

A DESCRIPTIVE STUDY TO ASSESS THE LEVEL OF THIRST AMONG POST CORONARY ARTERY BYPASS GRAFT (CABG) PATIENT IN CARDIO THORACIC INTENSIVE CARE UNIT (CTICU) OF SREE MOOKAMBIKA MEDICAL COLLEGE HOSPITAL KULASEKHARAM

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Abstract: Thirst is a common problem among patients after Coronary Artery Bypass Graft (CABG) surgery. It can cause discomfort and affect the patient's recovery. Therefore, this study was conducted to assess the level of thirst among post-CABG patients admitted in the Cardio Thoracic Intensive Care Unit (CTICU) of Sree Mookambika Medical College Hospital, Kulasekharam, and to find the association between the level of thirst and selected demographic variables. The study used a quantitative research approach with a non-experimental descriptive research design. The study was conducted at Sree Mookambika Medical College Hospital, Kulasekharam. A total of 25 post-CABG patients were selected using purposive sampling. Data were collected using a demographic questionnaire and the Categorical Thirst Scale. The data were analyzed using descriptive and inferential statistics. The findings showed that 56% of the patients were thirsty, 16% were very thirsty, 12% were very very thirsty, 12% were neutral, and 4% were not very thirsty. There was no significant association between the level of thirst and the selected demographic variables. The study concluded that the majority of post-CABG patients experienced thirst.

Keywords: Thirst, Post-CABG Patients, Coronary Artery Bypass Graft (CABG), Cardio Thoracic Intensive Care Unit (CTICU), Categorical Thirst Scale.

INTRODUCTION:

Dry mouth and thirst are the second most common symptom experienced by critically ill clients admitted in intensive care unit and is ranked as one of the ten most distressing symptoms (Gulia et al., 2019). It is a severe symptom that affects over 70% of ICU patients, with 33-52% of them rating their thirst as moderate and 18-52% as severe (Flim et al., 2022). Thirst is associated with several distressing symptoms, including sleep deprivation, dyspnoea, anxiety, and pain, which can severely impact a patient's quality of life and functionality (Sato et al., 2023). ICU Supervisors report that thirst is the most common frequent and distressing symptom experienced among ICU patients. (Qiongsan & Zheng, 2023).

It is important to recognize the various predictors of thirst among ICU patients. These include gastrointestinal disease, insufficient oral fluids mechanical ventilation, and the use of specific medications such as diuretics and opioids (Saltmes-Lillegard et al., 2023). Due to swallowing difficulties and aspiration risks, many ICU patients are unable to receive fluids. In certain cases, preventive measures that result in xerostomia or dry mouth are employed to prevent patients from inhaling saliva into their lungs (Chen et al., 2024). Moreover, the oral endotracheal tube itself can cause xerostomia, which further complicates patients who struggle to keep their mouth closed (Lee et al., 2020).

Identifying and treating thirst in ICU patients can be challenging due to several factors. Patients often experience decreased consciousness due to anaesthesia and delirium affecting 30% of ICU patients and most patients on mechanical ventilation who require medication (Clark & Archer, 2022). Additionally, 65% of ICU patients have generalized muscle weakness, which can make it difficult to drink and exacerbate feelings of thirst. Patients with catheters and infusion lines may also struggle with limited mobility, which can be uncomfortable when attempting to raise an arm to consume fluid (Sharma and Kumar, 2020). Moreover, ICU patients rely heavily on caregivers and visitors to meet their basic needs including access to water. Assessing risk factors can benefit both patients and health care professionals (Nascimento et al., 2020).

NEED FOR OF THE STUDY:

The worldwide prevalence of thirst among post Coronary Artery Bypass Graft (CABG) patients is relatively high, with studies reporting rates ranging from 50.8% to 76.8%. Intensity of thirst can vary; significant portion of patients experience mild to moderate thirst. Several factors, such as age, gender, and intra operative fluid management, are associated with the occurrence and severity of thirst. In India, the prevalence of thirst among post Coronary Artery Bypass Graft (CABG) patients is reported to be around 59%, with a significant portion experiencing moderate to severe thirst along with dry mouth another common symptom, which is also

prevalent, with factors like prolonged NPO and general anaesthesia. There are no specific studies detailing the prevalence of dry mouth among post Coronary Artery Bypass Graft (CABG) patients in Tamil Nadu and Kanyakumari district. Previous studies have reported that these symptoms like dry mouth and thirst are often disregarded, hence they have recommended to recognize dry mouth and thirst as an uncomfortable symptom and to prioritize its management. Researcher as a practising nurse have witnessed the difficulties experienced by post CABG clients during her clinical posting hence selected the study.

