“A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE AND COMPETENCY SKILL AMONG STAFF NURSES ON CODE BLUE AND CPR IN SELECTED HOSPITAL KOLAR, WITH A VIEW TO DEVELOP INFORMATION BOOKLET.”

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We hereby declare that the **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.

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ABSTRACT

Background

Health is a dynamic state. It is continually changing from minute to minute, day to day and year to year as we grow. Health is an important factor for everyone because when we are healthy, we can enjoy life.[1] The cardio vascular disease is considered to be the most common cause of death for both males and females worldwide. Myocardial Infarction is the most common lethal manifestation of coronary artery disease.[3] Basic Life Support is a type of medical care used on someone with life threatening injury or condition until full medical care can be given. Basic Life Support is provided in even respiratory failure. So, it is resuscitation in event of cardiac and respiratory arrest. An emergency responder or someone trained in BLS can provide this critical care.[5]

OBJECTIVES:

1. To assess the knowledge on code Blue and CPR among staff nurses by using structured knowledge questionnaire.
2. To assess the competency skill on code Blue and CPR among the staff nurses by using code Blue and CPR by using observation checklist.
3. To determine the association between knowledge and competency skill of staff nurses on code and CPR with selected demographic variables.
4. To develop information booklet on code Blue and CPR protocol.

METHODOLOGY:

Descriptive survey research design was used for present study, 120 staff Nurses in RLJH at Kolar were selected by using Simple random technique. Structured Knowledge questionnaire

and Observation checklist was used to assess the Knowledge and Competency Skill among Staff Nurses regarding Code Blue and CPR.

RESULTS:

Based on the objectives of study the overall knowledge level of the subject majority 103 (86%), of the sample belonged to moderate knowledge of level, 10 (8%) had inadequate knowledge and remaining 7(6%) had adequate level of knowledge.

With regard to the second objective the majority (70%) of the competency skill was found to be and (30%) of the subject had inadequate competency skill.

Regarding the association of knowledge and clinical competency it was found that the association was evident with clinical posting which is also supported by other studies.

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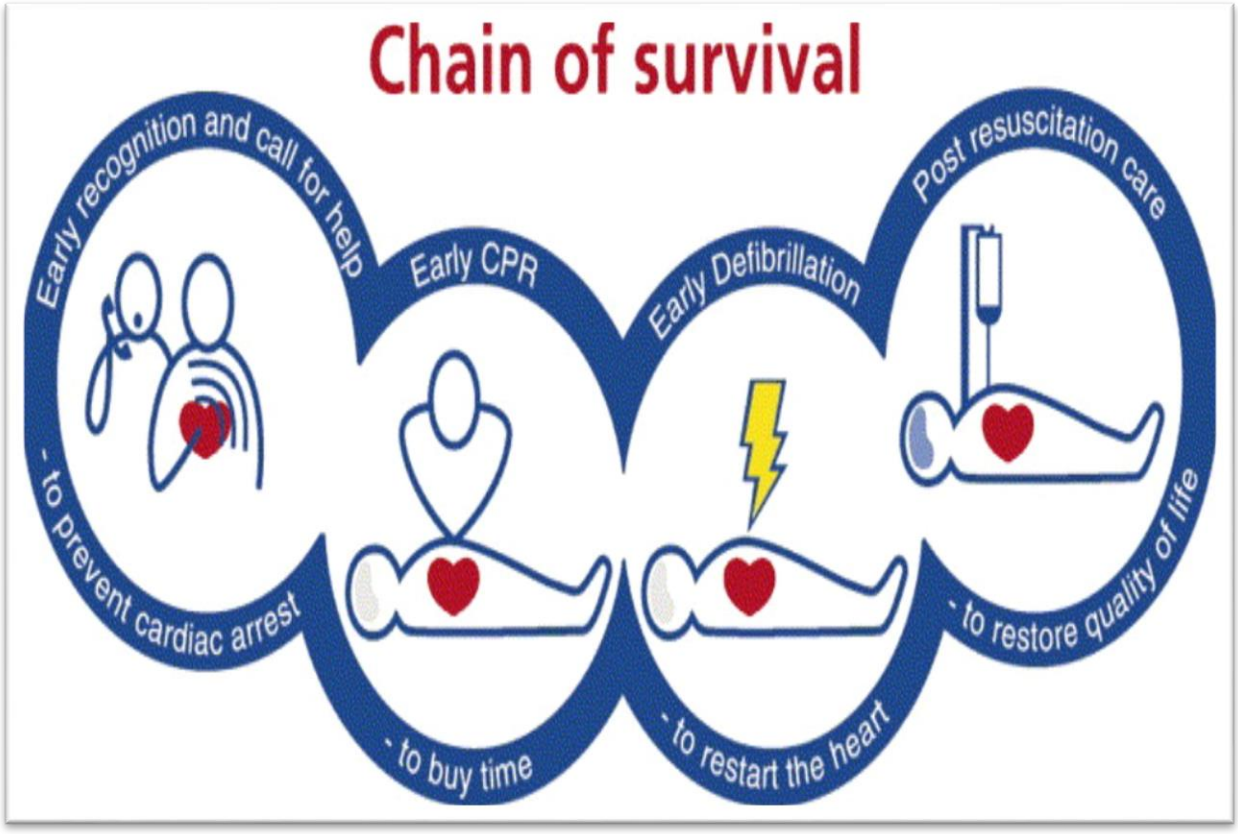
CHAPTERT-I

INTRODUCTION



Take some time to learn first aid and CPR. It saves lives, and it works

(Bobby Sherman)

Health is a dynamic state. It is continually changing from minute to minute, day to day and year to year as we grow. Health is an important factor for everyone because when we are healthy, we can enjoy life. In the past, health was considered to be the exact opposite of illness. The absence of illness or disease was a sign of good health. Today, health is explained not only in physical terms, but also in social, mental and spiritual terms.[1]

The most modern definition of health was created during a preamble in the constitution of the World Health Organization as adopted by the International Health Conference, New York in 1996. According to WHO," Health is a state of complete physical, mental and social well – being and not merely absence of disease or infirmity.[2]

The Cardio vascular disease is considered to be the most common cause of death for both males and females worldwide. Myocardial Infarction is the most common lethal manifestation of coronary artery disease.[3]

Heart disease is the world's largest killer, claiming 17.5 million lives every year. About every 29 seconds, an Indian dies of heart problem. As many as 20,000 new heart patients develop every day in India 9 crore Indian suffer from heart disease and 30% more are at high risk. Sudden cardiac arrest is a major public health problem. Basic Life Support (BLS) is the provision of treatment designed to maintain adequate circulation and ventilation to the patient in cardiac arrest, without the use of drugs or specialist equipment. Basic Life Support (BLS) includes recognition of signs of sudden cardiac arrest (SCA), heart attack, stroke, and foreign body airway obstruction (FBAO); and cardiopulmonary resuscitation (CPR).[4]

Basic Life Support is a type of medical care used on someone with a life – threatening injury or condition until full medical care can be given. Basic Life Support is provided in even respiratory failure. So, it is resuscitation in event of cardiac and respiratory arrest. An emergency responder or someone trained in BLS can be provided this critical care. Baic Life Support consist of Cardiopulmonary resuscitation and, when available, defibrillation using automated external defibrillators (AED). The keys to survival from sudden cardiac arrest (SCA) are early recognition and treatment, specifically, immediate initiation of excellent CPR and early defibrillation.[5]

Basic Life Support training is gaining more importance in nursing education. Being trained to perform Basic Life Support can make the difference between life and death for a victim. The Basic Life Support is an essential skill taught to the nursing students. Nurses require skills of assessment for cardiac arrest and need to initiate Basic Life Support, involving maintaining respiration and circulation for the causality until emergency services, or advanced life support services, arrive. All nurses with a responsibility for patients must be offered regular training and updates in resuscitation. As registered nurses, we all have a responsibility to ensure we remain competent to perform resuscitation.[6]

Cardio pulmonary resuscitation is a series of life-saving actions that improve the chances of survival following cardiac arrest. Successful resuscitation following arrest requires an integrated set of co-ordinate actions represented by the links in the chain of survival. In 1962, the American Heart Association (AHA) had established "A Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care" for the first time and since then the efforts to medically improve CPR has been continued up to now, and it has been applied continually to CPR based on the research results known from many clinical studies. The

newest development in the CPR guidelines is a change in the BLS sequence of steps from "A-B-C" (airway, breathing, compressions) to "C-A-B" (compression, airway, breathing). High quality CPR is the corner stone of a system of care that can optimize outcomes beyond return of spontaneous circulation. The return to a prior quality and functional state of health is the ultimate goal of a resuscitation system of care.[7]

NEED FOR THE STUDY

Between 2008 and 2030, the global population is projected to grow by 20%, from 6.7 billion to 8.1 billion people. The crude death rate is expected to remain more or less stable at around 8.4 deaths per thousand. In 2008, five out of top ten causes for mortality worldwide, other than injuries, were non-communicable diseases; this will go up to seven out of ten by the year 2030. In 2010, of all projected worldwide deaths, 23 million are expected to be because of cardio vascular diseases (CVD). In fact, CVDs would be the single largest cause of death in the world accounting for more than a third of all deaths.[8]

