ISSN - 2349-0691



# AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH



Journal homepage: www.mcmed.us/journal/ajanr

# A COMPARATIVE STUDY ON KNOWLEDGE OF CODE BLUE AMONG NURSING STAFF OF CORPORATE HOSPITALS AND GOVERNMENT HOSPITALS

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## **Article Info**

Received 25/12/2018 Revised 15/01/2019 Accepted 17/02/2019

Key word:Crp, Comparative Study, Code Blue, Nursing Staff, Kap Study.

# ABSTRACT

The "American Heart Association" published the Heart Disease and Stroke Statistics 2013 Update online on December 12, 2012. New out-of-hospital and in-hospital cardiac arrest statistics sourced from the Resuscitation Outcomes. This is summarized in the table below, with last year statistics for comparison. The "United States government" publishes the incidence and prevalence of heart disease 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 life time risk of developing coronary heart disease assume you make it to age 49% for men and 32% for women. Every minute in the United States someone dies from coronary heart disease. To assess the knowledge of code blue management on CPR among staff nurses working in selected Government and Corporate hospitals of Andhra Pradesh. To assess the knowledge of code blue management on CPR among staff nurses working in Government and Corporate hospitals. Manipal general Hospital (Vijayawada) was selected for Corporate Hospital setting. It is located 28 kilometers away from the Sims College of nursing. It is 1000 bedded General hospital. It provided services to the entire Krishna district. There were 70 beds in emergency department. There are 335 staff nurses working in this hospital in different shifts. Total admission to the emergency department was 400 per month. As shown in the talble 4, that demographic variables such as Age of the staff nurses, Gender, Professional qualification, Designation in the hospital, Attended CPR Classes, Experience in ICU, No. of CPR done by staff nurses during service had no association with level of knowledge among staff nurses working in Corporate hospital setting. This study indicates that Corporate Hospital staff nurses having more knowledge when compared to the Government Hospital staff nurses.

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**Research Article** 



#### INTRODUCTION

The "American Heart Association" published the *Heart Disease and Stroke Statistics - 2013 Update* online on December 12, 2012[1]. New out-ofhospital and in-hospital cardiac arrest statistics sourced from the Resuscitation Outcomes[2]. This is summarized in the table below, with last years statistics for comparison[3]:

The "United States government" publishes the incidence and prevalence of heart disease 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)[4]. The life time risk of developing coronary heart disease assume you make it to age 49% for men and 32% for women[5]. Every minute in the United States someone dies from coronary heart disease[6]. 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 155,000, the number of sudden deaths in which emergency medical services are called and attempt to resuscitate the individual[7]. In" Andhra Pradesh" Sudden cardiac arrest (SCR) contributed to 10% of overall mortality in this population[8]. On an average, Sudden Cardiac Diseases (SCD) cases were 5-8years younger compared to populations reported in the western hemisphere[9]. The prevalence of risk factors was also very high. 45 villages in rural Andhra Pradesh showed that cardiovascular disease (CVD) was the leading cause of mortality accounting for 32% of all deaths, a rate as high as in Canada (35%) and the US[10]. The prevalence of coronary artery disease (CAD) was only 5% and stroke is 2% possibly due to high mortality from poor medical care[11].

#### AIMS AND OBJECTIVES:

↓ To assess the knowledge of code blue management on CPR among staff nurses working in selected Government and Corporate hospitals of Andhra Pradesh.

↓ To assess the knowledge of code blue management on CPR among staff nurses working in Government and Corporate hospitals.

↓ To compare the knowledge of code blue management on CPR among staff nurses working in Government and Corporate hospitals.

↓ To find out the association between knowledge of code blue management on CPR with selected demographic variables among staff nurses working in Government and Corporate hospitals.

#### **MATERIALS AND METHODS:**

The study was carried out in various selected corporate and government hospitals after getting approval from the hospital management for carrying out the study. The research approach used in the study was "quantitative approach". In this study comparison of knowledge regarding the code blue management on CPR among staff nurses working in government and corporate hospitals was done and therefore a comparative approach was essential to test the difference between the government and corporate hospital staff nurses knowledge.