METHODOLOGY:

The study was done to assess the level of Thirst among post CABG patients, in Cardio Thoracic Intensive Care Unit (CTICU) of Sree Mookambika Medical College Hospital Kulasekharam. A quantitative research approach with non-experimental research design was used in this study. The study was conducted in Sree Mookambika medical college hospital, Kulasekharam. Purposive sampling technique was used for the selection of the samples. The total sample of the study is 25 post CABG patients. Level of thirst was assessed using categorical thirst scale prepared by researcher. The data was analysed and interpreted in terms of objective. Descriptive and inferential statistics was adopted for analysis and interpretation of data.

METHODOLOGY:

RESEARCH APPROACH:

In this study is quantitative research approach was adopted.

RESEARCH DESIGN:

In this study, Non-experimental descriptive research design was adopted.

SETTING OF THE STUDY:

The setting was chosen on the basis of availability of samples and the cooperation extended by the management and the health team. This study was conducted in Sree Mookambika medical College Hospital, Kulasekharam, it is 950 bedded NABH affiliated hospital. The hospital has CTICU, it is well structured and well equipped. The total bed strength is 8.

SAMPLE SIZE:

Sample size consists of 25 post CABG patients.

SAMPLING TECHNIQUE:

Purposive sampling technique.

SAMPLING CRITERIA:

Sampling criteria involves selecting cases that meet some pre-determined criteria of importance. The criteria for sample selection are mainly depicted under two heading which includes the inclusion and exclusion criteria.

INCLUSION CRITERIA:

- Post Coronary Artery Bypass Graft (CABG) patient between the age of 30- 70year On POD 1
- Patient who are conscious and who are extubated.
- Patient of both gender (male and female)

EXCLUSION CRITERIA:

- Patient who has underwent Coronary Artery Bypass Graft (CABG) and not extubated.
- Patient on nil per oral.
- Patient with mental disorder not able to follow instruction
- Patient with mouth desquamation and open sores in mouth.

DESCRIPTION OF THE TOOL:

The tool prepared to asses of thirst among post Coronary Artery Bypass Graft patient (CABG) in Cardio Thoracic Intensive Care Unit (CTICU). the tool has 3 sections

- Section-A Demographical variable
- Section-B Clinical variable
- Section-C Categorical Thirst Intensity Scale

Section-A Demographical variable:

Demographical variable includes Age, Gender, level of education, Occupation, marital Status, habits, religion, socio economic status, type of family, duration of illness.

Section-B: Clinical variable

Clinical variable includes Body Temperature, Heart Rate, oxygen saturation, Blood pressure, Respiratory Rate.

Section-C: Categorical Thirst Intensity Scale

Categorical thirst scale is a standardized tool prepared by Wirth SM et al., (2016) this is a simple way to classify patients' level of thirst using categories instead of numerical values specially in Intensive Care Unit (ICU) It is a 7 point categorical scale used to measure thirst intensity. It is a categorized from No thirst at all to very very thirsty. The researcher will ask the patient to measure the level of thirst he experiences according to his severity.

Validity:

The tool was tested for its content validity by experts in the medical surgical medicine and nursing, to ascertain relevance and completeness. The relevancy, clarity, fluency and simplicity of each component in the questionnaire were examined by the experts.

Reliability:

Internal consistency–Assessed using Cronbach s alpha value about 0.7and found reliable.

DATA COLLECTION PROCEDURE:

The study was conducted in CTICU of Sree Mookambika Medical College Hospital, Kulasekharam. 25 patients who met the inclusion criteria were selected using Purposive sampling technique. Developed rapport with the patient and assessed the level of thirst with Categorical Thirst Intensity Scale.

RESULT AND DISCUSSION

SECTION A: Distribution of samples according to the demographic variables.

Table 4.1: Frequency and percentage distribution of selected demographic variables.

