

To Assess The Knowledge And Attitude Regarding Basic Life Support Among Non-Medical Student.

Annu, PG

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ABSTRACT

Introduction: - Basic life support (BLS) is a technique for preserving lives that involves defibrillation quickly, adopting effective cardiopulmonary resuscitation (CPR), and immediately recognising cardiac arrest. In a number of medical emergencies, particularly out-of-hospital cardiac arrest (OHCA), which is to blame for more than 49.1% of all fatalities, it can be beneficial in lowering mortality and morbidity. Therefore, 3-5 minutes after the onset of OHCA, a quick intervention is essential for the result.

Material and methods: - The research approach is quantitative research approach and non-experimental descriptive design was used for this study. Study was conducted in SGT hospital. The study was conducted on 150 non-medical students who were selected with convenient sampling technique. For assessing the knowledge and attitude two different tools were used that are questionnaire and Likert scale. Analysis of the study is divided into two parts: descriptive and inferential statistics. In descriptive analysis mean, frequency percentage and standard deviation is calculated and in inferential analysis correlation and chi-square is calculated.

Results: -The result of the study was that, out of 150 respondents, 18% (57) participants were having inadequate knowledge, 74% (88) participant have moderate knowledge and 8% (5) having adequate knowledge. The mean score of knowledge is 8.66, similarly mean Percentage of knowledge is 37.66%, SD value is 2.9985. In attitude level no participants were having unfavourable attitude, 92% (152) participant have moderately favourable attitude and 8% (8) having favourable attitude towards BLS. The mean score of attitude is 23.34, similarly mean percentage of attitude is 66.68% and the SD value is 2.1762. There was there is a significant association between knowledge score with highest level of education. There is a significant association between attitude score with age in year.

Conclusion:- The researcher concluded that the majority of the students were not much aware of Basic Life Support and the attitude of majority of students towards Basic Life Support is moderately favourable. Hence the students are having less knowledge regarding Basic Life Support but are willing to learn so some programme can be arranged for them.

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I. INTRODUCTION

Basic life support refers to the initial care given for a sickness or accident, typically by any close (bystander) person before access to medical treatment is possible. The most crucial elements affecting patient survival odds are early patient detection, early EMS activation, and early bystander basic life support (BLS). This in turn is entirely dependent on what the onlookers know and do. (1)

A layperson or non-medical person should have the requisite knowledge regarding procedures to deal with these conditions because it is assumed that life-threatening conditions could occur anywhere and that no medical professional would be present to treat them. Some claim that only medical professionals can perform BLS (Basic Life Support). (3)

Cardiac arrest is a situation in which the heart's unexpected cessation of beating causes the breathing system's performance to decline. (2)

Chest compressions to promote circulation are of utmost importance because the majority of cardiac arrests in adolescents occur unexpectedly and are the result of a primary cardiac cause. (2) According to reports, most out-of-hospital cardiac arrests (OHCA) occur at home or in a dwelling. The hospital itself reports cases of in-hospital cardiac arrest (IHCA). (OHCA) appears to be a significant ongoing public health concern, with an average global incidence of 55 OHCA's per 100,000 people/year among adults. (4)

By providing enough blood supply to the heart and central nervous system to ensure temporary viability, early cardiopulmonary resuscitation (CPR) demonstrates its enormous benefit in shortening the time it takes for primary cardiac arrest.

For achieving the desired outcome CPR must be started early. Timely spreading knowledge about CPR improves the livelihood of survival by two to four times.

The statistics for heart and stroke in 2022 have been updated by the American Heart Association. In the United States, there are more than 356,000 out-of-hospital (OHCA) cases per year, and approximately 90% of them result in death. The incidence of non-traumatic OHCA as determined by EMS is thought to affect 356,461 individuals, or roughly 1000 people each day. About 10% of patients who have EMS treatment for cardiac arrest survive to be discharged from the hospital. (6)

II. METHODOLOGY

The present study aimed to assess the Knowledge and Attitude Regarding Basic Life Support among Non-Medical students at SGT University, Gurugram (Haryana).

A Quantitative research approach and Descriptive research design was used for the study. The study was conducted on 150 non-medical students who were selected with convenient sampling technique. For assessing the knowledge and attitude two different tools were used that are questionnaire and Likert scale.

III. ANALYSIS

Analysis of the study is divided into two parts: descriptive and inferential statistics. In descriptive analysis mean, frequency percentage and standard deviation is calculated and in inferential analysis correlation.

IV. RESULT

The data revealed that majority 52.70 percent (79) participants were in the age group of 21-24 years followed by 43.30 percent (65) in the age group of 17-20 years and 4.0 percent (06) were in the age group of 25 and above. 61 percent (91) were female and 39 percent (59) were male. With regard to education majority 84.70 percent (127) having graduation, followed by 8.0 percent (12) with diploma, 7.3 percent (11) having post-graduation. majority 86 percent (129) respondents were married and 14 percent (21) respondents were unmarried. majority 86 percent (129) respondents were married and 14 percent (21) respondents were unmarried.

Section I: Description of the Demographic Data.

