

# A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Global Warming and its Impact on Health among B.Ed. Students in Selected College, Nagamangala

KANTHARAJU S<sup>1</sup> ; CHANDRSHEKAR H.C<sup>2</sup>

Asst-Professor, Adichunchanagiri College of Nursing, Adichunchanagiri University. B.G. Nagara. Nagamangala (Tq), Mandya (Dist.), Karnataka, India

**Abstract:-** Global warming is all regarding adverse climate effects caused by the housing of greenhouse gases (CO<sub>2</sub>) within the earth's atmosphere that affects multifariousness and causes a severe hazard. The atmospheric phenomenon is however absorption and emission of infrared light by gases occur within the atmosphere and surface. The first greenhouse gases at vapor, which causes regarding a pair of thirty-six to seventieth of the greenhouse effect; carbon dioxide, which causes 9-26%, paraffin (CH<sub>4</sub>) that causes 4-9% and gas (O<sub>3</sub>) that causes 3-7% of the atmospheric phenomenon.

## Objectives

To determine the present knowledge relating to warming and its impact on health among B.Ed. Students. To work out the post-test knowledge relating to warming and its effects on health among B.Ed. Students. To work out the effectiveness of a structured teaching program on warming and its impact on health among B. Ed Students. To associate the knowledge relating to warming and its effects on health with demographic variables.

## Methods

A quasi-experimental Single cluster pretest and post-test style were accustomed to assess the effectiveness of standard pressure on information relating to warming and its effects on health among B.Ed. Students in elect school, Nagamangala. During this study, a straightforward organization technique was adopted. The split- [\*fr1] technique was accustomed to check the dependability of the tool. The info was analyzed victimization the Computation of mean and variance and inferential statistics. Paired \_t” check, chi-square check each tested. The info is diagrammatic by victimization varied graphical devices, the bar diagram, pie diagram, etc.

## Results

The Quasi-Experimental approach for Associate in Nursing intervention study is that the one within which subjects are at randomly assigned to treatment conditions,

The symbol of the current study is as follows:  
E O1 X O2

## Keywords:-

E - Experimental cluster  
X - Interventions  
O1 - Pre check  
O2 - Post-test

## I. INTRODUCTION

The term warming was in all probability 1st employed in its fashionable sense on eight August 1975 in an exceeding science paper by muggings Broker within the journal science referred to as we have a tendency to be on the brink of a pronounced world. Warming is that the increase of the earth's average surface temperature thanks to the impact of greenhouse gases, like dioxide emission from burning fossil fuels or from deforestation, that lure heat that might otherwise shake the world. The atmospheric phenomenon is however absorption and emission of infrared light by gases occur within the atmosphere and surface. It had been introduced by Joseph Fourier in 1824 and was 1st investigated quantitatively by Svante August Arrhenius in 1896. The greenhouse gases have a mean warming impact of 330C. The first greenhouse gases are vapor, which causes regarding a pair of thirty-six to seventieth of the greenhouse effect; carbon dioxide, which causes 9-26%, paraffin (CH<sub>4</sub>) that causes 4-9% and gas (O<sub>3</sub>) that causes 3-7% of the atmospheric phenomenon.

## Statement of the Problem

"A study to assess the effectiveness of structured teaching program on knowledge relating to warming and its impact on health among B.Ed. students in selected college, Nagamangala."

## Objectives

To assess the present knowledge relating to warming and its impact on health among the B.Ed. Students. To work out the post-test knowledge relating to warming and its effects on health among the B.Ed. Students. To assess the effectiveness of a structured teaching program on warming and its impact on health among the B.Ed. Students. To

associate the knowledge relating to warming and its effects on health with demographic variables.

**II. Methods and MATERIALS**

**Hypothesis: -**

There will be a big distinction between the mean pretest and post-test knowledge score relating to warming and its impact on health among B.Ed. Students in selected college. There'll be a big association between the amount of knowledge relating to warming and its effects on health among B.Ed. students in the selected college with their selected demographic variables

**Research approach**

Analysis design: - Quasi-Experimental style used

Population: - The population consists of B.Ed. Students of Adichunchanagiri, Nagamangala (T.Q.), and Mandya (D).

Sample: - sixty sample select for this study

Sample size: - A complete of sixty B.Ed. students

Sampling technique: - During this study, a likelihood straightforward sampling technique was used.

Research Variables: - Knowledge of B.Ed. students and structured teaching program

**Method of knowledge collection:**

The permission was obtained for conducting the study from the principal of BGS school of education, Sri Adichunchanagiri, Nagamangala talk, Mandya district. Moral clearance for conducting the study was obtained from thirty ethical committees of the faculty, and it had been shown to the BGS school of education Sri Adichunchanagiri. Information was collected from twelve Gregorian calendar months to nineteen Gregorian calendar

months 2014. The sample was selected as per the sampling criteria. The aim of the study was explained, and therefore the co-operation needed from the respondents was bestowed to them.

Tools used for the study:

Section – 1: look for info regarding demographic variables.

