A Study to Impact of a Structure Teaching Programme on Knowledge Regarding Climate Changes and Its Effect on Health Among Nursing 1st Year & 2nd Year Students from Selected Nursing Colleges at Indore City

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ABSTRACT

Climate change, driven by human-induced greenhouse gas emissions, poses serious threats to global health and well-being. This study aimed to assess the impact of a structured teaching programme on knowledge regarding climate change and its health effects among nursing students. A pre-experimental one-group pre-test and post-test design was used with 60 participants selected through convenience sampling. The mean pre-test score was 7.78 (SD ± 3.87) and the post-test score increased to 14.48 (SD ± 3.69). A significant difference was found ($t=9.61$, $p<0.05$). The findings support the effectiveness of the structured teaching programme. Incorporating such interventions can enhance awareness among future nurses.

KEY WORDS:- Evaluate, Knowledge, Impact, Structure Teaching Programme, Climate Change.

INTRODUCTION:-

Climate change is directly contributing to humanitarian emergencies from heat waves. Wildfires, floods, tropical storms and hurricanes and they are increasing in scale, Frequency and intensity. Research shows that 3.6 billion people already live in areas highly susceptible to climate change. Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from under nutrition, malaria, diarrhoea and heat stress alone.

(Acc. to WHO)

This study aimed to assess nursing student knowledge regarding climate change and its effects on health care sector, and responsibility for resource conservation with in professional practice.

OBJECTIVES:-

1. To assess the existing level of knowledge regarding climate change and its effects on health among nursing students.
2. To determine the post interventional level of knowledge regarding climate change and its effects on health among nursing students.
3. To determine the effectiveness of structured teaching programme on knowledge regarding climate change and its effects on health among nursing students.
4. To find the association between Pre-test knowledge scores regarding climate change and its effects on health among nursing students with their selected socio demographic variables.

HYPOTHESES [AT 0.05 LEVEL OF SIGNIFICANCE]:-

1. **H01:** There is no significant difference between mean pre-test and mean post- test knowledge score regarding climate change and its effects on health among nursing students
2. **H1:** There is a significant difference between mean pre-test and mean post- test knowledge score regarding climate change and its effects on health among nursing students.
3. **H02:** There is no significant association between mean pre-test knowledge scores regarding climate change and its effects on health among nursing students with their selected socio demographic variables.
4. **H2:** There is an significant association between mean pre-test knowledge scores regarding climate change and its effects on health among nursing students with their selected socio demographic variables.

METHODOLOGY:-

A pre-experimental one-group pre-test and post-test design was adopted to assess the effectiveness of a structured teaching programme on knowledge regarding climate change and its health effects among nursing students. The study was conducted at Bombay Hospital College of Nursing, Indore**,** involving 60 B.Sc. Nursing students from 1st and 2nd year, selected through non-probability convenience sampling.

Data were analyzed using descriptive statistics (mean, SD) to summarize the knowledge scores and inferential statistics (paired t-test) to compare the pre- and post-test results and determine the effectiveness of the intervention.

Table 1.:- Frequency & percentage distribution of socio-demographic variables:-

S.NO	DEMOGRAPHIC DATA	F	%
1.	Age (in year) 21-23 year	32	53%
2.	Batch B.Sc. NURSING 2nd YEAR	32	53.3%
3.	State (M.P.)	30	50%
4.	Father Education (Post Graduate)	30	50%
5.	Mother Education (Graduate)	25	41.66%
6.	Family Income (80000-100000)	20	33.33%
7.	Previous Knowledge (Yes)	35	58.3%
8.	Source Of Information (Mass Media & Seminar)	25	41.66%

The data presented in Table 1 show that in The Majority of participants (53.3%) were 2nd year B.Sc. Nursing students aged 21–23 years, and 58.3% had prior knowledge of climate change. Nearly half had postgraduate fathers and reported mass media/seminars as key information sources.

TABLE 2.:- COMPARISON OF THE PRE-TEST AND POST – TEST KNOWLEDGE SCORE AMONG SAMPLES

S.No.	Knowledge Score	Pre knowledge Score		Post knowledge Score	
		No.	%	No.	%
1.	Poor (0-7)	27	45%	04	6.66 %
2.	Average (08-14)	18	30%	08	13.33%
3.	Good (15-21)	12	7.2 %	14	23.33%
4.	Excellent(22-28)	3	5%	34	56.66%

The data presented in Table 2 show that in the pre-test, 45% of participants had poor knowledge, 30% had Average knowledge, good Knowledge had 7.2% and 5% had Excellent knowledge. After the structured teaching program on climate change and its health impacts, the post-test results revealed that 56.66% of participants had excellent knowledge, 23.33 had good knowledge, and 6.66% had poor knowledge.

Table 3:- Association between pre-test knowledge score regarding climate change its effects on health among nursing students with their selected socio demographic variables.

S.No.	DEMOGRAPHIC DATA	χ 2 value	Table value
1.	Age	69.9*	9.49
2.	Batch	5.4*	3.84
3.	State	7.3	9.49
4.	Father Education	10.0	16.92
5.	Mother Education	15.0	16.92
6.	Family Income	30.7*	16.92
7.	Previous Knowledge	18.26*	3.84
8.	Source Of Information	1.3	16.92

The Table 3 represents the information association of pre- test knowledge score with demographic profile i.e. age, batch, family income, previous knowledge is statistically significant at level of 0.05.

RESULT

The result shows that pre-test knowledge of nursing students 27(45%) were poor, 18(30%) average, 12(7.2%) good, 3(5%) excellent, and post-test knowledge score 4(6.66%) were is poor, 8(13.33%) average, 14(23.33%) good, 34(56.66%) excellent. The mean post-test score is 14.483 SD ± 3.69, which is higher than the mean pre-test score of 7.783 SD ± 3.87. A significant difference between pre and post test score, with a t-value of 9.61 ($t59=9.61$, $P<0.05$). Hence, research hypothesis H_1 is accepted.

CONCLUSION

The findings of the study clearly indicate that the structured teaching programme was effective in enhancing the knowledge of nursing students regarding climate change and its effects on health.

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