Sl. No	Demographic variables	Frequency(F)	Percentage (%)
1	Age		
	a. 30-40	5	20
	b. 41-50	6	24
	c. 51-60	7	28
	d. 61-70	7	28
2	Gender		
	a. Male	13	52
	b. Female	12	48
3	Marital status		
	a. Married	25	100
	b. Unmarried	0	0
4	Education		
	a. Primary school	4	16
	b. Higher secondary school	6	24
	c. Under graduate	10	40
	d. Post graduate	5	20
5	Religion		
	a. Christian	7	28
	b. Hindu	16	64
	c. Muslim	2	8
6	Employment Status		
	a. Self employed	9	36
	b. Government Employee	7	28
	c. Unemployed	4	16
	d. Others	5	20
7	Dietary pattern		
	a. Vegetarian	20	80
	b. Non vegetarian	5	20
8	Type of Family		
	a. Nuclear Family	17	68
	b. Joint Family	8	32
9	Bad habits		
	a. Alcoholism	8	32
	b. Smoking	5	20
	c. Both	4	16
	d. No bad habits	8	32

Table 4.1 shows: Age 20% belongs to a 30-40years, 24% belongs to a 41-50years, 28% belongs to a 51-60years, 28% belongs to a 61-70years, Gender 52% belongs to male, 48% belongs to female. Marital status 100% married. Education 61% belongs to a primary school, 24% belongs to a higher secondary school, 40% belongs to a under graduate, 20% belongs to a post graduate. Employment status 28%belong to government employe,36% belongs self -employed, 16% belongs to unemployed, 20% belongs to others, Dietary pattern 80% vegetarian, 20% belongs to a non - vegetarian, Types of nuclear family 68%belongs to a nuclear family, 32% belongs to a joint family and Bad habits, 32% belongs to alcoholism, 20% belongs to smoking, 16% belongs to both alcoholism and smoking, 32% belongs to no bad habits.

SECTION B

Table 4.2: Distribution of samples according to the level of knowledge.

Sl. No	Variable	Level of thirsty	Frequency(F)	Percentage (%)
		Not thirsty et all	0	0
		Not thirsty	0	0
		Not very thirst	1	4

Table 4.2 shows that 4% sample has not very thirsty, 12% sample has neutral, 56% sample has thirsty, 16% sample has very thirsty and 12% sample has very very thirsty.

SECTION C

Table 4.3: Distribution of samples according to mean and standard deviation

Sl. No	Variable	Mean	Standard Deviation
1	Thirsty	5.2	0.957

Table 4.3 shows that the mean score Pain is 5.2 with the standard deviation of pain is 0.95

SECTION D

Table 4.4: Association between the level of thirst among selected demographic variables

Sl. No	variables	Chi square	df	Table Value	Significance
1	Age	3.17	1	3.84	P>0.05
2	Gender	0.06	1	3.84	P>0.05
3	Marital status	0.01	1	3.84	P>0.05
4	Education	2.43	1	3.84	P>0.05
5	Religion	0.64	1	3.84	P>0.05
6	Employment Status	0.76	1	3.84	P>0.05
7	Dietary pattern	2.62	1	3.84	P>0.05
8	Type of Family	0.69	1	3.84	P>0.05
9	Bad habits	0.002	1	3.84	P>0.05

Table 4.4 represents that there is no significant association between level of thirst with demographic variables.

Nursing implications:

The research has derived the following implications from the study results. Which is concerning to the field of nursing practice, nursing education, nursing administration and nursing research.

Nursing practice:

The present study will help the nurses to identify the level of thirst among Post CABG patient.

Nursing education:

- The nursing education prepares the nursing students to make aware about the level of thirst among post CABG patients.
- The curriculum can encourage the students to create an awareness of thirst among post CABG patients.

Nursing administration:

- The findings of the study would motivate the researcher to conduct the study on large sample.
- The study would help to expand the scientific body of knowledge.
- Comparative studies can be done to assess the effectiveness of intervention.

LIMITATIONS:

- Small number of samples.
- Purposive sampling technique restricts generalization.

RECOMMENDATIONS:

- Similar study can be conducted in large number of samples for generalization.
- Studies can be conducted to assess the thirst among post CABG patients.
- Studies can be conducted to compare the effectiveness of intervention to improve the thirst among post CABG patients.

FINDINGS OF THE STUDY

4% sample has not very thirsty, 12% sample has neutral, 56% sample has thirsty, 16% sample has very thirsty and 12% sample has very very thirsty. There is no significant association between the level of thirsty and demographic variable.

CONCLUSION:

The study finding shows that majority of the patients have thirst

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