TABLE – 1: Frequency and Percentage Distribution of Demographic Variables (N=150)

Demographic Variable		Frequency Percentage
Age		
	a) 17-20years	65(43.3%)
	b) 21-24 years	79(52.7%)
	c) 25-above	6(4.0%)
Gender		
	a) Male	59 (39.3%)
	b) Female	91(60.7%)
Education		
	a) Diploma	12(8.0%)
	b) Graduation	127(84.7%)
	c) Post-graduation	11(7.3%)
Marital Status		
	a) Married	21(14.0%)
	b) Unmarried	129(86.0%)

Religion		
	a) Hindu	135(90.0%)
	b) Muslim	8(5.3%)
	c) Others	7(4.7%)

Section-B (I) Distribution of subjects according to knowledge level.
(N=150)

Knowledge Level	Score	Range	Frequency	Percentage
Inadequate	1 to 7	0 to 33%	57	38.0%
Moderately adequate	8 to 15	34 to 66%	88	58.7%
Adequate	16 to 23	67 to 100%	5	3.3%
Total			150	100.0%

The knowledge score of non-medical students regarding Basic Life Support. The mean score of knowledge is 8.66, similarly mean Percentage of knowledge is 37.66%, SD value is 2.9985.

Section-B (II) Distribution of subjects according to knowledge level.

Knowledge Level	Score	Range	Agriculture Science		Fashion Design		Mass com & Tech	
			F	%	F	%	F	%
Inadequate	1 to 7	0 to 33%	25	50.0%	23	46.0 %	9	18.0 %
Moderately adequate	8 to 15	34 to 66%	25	50.0%	26	52.0 %	37	74.0 %
Adequate	16 to 23	67 to 100%	0	0%	1	2.0 %	4	8.0 %
Total			50	100.0%	50	100%	50	100%

The knowledge level of the non-medical students about Basic Life Support. In knowledge level majority of 18% (57) participants were having inadequate knowledge, 74% (88) participant have moderate knowledge and 8% (5) having adequate knowledge.

Section 3: Attitude of non-medical students regarding Basic Life Support among Attitude score of non-medical students regarding Basic Life Support

Attitude Level	Score	Range	Frequency	Percentage
Unfavourable	1 to 17	Less than 50%	0	0%
Moderately favourable	18 to 26	51 to 75%	142	94.7%
Favourable	27 to 35	76 to 100%	8	5.3%
Total			150	100.0%

The attitude score of non-medical students regarding Basic Life Support. The mean score of attitude is 23.34, similarly mean Percentage of attitude is 66.68%, SD value is 2.1762.

Distribution of subjects according to attitude level.

Attitude Level	Score	Range	Agriculture Science		Fashion Design		Mass com & Tech	
			F	%	F	%	F	%
Unfavourable	1 to 17	Less than 50%	0	0%	0	0%	0	0%
Moderately favourable	18 to 26	51 to 75%	48	96.0%	48	96.0%	46	92.0 %
Favourable	27 to 35	76 to 100%	2	4.0%	2	4.0%	4	8.0 %
Total			50	100.0%	50	100%	50	100%

In attitude level no participants were having inadequate knowledge, 92% (152) participant have moderate knowledge and 8% (8) having adequate knowledge.

Section 4

To find association between knowledge regarding Basic Life Support among non-medical students with selected demographic variable.

(N=150)

Demographic Variable	Inadequate Knowledge	Moderate Knowledge	Adequate Knowledge	P-Value & df	Calculated value
Age in year					
a) 17-20years	25	38	2	0.985	0.370
b) 21-24 years	30	46	3	df=4	
c) 25-above	2	4	0		
Gender					
a) Male	21	36	2	0.887	0.241
b) Female	36	52	3	df=2	
Highest level of education					
a) Diploma	8	4	0	0.136	6.991
b) Graduation	47	75	5	df=4	
c) Post-graduation	2	9	0		
Marital status					
a) Married	8	13	0	0.651	0.858
b) Unmarried	49	75	5	df=2	
Religion					
a) Hindu	52	79	4	0.285	5.022
b) Muslim	1	6	1	df=4	
c) Others	4	3	0		

* =Significant

P ≤ 0.05

The obtained p-value for all demographic values are greater than 0.05, which indicates that there is a no significant association between knowledge score with selected demographic variables. Hence, the research hypothesis H₁ is rejected and null hypothesis H₀₁ is accepted.

To find association between knowledge regarding Basic Life Support among non-medical students with selected demographic variable.

(N=150)

Demographic Variable	Below Median	Median & Above Median	P-Value & df	Calculated value
Age in year				
a) 17-20years	40	25	0.970	0.061
b) 21-24 years	49	30	df=2	
c) 25-above	4	2		
Gender				
a) Male	38	21	0.625	0.239
b) Female	55	36	df=1	
Highest level of education				
a) Diploma	4	8	0.048	6.072*
b) Graduation	80	47	Df=2	
c) Post-graduation	9	2		
Marital status				
a) Married	13	8	0.992	0.000
b) Unmarried	80	49	df=1	
Religion				
a) Hindu	83	52	0.191	3.312
b) Muslim	7	1	df=2	
c) Others	3	4		

Median Score = 8

* =Significant

P ≤ 0.05

The obtained p-value for highest level of education is lesser than 0.05, which indicates that there is a significant association between knowledge score with highest level of education. Hence, the research hypothesis H₁ is accepted and null hypothesis H₀₁ is rejected.