Section – 2: Knowledge of B.Ed. students relating to warming

**Plan for knowledge analysis:**

Paired ‘t’ check and chi-square check each tested zero.05 level of significance to work out the effectiveness of structured teaching programme & association between selected demographic variables. The collected information was statistically analyzed and tabulated by applying descriptive and inferential statistics—the information diagrammatic by victimization varied graphical devices, the bar diagram, pie diagram, Etc.

**III. RESULTS**

Analysis of the study finding is categorized and bestowed below the subsequent headings:

Section 1: Description of selected Demographic Variables.

Section-2: Analysis of overall and aspect-wise knowledge of respondents on warming.

Section 3: Findings associated with the association of levels of knowledge of first B.Ed. Students with their selected demographic variables' viz. Age, Gender, a form of Community, Religion, Monthly financial gain of Family, Stream of Education, Level of Education, supply of knowledge.

**SECTION 1 DESCRIPTION OF SELECTED DEMOGRAPHIC VARIABLES**

**TABLE-1 Frequency and percentage distribution of first-year B.Ed. students according to their demographic variables n=60**

Sl. No	Demographic variables	Frequency (f)	Percentage (%)
1.	<b>Age (in years)</b>		
	a) 20-23yrs	35	58
	b) 24-27yrs	15	25
	c) 28-31yrs	6	10
	d) 31yrs and above	4	7
2.	<b>Gender</b>		
	a) Male	24	40
	b) Female	36	60
3.	<b>Type of community</b>		
	a) rural	45	75
	b) urban	15	25
4.	<b>Religion</b>		
	c) Hindu	48	80
	d) Muslim	8	13
	e) Christian	3	5.00
	f) Any others	1	1.67
	<b>Monthly income of a family</b>		
	a) Below 5000	3	5
	b) 5000-10000	44	73

5.	c) 10000-15000	8	13
	d) Above 15000	5	8
<b>Stream of Education in Bachelor's Degree</b>			
6.	a) Science	17	28
	b) Arts	37	61.67
	c) Commerce	6	10.00
<b>Level of Education</b>			
7.	a) Under graduation	48	80
	b) Post-graduation	12	20
<b>Source of information</b>			
8.	a) Print media	34	57
	b) electronic media	14	23
	c) Health professionals	5	8
	d) Family member or relatives	3	5
	e) Friends or neighbors	4	7

## Section-2: Analysis of overall and aspect-wise knowledge scores of B.Ed. students on global warming

**Table 2: Aspect-wise Pretest Mean Knowledge scores of B.Ed. students on Global Warming**

N=60

No.	Knowledge Aspects	Statements	Max. Score	Pretest Knowledge scores of B.Ed. students		
				Mean	SD	Mean (%)
I	General Information on global warming	5	5	2.9	0.8	58.0
II	Causes of global warming	10	10	5.0	1.4	49.5
III	Effects/impacts of global warming	10	10	5.6	1.1	55.5
IV	Proposed policy	03	03	1.7	0.8	55.6
V	Prevention	02	02	1.2	0.6	60.0
<b>Overall</b>		<b>30</b>	<b>30</b>	<b>16.26</b>	<b>3.03</b>	<b>53.90</b>

**Table 3: Classification of B.Ed. students on Pretest Knowledge level on Global Warming**

N=60

Knowledge Level	Category	B.Ed. students	
		Number	Percent
Inadequate	≤ 50 % Score	19	31.67
Moderate	51-75 % Score	38	63.33
Adequate	> 75 % Score	3	5.0
<b>Total</b>		<b>60</b>	<b>100.0</b>

**Table 4: Aspect-wise post-test means knowledge scores of B.Ed. students on global warming**

N=60

No.	Knowledge Aspects	Statements	Max. Score	Post-test mean Knowledge scores of B.Ed. students		
				Mean	SD	Mean (%)
I	General Information on global warming	5	5	3.6	0.7	72.3
II	Causes of global warming	10	10	6.4	1.1	63.7
III	Effects/impacts of global warming	10	10	6.5	1.1	64.8
IV	Proposed policy	03	03	2.1	0.6	69.4
V	Prevention	02	02	1.5	0.5	73.3
<b>Over All</b>		<b>30</b>	<b>30</b>	<b>20.02</b>	<b>2.59</b>	<b>66.61</b>

**Table 5: Classification of B.Ed. students on Post-test Knowledge level on global warming**  
N=60

Knowledge Level	Category	B.Ed. students	
		Number	Percent
Inadequate	≤ 50 % Score	1	1.67
Moderate	51-75 % Score	42	70.00
Adequate	> 75 % Score	17	28.33
<b>Total</b>		<b>60</b>	<b>100.0</b>