The United States government publishes very detailed figures on the incidence and prevalence of heart disease. There were 13.2 million Americans with heart disease in 2003 and there were 1.2 million Americans with a diagnosis of new or recurrent coronary heart disease in 2003. The American Heart Association distils this information into an annual summary called heart disease and Stroke Statistics. 34% of Americans have cardiovascular disease - defined as coronary heart disease (16 million), stroke (5.8 million), high blood pressure (73 million), heart failure (5.3 million). The annual incidence of a new or recurrent coronary attack is 1.2 million (770,000 will have a new coronary attack and 430,000 will have a recurrent attack). The lifetime risk of developing coronary heart disease assume you make it to age 40 is 49% for men and 32% for women. Every minute in the United States someone dies from coronary heart disease. The average number of years of life lost due to sudden cardiac arrest is 15 years 50% of men and 64% of women who die suddenly from coronary heart disease have no previous symptoms of the disease.[9]

Over one million heart attacks happen every year and more than 20% of people die before even reaching a hospital. Latest data shows that cardiac arrest is becoming the

number one cause of death. In fact, studies show that 80% of all cardiac arrests happen at home which will most likely be a family member or friend. Survival from out-of-hospital cardiac arrest is dependent upon the rapid institution of bystander cardiopulmonary resuscitation (CPR), and the early arrival of advanced rescuers and equipment. Bystander CPR (comprising airway opening, rescue breathing, and external chest compression; combined with rapid call for ambulance response) improves survival rates from cardiac arrest 2-3-fold. The importance of CPR and basic emergency care is recognized in New Zealand by the inclusion of these subjects in the school curriculum (albeit as an optional subject) and via workplace first aid training by the Department of Occupational Health and Safety.[10]

Basic Life Support competency is considered a fundamental skill for health care workers. In the wider community, it is an expectation that knowledge and competence in Basic Life Support is at a high standard in nursing education. Participation in both successful and unsuccessful cardiopulmonary resuscitation and Basic Life Support is one of the most stressful situations that the nursing students have to deal with after their registration. A thorough knowledge and competency (skill) help them to perform Basic Life Support to the patient's whenever is needed.[11]

A study was conducted to assess the levels of awareness to BLS and its practical knowledge among students, doctors and nurses of medical, dental, homeopathy and nursing colleges in a city in Tamil Nadu, India. The study revealed that everyone had very poor knowledge on BLS.[12]

A study was conducted to assess the knowledge and performance on BLS skills of high school students before and after CPR training. Before the training 29.5% of the students performed CPR as compared to 99.2% post training. At the four-month follow-up 99% of students still performed correct chest compressions. After the training, 99.2% stated that they felt confident about performing CPR as compared to 26.9% before the training.[13]

Hence, the investigators felt that more patients are collapsing due to inadequate knowledge and competency skills had a desire to carry out a study on assessing the knowledge and competency skill of CPR & Code Blue among health care providers to enhanced good adequate knowledge and rescue the patient with in given time.

CHAPTER – II

OBJECTIVES

STATEMENT OF PROBLEM

"A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE AND COMPETENCY SKILL AMONG STAFF NURSES REGARDING CODE BLUE AND CPR IN SELECTED HOSPITAL KOLAR, WITH A VIEW TO DEVELOP INFORMATION BOOKLET"

OBJECTIVE OF THE STUDY

1.To assess the knowledge on code Blue and CPR among staff nurses by using structured knowledge questionnaire.

2. To assess the competency skill on code Blue and CPR among the staff nurses by using code Blue and CPR by using observation checklist.

3. To determine association between Knowledge score with selected socio- demographic variables.

4. To develop information booklet on code Blue and CPR protocol.

ASSUMPTIONS

1. The staff nurses will have adequate knowledge & competency skill on Code blue & CPR protocol.
2. Increase Knowledge & Competency skill of CPR & Code Blue among health care providers will rescue the patient with in given time.

OPERATIONAL DEFINITIONS

Knowledge:

Knowledge of staff nurse in this study refers to the level of understanding of staff nurses regarding Code Blue and CPR as measured by structured knowledge questionnaire.

Competency Skill:

In this study it establishes the way of steps code blue and CPR which will be measured by observation skill.

Staff Nurses: In this study Staff Nurse refers to the registered nurses with the qualification of GNM, B.Sc./, P.B.B, Sc Nursing who all working in R.L J Hospital & Research Centre

Code Blue:

In this study Code Blue refers to an emergency situation announced in a hospital or Institution in which a patient is in cardio pulmonary arrest, referring a team of providers (Code team) to rush to the specific location to begin immediate resuscitative effect.

CPR:

In this study CPR refers to a procedure design to restore normal breathing after c cardiac arrest that includes the clearance of air passages to the lung, mouth to mouth method of artificial respiration and heart massage by the exertion of pressure in the chest

Information Booklet:

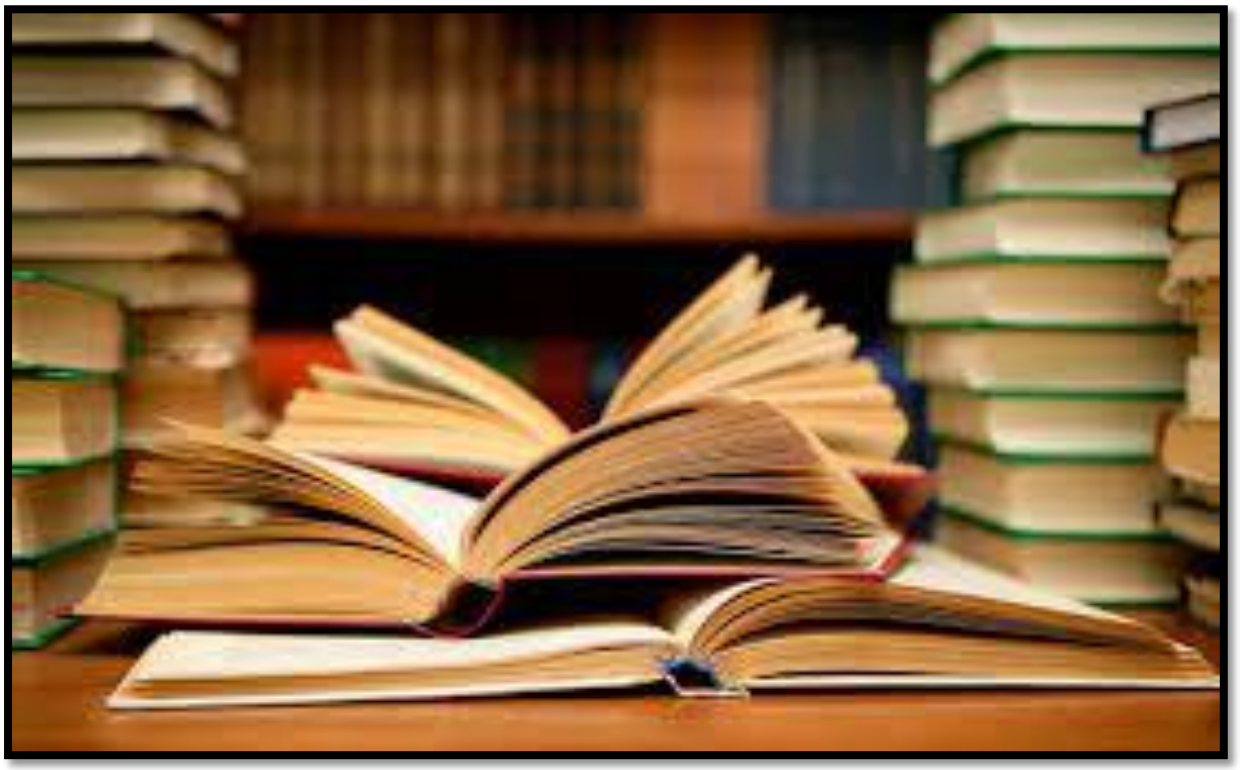
An information Booklet which describes on the Code Blue & CPR.

SUMMARY

This chapter explained on Statement of the problem, objectives and Operational definition, which helped the researcher to gain insight into the depth of the research.

CHAPTER- III

REVIEW OF LITERATURE



Review of Literature refers to the activities involved in identifying or searching information on a topic and developing an understanding of the state of knowledge of the topic.[14]

The literature for the present study will be reviewed from the text books, journals, electronic resources articles and organized under the following headings**.**

1. Literature related Knowledge on CPR

2. Literature related on Competency skills on Code blue

1. Literature related Knowledge on CPR

A descriptive study was conducted to assess the knowledge regarding CPR among first year GNM student of SND college of nursing, Yeola, Maharashtra. A total number of 50 nursing students were selected. The data was collected by using structured knowledge questionnaire and information booklet tool to find out the knowledge. the study revealed that no student had poor knowledge regarding CPR, there is 38% of adequate knowledge regarding CPR and the majority of student had good knowledge about CPR. The study concluded that students required more knowledge and skill regarding CPR to practice effectively. Even through majority had good knowledge but still perfection is required to practice whenever needed in emergency.[15]

A comparative study was conducted to determine and compare the prevalence of coronary artery disease (CAD) and coronary risk factors in both rural and urban population of Moradabad, India. A cross-sectional survey was conducted on two randomly selected villages and selected streets in the city of Moradabad district. The sample size was 3575 between the age group of 25-64 years. The result showed that 9.0% in the urban and 3.3% in the rural population had CAD and the prevalence among men were higher than women. The study was concluded that CAD and Coronary risk factor were to or three times higher among the urban

compared with rural subjects. Which may be due to greater sudatory behaviour and alcohol intake among urbans.[16]