The obtained p-value for age, gender, marital status and religion is greater than 0.05, which indicates there is no significant association between knowledge score with selected demographic variable hence the null hypothesis H₀₁ is accepted and alternative hypothesis H₁ is rejected.

To find association between attitude regarding Basic Life Support among non-medical students with selected demographic variable.

(N=150)

Demographic Variable	Moderately favourable	Favourable	P-Value & df	Calculated value
Age in year				
a) 17-20years	60	5	0.002 df=2	12.622*
b) 21-24 years	78	1		
c) 25-above	4	2		
Gender				
a) Male	55	4	0.526 df=1	0.403
b) Female	87	4		
Highest level of education				
a) Diploma	11 121 10	1	0.735 df=2	0.615
b) Graduation		6		
c) Post-graduation		1		
Marital status				
a) Married	20	1	0.900 df=1	0.016
b) Unmarried	122	7		
Religion				
a) Hindu	128	7	0.545 df=2	1.214
b) Muslim	7	1		
c) Others	7	0		

* =Significant

P ≤ 0.05

The obtained p-value for age in year is lesser than 0.05, which indicates that there is a significant association between attitude score with age in year. Hence, the research hypothesis H₂ is accepted and null hypothesis H₀₂ is rejected.

The obtained p-value for gender, highest level of education, marital status and religion is greater than 0.05, which indicates there is no significant association between attitude score with selected demographic variable hence the null hypothesis H₀₂ is accepted and alternative hypothesis H₂ is rejected.

To find association between attitude regarding Basic Life Support among non-medical students with selected demographic variable.

(N=150)

Demographic Variable	Below Median	Median & Above Median	P-Value & df	Calculated value
Age in year				
a) 17-20years	29	36	0.182 df=2	3.407
b) 21-24 years	40	39		
c) 25-above	5	1		
Gender				
a) Male	26	33	0.299 df=1	1.079
b) Female	48	43		
Highest level of education				
a) Diploma	10 60 4	2	0.039 df=2	6.512*
b) Graduation		67		
c) Post-graduation		7		
Marital status				
a) Married	8	13	0.267 df=1	1.234
b) Unmarried	66	63		
Religion				
a) Hindu	68	67	0.732 df=2	0.624
b) Muslim	3	5		
c) Others	3	4		

Median Score = 23

* =Significant

P ≤ 0.05

The obtained p-value for highest level of education is lesser than 0.05, which indicates that there is a significant association between attitude score with age in year. Hence, the research hypothesis H₂ is accepted and null hypothesis H₀₂ is rejected.

The obtained p-value for age, gender, marital status and religion is greater than 0.05, which indicates there is no significant association between attitude score with selected demographic variable hence the null hypothesis H₀₂ is accepted and alternative hypothesis H₂ is rejected.

V. DISCUSSION

Discussion on description of socio demographic characteristic of the sample

Out of 150 participants majority of students were in between age group of 21-24 years that is 79(59.6%) students. As I had setting of the study at SGT University and students join here for various courses.

Out of 150 participants majority of students were females that is 91(50.6%) students. As females are dominant in fashion designing, mass communication and agricultural sciences.

Out of 150 student majority of students were in graduation that is 127(84.7%).

Out of 150 student majority of students were unmarried that is 129(86.0%)

Out of 150 student majority of students were Hindu that is 135(90.0%)

Discussion on the knowledge regarding BLS among Non-Medical students.

In respect of mean, score for inadequate, moderate and adequate knowledge are, 1-7, 8-15 and 16-23 respectively. For moderate knowledge, there is higher mean than other levels. Which shows that students had adequate knowledge towards BLS.

As said by **Sami Mohammad** in a cross-sectional study that the knowledge among participants regarding BLS is low.(15)

Discussion on the attitude regarding BLS among Non-Medical students.

In respect of mean, score for favourable, moderately and unfavourable attitude are 27-35, 18-26 and 1-17 respectively. For moderately favourable attitude, there is higher mean than the unfavourable attitude which shows that students have favourable attitude towards BLS.

Aisha Aldhakhari, told in his cross-sectional study that overall, the participants had a favourable attitude to BLS.(6)

Discussion on the correlation between knowledge and selected demographic variable regarding BLS among Non-Medical students.

The obtained p-value for highest level of education is lesser than 0.05, which indicates that there is a significant association between knowledge score with highest level of education

The obtained p-value for age, gender, marital status and religion is greater than 0.05, which indicates there is no significant association between knowledge score with selected demographic variable.

Discussion on the association between attitude with their selected demographic variables.

The obtained p-value for highest level of education is lesser than 0.05, which indicates that there is a significant association between attitude score with age in year

The obtained p-value for gender, highest level of education, marital status and religion is greater than 0.05, which indicates there is no significant association between attitude score with selected demographic variable.

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