]

A quasi-experimental study was conducted on Effect of Documentation Training Program on Staff Nurses' Documentation Skills at Damanhur Hospital University. A convenient sample consisted of a total of 50 nurses. A Self-administered Questionnaire sheet which contained three parts to collect data for this study: (1) Nurses' demographic data, (II) Nurses' knowledge assessment, (III) an auditing checklist of patients' records. As a result, slightly more than two-fifth of staff nurses had a high level of knowledge regarding total documentation dimensions in preprogram training phase, while all staff nurses had high knowledge in the post-training program phase and a slight decline in follow-up phase with highly statistically significant improvement with all the phases of intervention. To conclude, a highly statistically significant improvement was detected in total staff nurses' documentation knowledge and performance level during the post and follow-up phases than preprogram training phase. Hence, the documentation training program has a positive effect on improving staff nurses' documentation skills.[23]

A pre-experimental study was conducted on effect of NANDA-I, NIC, and NOC documentation system training on quality of nursing care documentation in the perinatal ward of Yogyakarta Regional Public Hospital.The study had a pretest posttest design without a control group. Twenty-one nurses and eighty-six Medical Records (MR) of patients who were treated in the perinatal ward were used as samples selected using purposive sampling. Those nurses were trained in the nursing care documentation system. The quality of nursing care documentation was measured using modified Quality of Diagnoses, Interventions and Outcomes (Q-DIO) instrument. Data were analyzed using Independent samples t-test with a confidence level of 95%.As a result, the average of the scores of the quality of nursing documentation before training was lower (1.91) than the average after training (2.78).

There was a significant difference in the quality of nursing documentation before and after training ($p < 0.001$).In conclusion, training of NNN nursing documentation system could improve the quality of nursing documentation in the perinatal ward of Yogyakarta Regional Public Hospital.[24]

An interventional study was conducted on the Effect of Continuous Educational Intervention to Improve Nursing Documentation at a Public Hospital in Yemen. A total of 115 nurses were studied in each of two hospitals. Data were collected by questionnaire and NMCAT audit. Both descriptive and inferential statistical methods were used to analyze the data using SPSS version. Paired sample t-tests and Repeated Measures Analysis of Variance (ANOVA) were used. In conclusion continuous educational intervention and Knowledge, attitude, performance of nurses influenced towards the quality of nursing education. The manager of the hospital and nursing manager are recommended affording the opportunity to support human resources in the hospital, especially for nurses to participate in continuous education, in accordance with the demands of legislation in nursing education, and to organize the training of nursing documentation.[25]

A quasi-experimental was conducted on The Effectiveness of Nursing Documentation Training on Nurse's Knowledge about SDKI, SLKI, and SIKI).There is 150 nurses in a hospital in Central Java who participate in this study. The sampling technique used was total sampling method. The results showed that the average level of pre-test knowledge was 38.05, and post-test was 65.51. Data analysis using t-test obtained the p-value 0.000 (<0.05). In conclusion Nursing documentation training is effective in increasing the knowledge and ability of nurses in documenting nursing care using 3S.[26]

A Quasi-experimental study was conducted on The Effect of Training Program on Knowledge and Practice of Nurses Regarding Nursing Documentation at Omdurman Military Hospital 2019 Sudan. A questionnaire and evaluation checklist was used to collect data from (203) nurses. They were selected by non-probability sampling technique (purposive sampling). The data were analyzed by computer software program (SPPS) version 20. As a result, the study showed that more than half (60.6%) of nurses were female, (65%) had bachelor's degrees, (42.9%) had 1-2 years of experience and more than a third (34.0%) worked in general ward. Common nursing report errors were the change of shift and incidence report (73.4 %, 87.2%) in pretest which decrease to (50.2%, 44.3%) in the posttest, respectively. while the common nursing record error pretest Illegible record (69.3%), change in Patient condition (66.5%), Round book (73.9), Medication record error (60.1%).To conclude, the teaching program had a positive effect on the quality of nursing care. The study recommended updating nurses' knowledge and skills about documentation guidelines through continuous professional development.[27]

An experimental study was conducted on Improved Quality of Nursing Documentation: Results of a Nursing Diagnoses, Interventions, and Outcomes Implementation Study. Nurses from 12 wards of a Swiss hospital received an educational intervention an introductory class and consecutive classes, using a case discussion method to implement nursing diagnoses, interventions, and outcomes. The quality of documented nursing diagnoses, interventions, and nursing-sensitive patient outcomes was assessed by 29 Likert-type items with a 0–4 scale instrument, called Quality of Nursing Diagnoses, Interventions, and Outcomes (Q-DIO) and tested using t-tests. As a result, significant enhancements in the quality of documented nursing diagnoses, interventions, and outcomes were found following the implementation of a

planned educational program. The implementation of NANDA, NIC, and NOC (NNN) nursing diagnoses, interventions, and outcomes led to higher quality of nursing diagnosis documentation, etiology-specific nursing interventions, and nursing-sensitive patient outcomes.[28]

2. Studies related to knowledge and practice on nursing care documentation

A cross sectional study was conducted on Amhara Ethiopia knowledge attitude, practice and associated factors towards Nursing Care Documentation among nurses in west Gojjam zone public hospital in this study total 246 nurses were included from the selected hospitals. The study includes simple random sampling technique. As study design.as a result among 240 respondents 54.6% of them had good knowledge, 50% of study participants had favorable attitude and 47.5% of study participants had good nursing care documentation practice sex and monthly salary were found to be statistically significant with knowledge of nurses.[29]

A Quantitative study was conducted on Singapore effectiveness of an advanced practice nurse-led delirium education and training programme.in this study total 245 nurses were included from the intensive care unit. The study includes multiple choice questions as study design .As a result nurses improved knowledge and good competency, delirium screening documentations after 3 months very poor and it subsequently improved when measured at 10 months following further emphasis by senior nursing staff. Improved knowledge and competency in assessment did not improve compliance and documentation of delirium screening. [30]

A Cross sectional study was conducted on Mansoura University hospital. Assessing Nurses knowledge and auditing their practice regarding nursing care documentation in these study total 100 staff nurses and 557 nursing care charts from selected hospitals.

The study includes analytic cross sectional study design. As a result among nurses age ranged between 20 and 60 years.77.0% having nursing diploma 38% of the nurses had satisfactory knowledge about documentation 18% of the nurses agreed upon the barriers hindering the quality of nursing documentation.[31]

A cross sectional study was conducted on Ghana. Knowledge, attitude and practices of postoperative pain management by nurses in selected district hospitals in Ghana. The study includes multistage sampling was used. As a result this study showed that nurses in the four district hospitals had knowledge deficits regarding POP management. Eighty-one representing 48% of nurses had low knowledge on POP management. An overwhelming majority of nurses (97.6%) relied on routinely rendered basic nursing skills to relieve POP and few used pharmacological interventions.[32]

Longitudinal study was conducted on effectiveness of a standard clinical training programme on new graduate nurses competencies in Japan. In this study total 280 new graduate nurses were included from the selected hospital. This study includes self-administered questionnaire. a result among the intervention group was 0.73 points greater than in the control group with an intermediate effect size (Cohen's d = 0.53; 95% CI 0.26 to 0.80). A greater reduction in standard deviation of total competency scores in the intervention group was confirmed. Participation in standard clinical training produced a positive association with a mean increase in total competency score without significance[33]

A quasi-experimental study was conducted on Finland .A systematic review of the outcome of educational interventions relevant to nurses with simultaneous strategies for guideline implementation among nurses in national heart, lung and blood institute.

The study includes systematic review based design. As a result the data included 13 studies of different educational interventions .12 studies reported statistically significant outcomes for the interventions on at least one measurement in quality of patient care. Teaching and learning produced several good outcomes.[34]

A descriptive cross-sectional study was conducted on Knowledge and Practice of Documentation Techniques among Staff Nurses in Nepal. A purposive sampling method was used and sample size was calculated to be 200. A structured questionnaire was used to collect the demographic details and knowledge and practice of documentation. Data was analyzed using statistical package for the social sciences version 20. Point estimate at 95% Confidence Interval was calculated along with frequency and percentage for binary data. As a result the knowledge of documentation was seen adequate among 150(75%) staff nurses. The practice of documentation was seen poor 188(94%) among staff nurses. In conclusion, there is need of in-service education among staff nurses, thereby reaching a better patient care and safeguarding them from legal issues.[35]

A qualitative study was conducted on evaluation of registered nurses' knowledge and practice of documentation at a Jamaican hospital. In this study 90 patient records from three medical wards were audited for documentation practices using an approved Jamaican Ministry of Health tool, the no of samples was 12 nurses assigned to audited wards who have experience with documentation were gathered from a focus group discussion. As a result only 26% of the records had nursing diagnosis, which corresponded to the current medical diagnosis and 48% had documented evidence of discharge planning.87 percent had no evidence of patient teaching. In conclusion the study showed high levels of accurate documentation by nurses at a referral hospital in

Western Jamaica and the nurses appeared to be familiar with the required documentation guidelines.[36]

A Cross-Sectional Study was conducted on Knowledge and Practice of Nurses Regarding Nursing Documentation in tertiary care hospitals of Peshawar, Khyber Pakhtunkhwa. A survey of nurses was conducted and data were collected through a designed questionnaire from 300 staff nurses regarding demography profile, knowledge and practice about nursing documentation. Data analysis for descriptive statistics was done through SPSS 17.As a result Only 12% of nursing staff were satisfied with their nursing documentation and less than half (42%) of the nurses were in favor of education programs on nursing documentation. In conclusion there is need for strict check & balance and nurses should be trained by organizing seminars and teaching session on nursing documentation.[37]

A cross-sectional study was conducted on Knowledge and Practice of Tabriz Teaching Hospitals' Nurses Regarding Nursing Documentation in Iran. The data were collected from 170 nurses who selected to participate in the study with census sampling method from 32 Medical–Surgical units at four university hospitals in Tabriz. For assessing the quality of nurses' documents, 2040 documents that were selected with simple random sampling .Data was analyzed by SPSS software using One-way ANOVA and independent t test. Results: The results showed that all of nursing records and vital sign flow sheets had average quality and insufficient. In conclusion further coaching of nurses and encouraging them to work towards better documentation is needed for resolving nursing documentation insufficiencies.[38]

3. Study related Patient Safety Outcome with Nursing Care Documentation

A non-Experimental study was conducted at Hamad medical corporation, Qatar among staff nurses on nursing perceptions of patient safety Simple random sampling technique was adopted for this study they developed Hospital Survey of Patient Safety Culture (HSPSC) as a tool for data collection. 57% was the response rate for the distributed survey. Survey results were compared with those from US hospitals using the original AHRQ survey. As a result, this study provides a baseline measurement for safety culture at Hamad Medical Corporation and beginning adaptation of an instrument that can be used in other Middle Eastern healthcare organizations in the future.[39]

A statistical study was conducted in china "Hospital survey was on patient safety culture", Convenient sampling techniques was used to select Hospitals and 1160 participants (Chinese health-care workers (internal physicians and Nurse)) including 32 hospitals in 15 Cities across China. Modified Hospital Survey on Patient Safety Culture (HSPSC) questionnaire were used to measure 10 dimensions of patient safety culture, A total of 1500 questionnaires were distributed of which 1160 were responded validly (response rate 77%). The positive response rate for each item ranged from 36% to 89%. The results show that amongst the health care workers surveyed in China there was a positive attitude towards the patient safety culture within their organizations. Different position, qualification and work units may have different responses for different dimensions or items.[40]