A survey was conducted to find out the prevalence and predictors of non-fatal myocardial infarction in Jordan in May 2002, which measured the prevalence of self-reported myocardial infarction and the association with modifiable risk factors among Jordanians aged 40+ years. Of 3083 participants, 183(5.9%) had ever been told by a doctor that they had had myocardial infarction. The prevalence varied by age and sex. Among males and females, self-reported hypertension and hypercholesterolemia were significantly associated with myocardial infarction, and diabetes was a significant risk factor for women. There was a significant relationship between current smoking and myocardial infarction. Exercise and body mass index were not statistically significant predictors of myocardial infarction in both males and females. The study was concluded that continuously recommended monitoring the prevalence of non-fatal MI, the mortality and morbidity trends of MI among the Jordanian population.[17]

A Cross sectional study was conducted on knowledge, attitude and practice on CPR among medical and nursing interns of Tertiary Care Institute in Vijayawada (AR). A total number of 100 nursing and medical interns were selected. The data was collected by using pre tested structured questionnaire tool to find out the knowledge, attitude and practice. The study revealed that 36% of MBBS interns had poor knowledge score, and 46% of nursing interns had poor knowledge score,42% of MBBS interns had poor practice score,30% MBBS and 64% nursing interns have performed CPR. The study concluded that knowledge and practice score of BLS/CPR which is poor in both medical and nursing students. Even though they have positive and good attitude score. BLS Training should be the part of curriculum to score this issue.[18]

A cross sectional study was conducted on knowledge of non-medical individuals about CPR in case of Cardiac arrest among the aged group above 18 years of age who were not health care providers residents of Jeddah, Saudi Arabia. A total number of 600 non-medical individuals were selected. The data was collected by using questionnaire tool to find the knowledge of non-medical individuals. The study revealed that only 196(32.7%) of the participants reported knowing how to give chest compression 28.7% stated that they had previous received training in CPR. Regarding manifestation of cardiac arrest, 40. 7%suggested loss of consciousness, 36.8% suggested cessation of breathing, and 24.7% suggested cessation of circulation, only 11.7% among respondents were found to be able to perform mouth to mouth ventilation, and 29.5% were able to performed be while 55.5% knew the location for performing chest compressions 44. 7% know the correct depth and only 18.5% knew the correct compression- ventilation rate. Bystander CPR had been performed by only 10.7%. The study was concluded that they found lack of knowledge regarding CPR. Advising for a coordinated national effort to improve the public awareness about CPR performance, which includes mass education, specialized training, and setting legislation.[19]

A cross sectional descriptive study was conducted to examine the knowledge, attitude and practice on CPR among hospital nurses who most in community setting in Lebanon. A total number of 692 working nurses were selected. the data was collected by using structured questionnaire tool to find the knowledge attitude and practice. The study revealed that most of nurses received CPR training but 19.8% did not renew their certification in the past two years, because of limited training centres and lack of time. Only 1/3rd of sample knew the first step to be taken in arrest, yet 61% knew compression to breath ratio. Nurse who in work in community setting hard significantly less frequent training in resuscitation that hospital

nurses the study concluded that Lebanon needs a national policy on CPR, regular training of all nurses and good Samaritan law.[20]

A Cross sectional study was done to analyse the knowledge and attitude on cardiopulmonary arrest among staff nurses of Lleida university Spain. A total number of 30 registries nurses were selected. The data was collected by using questionaries tool to find out the knowledge and attitude. The study revealed that knowledge and attitude of nurses in event of cardiopulmonary arrest, the questionaries comprised three sections'; socio demographic information theorical and practical understanding attitude of ethical issue. Cronbach's alpha for the internal consistency of attitude questionnaire was 0.62% the knowledge that nurses self-reported with regard to cardiopulmonary arrest directly affected their attitudes. The study concluded that questionnaire is first one which successfully linked knowledge of CPR to attitudes towards ethical issues health policies should ensure that CPR training is mandatory for nurses and all health care workers and this training should include the ethical aspects.[21]

2. Literature related on Competency skills on Code blue

A descriptive study was conducted to assess the knowledge on Code Blue protocol among the nurses of general ward and CCU at Mahatma Gandhi Medical College and Research Institute, Pondicherry. A total number of 60 nurses (30 general ward nurses and30 CCU nurses) were selected by purposive sampling technique. The data was collected by using semi structured questionnaire to find out the knowledge. The study revealed that the knowledge mean score of CCU nurses is 19.30& and SD is 3.36.and the knowledge mean score of general ward nurses is 15.23 and SD is 2.19, the findings show that statistically highly significant and the study concluded that CCU nurses where having more knowledge than general ward nurses

about Code Blue, Code Blue call is the life-threatening Scenario where it should be known to every nurse who are working in both CCU and general ward.[22]

An observational study was conducted on knowledge and attitude on BLS among medical / paramedical staff of Kist medical college hospital Nepal. A total number of 121 staff were selected by using simple random method, the data was collected by using questionnaire tool. To find out the knowledge and attitude the study revealed that 9(7.4%) of the 121-responder answered > 11,53(43%) answered 7-10, and 58(48%) answered >7 of 15 questionnaire correctly. the clinical faculty members, house officers had a mean score of 7.4 +_ 3.15, 7.37 +_ 2.02 and 6.63 +_2.16 respectively while dental / basic science faculty members attained a least mean score of 4.52 +_ 2.13. those who had received CPR training within 5 years obtained a highest mean score of 8.62+_2.49. and those who had training more than 5 years back / no training obtained a mean score of 5.54+_ 2.38 and 6.1+_2.29 respectively. The study concluded the average health personnel in hospital lack adequate knowledge in CPR/BLS. Training and experience can enhance knowledge of CPR thus standard CPR/BLS training and assessment are recommended. [23]

A cross-sectional study was conducted to study the awareness of Basic Life Support among students of nursing colleges in Tamil Nadu by assessing the responses to 20 selected basic questions regarding Basic Life Support. Out of 1,054 responders no one among them had complete knowledge on BLS. Only 2 out of (0.19%) had secured 80 - 89% marks, 10 out of (0.95%) had secured 70 - 79% marks, 40 of (4.08%) had secured 60 - 69% marks and 105 (9.96%) had secured 50 - 59% marks. A majority of them that is 894 (84.82%) had secured less than 50% marks. The study concluded that awareness of BLS among students in nursing colleges is very poor and teaching is required.[24]

CHAPTER – IV

RESEARCH METHODOLOGY

This chapter deals with the methodology adopted for the proposed study and the different steps under taken. It includes research approach, research design, setting, sample and sampling techniques, sampling criteria development and description of the tool, procedure of the data collection and data analysis.

Methodology of the research indicates the general pattern of organising the procedure for empirical study together with the method of obtaining valid and reliable data for problem under investigation.[25]

RESEARCH APPROACH

Research approach deals with the researcher on what data to collect and how to analyse it. It also suggests possible conclusion to be drawn from the data in view of the nature of the problem selected for the study.[26]

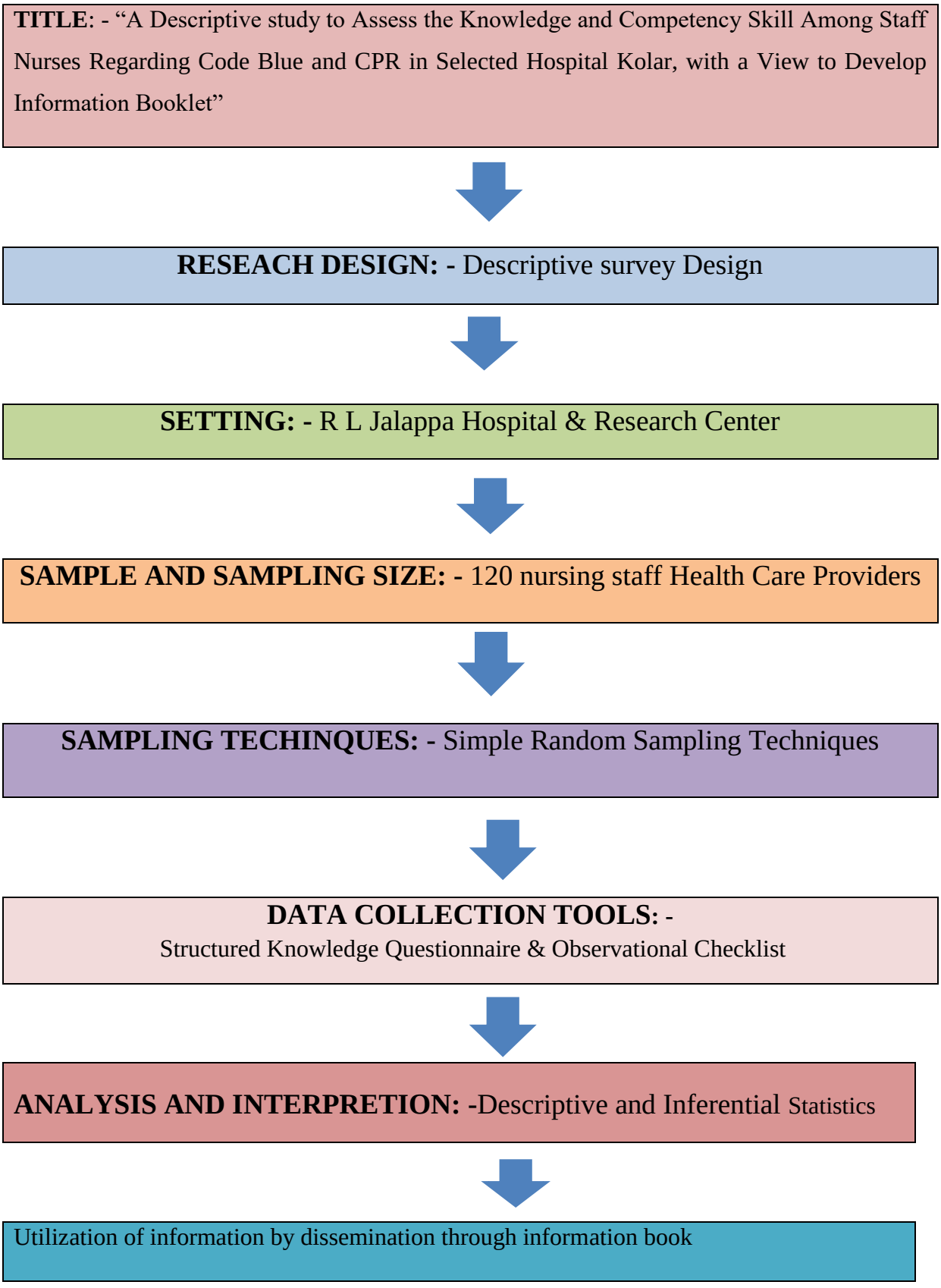
The research approach used for this study was Quantitative Research Approach.