#### HYPOTHESIS SET FOR THE STUDY:

**H**<sub>1</sub>: There is a significant difference in the knowledge of code blue management on CPR among staff nurses working in Government and Corporate hospitals.

**H<sub>2</sub>:** There is a significant association between the knowledge of code blue management on CPR with selected demographic variables among staff nurses working in Government and Corporate hospitals.

#### **STUDY DESIGN:**

The research design used for the present study was "comparative descriptive design" where the information was taken regarding code blue management on CPR among staff nurses working in government and corporate hospitals to compare the difference between those two groups.

## AREA OF STUDY:

Government and Corporate hospitals were selected for the study. Government General Hospital (Vijayawada) was selected for Government Hospital setting. It is located 30 kilometers away from the Sims College of nursing. It is 1000 bedded General hospital. It provides services to the entire Krishna district. There were 90 beds in emergency department. There are 400 staff nurses working in this hospital in different shifts. Total admission to the emergency department was 400 per month.

Manipal general Hospital (Vijayawada) was selected for Corporate Hospital setting. It is located 28 kilometers away from the Sims College of nursing. It is 1000 bedded General hospital. It provided services to the entire Krishna district. There were 70 beds in emergency department. There are 335 staff nurses working in this hospital in different shifts. Total admission to the emergency department was 400 per month.

#### **Inclusion criteria:**

Staff nurses who were,

- Registered staff nurses
- Willing to participate in study
- Available at time of data collection

#### Exclusion criteria:

Staff nurses who were,



• Undergone training of "Advanced cardiac life support and Basic life support" certified staff nurses.

# **STUDY POPULATION:**

The total sample size was 100 staff nurses, out of which 50 staff nurses selected from G.G.H, 50 staff nurses selected from Manipal General Hospital.

Statistical Update	Out-of-Hospit	al Cardiac Arrest		In-Hospital Ca	rdiac Arrest					
	Incidence	Bystander CPR	Survivor rate*	Incidence	Survival rate*					
	mendence	(overall)	(overall)	mendence	Adults	Children				
2013	359,400	40.1%	9.5%	209,000	23.9%	40.2%				
2012	382,800	41.0%	11.4%	209,000	23.1%	35.0%				

# Table 1: Survival rates represent survival to hospital discharge [3]

# Table 2: Frequency and percentage distribution of level knowledge on code blue management of CPR among staff nurses working in Government and Corporate hospitals. n=50+50

Level of Knowledge	Governme	ent Hospital =50	Corporate n=	e Hospital 50
	(n)	Percentage	(n)	Percentage
Inadequate (1-15)	25	5	9	18
Moderately adequate(16-35)	23	46	30	60
Adequate (36-50)	2	4	11	22
Total	50	100	50	100

 Table 3: Association between the knowledge of code blue management on CPR among Staff Nurses with their selected demographic variables in Government Hospital setting.

	[	Level of knowledge							
		Inadeq	equate Moderately		Adequate (36-50)		Chi-square value (x 2)		
S.No	Demographic variables	(1-15)		adequate					
				(16-35)			-		
		F	%	F	%	F	%		
1	Age of the Staff nurse								
	18-20 years	7	14	3	6	0	0	0.890	
	21-25 years	4	8	11	2	0	0	df=3	
	26-35 years	4	8	9	18	0	0		
	36-45 years	2	4	2	4	0	0		
2	Gender								
	Male	4	6	3	6	0	0	0.157	
	Female	21	42	30	60	0	0	df=1	
3	Professional Qualification								
	G.N.M	13	26	10	20	0	0	1.203	
	B.SC( Nursing	12	24	15	30	0	0	df=1	
	M.SC( Nursing)	0	0	0	0	0	0		
4	Designation in hospital								
	Staff nurse	13	26	18	36	0	0	0.035	
	Ward incharge	12	24	7	14	0	0	df=1	