A cross-sectional study was conducted in Nursing Department of a Tertiary Care Teaching Hospital" in North India. On "Patient Safety is the Need of the Hour: A Study in Simple random sampling techniques was used to select 1200 nursing officers

(both clinical and administrative). The data were collected using structured questionnaire using Hospital Patient Safety Survey Questionnaire of AHRQ of USA and 5 point Likert scale is used. The questionnaire yielded a response rate of only 66.5%. There was no patient safety committee in the hospital. Structured system for implementation of patient safety measures is missing and hospital has to work a lot when it comes to delivering the patient care services in a safe environment.[41]

A qualitative, exploratory study was conducted on patient safety through nursing documentation: barriers identified by health care professionals and students in Norway. This study conducted six focus group interviews with nurses and social educators (n=12) involved in primary care practice and nursing and social educator bachelor's degree students from a University College (n=11). Data were analyzed using qualitative content analysis. As a result the barriers to patient safety and quality in documentation practices: "Individual factors", "Social factors", "Organizational factors," and "Technological factors". In conclusion, to achieve successful documentation, increased awareness and efforts by the individual professional are necessary and primary care services must facilitate the achievement of these goals by providing adequate resources, clear mission statements, and understandable policies.[42]

A descriptive correlational study was conducted on Quality of Nursing Documentation and its Effect on Continuity of patients' care. The study was conducted at Tanta University Hospitals affiliated to Ministry of Health. A convenient sample of 80 nurse supervisors and simple random sample of 80 staff nurses in intensive care units. Data was collected using two instruments adapted by the investigator.

The first instrument was a quality of nursing documentation questionnaires. The second instrument was Auditing continuity of patient care checklist. As a result the study showed that the most of studied samples resulted in accepted level of nursing documentation quality and the majority of total studied samples resulted in average level of continuity of patient care. To conclude there was a highly statistically significant positive correlation between quality of nursing documentation and continuity of patient care. As per the recommendation encourage nurses to comply with standard of nursing documentation at intensive care units.[43]

A descriptive register-based qualitative study was conducted on Inter organizational health information exchange-related patient safety incidents in Finland. A total of sixty (n = 60) inter organizational health information exchange-related patient safety incident free text reports were analyzed. The reports were reported in the emergency department, emergency medical services, or home care between January 2016 and December 2019 in one hospital district. As a result, the identified inter organizational health information exchange-related incidents were grouped under two main categories: "Inadequate documentation"; and "Inadequate use of information". The causes of these incidents were grouped under the two main categories "Factors related to the healthcare professional " and "Organizational factors", while the consequences of these incidents fell under the two main categories "Adverse events" and "Additional actions to prevent, avoid, and correct adverse events".

To conclude, this study shows that the inadequate documentation and use of information is mainly caused by factors related to the healthcare professional and organization, including technical problems. Continuous research and development work is needed because the processes and information systems used in health care are constantly evolving.[44]

SUMMARY

The chapter explained on studies related to the effectiveness of the training program on Nursing care documentation and its outcome, knowledge, and practice on nursing care documentation, and Patient Safety Outcome with Nursing Care Documentation which helped the researcher to conduct the study easily. It has aided the researcher in comprehending the implications of the problem and in analyzing the gaps from earlier studies, which has also aided in structuring the current study.

CHAPTER - 3

METHODOLOGY

A research study's research methodology is always regarded as its blueprint. It is defined as a collection of methods, techniques, and tools employed in the research study and also refers to a systematic way of carrying out specific activities. This chapter covers the research approach, design of the study, variables of the study, setting, population, sample, sample size, and sampling procedure, the process for developing and describing the tool, interpretation of the results, reliability and validity, pilot research, method for gathering data, a method for developing and describing competency-based teaching program method for gathering data, and strategy for data analysis used for the study.

RESEARCH APPROACH:

The term "research approach" refers to a group of policies and strategies that determine the entire course of research. The researcher has chosen the strategy and process for gathering, analyzing, and interpreting the data. It is mostly dependent on the nature of the study problem that was chosen and on providing the most precise and effective solution possible.

In this study, the researcher adopted a Quantitative with Evaluative Approach as it helps to explain the effect of the independent variable on the dependent variables since the study is aimed at evaluating the Effectiveness of Competency Based Teaching program on the Knowledge competency level of nursing staff in the selected hospital at Kolar district by comparing the differences between pre-test and post-test scores.

RESEARCH DESIGN:

A research design is a researcher's structural framework to combine several research methodologies and procedures. It is a method for answering the research question that aids in choosing the study's goals and guarantees that the research methods are appropriate for the job and employ the right method of data analysis.

The research design adopted in this study was **Quasi-Experimental Design with One Group Pre-Test and Post-Test Design with randomization.**

Schematic representation of the research design is as follows,

Group	**Pre-test**	**Intervention**	**Post-test**
SG (Random assignment of the study subjects)	**O1**	**X**	**O2**

SG- Study group.

O1- Pre-test assessment of Socio-demographic characteristics and assessment of knowledge and Competency level by using structured questionnaires, observational checklist & patient safety outcome checklist/ care bundles.

X- Competency Based teaching program on nursing care documentation at acute health care setting by using forms, formats, and care bundles.

O2-Post-test to assess the post-intervention knowledge and competency level on patient safety outcome in the study group after 15 days by using the same structured questionnaires.

R-The samples were selected by using a simple random sampling technique.

VARIABLES UNDER STUDY:

In research, a variable is any quality of a participant, location, event, or phenomenon that the researcher attempts to quantify in some way. The variable that is anticipated to change due to manipulating the independent variables in an experiment that depends on other measured factors is known as the presumed effect.

Independent Variable:

a) Competency-based teaching program
b) Mobile App

Dependent Variables:

a) Knowledge
b) Skill
c) Patient Safety Outcomes

SETTING

The present Study is conducted at R. L .Jalappa Hospital & Research Center Tamaka, Kolar. It is a multispecialty hospital with 1200 bed strength and whereas Acute Critical Care bed is 160 such as Intensive care unit, Medical and surgical Intensive care unit and Emergency Medicine Department.

POPULATION:

A population in research is typically a sizable group of people or things that are known to share common features and is the major subject of a scientific question. The population for the present study includes all the Nursing Staff working at R. L. Jalappa Hospital & Research Centre.

SAMPLE:

A sample is a smaller version of a bigger group, a subset that represents a wider population, and is referred to as such.

SAMPLE SIZE

In this study the sample size consists of 220 Staff Nurse working at R. L. Jalappa hospital and Research Center Kolar. The sample size for this study is derived using power analysis, which takes into account previous studies and a thorough examination of the literature. This is derived by applying the method to test the difference between two means at a specified significance level of 95% (CI) and 5% absolute error (d), or with a power of 95%, the estimated sample size is around 197. The investigators have taken 10% of the sample's attrition. The formula in calculating the sample size for difference in two means is

$$\mathrm{n} = 2\,\frac{\sigma^2\left(Z_\alpha + Z_{1-\beta}\right)2}{(\mathrm{d})^2}$$

SAMPLING TECHNIQUE:

The term "sampling technique" describes the process of choosing from a broader defined set of items the relatively small number of study subjects who will actually engage in the research. For the present study simple random sampling technique was adopted to collect the data.

CRITERIA FOR SAMPLE SELECTION:

The samples were chosen using the inclusive criteria listed below.

Inclusion Criteria

1. Staffs that are registered and working in R. L. Jalappa Hospital, and Research Center Kolar.
2. Who is willing to participate in the study.

Exclusion Criteria

1. Who are not available at the time of data collection

DEVELOPMENT AND DESCRIPTION OF THE TOOL:

Materials required to measure what the researcher sought to measure in their study are known as research instruments. The investigators used following steps to develop study instruments/ tools for the study.

- Search of Theoretical basis to develop items through reviewing various literatures.
- Designing the individual items and Preparation of blue print.
- Development of the knowledge questionnaire.

- Development of observation checklist for assessing nursing care documentation skill.
- Development of patient safety outcome checklist/ care bundles
- Establishing Content validity of the tool through the subject experts.
- Pretesting of the tool for reliability and validity of data collection tools.
- Finalization of the tool for the data collection process

DESCRIPTION OF THE TOOL

The sections included in the tool are

1. Tool-I **Structured Knowledge Questionnaire on Patient Care Documentation**.

Section A-Consisted of socio-biographic data

Section B- Knowledge Questionnaire on Nursing Care Documentation which focused on:

a. Nursing initial assessment
b. Ongoing assessment
c. Handover
d. Transfer-in & transfer-out
e. Patient progress notes
f. Physiological parameters monitoring
g. Discharge and counselling information.

2. Tool-II **Observational competency checklist on Nursing Care Documentation**.
3. Tool-III **Observation checklist on Patient Safety Outcomes - Care Bundles.**

SCORE INTERPRETAT

The knowledge questionnaire **had 30 items. Each c**orrect response had a score of "1," wrong response was scored with zero. Each multiple-choice question has four possible answers. The interpretation of the level of knowledge was graded as:

Level of Knowledge	**Score Range**
Poor Knowledge	≤50% (≤ 15)
Average Knowledge	51-75% (16-23)
Good Knowledge	>76% (24-30)

The competency maximum score was 20 and it was graded as foe each yes / performance a score of one was allotted and no was graded as zero. The score is interpreted as.

Level of Practice	**Score Range**
Poor Practice	≤50% (≤ 10)
Average Practice	51-75% (11-15)
Good Practice	>76% (16-20)

DEVELOPMENT OF MOBILE APP ON NURSING CARE DOCUMENTATION

A competency-based training Mobile app focused on the content of nursing care documentation guidelines specific to

a. Nursing initial assessment

b. Ongoing assessment

c. Handover

d. Transfer-in & transfer-out

e. Patient progress notes

f. Physiological parameters monitoring

g. Discharge and counselling information.

ESTABLISHING CONTENT VALIDITY AND RELIABILITY OF THE TOOL:

VALIDITY:

Drafted data collection tools/instruments with a Competency-based Training program were submitted to around five experts for validation, along with the statement of the problem, objectives, operational definitions, blueprint, and criteria rating scale. Experts suggested modifications in a few of the items in the questionnaire. Based on the expert's suggestions tool and competency-based training program were modified and finalized.

RELIABILITY:

Validated tools were pretested by administering them to 15 nursing staff in order to assess the clarity of items and the time required to complete the questionnaire. Appropriate responses were evident for all the items and the subjects had taken around 30 -35 minutes to complete the questionnaires.

The reliability of the tool was tested for stability by the test-retest method and Karl Pearson's coefficient 'r' value for the Knowledge questionnaire was r=0.97. Hence the tools were found to be feasible and at an acceptable level.

ETHICAL CONSIDERATION:

The formal ethical clearance was obtained from the Institutional Ethics C**ommittee** Formal permission was obtained from the medical superintendent. Written informed consent was obtained from the study subjects and reassurance of confidentiality of information was given to the study participants.