RESEARCH DESIGN

Research design is an investigators overall plan for obtaining answers for the research questions.[27]

The research design adopted for this study was Descriptive Survey Research Design.

Fig- 1 SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



SETTING OF THE STUDY

Setting refers to the area where the study is conducted**.**[28]

The study was conducted in R.L. Jalappa Hospital & Research Centre Tamaka, Kolar which is 1200 bedded multispeciality tertiary referral medical teaching hospital the criteria for selecting this setting were geographical proximity, feasibility of conducting the study, availability of the samples and familiarity of the investigators of the settings.

POPULATION

The population for this study refers to the group which represents the entire group or all the elements like individuals that meet inclusion criteria in the study.[29]

The population chosen for the study was all the Nursing Staff working in Health care settings.

SAMPLE

Sample refers to subset of the population that is selected to participation in a particular study.

The sample chosen for the study is all the Nursing Staff working in R. L. Jalappa Hospital & research centre.

SAMPLE SIZE

The sample for present study consisted of 120 working Staff Nurses, in the Health Care Settings, R.L Jalappa Hospital & Research Centre.

SAMPLING TECHNIQUE

Sampling technique defines the process of selecting a group of people or other elements with which to conduct a study.[30]

Simple Random technique was adopted to collect the data for the present study.

SAMPLING CRITERIA

Inclusion criteria:

a. Registered nurses who are working in selected hospital.

b. Willing to participate in this study.

Exclusion criteria:

a. The nurses who are not available at time of data collection.

SELECTION AND DEVELOPMENT OF TOOL

An instrument is a device or technique that a researcher used to collect data based on the research problem and the objectives of the study.[31]

The following steps were undertaken for selection and development of the tool.

Selection of the tool

The tool developed and adopted for the study consisted of

- Structured Knowledge Questionnaire to assess the knowledge
- Observation checklist to assess the Competency Skill among staff nurses regarding code blue and CPR.

DEVELOPMENT OF THE TOOL

The adopted tool consists of the following sections.

Section- A

It consists of socio- demographic variables such as age, gender, qualification, year of experience, marital status, clinical areas posting, previous exposure of code blue.

Section- B

It consists of structured knowledge questionnaire which contains questions pertaining to the knowledge and competency skill among Staff Nurses regarding Code Blue and CPR

Knowledge score

Scores was grouped as shown below, for categorization.

	Aspect	Frequency	Percentage
Knowledge level	**Inadequate Knowledge**	**0 – 17 scores**	**<50%**
	Moderate Knowledge	**18 -25 scores**	**51 -75%**
	Adequate Knowledge	**26-30 scores**	**>76%**

Section- C

It consists of observational checklist on procedural steps of code blue and CPR.

It included 28 items with 3 alternatives “Yes”, “No” & “Not applicable”

The right step of the procedure was scored with 1-yes and wrong step as 0- No the not applicable was indicated as NA where no score was allotted.

METHOD OF DATA COLLECTION PROCEDURE

- The ethical clearance was obtained.
- A written formal permission from the medical superintendent & the chief nursing officer was obtained from R. L. Jalappa Hospital.
- A total of 120 study subjects who met the selection criteria where selected by using Simple Random sampling Technique.
- The investigators introduce themselves, explained the purpose of study to each subject and obtained consent after assuring confidentiality data was collected from 20 subjects per day.
- Tool -Structured Knowledge Questionnaire was distributed to each subject and informed to read and follow the instructions carefully. Subjects were requested to respond to questionnaire in the tool. Time taken to answer the questions in the tool by the subjects was around 30 minutes.
- The competency skill was assessed by the investigators by making a simulation of the procedure Code Blue and CPR and scoring was allotted as per the developed Observational Checklist. Each skill was allotted with 4-minutes and Five OSCE stations were created

PLAN FOR DATA ANALYSIS

Data analysis is the schematic organization of research data and the testing of research hypothesis using the data.[32]

The following steps are planned:

- Data was organized on master sheet
- Socio- demographic data were analyse in the terms of frequency and percentage.
- Calculation of mean, standard deviation and mean percentage of knowledge scores were done.
- To find the association between selected demographic variables with knowledge score chi square test was adopted.

SUMMARY

This chapter dealt with the methodology, research approach, research design, setting, population, sample and sampling technique, development and description of the tool and plan for analysis.

CHAPTER- VI

RESULTS

This chapter deals with the data analysis and interpretation of findings.

Data analysis is defined as the systematic organization and synthesis of research data and the testing of research using those data.[33]

SECTION- I

This section deals with data pertaining to Socio- demographic characteristics of sample.

SECTION- II

- The section deals with data pertaining to the first objective to assess the knowledge on CPR and Code Blue among Staff Nurses by using Structured Knowledge Questionnaire.
- This section even deals with data pertaining to the second objective to assess the Competency Skill on CPR and Code Blue among Staff Nurses by using observation checklist.

SECTION- III

This section deals with the data pertaining to the third objective to determine the association between knowledge scores with selected socio demographic variables.

SECTION- I

This section deals with the pertaining to the distribution of the sample according to socio-Demographic variables**.**

Table 1:1 Frequency and percentage of distribution of subject with regard to socio – demographic variables (Age in year, Gender, Qualification)

n = 120

SL.NO	Demographic characteristics	Frequency	Percentage (%)
1	**Age in year**		
a)	19-30	**91**	**76**
b)	31- 40	29	24
c)	41- 50	0	-
d)	51- 60	0	-
2	**Gender**		
a)	Male	25	21
b)	Female	**95**	**79**
3.	**Qualification**		
a)	ANM	2	1.7
b)	GNM	46	38.3
c)	B.SC Nursing	**70**	**58.3**
d)	M.SC Nursing	2	1.7

Table1.1 depicts that majority of the subjects (76%) belong to the age group of 19-30 years. The number of female subjects (79%) was higher as compare to male (21%). (58.3%) of subjects were qualified with the B.Sc. Nursing.

Table 1:2 Frequency and percentage of distribution of socio – demographic variables (Year of experience, Marital Status, Clinical areas posting, Previous Exposure of Code Blue)

n = 120

SL.NO	Demographic characteristics	Frequency	Percentage
4.	**Year of experience**		

a)	<5	26	22
b)	>5	**94**	**78**
5.	**Marital status**		
a)	Single	**64**	**53.3**
b)	Married	54	45.0
c)	Widow	2	1.7
d)	Divorced/ Separated	-	-
6.	**Clinical areas posting**		
a)	Intensive care unit	13	11
b)	Emergency Department	21	18
c)	Medical & surgical ward	**76**	**63**
d)	Post-operative wads/OPD/OT	10	08
7.	**Previous Exposure of Code Blue**		
a)	YES	**70**	**58**
b)	No	50	42

Table 1.2 depicts that majority of the subjects (78%) were more than 5years experience (53.3%) of the subjects were unmarried. and (45%) were married. (63%) were having medical and surgical ward posting. (58%) of the subjects were previous exposure of code blue whereas (42%) of the subjects were not exposed to code blue.

Section-II deals with data pertaining to the first objectives to the study.

Table 2: - Distribution of sample according to overall knowledge on the Code blue and CPR distribution of sample

n =120

Aspect	Grade	Frequency	Percentage
Knowledge Level	Inadequate (<50%) (0 – 17 score)	10	8%
	Moderate (50 -75%) (18 -25 score)	**103**	**86%**
	Adequate (>76) (26 -30 score)	7	6%