5	Have you attend any CPR							
	classes before							
	Yes	13	26	19	38	0	0	6.179
	No	12	24	6	12	0	0	df=1
6	Experience in ICU							
	0-4 Months	11	22	18	36	0	0	2.680
	5-9 Months	8	16	5	10	0	0	df=3
	10-14 Months	6	12	2	4	0	0	
7	No. of CPR done by you							
	during your service							
	1-5 times	8	16	10	20	0	0	0.485
	6-10 times	12	24	6	12	0	0	df=2
	11-15 times	0	0	0	0	0	0	
	None	5	10	9	18	0	0	

 Table 4: Association between the knowledge of code blue management on CPR among Staff nurses with their selected demographic variables in Corporate Hospital setting

		Level of knowledge						Chi-	
S.N Demographic variable		Inade	quate	Moderately adeq	uate	e Adequate		square	
0		(1-15) (16-35)		(36-50)		6-50)	value		
		F	%	F	%	F	%	(x <sup>2</sup> )	
1	Age of the Staff nurse								
	a) 18-20 years	4	8	2	4	2	4	3.998	
	b) 21-25 years	4	8	25	50	3	6	df=3	
	c) 26-35 years	1	2	3	6	2	4		
	d) 36-45 years	0	0	0	0	4	8		
2	Gender								
	a) Male	3	6	3	6	8	16	4.894	
	b) Female	6	12	27	54	3	6	df=2	
3	Professional Qualification								
	a) G.N.M	7	14	27	54	5	10	1.557	
	b) B.SC(Nursing)	2	4	3	6	6	12	df=2	
	c) M.SC(Nursing)	0	0	0	0	0	0		
4	Designation in hospital								
	a) Staff nurse	7	14	17	34	4	8	2.2	
	b) Ward incharge	2	4	13	26	7	14	df=2	
5	Have you attend any CPR classes								
	before								
	a) Yes	3	6	14	28	7	14	5.04	
	b) No	5	10	16	32	4	8	df=1	
6	Experience in ICU								
	a) 0-4 Months	5	10	10	20	8	16	0.777	
	b) 5-9 Months	3	6	11	22	3	6	df=2	
	c) 10-14Months	2	4	9	18	0	0		
7	No. of CPR done by you during								
	your service								
	a) 1-5 times	7	14	8	16	2	4	3.122	

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b) 6-10 times	0	0	7	14	3	6	df=3
c) 11-15 times	1	2	11	22	4	8	
d) None	1	2	5	10	2	4	



## **RESULTS AND DISCUSSION:**

As shown in the table 1, that out of 50 Staff nurses in Government hospital setting 25(50%) were having inadequate knowledge, 23(46%) were having moderately adequate knowledge, 2(4%) were having adequate knowledge. In Corporate hospital setting 9(18%) were having inadequate knowledge, 30(60%) were having moderately adequate knowledge, 11(22%) were having adequate knowledge.

As shown in the table 2 that out of 50 Staff nurses in Government hospital setting 25(50%) were having inadequate knowledge, 23(46%) were having moderately adequate knowledge, 2(4%) were having adequate knowledge. In Corporate hospital setting 9(18%)were having inadequate knowledge, 30(60%) were having moderately adequate knowledge, 11(22%) were having adequate knowledge.

As shown in the talble 4, that demographic variables such as Age of the staff nurses, Gender, Professional qualification, Designation in the hospital, Attended CPR Classes, Experience in ICU, No. of CPR done by staff nurses during service had no association with level of knowledge among staff nurses working in corporate hospital setting.

# **CONCLUSION:**

Major Findings Of The Study Mean value for level of knowledge in corporate hospital 26.46 with standard deviation of 8.46 was significantly higher than Government hospital mean value of 16.98 with standard deviation of 5.51 .The independent 't' test value in Government and Corporatewas t = 6.634 which is statistically significant at the level of P<0.05.

#### **CONCLUSION:**

This study indicates that Corporate Hospital staff nurses having more knowledge when compared to the Government Hospital staff nurses.

**H**<sub>1</sub>: There is a significant difference in the knowledge of code blue management on CPR among staff nurses working in Government and Corporate hospitals.

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