PILOT STUDY:

The pilot study was conducted in the month of march-2023 among staff nurses working at other institutions- RLJH- NH with a sample size of 22. The investigators obtained formal written permission from the concerned authorities. Informed consent was obtained from the study participants by assuring confidentiality. The data was collected from staff nurses by using structured questionnaires on knowledge and competency checklist. The competency-based Teaching programme was conducted by using Mobile App on documentation guidelines. Post-test on knowledge and competency assessment was by using the same questionnaires after 15 days. The collected data were analysed by using descriptive and inferential statistics.

The pilot study results s**howed that tools were found** feasible and the Mobile App was found effective in changing the level of knowledge, competency, and patient safety outcomes. The study objectives and hypotheses could be analysed by using both descriptive and inferential statistics.

METHOD OF DATA COLLECTION:

The data was collected in the month of May-2023 by using the following steps:

Step 1: Ethical clearance was obtained from the Research and Ethics Committee of the Institution and Hospital Authorities.

Step 2: The sample was selected by using a simple random sampling technique by taking Informed Consent from the study participants.

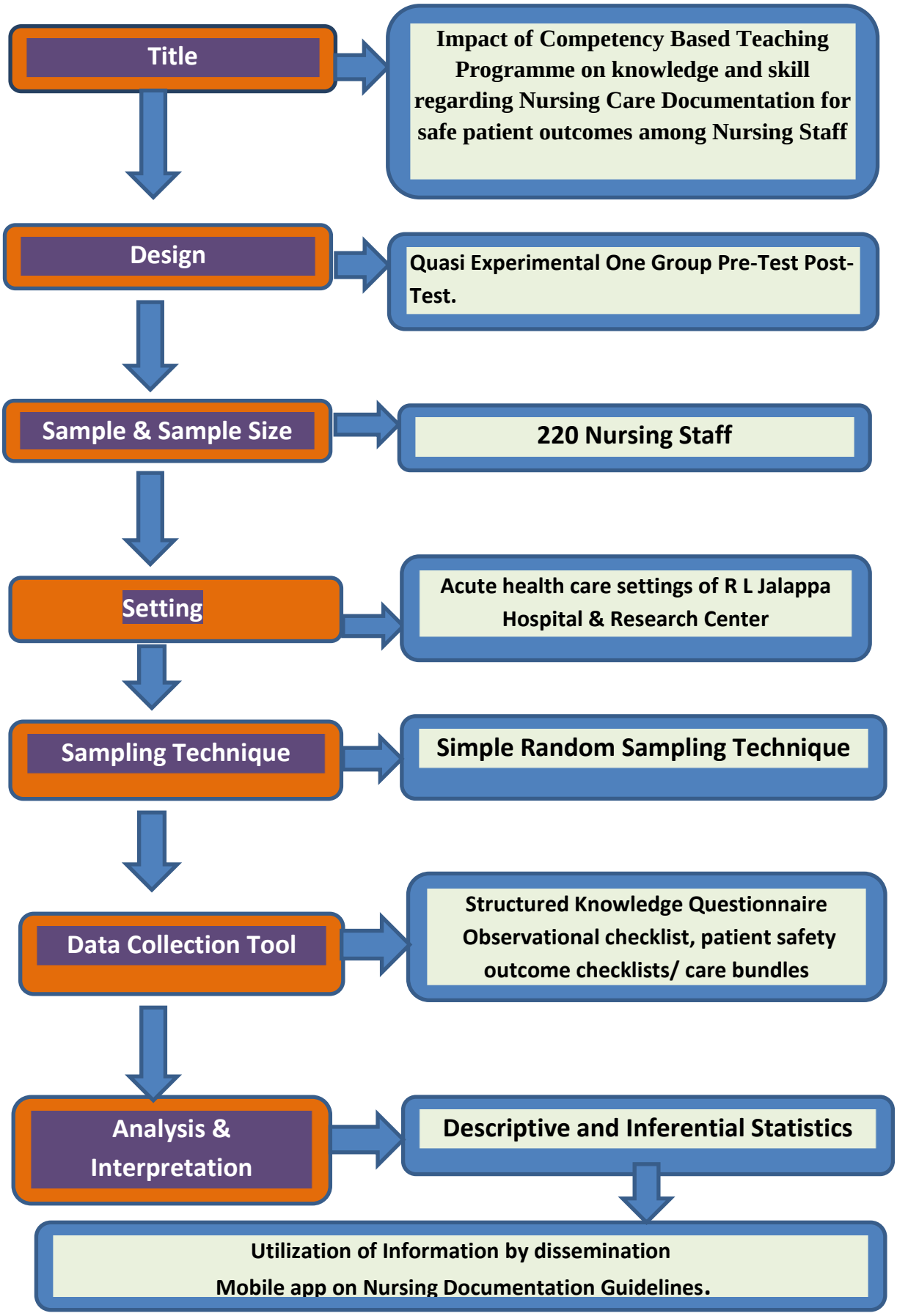
Step 3: The investigators used the following tools:

a. A Structured Knowledge Questionnaire on Patient Care Documentation.
b. An observational Competency Checklist on Nursing Care Documentation
c. Patient Safety Outcomes Checklist/Care bundles

Step 4: Method of data collection

a. A self-administered knowledge Structured Knowledge Questionnaire was used
b. The skill on Nursing Care Documentation was assessed by using competency based observational checklist.
c. The competency-based teaching programme was implemented on the same day of pre-test.
d. The post test was conducted after 15 days by using the same tool.

SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



PLAN FOR DATA ANALYSIS:

The collected data was coded and entered through Microsoft Excel and was analyzed by using SPSS software with appropriate statistical methods.

- Socio-demographic data were analysed by frequency and percentage.
- Descriptive statistics like frequency, percentage distribution, mean, range, and standard deviation for assessing the level of knowledge & competency level.
- Inferential statistics like Paired ‘t-tests were used to determine the effectiveness of a Competency-based teaching program.
- The chi-square test for association between the selected socio-demographic variables with knowledge, and competency level with sociodemographic variables was calculated.

SUMMARY

This chapter dealt with the methodology adopted for the present study. It included research approach, research design, variables under study, research setting, population, sample, sampling technique, development of the data collection tools, description of tools, determining validity and reliability, pilot study, procedure of data collection and the plan for data analysis

CHAPTER-4

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data where the data is collected through structured questionnaires from 220 Nursing staff in order to "assess the impact of Competency-Based Teaching program on Knowledge and competency level of nursing staff on nursing care documentation.

Data analysis is the process of organizing and synthesizing the data in such a way that research questions must be answered and hypotheses tested.

Based on the objectives and hypotheses of the study, the data collected were tabulated, organized, and presented under the following sections:

Section I: Distribution of sample characteristics according to demographic variables of Staff Nurses.

Table 1: Frequency and Percentage Distribution of subjects according to demographic variables.

n=220

Sl. No.	Socio demographic variables	Frequency	Percentage
1.	**Age (Years)**		
	1.1) Below 25 years	121	55
	1.2) 26-30 years	39	18
	1.3) Above 31 years	60	27
2.	**Gender**		
	2.1) Female	198	90
	2.2) Male	22	10
3.	**Professional Qualification**		
	3.1) GNM	48	22
	3.2) P. B. BSc nursing	29	13
	3.3) BSc nursing	126	57
	3.4) M. Sc. and above	17	8
4.	**Working Experience**		
	4.1) 0-2 Years	78	36
	4.2) 3-5 Years	38	17
	4.3) 5-7 Years	19	9
	4.4) 8-10 Years	18	8
	4.5) Above 11 Years	67	30

5.	**Working areas**		
	5.1) Medical ICUs	114	52
	5.2) Surgical ICUs	19	9
	5.3) HDUs	18	8
	5.4) EMD	69	31
6	**Previous exposure to information within 6 months**		
	6.1) Yes	11	5
	6.2) No	209	95

Table 1: Findings of the study revealed that**,** Majority of staff nurses 121(55%), belonged to the age group below 25 years, Minority 29(18%) belonged to the age group 25-30 years. Majority 198(90%) of staff nurses were females and minority22(10%) were males. Majority of staff nurses 126(57%) completed B. Sc. Nursing, and minority 17(8%) completed M.sc N and above. Majority 78(36%) of staff nurses had the working experience 0-2 years, Minority 18(8%) had working experience of 8-10 years. Majority 114(52%) of the staff nurses worked in Medical ICUs, Minority 18(8%) worked in EMD. Majority 209(95%) of staff nurses didn't had previous exposure to information within 6 months and Minority 11(5%) had exposure to previous exposure to information by continuous nursing education given.