Fig - 2

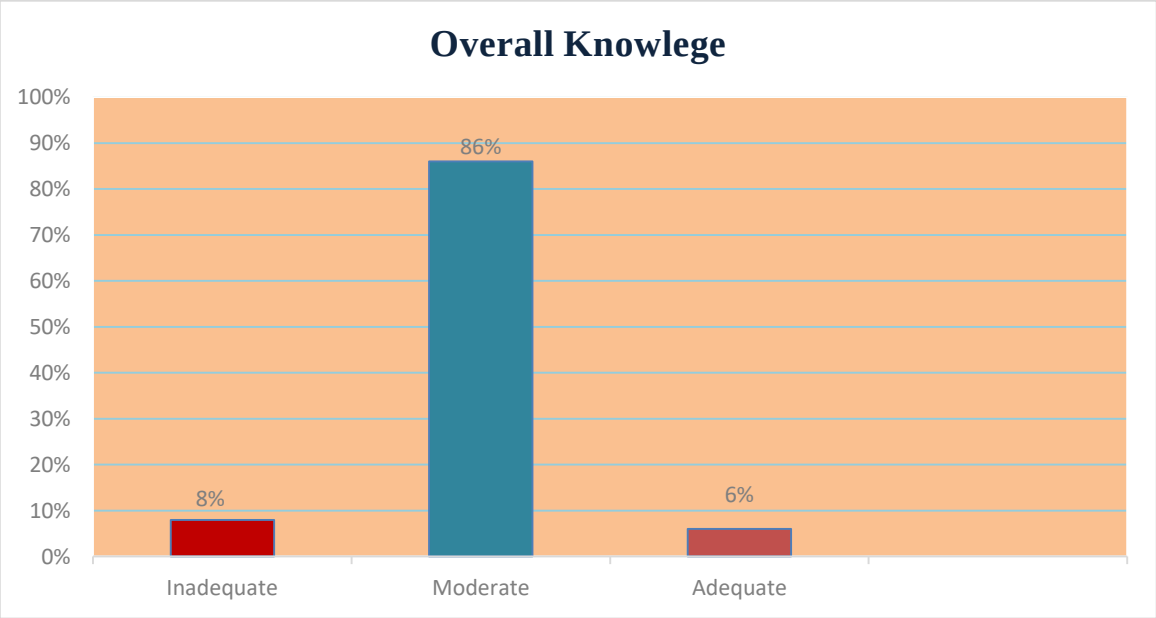


Table 2 depicts that majority of the subjects 103(86%) were having moderate level of knowledge. 7(6%) of the subjects were had adequate knowledge and 10(8%) of the subjects were had inadequate knowledge.

Table 3: - Distribution of sample according to overall level of Competency skill on the Code Blue and CPR

n =120

SL.NO	Checklist points	Score

	OBSERVATION	Yes %	No	Not applicable
1.	Where there any signs that the patient was deteriorating prior to the code? Determination that the patient was in cardiac arrest a) Unconscious b) Absent central pulses c) Respiratory arrest Time of arrest	**94**	**6**	
2.	Were there any problems calling for help? if any details.	**83**	**17**	
3.	Was there any issue with quickly getting the patient into a position on which CPR could be performed?	**72**	**28**	
4.	Was ventilation started within the time frame as per standard guideline?	**53**	**47**	
5.	• Were there any issue with achieving good ventilation? • If any problem (details):	**76**	**24**	
6.	• Was chest compression started soon after recognizing arrest as per guideline.	**74**	**26**	
7.	• Were there any problem getting compression board under the patient. • Were there any issues achieving good compressions?	**70**	**30**	
8.	• Was the rhythm shockable and delivered?	**60**	**40**	
9.	• Where their problems to attach the monitor /AED /Defibrillator in the time frame advice as per protocol • If any problems (details):	**71**	**29**	
10.	• Was the required equipment brought to the scene and set up for use?	**64**	**36**	
11.	• Bag valve mask device with oxygen /intubation equipment/suction/crash cart/pulse oximeter/end tidal Co2 monitor/automatic blood pressure device	**55**	**45**	
12.	Did the CPR team arrive in timely manner asper guidelines?	**70**	**30**	

13.	Was the CPR team providing a brief history of the patient and your initial responses?	**76**	**24**	
14.	Were you able to assist the CPR team with universal precautions?	**68**	**32**	
15.	Was family communicated regarding the events?	**63**	**37**	
17.	Evaluates consciousness	**65**	**35**	
18.	Activates emergency system and prepare defibrillator	**72**	**28**	
19.	Evaluates for probability of cervical trauma and positions the patient in a supine position in a safe place	**68**	**32**	
20.	Position her / himself against patients (right side)	**73**	**27**	
21.	checks carotid artery pulsation (< 10 sec)	**64**	**36**	
22.	○ If no pulsation; does chest compressions ○ If pulsation palpated, checks airway and breathing. If breathing not adequate, gives artificial breathing10_-12breaths/minutes (each 5-6seconds). evaluates pulse every 2 minutes.	**73**	**27**	
22.	Positions hand and fingers on inferior half of sternum	**68**	**32**	
23.	Does compressions firm and fast does compressions with a depth of 5cm does compression 100-200times/minutes confirms of chest recoil between each compression does compression 30 times each cycle does compression with minimal interruption.	**66**	**34**	
24.	Opens airway with head tilt-chin lift technique or jaw thrust on neck trauma and confirms patency of airway	**64**	**36**	
25.	• Gives artificial breathing within 1 seconds • Blows enough air to elevate chest wall	**73**	**27**	
26.	Gives 2 ventilations for each 30 chest compressions	**60**	**40**	
27.	Turns on defibrillation equipment Places electrodes or pads to evaluate ECG pattern	**71**	**29**	

28.	▪ if rhythm is shockable ▪ On defibrillator; pushes shock button after defibrillator indicates it ▪ Chooses 360J or 200J gives gel on pads on apex and sternum, gives 12.5kg pressure on chest wall and pushes discharge button ▪ Assess rhythm, pulse and continue the procedure.	**87**	**13**	
	Total Percentage	**70**	**30**	

Table: -3 depicts that majority of the study subject competency score was '**Yes' (70%)** and '**No' (30%)** had not performed the complete procedure on Code Blue and CPR**.**

SECTION C

This section deals with the data pertaining to the association between knowledge with selected socio-demographic variables

Table 4: - Association of knowledge score with selected Socio- demographic variables

n = 120

Sl. No.	Variables	Knowledge level		X^2 Calculated value	Df	Inference
		Below Median <20	**Above Median >20**			
1	**Age in years**					
a.	< 30yrs	61	36	0.93	1	**NS**
b.	>30yrs	17	6			
2	**Gender**					
a.	Male	16	9	0.01	1	**NS**
b.	Female	62	33			
3	**Qualification**					
a.	Diploma	32	15			
b.	Graduate	47	26	0.174	1	**NS**
4	**Year of Experience**				1	**NS**
a.	<5yrs	60	34			
b.	>5yrs	18	8	0.261		

5	**Marital Status**					
a.	Single	42	25		1	**NS**
b.	Married	36	17	0.356		
6	**Clinical Posting**					
a.	Critical Care	22	12			
b.	Others	56	30	0.001	1	**SS**
7	**Previous Exposure of Code Blue**				1	**NS**
a.	Yes	48	24	0.21		
b.	No	30	18			

NS- Not Significant **X^2 table value at 1 df =3.84** **SS- Statistically Significant**

Section C-Reveals that there was no significant association between the knowledge score and selected socio demographic variables as the X^2 value was less than table value 3.84 with respect to age **(X^2 0.df- 1**), gender **(X^2 0.01 df- 1),** qualification **($X^2$0.174 df- 1),** year of experience **(X^2 0.261 df- 1)**, marital status **(X^2 0.356 df- 1),** previous exposure **(X^2 0.218 df 1).**

Whereas with regard to Clinical Posting **(X^2 0.0017 df- 1)** there was significant associated with knowledge, as the calculated x value was greater than table value. Thus, the stated assumption was accepted which states that there will be significant association between the knowledge and selected socio demographic variables.

SUMMARY

This chapter deals with the data analysis and interpretation of the study findings. As per objectives of the study knowledge of Staff Nurses regarding Code Blue and CPR were assessed the results revealed that, majority 86% of the study samples had moderate knowledge, 8% of the study samples had inadequate knowledge and remaining 6% of sample had adequate knowledge.

The association between knowledge and socio demographic variable were assessed and result revealed that variable like age, gender, qualification, year of experience, marital status and previous exposure of Code Blue was not statistically significant, Clinical posting is statistically significant.

CHAPTER -VII

CONCLUSION

This present study focused on assess the Knowledge and Competency Skill among staff Nurses regarding Code Blue and CPR in selected Hospital Kolar, based on the findings the conclusion are presented under the following points;

Based on the objectives of the conclusion are presented under the following points.

As per the first objective of the study, to assess the Knowledge of Staff nurse on Code Blue and CPR, majority of the subjects 103(86%) were having moderate level of knowledge.

7(6%) of the subjects were had adequate knowledge and 10(8%) of the subjects were had inadequate knowledge.

As per the second objectives the majority of the subjects competency score was '**Yes' (70%)** and '**No' (30%)** had not performed the complete procedure on Code Blue and CPR**.**

The third objectives reveals that there was no significant association between the knowledge score and selected socio demographic variables as the X^2 value was less than table value 3.84 with respect to age **(X^2 0.df- 1**), gender **(X^2 0.01 df- 1),** qualification **($X^2$0.174 df- 1),** year of experience **(X^2 0.261 df- 1)**, marital status **(X^2 0.356 df- 1),** previous exposure **(X^2 0.218 df 1).**

Whereas with regard to Clinical Posting **(X^2 0.0017 df- 1)** there was significant associated with knowledge, as the calculated x value was greater than table value. Thus, the stated assumption was accepted which states that there will be significant association between the knowledge and selected socio demographic variables

IMPLICATIONS

The finding of the study can be used in the following areas of nursing profession**.**

Nursing practice

- Nursing professional working in the hospital should be trained for staff nurses regarding the knowledge on Code Blue and CPR.
- Nursing Professional play, a key role in enhancing the knowledge on Code Blue and CPR among staff nurse.

Nursing education

- As a nurse educator, there are abundant opportunities for nursing professional to educate other health care professionals on Code blue and CPR to save clients.
- The study emphasizes on significance of short term Inservice education program for nurses and students to educate on Code Blue and CPR.

Nursing administration

Nursing administrator can take a part in developing protocols and standing orders regarding the uses of Code Blue and CPR**.**

Nursing administrator can mobilize the available resources to gain the knowledge regarding the Code Blue and CPR.