**Table 6: Aspect wise Pretest and Post-test mean Knowledge on global warming**

N=60

No.	Knowledge Aspects	B.Ed. students' Knowledge (%)						Paired "t" Test
		Pretest		Post-test		Enhancement		
		Mean	SD	Mean	SD	Mean	SD	
I	General Information on global warming	58.0	0.8	72.3	0.7	14.3	0.80	6.90
II	Causes of global warming	49.5	1.4	63.7	1.1	14.2	1.36	8.08
III	Effects/impacts of global warming	55.5	1.1	64.8	1.1	9.3	1.01	7.18
IV	Proposed policy	55.6	0.8	69.4	0.6	13.8	0.70	4.63
V	Prevention	60.0	0.6	73.3	0.5	13.3	0.52	4.01
	<b>Over All</b>	<b>53.90</b>	<b>3.03</b>	<b>66.61</b>	<b>2.59</b>	<b>12.71</b>	<b>3.01</b>	<b>9.64</b>

**Table 7: Overall pretest and post-test mean Knowledge on global warming.**

N=60

Aspects	Max. Score	Knowledge			Paired "t" Test
		Mean	SD	Mean (%)	
Pretest	30	16.26	3.03	53.90	9.64*
Post-test	30	20.02	2.59	66.61	
Enhancement	30	3.76	3.01	12.71	

\* Significant at 5% level, t (59) =1.67; p >0.05, = significant

**SECTION 3**

**Findings related to the association of level of knowledge scores of first-year B. Ed students with their selected demographic variables**

TABLE 8

Association of pretest level knowledge of first-year B. Ed students regarding global warming with their selected students' demographic variables viz. Age, Gender, Type of Community, Religion, Monthly Income of Family, Stream of Education, Level of Education, Source of Information

n=60

Sl. No	Demographic variables	Sample (n)		knowledge level of Respondents				d.f	Chi-square (χ <sup>2</sup> – value)	Significance at 0.05 level
				≤median (34)		>median (26)				
		n	%	f	%	f	%			
1.	<b>Age (in years)</b>							7	23.39	S* P<0.05
	a) 20-23 years	35	58	30	88.24	5	19.23			
	b) 24-27 years	15	25	3	8.82	12	46.15			
	c) 28-31 years	6	10	1	2.94	5	19.23			
	d) 31 years and above	4	7	0	0.00	4	15.38			
2.	<b>Gender</b>							3	0.72	N.S. P>0.05
	a) Male	24	40	12	35.29	12	46.15			
	b) Female	36	60	22	64.71	14	53.85			

3.	<b>Type of community</b>								3	0.09	NS p>0.05
	a) Rural	45	75	25	73.53	20	76.29				
	b) Urban	15	25	9	26.47	6	23.08				
4.	<b>Religion</b>								7	2.39	NS p>0.05
	a) Hindu	48	80	25	75.53	23	88.46				
	b) Muslim	8	13	6	17.63	2	7.69				
	c) Christian	3	5.00	2	5.88	1	3.85				
	d) Any others	1	1.67	1	2.94	0	0.0				

5.	<b>Monthly income of the family (in rupees)</b>								7	4.83	NS p>0.05
	a) Below 5000	3	5	2	5.88	1	3.85				
	b) 5001-10000	44	73	28	82.35	16	61.54				
	c) 10001-15000	8	13	2	5.88	6	23.08				
	d) 15001Above 15000	5	8	2	5.88	3	11.54				
6.	<b>Stream of education in bachelor's degree</b>								5	1.88	NS p>0.05
	a) Arts	17	28	12	35.29	5	19.23				
	b) Science	37	61.67	19	55.88	18	69.23				
	c) Commerce	6	10	3	8.82	3	11.54				
7.	<b>Level of education</b>								3	3.32	NS p>0.05
	a) Under Graduation	48	80	30	88.24	18	69.23				
	b) Post Graduation	12	20	4	11.76	8	30.77				
8.	<b>Source of information about global warming</b>								9	23.86	S* P<0.05
	a) Print media	20	33	12	35.29	8	30.77				
	b) Electronic media	25	42	16	47.06	9	34.62				
	c) Health professional	5	8	3	8.82	2	7.69				
	d) Family members or relatives	4	7	1	2.94	3	11.54				
	e) Friends or neighbors	6	10	2	5.88	4	15.38				

#### IV. DISCUSSION

This study shows that a structured teaching program was effective in improving the Knowledge regarding global warming and its impact on health.

#### REFERENCES

- [1]. Carlow. K, Cook. J, Duplisy et al. -Introduction of global warming. doi:10.5194/acpd-9-18235-2009, Vol.9, PP-18235-18270. Available from: URL:<http://www.en.wikipedia.org>
- [2]. Thilka Ravi, Dr. Shroft. -Adverse climate changes. doi:237.9/maed.9.86c-2008, pp-18035-18036. Available from: URL:<http://www.medindia.net>
- [3]. Lissy, Joseph, Nattukalathil, Westeleri P.O, et al. "Global warming and its impacts on climate of India".doi:93456/269pr-2008, PP-228-290. Available from: URL:<http://www.climateemergencyinstitute.com>
- [4]. Lindzen, Richard s. Global warming facts, causes and effects of climate. American meteorology society vol.7, no-3,Mar-1990. Available from <http://www.nrdc.org>