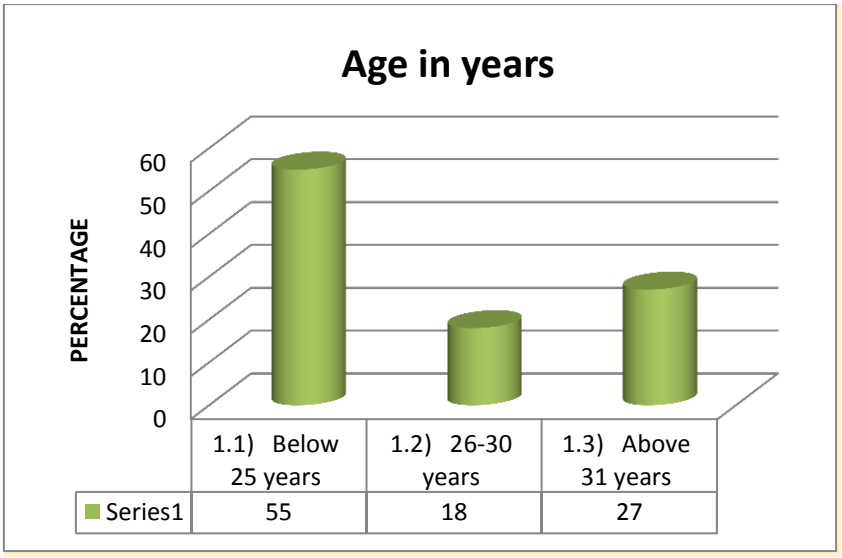


Figure -1 Percentage distribution on age in yeas of Staff Nurses

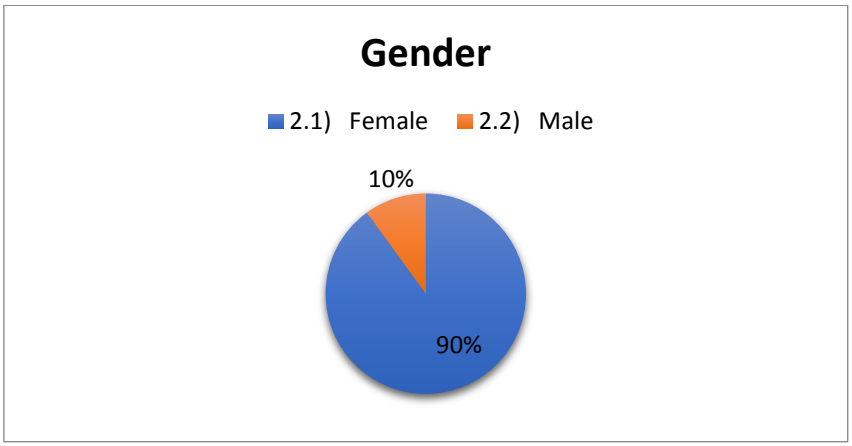


Figure -2 Percentage distribution on Gender of Staff Nurses

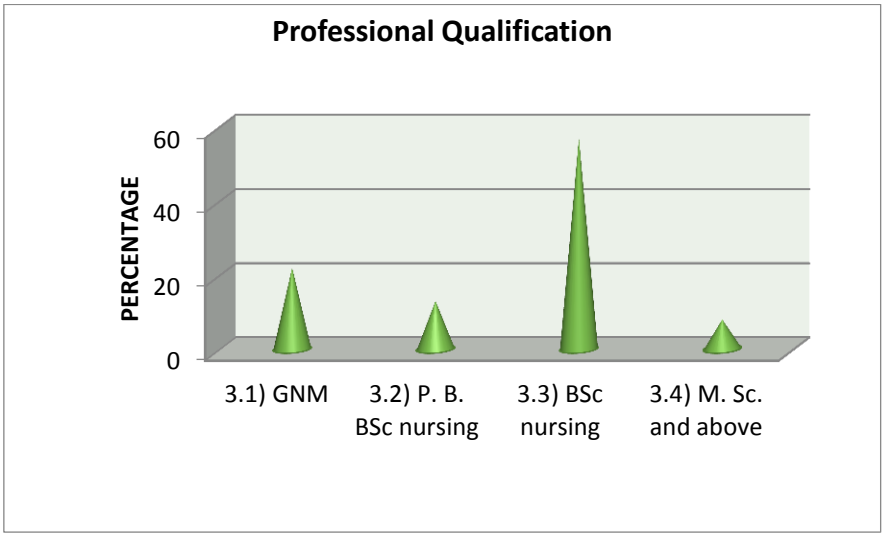


Figure -3 Percentage distribution on professional qualification of Staff Nurses

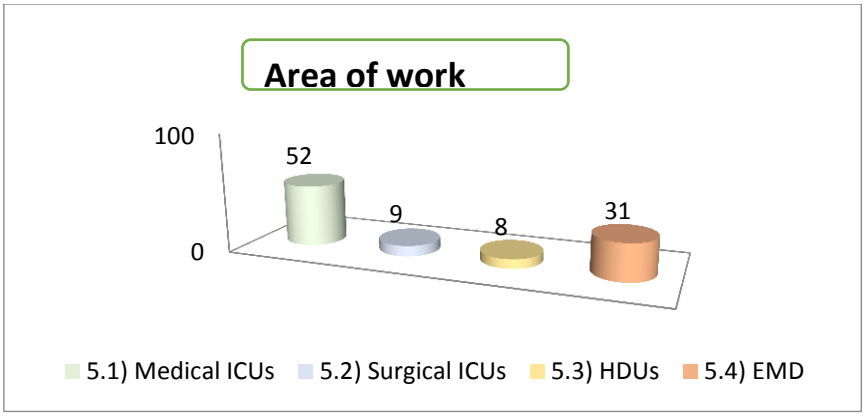


Figure -4 Percentage distributions on area of work of Staff Nurses

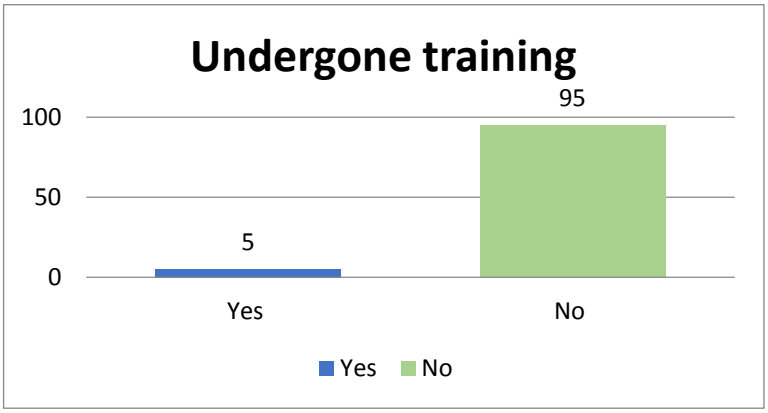


Figure -5 Percentage distributions on previous exposure to information within 6 months of Staff Nurses

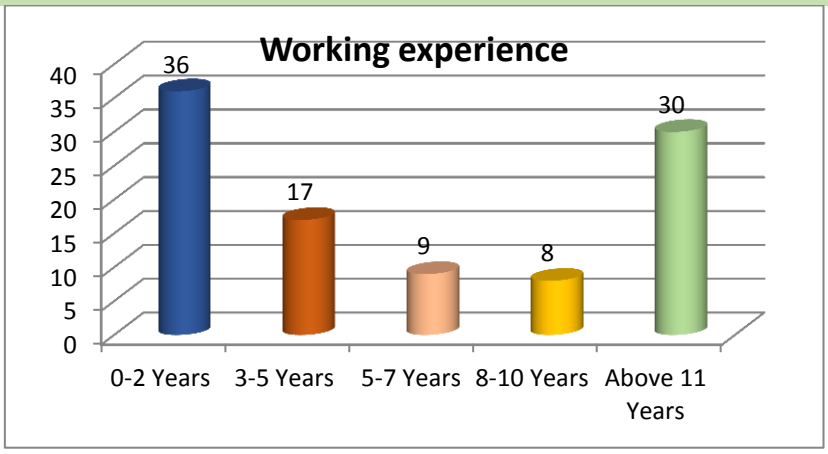


Figure -6 Percentage distributions on Working Experience to information within 6 months of Staff Nurses

Section II: Findings on Knowledge regarding competency-based teaching programme about Nursing Care Documentation among staff nurses.

Table 2: Frequency (f) and Percentage (%) distribution of Knowledge scores among Staff Nurses on competency-based teaching programme about Nursing Care Documentation.

n=220

Scores	Pre-test		Post test	
	Frequency	Percentage	Frequency	Percentage
Good (24-30) 85%	7	3 %	186	
Average (16-23) 15%	15	7%	34	
Poor (0-15) 0%	198	90%	0	

Table 2: The findings revealed that in pre-test majority 198 (90%) of the staff nurses had poor knowledge, 15(7%) had average knowledge and 7(3%) had good knowledge. In post-test majority 186(85%) of staff nurses had good knowledge and 34(15%) had average knowledge scores and none had poor knowledge. This showed there was gain in knowledge scores after administering competency based teaching programme on staff nurses about nursing care documentation.

Findings on Practice regarding among Staff Nurses on competency based teaching programme about Nursing Care Documentation.

Table 3: Frequency (f) and Percentage (%) distribution of practices scores among Staff Nurses on competency based teaching programme about Nursing Care Documentation.

n=220

Scores	Pre-test		Post test	
	Frequency	Percentage	Percentage	Frequency
	Percentage			
Good (16-20)	**29**	**13%**	**119**	**54%**
Average (11-15)	**102**	**46 %**	**101**	**46 %**
Poor (0-10)	**89**	**41 %**	**0**	**0 %**

Table 3: The findings of the study showed that in pre-test majority 102(46%) of the staff nurses had average practice scores, 29(13%) had good practice scores and 89(41%) had poor practice scores. In post-test Majority had 119(54%) of staff nurses had good practice scores and 101(46%) had average practice score and none had poor practice score. This showed there was gain in practice level after administering competency-based teaching programme on staff nurses about nursing care documentation.

Table 4: Mean, Median, Mode, Standard Deviation and Range of Knowledge scores competency-based teaching programme on staff nurses about nursing care documentation.

n=220

Area of analysis	Mean	Median	Mode	Standard Deviation	Range
Pre-test	16.48	16	15	1.44	9%
Post test	22.4	22	17	2.36	14%
Difference	3.63	04	1	1.02	3 %

Table 4: reveals that there is positive gain in Knowledge of Mean, Median, Mode, and Range scores after administering competency-based teaching programme on staff nurses about nursing care documentation.

Table 5: Mean, Median, Mode, Standard Deviation and range of Practice scores about competency-based teaching programme on staff nurses about nursing care documentation.

n=220

Area of analysis	Mean	Median	Mode	Standard deviation	Range
Pre-test	14.04	14	15	0.13	1.5
Posttest	16.42	13	16	0.15	1.5
Difference	1.05	1	0	0.02	0.5

Table 5: reveals that there is positive gain in Practice of Mean, Median and Range scores after administering competency-based teaching programme on staff nurses about nursing care documentation.

Table 6: Mean Difference, Standard Error and paired t-test of Knowledge scores.

n=220

Mean difference	Standard error	Paired t-test	
		Calculated	Tabulated
3.92	0.16	10.28	1.96

(p<0.05) t=1.96

Table 6: reveals that Mean difference is 3.92, Standard error is 0.16 and calculated paired t test is 10.28. hence calculated value was more than tabulated value 1.96. Hence, competency based teaching programme was effective in increasing knowledge among staff nurses.

Table 7: Mean Difference, Standard Error and paired t-test of Practice scores.

n=220

Mean difference	Standard error	Paired t-test	
		Calculated	Tabulated
2.05	0.004	2.06	1.96

(p<0.05) t=1.96

Table 7: Reveals that Mean difference is 2.05, Standard error is 0.004 and calculated paired t test is 2.06.The calculated value is more than the tabulated value 1.96. Hence, we are accepting the null hypothesis. Hence, competency based teaching programme was effective in improving the Practice scores of Staff Nurses.

Table 8: Association between Post-test Knowledge scores and selected demographic variables.

n=220

Sl. No	Socio Demographic Variables	Knowledge score			Chi square		
		Good	Average	Poor	Cal	P value	Significance
1	**Age**						
1.1	<25 years	103	21	0	5.893	0.328	SS
1.2	26-30 years	67	8	0			
1.3	>30 years	16	5	0			
2	**Gender**						
2.1	Male	19	3	0	2.25	0.206	SS
2.2	Female	108	90	0			
3	**Professional Qualification**						
3.1	G.N.M nursing	08	40	0	12.43	0.003	SS
3.2	P.B.Sc nursing	15	14	0			
3.3	B.Sc nursing	104	22	0			
3.4	M.Sc nursing	13	4	0			
4	**Working Experience**						
4.1	0-2 years	1	5	0	19.554	0.0002	SS
4.2	3-5 years	8	6	0			
4.3	5-7 years	12	14	1			
4.4	8-10 years	93	40	0			
4.5	Above 10 years	2	22	16			
5	**Working Area**						
5.1	Medical ICUs	48		0	23.264	0.0002	SS
5.2	OPD'S	05	38	0			
5.3	EMD	29	15	0			
5.4	ICUs	18	67	0			

6	**Previous exposure to information within 6 months**						
6.1	Yes	10	196	4	14.56	0.125	SS
6.2	No	1	04	5			

TABLE 8: The findings regarding Post-test Knowledge scores and selected Socio-demographic variables showed that in Age $t_{(cal)}$ 5.893 was greater than $t_{(tab)}$ 0.328, Gender $t_{(cal)}$ 2.25 was greater than $t_{(tab)}$ 0.206, Professional qualification $t_{(cal)}$ 12.43 was greater than $t_{(tab)}$ 0.003, Working experience $t_{(cal)}$ 19.554 was greater than $t_{(tab)}$ 0.0002, Working area $t_{(cal)}$ 23.264 was greater than $t_{(tab)}$ 0.0002, Previous exposure to information $t_{(cal)}$ 14.56 was greater than $t_{(tab)}$ 0.125. this showed that there was a statistically significant association between Age, Gender, Professional qualification, working experience, Working area, and Previous exposure to information within six months. Hence hypothesis was accepted.