Nursing research

The study helps nursing researchers to develop appropriate education tools for health care providers regarding on Code Blue and CPR.

RECOMMENDATIONS

1. A similar study can be done on a large sample.
2. A similar study can be done among all the direct health care providers.
3. A similar study can be done in different type of health care setting.
4. A comparative study can be conducted to assess the knowledge and Competency skill among health care providers

LIMITATIONS

1. The study did not use any control group
2. The study doesn't have any intervention and assessment of intervention
3. The sample were assessed only by using structured knowledge questionnaire and observational checklist.

SUMMARY

This chapter presents the conclusion drawn, implication and limitation, suggestion and recommendation for future study.

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ANNEXURE

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/49 /2019-20 MEETING NO- 05 Date:14-03-2020

This is to certify that the instutution committee of Sri Devaraj Urs College of Nursing, tamaka, Kolar has examined and unanimously approved the following research projects.

Sl. No	Name of the Topic	Guide	Investigator	Accepted/ Not accepted	Remarks
1	A study to assess the level of effectiveness of planned teaching programme on knowledge regarding health appraisal activities among primary schools of kolar taluk	Dr. Malathi K.V	Abdul Rahaman Abiya stanly Anie Varghese Ann Rose Nixon Anjali M.	Accepted	
2	A study to assess the effectiveness of deep breathing exercises as play way method on respiratory parameters among children admitted with lower respiratory tract infection in a selected hospital, kolar	Dr. Radha M..S.	Elizabeth joseph Alphonsa George Alphonsa john Archana Bahavana B.	Accepted	
3	A descriptive study to assess Psychosocial stress among geriatrics in a selected old age homes of kolar district with a view to develop an information leaflet.	Mrs. Jairakini Aruna	Rahul Beena Arya Anna Reiji Arathi	Accepted	

4	A study to assess the effectiveness of clinical instructors mentoring on stress and clinical performance of 1st year nursing students at SDUCON, Tamaka, kolar	Mrs. Lavanya Subhashini	Bini Jose Brinda Jenefer suguna Jerin Vijay Lisha Reji Mohammed Nayaz	Accepted	
5	A study to assess maternal satisfaction regarding quality of nursing care during labour and post partum among postnatal mother at selected hospital kolar.	Mrs. Punitha M	Chaitra Deepika Chickareddemma Janifer Riya jose Samuel	Accepted	
6	A study to assess the knowledge regarding benefits of iodized salt and salt preservation practices among Home makers of selected Households at kolar, with a view to conduct planned group teaching programmes	Mrs. Vani R	Priyanka Rachana Raveena Reshma Rosna	Accepted	
7	A descriptive study on identification of auditory processing disorder (APD) among school going children in selected schools at kolar.	Mr. R. Rajesh	Srikanth P S Sruthi Sneha Prasad Bhavanashree Sree kutty Sherly	Accepted	
8	A study to assess the effectiveness of a competency skill among staff nurses on code blue and CPR in selected hospital kolar with a view to develop information booklet.	Dr.Zeanath C.J	Rajesh Samyuktha Shwetha Sumi Issac Sunitha	Accepted	
9	A study to evaluate the effectiveness of video assisted Teaching on knowledge and practice regarding Sheehans syndrome among staff nurses working at selected hospital kolar.	Mrs. Gayathri	Tessi Mole Supriya Sophiya Trinipaul vinthya	Accepted	
10	A study to assess the effectiveness of curry leaves mix in management of blood glucose level among type-2 diabetic clients in a selected urban area, kolar..	Prof. Mary Minerva	Masiulla Bindushree Aswathy Sona Nathiya	Accepted	

11	A study to assess the prevalence of breast cancer and effectiveness of Planned health education (PHE) on knowledge regarding identification of warning signs of breast cancer and its prevention among women attending different OPDs of selected hospital with a view to develop video programme.	Dr. G. Vijayalakshmi	Chaitra Magrisha Prema Suresh Uma Vidhya Nethravathi Munirathna	accepted	

Sl. No.	Name	Signature
1	Dr.V.Lakshmaiah	present
2	Dr.Mohan Kumar	Absent
3	Dr.Bhuvana K.	present
4	Mr.Sridhar	Absent
5	Mr.Suresh B	present
6	Swamy Acharyananda Avadutha	present
7	Mrs.Lakshmi	Absent

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

Chairperson
IEC (Human studies)
CHAIR PERSON
ETHICS COMMITTEE
SRI DEVARAJ URS COLLEGE OF NURSING
TAMAKA KOLAR - 563103.

ANNEXURE -II

PERMISSION LETTER FOR CONDUCTING DISSERTATION

ANNEXURE-2

PERMISSION LETTER TO CONDUCT STUDY

Date:04/12/2020

From,

Research Group VIII,

III B.sc (N)

Sri Devaraj Urs college of Nursing,

Tamaka, Kolar-563103

To,

The Medical Superintendent,

R.L Jalappa Hospital & Research institute

Tamaka Kolar, 563103

Forward through:

The Guide & Principal, SDUCON.

Respected Sir,

Sub: Requesting permission to conducting a research study in RLJH&RC.

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 requirements.

Title: "A STUDY TO ASSESS THE EFFECTIVENESS OF A COMPETENCY SKILL AMONG STAFF NURSES ON CODE BLUE AND CPR IN SELECTEDHOSPITAL KOLAR, WITH A VIEW TO DEVELOP INFORMATION BOOKLET".

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. Our data collection period will be from month of December 2020 to Jan 2021.

We will be highly obliged and remain thankful for your great help.

Thanking you,

Date: 04/12/2020

Place: Tamaka

yours sincerely,

Mr. Rajesh N Raj
Ms. Samyuktha Samyuktha
Ms. Shwetha Shwetha
Ms. Sumi Issac Sumi
Ms. Sunitha C Sunitha.C

Encl:
1) Statement with objectives
2) Structured knowledge questionnaire
3) Answer Key Scale
4) Content Validity Certificate

For kind consideration & needful / Forwarded to MS-RLJH&RC to a request to permit them to collect data 04/12/20

Prof. Zeenath Cariena. J.
Chief Nursing Officer
R.L.J.H. & R.C., Tamaka, Kolar.

Brought to me today
Permitted to conduct the study maintaining COVID precautions strictly
S.M. Azeem. M
19/04/2021

ANNEXURE- III

INFORMED CONSENT FORM

NAME OF THE INVESTIGATORS: Mr. Rajesh, Ms. Samyuktha, Ms. Shwetha, Ms. Sumi Issac, Ms. Sunitha

NAME OF THE ORGANIZATION: RL. Jalappa Hospital

TITLE OF THE STUDY: *"*A study to assess the Knowledge and Competency Skill among Staff Nurses regarding Code Blue and CPR in selected hospital Kolar, with a view to Develop Information Booklet."

If you agree to participate in the study, we will collect information related to the knowledge and Competency Skill among Staff Nurses regarding Code Blue and CPR.

You are invited to take part in this research study. You are being asked to participate in this study because you are satisfying our eligible 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.

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

Signature:

ANNEXURE –IV

"TO ASSESS THE KNOWLEDGE AND COMPETENCY SKILL AMONG STAFF NURSES REGARDING CODE BLUE AND CPR IN SELECTED HOSPITAL KOLAR, WITH A VIEW TO DEVELOP INFORMATION BOOKLET''

The knowledge questionnaire consists of two sections

Section: A- consists of socio demographic data

Section: B-Consists of structured knowledge questionnaires

Dear participants,

I request you to answer the following questions regarding CPR and Code Blue with most appropriate response. Each correct answer carries one mark. Your answer will be kept confidential

Code no …

SOCIO- DEMOGRAPHIC DATA

1. Age in years;

---

2. Gender;

a. Male

b. Female

3.Qualification

a. ANM

b. GNM

c. B.SC

d. M.SC

4. Year of Experience

---

5. Marital status;

a. Single

b. Married

c. Widow

d. Divorce/ Separated

6. Clinical areas Posting;

a. Intensive Care Unit

b. Emergency Department

c. Surgical and Medical Wards

d. Post-Operative Wards/OPD/OT

7. Previous Exposure of Code Blue;

a. Yes

b. No

If yes, ----------

SECTION B: STRUCTURED KNOWLEDGE QUESTIONAIRE ON A COMPETENCY SKILL AMONG STAFF NURSES ON CODE BLUE AND CPR IN SELECTED HOSPITAL KOLAR

INSTRUCTIONS: Read the following items carefully. Choose the most appropriate response from the given options and place a tick (√) mark in the space provided.