The major findings of the study are as follows:

1. **Findings related to socio demographic variables of staff nurses working in acute health care facilities.**

The findings of the study revealed that**,** Majority of staff nurses 121(55%), belonged to the age group below 25 years, Minority 29(18%) belonged to the age group 25-30 years. Majority 198(90%) of staff nurses were females and minority22(10%) were males. Majority of staff nurses 126(57%) completed B.Sc Nursing, and minority 17(8%) completed M.sc N and above. Majority 78(36%) of staff nurses had the working experience 0-2 years, Minority 18(8%) had working experience of 8-10 years. Majority 114(52%) of the staff nurses worked in Medical ICUs, Minority 18(8%) worked in EMD. Majority 209(95%) of staff nurses didn't have previous exposure to information within 6 months and Minority 11(5%) had exposure to previous exposure to information by continuous nursing education given.

2. **Findings related to pre-test and post-test knowledge of the staff nurses on administering competency-based teaching programme about Nursing Care Documentation.**

The findings of the study revealed that in pre-test majority 198 (90%) of the staff nurses had poor knowledge, 15(7%) had average knowledge and 7(3%) had good knowledge. In post-test majority 186(85%) of staff nurses had good knowledge and 34(15%) had average knowledge scores and none had poor knowledge. This showed there was gain in knowledge scores after administering competency-based teaching programme on staff nurses about nursing care documentation.

3. **Findings related to pre-test and post-test practice scores of the staff nurses on administering competency-based teaching programme about Nursing Care Documentation.**

The findings of the study showed that in pre-test majority 102(46%) of the staff nurses had average practice scores, 29(13%) had good practice scores and 89(41%) had poor practice scores. In post-test Majority had 119(54%) of staff nurses had good practice scores and 101(46%) had average practice score and none had poor practice score. This showed there was gain in practice level after administering competency-based teaching programme on staff nurses about nursing care documentation.

4. **Mean Difference, Standard Error and paired t-test of Knowledge scores.**

reveals that Mean difference is 3.92, Standard error is 0.16 and calculated paired t test is 10.28. hence calculated value was more than tabulated value 1.96. hence competency-based teaching programme was effective in increasing knowledge among staff nurses.

5. **Mean Difference, Standard Error and paired t-test of practice scores.**

reveals that Mean difference is 2.05, Standard error is 0.004 and calculated paired t test is 2.06. The calculated value it was more than the tabulated value 1.96. hence, we are accepting the null hypothesis. hence competency-based teaching programme was effective in improving the Practice scores of Staff Nurses.

SUMMARY:

This chapter was dealt with the data analysis and interpretation of the data collected from the nursing staff. The results of the analysis showed that the Competency Based Teaching programme had an impact on improving the Knowledge, competency level & safe patient outcomes.

CHAPTER – 5

SUMMARY AND CONCLUSIONS

This chapter deals with major highlights of the study findings that the researcher has analyzed, which will give a picture on the status of the hypothesis that has been used in the study.

Nurses play a critically important role in ensuring patient safety while providing care directly to patients. From a patient safety perspective, a nurse's role includes monitoring patients for clinical deterioration, detecting errors and near misses, understanding care processes and weaknesses inherent in some systems, identifying and communicating changes in patient condition, and performing countless other tasks to ensure patients receive high-quality care.[12]

During the clinical experience, the investigators found that, most of the nursing staff working at critical care units was having moderate knowledge and skill in documentation procedure. Based on the clinical experience and the review of literature a quantitative quasi experimental one group pre and post-test designed study to assess the **Impact of Competency Based Teaching Programme on knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities** was conducted. The Study aimed to assess the effectiveness of competency-based teaching programme on safe patient outcomes by enhancing knowledge and skill of nursing staff on patient care documentation.

The Quasi Experimental one group pretest- posttest Design with evaluative approach was used. A total of 220 staff nurses working at critical care units of RLJH&RC were

selected for the study by using simple random sampling technique to collect the data. Data was collected by using structured knowledge questionnaire and observational checklist/ patient safety checklist/ care bundles.

The major findings of the study

Based on the objectives of the study the analysis was made by using descriptive and inferential statistics. The study findings revealed that**, m**ajority of staff nurses 121(55%), belonged to the age group below 25 years, only 29(18%) belonged to the age group 25-30 years. Majority 198(90%) of staff nurses were females and 22(10%) were males. Majority of staff nurses 126(57%) completed B. Sc Nursing, and 17(8%) completed M. Sc. Nursing and above. Majority 78(36%) of staff nurses had the working experience 0-2 years, and 18(8%) had working experience of 8-10 years. Majority 114(52%) of the staff nurses worked in high dependency wards and 18(8%) worked in EMD.

The findings of the study revealed that in pre-test majority 198 (90%) of the staff nurses had poor knowledge, 15(7%) had average knowledge and 7(3%) had good knowledge. In post-test majority 186(85%) of staff nurses had gained knowledge and 34(15%) had average knowledge scores and none had poor knowledge.

The findings of the study showed that in pre-test majority 102(46%) of the staff nurses had average practice scores, 29(13%) had good practice scores and 89(41%) had poor practice scores. In post-test Majority had 119(54%) of staff nurses had good practice scores and 101(46%) had average practice score and none had poor practice score.

The findings revealed that Competency-based teaching programme was found effective as the Mean difference is 3.92, Standard error is 0.16 and calculated paired t test is 10.28. Hence calculated value was more than tabulated value 1.96.

The study findings revealed that the Competency-based teaching programme was effective in improving the practice scores of Staff Nurses as mean difference is 2.05, Standard error is 0.004 and calculated paired t test is 2.06. The calculated value is more than the tabulated value 1.96. Hence, the stated null hypothesis is accepted.

IMPLICATIONS OF THE STUDY:

The findings of the current study have implications which are stated below:

NURSING EDUCATION

- The study findings have implication suggest in developing the short-term certificate or value-added course documentation guidelines with legal implications.
- Findings also influence on strengthening the competency skill on nursing care documentation to all the nursing staff by conducting the workshops, conference, and seminars.
- The study findings have impact on patient safety / Quality outcome.
- The curriculum of nursing can be designed with special emphasis on documentation Competency with EMR.
- Training programs shall be pursued to all the nursing staff enriching the knowledge and skills needed to heighten their competency and patient safety outcomes.

- National and international agencies including state Governmental and non-governmental health care facilities may define and publish the standards on documentation of clinical nursing care.
- The governing authorities may publish standardised forms and formats with master content to empower each nursing professional to create benchmark and boundaries on professional accountability.

NURSING PRACTICE:

- ❖ The right document by Registered Nurse has direct impact patient safety a positive outcome.
- ❖ The nursing right documentation skill advocates legally in preventing duplication of patient care and adverse therapeutic events.
- ❖ The documentation of nursing staff saves the patient and nursing professionals legally.
- ❖ The competency-based training to nurses by health care industry can improve the quality of patient care and on a whole has an impact on the Nation's health**.**
- ❖ The health care industry can create training module/ LIMS to train nurses as induction training programme and also as refresher certificate training programme.
- ❖ he children and can find a appropriate treatment program/counselling /referral systems for them.
- ❖ The school and administrative authorities should address the needs for professional development and training of teachers in integration of instructional

methods for children with learning disabilities which will enhance the development of children with learning disabilities.

NURSING ADMINISTRATION:

- ❖ The findings of the study have an impact on practice setting as it recommends that the MoH&FW & Ministry of Education can revise the syllabus on nursing competency outcome on documentation.

NURSING RESEARCH:

- ❖ The study findings have implication on nursing research by enabling the Futuristic nursing staff on capacity building by CNEs, CBNEs, simulations, workshops, mentoring.
- ❖ The evidence-based data on documentation can be generated, and replicated.

RECOMMENDATIONS:

This study shows a better outcome on adequate awareness and practicing the learned knowledge in implementing the favourable positive patient outcomes by gain in knowledge and competency skills. Based on the study findings the researchers have shortlisted the following recommendations for futuristic nursing:

- The same study can be can be undertaken using true experimental design at different settings.
- The same study can be can be undertaken at different health care facilities.
- A comparative study can be conducted on documentation competency of nursing staff.

- Research may be undertaken to evaluate the impact of CBNE on safe documentation.

Conclusion

The study findings revealed that, the Competency-based teaching programme was effective in improving the practice scores of Staff Nurses on documentation of patient clinical data.

BIBLIOGRAPHY

1. Crisp T and Potter P; Fundamental of Nursing, 2nd Edition, Elsevier, Sydney, 2004.
2. Jefferies, D., Johnson M., & Griffiths, R.(2010).A meta-study of the essentials of quality nursing documentation. International Journal of Nursing Practice, 16(2),112-124
3. Clarke EB, French B, Bilodeau ML, Capasso VC, Edwards A, Empoliti J. Pain management knowledge, attitudes and clinical practice: the impact of nurses' characteristics and education. Journal of Pain and Symptom Management. 1996 Jan 1;11(1):18-31. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3577415/
4. Wang N, Hailey D, Yu P. Quality of nursing documentation and approaches to its evaluation a mixed-method systematic review. Journal of Advanced Nursing. 2011;67(9):1858-75.
5. Ekman I, Hedman H, Swedberg K, Wallengren C. Commentary: Swedish initiative on personcentred care. Bmj. 2015;350:h160.
6. Clancy TR, Delaney CW, Morrison B, Gunn JK. The benefits of standardized nursing languages in complex adaptive systems such as hospitals. JONA: The Journal of Nursing
   Administration. 2006;36(9):426-34.
7. McCarthy B, Fitzgerald S, O'Shea M, Condon C, Hartnett-Collins G, Clancy M, et al.Electronic nursing documentation interventions to promote or improve patient safety and quality care:A systematic review. Journal of nursing management. 2019;27(3):491-501.
8. Ioanna P, Stiliani K, Vasiliki B. Nursing documentation and recording systems of nursing care.Health Science Journal. 2007(4).
9. Goodwin DL. Documentation skills for nursing students. Nursing made Incredibly Easy. 2019 Mar 1;17(2):16-21.
10. Meißner A, Schnepp W. Staff expericenes within the implementation of computer-based nursing records in residential aged care facilities: a systematic review and synthesis of qualitative research. BMC Med Informatics Decision Making. 2014; 14(54). https://doi.org/10.1186/1472-6947-14-54.
11. Faizullah M, Nisar-ur-Rahman MI, Anwar M, Sarfraz M. A cross-sectional study on knowledge, attitude and practices of medical doctors towards antibiotic

prescribing patterns and resistance in Khyber PakhtunKhawah, Pakistan. Journal of Applied Pharmaceutical Science Vol. 2017 Dec;7(12):038-46.6 https://www.japsonline.com/admin/php/uploads/2498_pdf.pdf

12. Polit DF, Hungler BP. Nursing research: Principles and methods. Philadelphia: JB Lippincott company; 2006. https://www.dictionary.com/browse/assess

13. Suresh KS. Nursing research and statistics. 2nd ed. Kolkatta: Elsevier publication; 2014.

14. Anila G das, Haseena T A.Knowledge and Attitude of Staff Nurses Regarding Palliative Care.international journal of science and research.2015 vol4. https://pdfs.semanticscholar.org/41f9/2cafff47651d572b41b17f557465e594ba50.pdf

15. FrankKiwanuka, RonaldMasaba.Nurses‟ knowledge, attitude and practices regarding pain assessment among patients with cancer at Uganda Cancer Institute.J Anal Res ClinMed,2018,6(2),72-9.Doi:10.15171/jarcm.2018.01 https://journals.tbzmed.ac.ir/JARCM/Manuscript/JARCM-6-72.pdf1.

16. Choudhary VS. Assessment of the Knowledge and Attitudes of Staff Nurses on Nursing Care of Cancer Patients Undergoing Chemotherapy at Selected Cancer Hospitals of Punjab. Nurse Care Open Acces J. 2016; 1(2):00009. https://medcraveonline.com/NCOAJ/NCOAJ-01-00009

17. Sturesson, Lars .Patients' and nurses' perception of pain management in the emergency Department. Journal of nursing research 2017 vol3.7(1)(7-11)

18. Horii, S., Nguyen, C.T.M., Pham, H.T.T., Amaike, N., Ho, H.T. and Aiga, H., 2021. Effectiveness of a standard clinical training program in new graduate nurses' competencies in Vietnam: A quasi-experimental longitudinal study with a difference-in-differences design. *Plos one*, *16*(7), p.e0254238.

19. Tasew H, Mariye T, Teklay G. Nursing documentation practice and associated factors among nurses in public hospitals, Tigray, Ethiopia. BMC research notes. 2019 Dec;12(1):1-6.

20. Chaghari, M., Saffari, M., Ebadi, A., & Ameryoun, A. (2017). Empowering education: A new model for in-service training of nursing staff. *Journal of advances in medical education & professionalism*, *5*(1), 26.0.

21. Adubi IO, Olaogun AA, Adejumo PO. Effect of standardized nursing language continuing education programme on nurses' documentation of care at University College Hospital, Ibadan. Nursing Open. 2018 Jan;5(1):37-44.

22. Mosaad Mohammed Elghabbour G, Elgharib Mohamed Mostafa Eldiasty N, Hassan Saad Elzohairy M. Effect of Documentation Training Program on Staff Nurses' Documentation Skills. Egyptian Journal of Health Care. 2020 Jun 1;11(2):1177-86.

23. Setyaningrum EE, Nurjannah I, Rustiyaningsih A. Effect of NANDA-I, NIC, and NOC documentation system training on quality of nursing care documentation in the perinatal ward of Yogyakarta Regional Public Hospital. Belitung Nursing Journal. 2019 Oct 30;5(5):180-91.

24. ALHAWRI FH, RAMPAL KG, MOHAMMED A, ABDULLA H. Effect of Continuous Educational Intervention to Improve Nursing Documentation at a Public Hospital in Yemen. International Journal of Pharmaceutical Research. 2020 Jul;12(3).

25. Kartini M, Ratnawati E. The Effectiveness of Nursing Documentation Training on Nurse's Knowledge about SDKI, SLKI, and SIKI. Jurnal Kesehatan. 2022 Jun 22;11(1):47-51.

26. Ahmed SN, Nimer MJ. The Effect of Training Program on Knowledge and Practice of Nurses Regarding Nursing Documentation at Omdurman Military Hospital 2019–Sudan. Saudi J Nurs Health Care. 2022;5(5):114-9.

27. Müller-Staub M, Needham I, Odenbreit M, Ann Lavin M, Van Achterberg T. Improved quality of nursing documentation: results of a nursing diagnoses, interventions, and outcomes implementation study. International Journal of Nursing Terminologies and Classifications. 2007 Jan;18(1):5-17.

28. Andualem A, Asmamaw T, Sintayehu M, Liknaw T, Edmealem A, Gedfew B, Bewuket M. Knowledge, attitude, practice and associated factors towards nursing care documentation among nurses in West Gojjam Zone public hospitals, Amhara Ethiopia, 2018. Clinical Journal of Nursing Care and Practice. 2019;3(1):001-13.

29. Lieow JL, Chen FS, Song G, Tang PS, Kowitlawakul Y, Mukhopadhyay A. Effectiveness of an advanced practice nurse-led delirium education and training programme. International nursing review. 2019 Dec;66(4):506-13.

30. Hassan NA. Assessing Nurses' Knowledge and Auditing their Practices Regarding Nursing Care Documentation. Port Said Scientific Journal of Nursing. 2018 Jun 1;5(1):95-112.

31. Menlah A, Garti I, Amoo SA, Atakro CA, Amponsah C, Agyare DF. Knowledge, attitudes, and practices of postoperative pain management by nurses in selected district hospitals in Ghana. SAGE Open Nursing. 2018 Nov;4:2377960818790383

32. Horii S, Nguyen CT, Pham HT, Amaike N, Ho HT, Aiga H. Effectiveness of a standard clinical training program in new graduate nurses' competencies in Vietnam: A quasi-experimental longitudinal study with a difference-in-differences design. Plos one. 2021 Jul 9;16(7):e0254238

33. Häggman-Laitila A, Mattila LR, Melender HL. A systematic review of the outcomes of educational interventions relevant to nurses with simultaneous strategies for guideline implementation. Journal of clinical nursing. 2017 Feb;26(3-4):320-40.BibTeX EndNote RefMan.

34. Gurung N. Knowledge and Practice of Documentation Techniques among Staff Nurses. Journal of College of Medical Sciences-Nepal. 2022 Mar 31;18(1):36-41.

35. Blake-Mowatt C, Lindo JL, Bennett J. Evaluation of registered nurses' knowledge and practice of documentation at a J amaican hospital. International nursing review. 2013 Sep;60(3):328-34.

36. Khattak IU, Zaman T, Ghani S. Knowledge and practice of nurses regarding nursing documentation: a cross-sectional study in tertiary care hospitals of Peshawar, Khyber Pakhtunkhwa. Journal of Rehman Medical Institute. 2016;2(3):47-54.

37. Jasemi M, Zamanzadeh V, Rahmani A, Mohajjel A, Alsadathoseini F. Knowledge and practice of Tabriz teaching hospitals' nurses regarding nursing documentation. Thrita. 2013 Jun 30;2(2).

38. Al-Ishaq MA. Nursing perceptions Of patient safety at Hamad Medical Corporation in the state of Qatar (Doctoral dissertation).

39. Nie Y, Mao X, Cui H, He S, Li J, Zhang M. Hospital survey on patient safety culture in China. BMC health services research. 2013 Dec;13(1):1-1.

40. Siddharth V, Koushal VK, Goyal V. Patient safety is the need of the hour: A study in nursing department of a tertiary care teaching hospital. International Journal of Research Foundation of Hospital & Healthcare Administration. 2017;5(2):55-9.

41. Bjerkan J, Valderaune V, Olsen RM. Patient safety through nursing documentation: Barriers identified by healthcare professionals and students. Frontiers in Computer Science. 2021 Jun 1;3:624555.

42. Abd El Rahman AI, Ibrahim MM, Diab GM. Quality of Nursing Documentation and its Effect on Continuity of patients' care. Menoufia Nursing Journal. 2021 Nov 1;6(2):1-8.

43. Hyvämäki P, Sneck S, Meriläinen M, Pikkarainen M, Kääriäinen M, Jansson M. Interorganizational health information exchange-related patient safety incidents: A descriptive register-based qualitative study. International Journal of Medical Informatics. 2023 Mar 17:105045.

ANNEXURE I

	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/ 50 /2022 **Date:28/07/2022**

This is to certify that the Institutional Ethics committee of Sri Devaraj Urs College of Nursing, Tamaka, Kolar has examined and unanimously the following projects of III Year Basic B.Sc Nursing and II year P.B.B.Sc, I Year M.Sc Nursing Students and Faculty projects for the academic year 2021-22

Number of projects B.Sc Nursing: 11
Number of projects M.Sc Nursing: 18
Number of Faculty Projects: 14

Total Projects - 43

Sl. No	Name of the Topic	Guide	Investigators	Accepted/ Not accepted	Remarks
1.	A descriptive study to assess the knowledge regarding assistive technology for children with learning disabilities among school teachers in selected schools at kolar.	Mr. R Rajesh	Abigale Thomas Amrutha GN Ansu James Athulya CS Gayathri N Meghana V Rajeena Biju Sneha Benny Tessy Thomas Suresh (PBBSc) Arunamma (PBBSc)	Accepted	For Remarks find meeting minutes for all projects
2	"A Descriptive Study To Assess The Academic Stress And Self Efficacy In Relation To Study Habits Among Adolescents In Selected Pu Colleges, Kolar."	Mrs. Punitha M	Miss. Achangel Sebastian Miss. Amrutha S Miss. Anu Johnson Miss. Ayana Joseph Miss. Husna N Miss. Merin Lenin Mr. Rakesh M P Miss. Sneha Rajmohanan	Accepted	

			Nayana Salu prasad Soumya Sunny Vishwas Gowda S V Manjula T. N		
7	"A study to assess the Impact of Competency Based Teaching Programme on knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities of R.L. Jalappa Medical Teaching Hospital Kolar. In a view to develop mobile app on Nursing Care Documentation."	Dr. Zeanath Cariena Joseph	Aleena Babu Anjana K S Arya Jayan Devika Anil Lisha Thomas Nikitha Peter Sandra Lukose Sruthi S Nair Yuvaraj T N Munikrishna H	Accepted	
8	A study to assess the knowledge and attitude regarding e-health services among elderly at selected urban community areas, kolar, with a view to develop information pamphlet.	Mrs. Vani R	Aleena benny Anmary shiju Asha binu Diya biju Justy babu Mahima mani Praisy j Saumya roy Sruthi s suresh Narayanaswami	Accepted	
9	"A study to evaluate the effectiveness of health education programme regarding knowledge on respiratory allergy among farmers at selected villages of kolar taluk karnataka"	Dr. Malathi k. V	Aleena Jose Ann Maria James Ashwin Anna David Diya John Keerthana Manoj Manjula M. N Prema. A Selin Samuel Sujitha P. S Satishkumar. U	Accepted	

ANNEXURE II

PERMISSION LETTER FOR CONDUCTING STUDY

Date: 16-05-2023.

PERMISSION LETTER TO CONDUCT STUDY

From,
Research Group 7
3rd Bsc (N)
Sri Devaraj Urs College of Nursing
Tamaka, Kolar-563103

To,
The Medical Superintendent
R L Jalappa Hospital & Research Centre
Tamaka, Kolar, 563103

Through: Proper channel

Respected Sir,

Sub: Requesting permission to conduct research study in RLJH&RC among Nursing staff –reg.

We the undergraduate students of Sri Devaraj URS College of Nursing .Tamaka, Kolar has selected the below mentioned topic for our research project as partial fulfilment of requirement.

Title: "A study to assess the Impact of competency based Teaching Programme to Knowledge and skill regarding Nursing Care Documentation for safe patient outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar. In a view to develop Mobile App on Nursing Care Documentation" With regarding to above we kindly request you to grant permission to conduct a research study on nursing staff of RL Jalappa Hospital without disturbing the hospital routine. We will be highly obliged and remain thankful for your approval.

Thanking you.

Yours Sincerely,

1. Aleena Babu 2. Anjana K S 3. Arya Jayan 4. Nikitha Peter
5. Isha Thomas 6. Sandra Lukose 7. Sruthi S Nair 8. Devika Anil
9. Yuvaraj T N 10. Munikrishna. H

Research Guide:
Dr. Zeanath Cariena Joseph. Mrs, Kindly consider

Permitted
16.5.23.
Medical Superintendent
R.L. Jalappa Hospital & Research Centre
Kolar-563103.