GENERAL QUESTIONS

1. An emergency code for cardiac arrest is;

a) Code Red
b) Code Green
c) Code Blue
d) Code Yellow

2. The Digit used in RLJ Hospital for Code Blue call is;

e) 333
f) 222
g) 444
h) 555

3.The emergency medical team members of Code Blue are;

a) Doctor/ Security/ Respiratory Therapist
b) Critical Care Nurse/ Respiratory Therapist/ Pharmacist
c) Bed side Nurse/ Security/ Doctor
d) Critical Care Nurse/ Doctor/ Respiratory Therapist

4. The essential equipment to be arranged on Code Blue call;

a) Cardiac Monitor/ Cardiac Board/ ECG
b) AMBU Bag/ Cardiac Monitor/ Laryngoscope
c) Laryngoscope/ ECG/ AMBU Bag
d) Defibrillator/ Laryngoscope/ Cardiac Board

5. Most common indication for CPR;

a) Sepsis
b) Fatigue
c) Cardiac arrest
d) Diabetes

6. During CPR the best position is;

a) Fowler s position
b) Lateral position
c) Supine position
d) Lithotomy position

7. The step that is not a part of the five steps in the Adult Chain of survival;

a) Early CPR
b) Rapid defibrillation
c) Advanced airway placement
d) Integrated post- cardiac arrest care

8. The Basic Life Support (BLS) steps for adults are;

a) Assess the individual, give two rescue breaths, defibrillate, and start CPR
b) Assess the individual, activate EMS and get AED, check and start CPR
c) Check pulse, give rescue breaths assess the individual, and defibrillate
d) Assess the individual, start CPR, give two rescues' breaths and defibrillate

9.Best site to assess pulse in a collapsed victim is;

a) Radial pulse
b) Popliteal pulse
c) Femoral pulse
d) Carotid pulse

10. You are the first rescue to arrive at the side of a victim the very 1st step you take is to;

a) Make sure the scene is safe
b) Attach the AED pads
c) Check for breathing
d) Tap the victim's shoulder for responsiveness

11. If you find an adult who is unresponsive and not breathing and scene is safe. What is your next step;

a) Start CPR
b) Activate the emergency response
c) Check for a pulse
d) None of the options are correct

12. Immediate action to be performed when victims pulse felt is;

a) Give 2 rescue breaths and starting chest compression
b) Starting high quality chest compression
c) Call the code and starting chest compression
d) Activating the emergency response and wait for help

13.The correct sequence for Basic Support is;

a) Airway, Breathing, Compression
b) Breathing, Airway, Compression
c) Compressions, Airway, Breathing
d) Breathing, Compression, Airway

14. Chest compression should be started within;

a) 2 seconds
b) 10 seconds
c) 15 seconds
d) 20 seconds

15. The following statement is incorrect about performing chest compression;

a) Position yourself at the side of the victim
b) Press down at least 2 inches in adults
c) Minimize interruptions
d) Allows partial recoil of the chest

16. The following is not correct when performing CPR;

a) Give effectiveness breath that make the chest wise
b) Limit chest compression interruption for less than 10seconds
c) Blind – mouth sweep check for foreign objects
d)
e) Allows complete chest recoil during compression

17. During 2 rescue CPR on an adult victim what is the compression breath ratio;

a) 15: 2
b) 30: 1
c) 15:1
d) 30:2

18. The recommended compression depth for an adult is;

a) 1 inch
b) 1.5 inch
c) At least 2. Inches
d) None of the above are corrected

19. Every 30 high quality chest compression should be followed with;

a) Continue with compression at 30 min for 5 cycles
b) Activate the emergency response system
c) Give rescue breaths
d) Check for a pulse

20. You suspect a head and neck injury in a victim who is unresponsive and not breathing. How would you open the airway to give breathe;

a) Jaw- thrust technique
b) Thumb and index lift
c) Head tilt-chin lift
d) E-C Clamp technique

21. Adequacy of rescue breaths given is confirmed by;

a) The victim's spine rises
b) The victim's chest rises
c) The victims stomach rises
d) The victims chin rises

22. The technique is used for bag mask ventilation during 2 rescuer CPR;

a) E- C clamp technique
b) Jaw thrust technique
c) Thump index technique
d) None of the option are correct

23. During 2 rescue CPR on an adult how many cycles of CPR do you perform before switching roles;

a) 2 cycles
b) 5 cycles
c) 4 cycles
d) 30:2 cycles

24. How often should you recheck for a pulse when you are performing rescue breaths on an unconscious patient with a pulse;

a) Every 45 seconds
b) Every I minute
c) Every 2 minutes
d) Every 4 minutes

25. You find a victim whose chest is covered with water the AED arrives to the scene before using AED. You would;

a) Continue with AED usage while note delaying CPR
b) Quickly wipe the chest before placing the AED pad
c) Don't use the AED because the victim is covered with water
d) Wait until patient dries

26. CPR should be stopped when;

a) Victim regains pulse and breathing
b) Rib fracture

c) CPR are performed 10 minutes
d) Cervical injury

27. You are using AED. Before pressing the shock button as indicated by AED. You would do the following;

a) Shout clear and then press the shock button
b) Shout clear and look to make sure no one is in contact with the victim
c) Continue with 8 cycle of CPR
d) Make sure chest compression are not interruption

28. The vital characteristics of first- rate CPR

a) Starting chest compressions within 10 seconds of recognition
b) Pushing hard and fast
c) Minimizing interruptions
d) All of the above

29. An unconscious patient be placed in the recovery position only if;

a) The patient has brachy cardia and is not breathing
b) The patient has a pulse and is breathing appropriately
c) The patient has no pulse and is not breathing
d) The patient has a bounding pulse and is not breathing

30. Most common complication of CPR;

a) Fracture rib bones or sternum
b) Cerebrovascular disease
c) Fracture of Scapula
d) Fracture of spine

KEY ANSWERS

SL.NO	***ANSWER***	***SL.NO***	***ANSWER***
1.	C	16.	C
2.	C	17.	D
3.	D	18.	C
4.	D	19.	C
5.	A	20.	A
6.	C	21.	B
7.	C	22.	A
8.	B	23.	B
9.	D	24.	C
10.	A	25.	B
11.	B	26.	A
12.	C	27.	B
13.	C	28.	D
14.	B	29.	A
15.	D	30.	B

ANNEXURE- V

CARDIOPULMONARY RESUSCITATION CLINICAL SKILL CHECKLIST

SL.NO	Checklist points	Score		
	OBSERVATION	**Yes**	**No**	**Not applicable**
1.	Where there any signs that the patient was deteriorating prior to the code? Determination that the patient was in cardiac arrest a) Unconscious b) Absent central pulses c) Respiratory arrest Time of arrest			
2.	Were there any problems calling for help? if any details:			
3.	Was there any issue with quickly getting the patient into a position on which CPR could be performed?			
4.	Was ventilation started within the time frame as per standard guideline?			
5.	• Were there any issue with achieving good ventilation? • If any problem (details):			
6.	• Was chest compression started soon after recognizing arrest as per guideline.			
7.	• Were there any problem getting compression board under the patient. • Were there any issues achieving good compressions?			
8.	• Was the rhythm shockable and delivered?			
9.	• Where their problems to attach the monitor /AED /Defibrillator in the time frame advice as per protocol			

	• If any problems (details):			
10.	• Was the required equipment brought to the scene and set up for use?			
11.	• Bag valve mask device with oxygen /intubation equipment/suction/crash cart/pulse oximeter/end tidal Co2 monitor/automatic blood pressure device			
12.	Did the CPR team arrive in timely manner asper guidelines?			
13.	Was the CPR team providing a brief history of the patient and your initial responses?			
14.	Were you able to assist the CPR team with universal precautions?			
15.	Was family communicated regarding the events?			
17.	Evaluates consciousness			
18.	Activates emergency system and prepare defibrillator			
19.	Evaluates for probability of cervical trauma and positions the patient in a supine position in a safe place			
20.	Position her / himself against patients (right side)			
21.	checks carotid artery pulsation (< 10 sec)			
22.	○ If no pulsation; does chest compressions ○ If pulsation palpated, checks airway and breathing. If breathing not adequate, gives artificial breathing10_-12breaths/minutes (each 5-6seconds). evaluates pulse every 2 minutes.			
22.	Positions hand and fingers on inferior half of sternum			
23.	Does compressions firm and fast does compressions with a depth of 5cm does compression 100-200times/minutes confirms of chest recoil between each compression does compression 30 times each cycle does compression with minimal interruption.			
24.	Opens airway with head tilt-chin lift technique or			

	jaw thrust on neck trauma and confirms patency of airway			
25.	• Gives artificial breathing within 1 seconds • Blows enough air to elevate chest wall			
26.	Gives 2 ventilations for each 30 chest compressions			
27.	Turns on defibrillation equipment Places electrodes or pads to evaluate ECG pattern			
28.	▪ if rhythm is shockable ▪ On defibrillator; pushes shock button after defibrillator indicates it ▪ Chooses 360J or 200J gives gel on pads on apex and sternum, gives 12.5kg pressure on chest wall and pushes discharge button ▪ Assess rhythm, pulse and continu`e the procedure.			

ANNEXURE- VI

Criteria rating scale

Criteria rating scale for validating the content of the Knowledge Questionnaire on assess the knowledge regarding Code Blue and CPR

Respected Sir/Madam,

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

SL NO:	**Item**	**Very Relevant**	**Relevant**	**Needs Modification**	**Not Relevant**
SECTION-A Demographic data:					
1.	Age				
2.	Gender				
3.	Qualification				
4.	Marital status				
5.	Clinical Experience				
6.	Previous exposure to code blue				
SECTION-B Structured Knowledge and Competency Skill Among Staff Nurses Regarding Code Blue and CPR					
1.					
2.					
3.					
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.					

ANNEXURE- VII

LETTER REQUESTING OPINIONS AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY OF RESEARCH TOOL AND LESSON PLAN

From,

IIIrd Year B.Sc. (N)

Dept. Medical surgical Nursing

Sri Devaraj Urs College of Nursing,

Tamaka, Kolar- 563101

TO,

Respected Sir/Madam,

Subject: Request for opinion and suggestion of experts for establishing content validity of research tool –reg.

We, the IIIrd Year B. Sc (N) students of Sri Devaraj Urs College of Nursing, Tamaka, Kolar have selected below mentioned topic for research project for the fulfilment of the requirements of nursing research subject for B. Sc (N) degree course.

Title of the Topic:

"A study to assess the Knowledge and Competency Skill among Staff Nurses regarding Code Blue and CPR in selected hospital Kolar, with a view to Develop Information Booklet."