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

ANNEXURE III

INFORMED CONSENT FORM

Principal Investigator : Dr. Zeanath Cariena J
Co- Investigators **:** Ms.Aleena Babu, Ms.Anjana K S ,Ms.Arya Jayan, Ms.Devika Anil
Ms. Lisha Thomas, Ms.Nikhitha Peter, Ms.Sandra Lukose,
Ms. Sruthi S Nair, Mr.Yuvaraj T N,Mr.Munikrishna H

Name of the Organization: Sri Devaraj URS College of Nursing, Tamaka, Kolar.

If you agree to participate in the study, I will collect information (as per Performa) from you or a person responsible for you or both. We will collect relevant details. You are invited to part in this research study. You are being asked to participate in this study because you satisfy our eligibility our 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 give my consent to collect the information & also can be used for medical research, test validation, or education as long as my privacy is maintained.

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 the questions and 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 is closure of m6y personal information for presentation and publication.

Principal investigator signature:

Principal Investigator

ANNEXURE IV

STRUCTURED KNOWLEDGE QUESTIONNAIRE

1. STRUCTURED KNOWLEDGE QUESTIONNAIRE ON PATIENT CARE DOCUMENTATION.

SECTION: A – SOCIO-DEMOGRAPHIC DATA;

1. **Age in years;**
   1.1 Below 25 years
   1.2 26-30 years
   1.3 Above 31 years

2. **Gender;**
   2.1 Male
   2.2 Female

3. **Qualification**
   3.1 GNM
   3.2 P. B. BSc Nursing
   3.3 B.SC
   3.4 M.SC

4. Working Experience

4.1) 0-2 Years

4.2) 3-5 Years

4.3) 5-7 Years

4.4) 8-10 Years

4.5) Above 11 Years

5. Working areas

5.1) Medical ICUs

5.2) Surgical ICUs

5.3) HDUs

5.4) EMD

6. Previous exposure to information within 6 months

6.1) Yes

6.2) No

SECTION: B – STRUCTURED KNOWLEDGE QUESTIONNAIRE,

Dear participants;

a. Read all the given questions carefully & tick **(√)** the correct answer.
b. Your answer shall be kept confidential.
c. Each correct answer with 1 & wrong answer carries 0 score.
d. Answer all the questions.

1. **The documentation is** :
   a. Anything written or printed information that you rely on as record or proof for authorized persons.
   b. Lab results for patient you are taking care of.
   c. Admission paperwork for billing purpose.
   d. Instructions from the attending Doctors.

2. The Nursing report refer to:
   a. Oral, written or audiotaped exchanges between caregivers.
   b. Summary of X-ray, MRI and Sonograms done on patient.
   c. Documentation of all activity patients has had previously for current condition.
   d. Review of all patient for cause trending.

3. What are the guidelines for quality documentation and reporting? (Select all that apply)
   a. Detailed
   b. Factual
   c. Organized
   d. Focused
   e. Accurate
   f. Complete
   g. Current
   h. Electronically recorded

4. The purposes of nursing care documentation includes;
   a. Technology enhancing learning process.
   b. Communication, assessment, auditing and monitoring.
   c. Opportunity for career development.
   d. Engaging in new learning experience

5. The principles of nursing care documentation include;
   a. Accuracy in charting.
   b. Brief & clear
   c. Using scientific abbreviations.
   d. Option on only
   e. Option a & b only
   f. Option, a, b & c only

6. **The patient care record is define as a**
    a. A confidential, permanent legal documentation of information relevant to a client's health care.
    b. Name, address, phone number, insurance information.
    c. List of medications.
    d. Temporary notes made pertaining to the client's current visit made on the nurses pocket notepad.

7. **The benefits of documentation includes (tick all the is applicable)**
    a. Improves quality and convenience of Patient Care
    b. Improves care co-ordination.
    c. Improves patient participation in the care.
    d. Improves patient participation in care decision.
    e. Option, a, b ,c, & d

8. **The Nursing care documentation includes;**
    a. Initial and ongoing nursing assistant of patients.
    b. Notification of Doctors visits.
    c. Medications, Treatment given and observable effects.
    d. Option b, c & d.
    e. All of the above.

9. **The initial assessment includes of the following scales of assessment except;**
    a. Assessment of pain
    b. Assessment of level of consciousness
    c. Assessment of fall risk
    d. Assessment risk of DVT
    e. Option, a & b only
    f. Option c & d only
    g. Option a, b, c & d

10. **The patient admission record shall be documented within _____ hours of admission.**
    a. 4 hours.
    b. 8 hours.
    c. 12 hours
    d. 16 hours

11. **The standard ongoing nursing documentation includes (tick all that is applicable)**
    a. Physical assessment, vital signs.
    b. Pain, fall risk, skin status assessments.
    c. Plan of care once per shift (review)
    d. Nursing progress notes.
    e. Family problems expressed.
    f. Mode of transportation

12. The organized nursing are documentation includes;

a. Have everything in one folder so it can be found.
b. Color code information from various departments to make it easier to identify that information.
c. Communicate information in a logical order.
d. Write legibly.

13. A nurse is giving a hand-off report to the oncoming nurse. Which information is critical for
the nurse to report?
a. The patient had a good day with no complaints.
b. The family is demanding and argumentative.
c. The patient has a new pain medication, Lortab.
d. The family is poor and had to go on welfare

14. The ongoing nursing documentation shall be done.

a. At least once per shift – including but not limited to
b. At least twice ……..
c. At least thrice …….
d. At least four times ……

15. SOAP--medical records based includes what type of information?

a. Subjective
b. Organized
c. Objective
d. Analytical
e. Assessment
f. Plan

16. The information that is documented on flow sheets? (Select all that apply).

a. Physicians name
b. Vital signs
c. Lab results
d. Hygiene (I/O measurements in graphs and flow charts)
e. Ambulation activity
f. Discharge Plan
g. Restraint checks

17. One among the following situation will require the nurse to obtain a telephone order

a. As the nurse and primary care provider leave a patient's room, the primary care provider gives the nurse an order.
b. At 01:00AM, a patient's blood pressure drops from 120/80 to 90/50 and the incision dressing is saturated with blood.
c. At 08:00AM, the nurse and primary care provider make rounds and the primary care provider tells the nurse a diet order.
d. A nurse reads an order correctly as written by the primary care provider in the patient's medical record.

18. The nursing care planning is a

a. Formal process of notifying the diagnosis to doctor
b. Informal process of discussing the disease
c. Formal process that correctly identifies existing potential / risk needs of patient.
d. Informal process that identifies existing problems of family members

19. The components of nursing care plan includes;

a. Assessment and planning implementation problem sol…..
b. Assessment planning, implementation & evaluations.
c. Assessment planning outcome measurement & evaluation.
d. Assessment implementation evaluation & documentation

20. The care bundle used in measuring the risk of vascular access is;

a. Care bundle of VAP.
b. Care bundle of CLABSI
c. Care bundle of VAD
d. Care bundle of CAUTI

21. The CAUTI care bundle presents and measures risk of _____ related infections.

a. Upper respiratory treat infection.
b. Gastro intestinal infections.
c. Blood steam infections.
d. Urinary tract infections

22. The counseling and communication of patient / family members is recorded in ---

a. Nursing assessment format
b. Nursing communication format
c. Nursing monitoring format
d. Nursing care plan format.

23. T**he monitoring of surgical wound and its care is documented in ….. care bundle;**

a. Wound care checklist.
b. Surgery care checklist
c. Anesthesia care check list
d. Nurses care check list.
e. Doctors care check list.

24. The nursing care activities of patient on ventilator are recoded in ……

a. Ventilator flow sheet.
b. Ventilator associated pneumonia sheet
c. Ventilator care sheet
d. Ventilator monitoring sheet.

25. If an error is made while recording, the nurse should:

a. A: Erase it or scratch it out
b. B: leave a blank space in the note.
c. C: Draw a single line through the error and initial it
d. D: obtain a new nurse's note and rewrite the entries

26. **A nurse needs to begin discharge planning for a patient admitted with pneumonia and a congested cough. When is the best time the nurse should start discharge planning for this patient?**
    a. Upon admission
    b. Right before discharge
    c. After the congestion is treated
    d. When the primary care provider writes the order

27. A nurse developed the following discharge summary sheet. Which critical information should be added? TOPIC DISCHARGE SUMMARY- Medication, Diet, Activity level, Follow-up care
Wound care, Phone numbers, when to call the doctor, Time of discharge,
    a. Kardex form
    b. Admission nursing history
    c. Mode of transportation
    b. SOAP notes

28. The nursing care documentation includes all of the following except;
    a. Transfer in & Transfer out.
    b. Referral to higher center
    c. The change in condition of the patient
    d. Patient discharge
    e. Patients credentials

29. **A nurse is discussing the advantages of standardized documentation forms in the nursing**
information system. Which advantage should the nurse describe?
    a. Varied clinical databases
    b. Reduced errors of omission
    c. Increased hospital costs
    d. More time to read charts

30. The Nursing care plan is document based on
    a. Patient's priority needs.
    b. Patient preference
    c. Patient need expansion
    d. Patient relatives performs

OPTIONAL QUESTIONS – NICE TO KNOW (NOT INCLUDED IN THE STUDY)

1. Who introduce nursing notes?
    a. Ellen L Buell
    b. Florence nightingale
    c. Antonie phillps
    d. Joseph Lister

2. **Who invented nursing care plan ?**
    a. Aristotle
    b. Ellen L Buell
    c. Florence nightingale
    d. Joseph lister

3. **When did nursing documentation start?**
    a. Approximately 250 AD
    b. Approximately 300 AD
    c. Approximately 150 AD
    d. 200 AD

4. **When was the nursing process introduced?**
    a. 1958
    b. 1960
    c. 1972
    d. 1963

5. **Who first introduced the nursing process ?**
    a. Ida Jeanorlanda
    b. Ellen L Buell
    c. Florence nightingale
    d. Joseph lister

ANSWER KEY

Sl.No,	Quest No.	Answer option	Quest No.	Answer option
1	A		16	B,D,E.G
2	A		17	B
3	BCEFG		18	C
4	B		19	B
5	E		20	C
6	A		21	D
7	E		22	B
8	A		23	A
9	G		24	B
10	C		25	C
11	A,b,c,d		26	A
12	C		27	C
13	C		28	E
14	A		29	B
15	ACEF		30	A
		Optional question answers		
1	b	2	b	
3	b	4	a	
5	a			

TOOL-II OBSERVATIONAL COMPETENCY CHECKLIST ON NURSING CARE DOCUMENTATION

The investigators makes an active audit on the following nursing care documentation and allots score of one to all the performed documentation and not documented shall be scored zero.