With regard to the above matter, we kindly request you to validate the tool for its appropriateness and relevancy we are hereby enclosing the objectives of the study and the knowledge questionnaire for your reference. We will be highly obliged and thankful for your great help.

Thanking you Sir /Madam.

Yours Faithfully,

Enclosure:

- Statement of the problem with objects — Mr. Rajesh
- Structure knowledge questionnaire — Ms. Samyuktha
- Answer key scale — Ms. Shwetha
- Content validity certificate — Ms. Sumi Issac
- Criteria rating — Ms. Sunitha

ANNEXURE- VIII

CONTENT VALIDITY CERTIFICATE

We hereby certify that We have validated the tool and information Booklet of 8th batch of 3 yr. BSC (N), students of Sri Devaraj Urs College of Nursing Tamaka Kolar, who are undertaking a research project as a partial fulfillment of Bachelor of science in nursing degree.

Title of the Topic:

"A study to assess the Knowledge and Competency Skill among Staff Nurses regarding Code Blue and CPR in selected hospital Kolar, with a view to Develop Information Booklet."

DATE **Name & Signature**

PLACE: Tamaka, Kolar

ANNEXURE-IX

LIST OF EXPERTS WHO VALIDATED THE TOOL

SL. No	Name of expert, Designation and Name of Institute
1.	Dr. Vijayalakshmi, Principal, SDUCON, Tamaka, Kolar
2.	Dr. M.S Radha, Vice. Principal & HOD of Child Health Nursing, SDUCON Tamaka, Kolar
3.	Dr. Malathi K.V, Dept. of Community Health Nursing, SDUCON

	Tamaka, Kolar
4.	Mrs. Umadevi, Assoc. Prof. of Medical Surgical Nursing, SDUCON, Tamaka, Kolar

ANNEXURE – X

FORMULAS USED FOR DATA ANALYSIS

1. Mean $\bar{X} = \frac{\Sigma x}{n}$

2. Standard Deviation **(SD) =** $\sqrt{\frac{\Sigma (x - \bar{x})^2}{n}}$

3. Chi -Square test for contingency table $X^2 = \frac{\Sigma (O - E)^2}{}$

$$E$$

4. Chi -Square test (2x2 table) $X^2 = \dfrac{n(ad-bc)^2}{(a+b)(b+c)(c+d)(a+c)}$

ANNEXURE – XI

PHOTO DATA COLLECTORS

ANNEXURE – XII

SOCIO DEMOGRAPHIC VARIABLES

	AGE		GENDER		QUALIFICATION				YEAR OF EXPERIENCE		MARITAL STATUS				CLINICAL POSTING				PREVIO EXPOS OF CO BLUE
	<30 yrs.	>30 yrs.	Male	Female	ANM	G. NM	B. Sc	M.Sc.	<5Yrs	>5 Yrs.	Single	Married	Widow	Divorce	Intensive Care	Emergency	Surgical and	Post Operativ	Yes
1.		b	a				c			b		b				b			Yes
2.		b	a			b						b				b			Yes
3.	a			b			c		a		a					b			Yes
4.	a			b			c		a			b				b			Yes
5.	a			b			c		a			b				b			Yes
6.	a			b			c		a			b				b			Yes
7.	a			b			c		a			b				b			Yes
8.	a			b			c		a			b				b			Yes
9.	a			b			c		a			b				b			Yes
10.	a			b			c		a			b				b			Yes
11.	a			b			c		a			b				b			Yes
12.	a			b			c		a			b				b			Yes
13.	a		a				c		a			b				b			
14.	a			b			c		a			b					c		
15.	a			b			c		a		a				a				Yes
16.	a			b			c		a		a						c		
17.	a		a				c		a		a						c		Yes
18.	a			b			c			b		b					c		

19.	a			b		b			a		a						c		Yes
20.		b		b		b				b		b					c		
21.	a			b			c		a			b					c		
22.	a			b			c		a			b					c		Yes
23.	a			b			c		a			b					c		
24.		b		b		b				b		b					c		Yes
25.		b		b		b				b		b			a				Yes
26.		b		b		b				b		b					c		Yes
27.	a			b		b				b		b					c		Yes
28.	a			b			c		a			b				b			Yes
29.	a			b			c		a			b				b			Yes
30.	a			b			c		a			b				b			Yes
31.		b		b			c		a			b					c		
32.	a			b		b			a			b					c		
33.	a			b		b			a		a						c		Yes
34.	a			b		b			a		a						c		
35.	a		a		A				a		a						c		Yes
36.	a		a			b			a		a						c		
37.	a			b			c		a		a						c		
38.	a			b		b			a			b			a				Yes
39.	a			b		b			a		a						c		Yes
40.		b		b		b			a			b					c		
41.	a			b			c		a		a						c		Yes
42.	a		a				c		a		a						c		Yes
43.	a					b			a		a				a				Yes

44.		b		b			c			b		b			a				Yes
45.	a			b			c		a		a						c		
46.	a			b		b				b		b					c		
47.	a			b			c		a			b					c		Yes
48.		b		b			c			b	a						c		Yes
49.	a			b		b			a		a						c		
50.	a			b		b			a		a						c		
51.	a			b		b			a		a						c		
52.	a			b			c		a		a						c		Yes
53.	a		a				c		a		a						c		Yes
54.	a			b		b			a		a						c		Yes
55.	a			b			c		a			b					c		Yes
56.		b		b			c			b		b					c		Yes
57.	a			b					a			b					c		
58.	a			b		b			a			b					c		
59.	a			b		b			a			b					c		
60.	a			b		b			a		a						c		
61.	a			b			c		a		a						c		Yes
62.	a			b			c		a		a						c		
63.	a			b			c		a		a						c		
64.	a		a				c		a		a						c		
65.	a		a				c		a		a							d	Yes
66.	a		a				c		a		a							d	Yes
67.	a			b		b			a		a						c		
68.	a			b		b			a		a						c		

69.		b	a				c		a			b					c		Yes
70.	a			b			c		a		a						c		
71.	a			b		b			a		a				a				
72.	a		a				c		a		a							d	
73.	a			b			c		a		a				a				
74.	a		a				c		a		a							d	Yes
75.	a			b			c		a		a						c		Yes
76.		b	a				c			b		b			a				Yes
77.		b		b	A					b		b						d	Yes
78.	a			b			c			b		b						d	Yes
79.		b		b			c			b		b						d	Yes
80.		b	a			b				b		b			a				Yes
81.	a		a			b			a		a						c		
82.	a		a				c		a		a							d	Yes
83.	a			b			c		a		a					b			
84.	a			b			c		a		a					b			
85.	a			b			c		a		a				a				
86.	a			b			c		a		a					b			
87.	a			b			c		a		a					b			
88.	a		a				c		a		a						c		
89.	a		a						a		a						c		
90.	a		a				c		a		a						c		
91.	a		a			b			a		a							d	Yes
92.		b		b		b			a		a						c		
93.	a			b			c		a		a						c		

94.	a			b			c		a		a						c		
95.	a			b		b			a		a						c		
96.	a			b			c		a		a				a				
97.	a			b			c		a		a				a				Yes
98.	a			b		b			a		a						c		Yes
99.	a		a			b			a		a						c		Yes
100	a			b		b			a		a						c		Yes
101	a			b			c		a		a						c		Yes
102		b		b				d		b		b					c		Yes
103		b		b		b			a			b					c		Yes
104		b		b		b				b		b					c		
105	a			b		b			a		a						c		Yes
106	a			b		b			a		a						c		Yes
107	a			b		b				b		b					c		Yes
108	a		a			b			a		a						c		
109		b	a				c			b		b					c		Yes
110	a			b			c		a		a						c		
111	a			b		b			a		a						c		
112		b		b			c			b		b					c		Yes
113	a			b			c			b	a						c		Yes
114	a			b			c			b		b					c		Yes
115	a			b				d	a		a					b			Yes
116	a			b		b			a			b					c		Yes
117	a			b		b				b	a						c		Yes
118		b		b		b			a			b						d	Yes

119	a			b			c		a			b					c		Yes
120	a			b			c			b	a				a				Yes

MASTER DATA SHEET -A

Ques. No: → Sample: ↓	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	1	1	0	1	0	0	1	1	1	1	0	1	0	1	0	1	1	1	0	0	1	1	1	1
2	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1
3	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	1	0	1
4	1	1	0	1	0	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1	1	0	1
5	1	1	1	0	1	0	1	0	1	1	1	1	1	0	1	0	1	0	1	0	1	1	0	1
6	1	1	1	0	1	0	1	1	0	1	1	0	1	1	0	1	0	1	1	1	0	1	1	1
7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1	1	0	1	1
8	1	0	1	1	0	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	0
9	1	1	0	1	1	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1	0	1	1	1
10	1	1	0	1	0	1	1	0	1	1	1	0	1	1	0	1	1	1	0	1	1	0	1	1
11	1	1	0	1	1	1	1	0	1	0	1	1	1	1	0	1	1	0	1	0	1	1	1	0
12	1	1	1	0	1	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0	1	0	1	0
13	1	0	1	1	0	0	1	0	1	0	1	0	1	0	1	1	1	0	1	1	1	1	0	1
14	1	1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1	1	0	1	1
15	1	0	1	0	1	0	1	0	1	1	1	0	1	0	1	1	1	0	1	1	1	1	0	1

16	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**1**	**1**	**0**	**1**	**1**	
17	**1**	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**1**	
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MASTER SHEET – B

QUESTION NO: -→	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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