SL.No.	Documentation Requirements	YES	NO	NA
1.	Admission is recorded.			
2.	Initial Assessment is recorded with nursing care plan.			
3	Admission, Treatment and hospitalization consent recorded (Multidisciplinary)			
4	Assessment of vitals parameters recorded. In ICU –flowsheet/Graphical chart.			
5	Assessment of Level of conscious, Pain, edema, Disability, DVT recorded.			
6	Nutritional Assessment is recorded.			
7	Fall & Braden risk is recorded.			
8	Drug Administration is recorded			
9	Oral /verbal doctor's order recorded.			
10	Critical alert results are reported and documented (recall)			
11	Shift or handover of patients recorded.			
12	Transfer in & Transfer out Referral to Higher Center, DAMA & LAMA documented.			
13	Preparation for Diagnosis & therapeutic measures initiated is documented.			
14	Laboratory & Radiological reports Documented			
15	Intake & output chart is updated & recorded.(including NG Feeds)			
16	VAD (Vascular Access Device Care bundle) is updated and documented.			
17	CAUTI (Catheter Associated Urinary Tract Infection) Care bundle is updated documented.			
18	Ongoing Assessment on patient care progress is documented shift wise.			
19	Communication/counselling of patient, family, and caretaker Documented.			
20	Discharge notes are recorded.			
Optional- not included in the study analysis				
1.	VAP (Ventilator Associated Pneumonia) is updated and documented.			
2.	CLABSI (Central Line Blood Steam Infection) is updated and documented.			
3	SSI (Surgical Site Infection) is updated and recorded			
4	Activation of patient safety code is recorded			
5	Incident/events related to patient care is documented.			

Tool-III Observation **checklist on Patient Safety Outcomes - Care Bundles.**

Patient Name:……Age……..Gender……

UHID Number…….Diagnosis……DOA

Vascular access device checklist					
Sl. No.	**Check List**	**Date / Time / Observation**	**Yes**	**No**	**NA**
1.	Hand Hygiene before insertion and manipulation of Vascular Access Device (**VAD**)				
2.	Select appropriate size as per requirement.				
3.	Use appropriate PPE and aseptic technique during insertion				
4.	Select upper extremity for inserting a Peripheral line in adults and the upper or lower extremity and the scalp in young infants.				
5.	Select subclavian vein, rather than the jugular or femoral veins in case of central line.				
6.	Skin antisepsis with single use application with 2% Chlorhexidine Gluconate in 70% Isoproply alcohol.				
7.	"No touch" technique after skin antisepsis				
8.	Use a sterile semi permeable, transparent dressing to allow observation of insertion site.				
9.	Replacement of IV administration sets as per protocol, use close IV fluid containers.				
10	Flush all VADs with preservation-free 0.95% sodium chloride before and after each drug administration.				
11	Remove and reinsert another site if VIP score ≥ 2				
12	Use of dedicated port if TPN on flow.				
13	Reposition the patient to comfortable position and assess for discomfort.				
14	Wash hands & document the procedure with date, size of catheter site of insertion.				
15	Current VIP Score.				
	Staff Sign.				

VIP SCORE

Parameter	**Score**	**Parameter**	**Score**
IV Site appears healthy	0	Pain, Erythema, induration	3
Slight pain or redness	1	Pain, Erythema, induration, Palpable Venous cord	4
Pain, Erythema & Swelling	2	Pain, Erythema, induration, palpable venous cord & Pyrexia	5

Catheter-associated Urinary Tract Infections (CAUTI) Bundle checklist
Maintenance care Bundle

Date			
Time			
	Yes	**No**	**NA**
Hand hygiene			

No touch technique while inserting			
Urine drainage bag below the level of patient			
Q6H catheter care			
Assess need for Foleys everyday			
No routine changes of catheter			
No clamping of catheter			
Signature			

Wound care checklist

Sl. No.	Check List	Date / Time / Observation	Yes	No	NA
1.	Check the orders for dressing.				
2.	Perform Hand Hygiene				
3.	Administer analgesics / Prophylactic antibiotics if ordered.				
4.	Collect the necessary articles.				
5.	Explain the procedure & assess the condition of the patient				
6.	Provide privacy & give comfortable position				
7.	Done appropriate PPE				
8.	Remove and discard the previous dressing if any into appropriate bin				
9.	Create sterile field around the wound				
10	Ascertain the type of wound (Clean/Contaminated)				
11	Perform Hand Hygiene.				
12	Clean the wound from centre to periphery in each stroke with appropriate solution.				
13	Secure the wound with adequate sterile dressing and make the patient comfortable.				
	After Care of patient and articles				
14	Assist the patient to dress up & change the linen if soiled				
15	Take all the articles to the utility room, clean and send if for sterilization				
16	Wash hands and document the procedure with date, time, of dressing and among of drainage etc.				
17	Send for culture if indicated.				
18.	Assess the comfort of the patient				
	Staff Sign.				

SUCTIONING CHECKLIST

Sl. No.	Check List	Date / Time / Observation	Yes	No	NA

1.	Review Doctor's Order/as required.			
2	Explain the procedure & assess the condition of the patient			
3	Collect the necessary articles at the bed side of the patient			
4	Perform Hand Hygiene			
5	Auscultate lung for breath sound & assess the need for O_2 supplement.			
6	Reposition the patient to comfortable position and assess for breath sounds			
7	Done appropriate PPE			
8	Fill container with normal saline			
9	Open the new suction catheter with appropriate size & attach sterile catheter to suction tubing.			
10	Lubricate catheter with normal saline			
11	Insert Suction Catheter with dominant hand			
12	Apply intermittent suction and withdraw catheter in rotatory motion			
13	Repeat if needed, (Suction not more than 10 seconds in one stroke)			
14	Rinse the suction catheter in normal saline container and discard			
15	Encourage patient to take deep breath or attach O_2 as indicated			
16	Wash hands & document the procedure, Respiratory status, Type of secretion Discomfort if any			
	Staff Sign.			

Central Line-Associated Bloodstream Infection (CLABSI) bundle checklist

Date			
Time			
	Yes	***No***	***NA***
Hand hygiene			
Assessing the need for line everday & Remove if not required			
Use of prepared trolley with all necessary items			
Full surgical barrier precautions while inserting the catheter			
10% Providone iodine as skin Preparation			
Sterile transparent dressing used and changed whenever soiled			
No use of ointments in dressing			
Look for signs of local site infection everyday			
Cleaning access port with alcohol before line access			
No routine change of catheter			

No change of line over a guide wire			
Remove and reinsert another site if suspicion of infection			
Use of dedicated port if TPN on flow			
Signature of staff			

Ventilator-Associated Pneumonia Bundle			
Date			
Time			
	Yes	**No**	**NA**
Hand hygiene			
Head end elevation			
Was sedation vacation given today?			
Can patient be weaned off ventilator?			
Was spontaneous breathing trial done today?			
Glycemic control			
Ulcer prophylaxis			
Thromboprophylaxis			
Frequent emptying of condensates of airway tubing			
Physiotherapy			
Tuming patients			
Oral care Q6th hourly			
Feeding			
Sign			

PRESSURE INJURY MONITORING AND REPOSITIONING FORMAT

Pressure injury identified : On Admission / During IP Date of identification :

Date & Time / 2 Hrly	Grade	REPOSITIONING SCHEDULE						Skin Inspection Comments					Nursing Staff Signature		
		Left	Right	Back	Prone	Mobilize	Up to sit	1	2	3	4	5	1st	2nd	Night

ANNEXURE V

Criteria rating scale

Criteria rating scale for validating the content of the knowledge Questionnaire, OBSERVATION checklist and mobile app on assessing the **Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities**

Respected Sir / Madam,

Kindly go through the content and rate the content in the appropriate columns given and you 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	Qualification				
4	Working area				
5	Years of experience				
5	Previous exposure to code blue				
Section-B Structured Knowledge and Competency Skill among Staff Nurses Regarding documentation Skill					
1					
2					
3					
4					
4					
5					
6					
7					
8					
9					

10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
Observational Checklist on Documentation Competency					
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

11					
12					
13					
14					
15					
16					
17					
18					
20					

Tool-III Observation **checklist on Patient Safety Outcomes - Care Bundles.**

1	V**AD** Care Bundle				
2	**SSI** Care Bundle				
3	**VAP** Care Bundle				
4	**CAUTI** Care Bundle				
5	**CLABSI** Care Bundle				
6	**Pressure Ulcer** Care Bundle				

Signature of the Validator

ANNEXURE VI

LETTER REQUESTING OPINION & SUGGESTION OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL

FROM,

The 3rd year BSc Nursing Students,

Sri Devaraj URS College of Nursing

Tamaka, Kolar

To,

Respected Sir/ Madam,

Subject: Requesting for opinions and suggestions of experts for establishing content validity of research tool and documentation app-reg.

With reference to the above, we the 3rd year B.Sc. nursing students of Sri Devaraj URS College of Nursing, Tamaka, Kolar, have selected the below mentioned topic for research project to be submitted to Sri Devaraj URS College of Nursing, Tamaka, Kolar as a fulfillment of Bachelor of Science in Nursing degree.

Title of the Topic: "A study assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"

With regard to the above matter, we kindly request you to validate the content of structured knowledge questionnaire and documentation app for its appropriateness and relevancy. We are enclosing our tool for your reference. We remain thankful for your great help.

Thanking you.

Yours faithfully

1. Aleena Babu
2. Anjana K S
3. Arya Jayan
4. Devika Anil
5. Lisha Thomas
6. Nikitha Peter
7. Sandra Lukose
8. Sruthi S Nair
9. Yuvaraj T N
10 Munikrishna. H

ANNEXURE VII

CONTENT VALIDITY CERTIFICATE

I hereby certify that I have validated the tool and content of 3rd year B.Sc. Nursing students of Sri Devaraj URS College of Nursing, Tamaka, Kolar, who is undertaking research project as a partial fulfillment of Bachelor of Science in Nursing Degree.

"A study assess the Impact of Competency-based Teaching Programme on Knowledge and skill regarding Nursing Care Documentation for Safe Patient Outcomes among Nursing Staff working in Acute Health Care Facilities of R. L. Jalappa Medical Teaching Hospital Kolar with a view to develop Mobile App on Nursing Care Documentation"

Signature of the valid

Your suggestions please:

_____

_____

_____

_____

_____

_____

_____

ANNEXURE-VIII

LIST OF EXPERTS WHO VALIDATED THE TOOL

Sl. No.	Name of expert, Designation and Name of Institute
1.	Dr. G. Vijayalakshmi, Principal, SDUCON, Tamaka, Kolar
2.	Dr. Lavanya Subhashini, Vice Principal, SDUCON, Tamaka, Kolar
3.	Mrs. Jairakini Aruna, Professor & Hod, Dept, of Psychiatry, SDUCON
4.	Mrs. Punitha M, Professor & Hod, Dept, of OBG, SDUCON
5.	Mrs. M Jebamani Hepzibai , DNS, RLJH &RC

ANNEXURE-IX

PHOTO GALLERY

Competency Based Training On Nursing Care Documentation

Research Investigators

study to asses the impact of competency based teaching programme on knowledge and skill regarding nursing care documentation for safe patient outcomes

ORIGINALITY REPORT

9%	7%	6%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Nicholls State University Student Paper	1%
2	ejhc.journals.ekb.eg Internet Source	<1%
3	Blake-Mowatt, C., J.L.M. Lindo, and J. Bennett. "Evaluation of registered nurses' knowledge and practice of documentation at a Jamaican hospital : Evaluation of nurses' documentation in Jamaica", International Nursing Review, 2013. Publication	<1%
4	www.researchgate.net Internet Source	<1%
5	blobby.wsimg.com Internet Source	<1%
6	journals.plos.org Internet Source	<1%
	moam.info	