



“Effectiveness Of Structured Teaching Program On Knowledge Regarding Geriatric Care And Attitude Towards Elderly Among Undergraduate Student In Selected Colleges Of Guwahati, Assam: A Quasi-Experimental Study.”

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ABSTRACT

BACKGROUND OF THE STUDY

According to the World Health Organization (WHO) World Report on Ageing and Health (2022), every country in the world is experiencing growth in the size and the proportion of older persons in the population. The population aged 60 years and older will double by 2050. Elderly aged 80 years or older is expected to triple between 2020 and 2050 to reach 426 million.¹

In India the elderly population is expected to increase its share to 12.5% and 20% by 2026 and 2050 respectively. There is pressure on all aspects of care for the older persons- be it financial, health or shelter.²

As elderly grow older, they need extra care and comfort to lead a healthy life. Their changing behavioural patterns put them at risk of being abuse by their family members due to ignorance. Apart from increased risk of diseases in old age, there are various other issues that lead to the deterioration of the health of the elderly. The inability of the younger family members to understand the various complex needs (physical, emotional, nutritional and financial) lead to them regarding the elderly individuals as a burden. Elders suffering from cognitive challenges undergo serious personality changes and for that matter they require tremendous care. The overwhelming feelings of dejection and purposelessness turn violent when they are left unattended requiring long term and constant care.³

In the 21st century, the growing security of older persons in India is apparent. HelpAge India focuses on the issue of Elder Abuse to create awareness and advocate various measures that can be taken up to ensure the safety and security of the elderly. The need to study the prevalence and extent of abuse among elderly across cities, perception is expected to help the HelpAge to address the issue of Elder Abuse.²

World Health Organization (WHO) considers abuse of older people as an important public health problem.⁴ The WHO defines “elder abuse” or “abuse of older people” as a single or repeated act or lack of appropriate action occurring within any relationship in which there is expectation of trust that causes harm or distress to an older person.⁵

One often refrains from acknowledging the existence of ‘Elder Abuse.’ But a dark reality pervades within the four walls and confines of one’s home. The HelpAge India, has been trying to understand the crime against elderly, by getting the elder perspective, their understanding and experiences. Shockingly, in 2014, half of India’s elderly (50%) reported of having experienced abuses and most of them were living with their families.⁶

Data suggests that 46% of elders in India are unaware of any kind of legal support available, they are not aware that elder abuse is a punishable offence. Any person harassing elderly can be brought under Section 506 for criminal intimidation. If the person is mentally or verbally abusive towards an elderly person, a case under Section 294 can be brought into force. Most of the elderly are also not aware that they can apply for a monthly allowance from their children, in case they are not able to support themselves. The children or heirs could be punished by law for not providing maintenance to their older parents. According to studies, elders often report financial exploitation than emotional abuse, physical abuse, sexual abuse or neglect.⁷

OBJECTIVES OF THE STUDY

- ❖ To assess the pre-test and post-test level of Knowledge regarding Geriatric care among the Undergraduate students in selected Colleges of Guwahati, Assam.
- ❖ To assess the pre-test and post-test level of Attitude towards Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.
- ❖ To assess the Effectiveness of Structured teaching program on Knowledge regarding the Geriatric care and Attitude toward Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.
- ❖ To assess the correlation between Knowledge regarding Geriatric care and Attitude towards Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.
- ❖ To find the association of Knowledge regarding Geriatric care with selected demographic variables.
- ❖ To find the association of Attitude towards Elderly with selected demographic variables.

METHODS AND MATERIALS

Quasi-Experimental (One group Pre-test and Post-test) design was used to accomplish the objectives. Study was undertaken on 100 Undergraduate students of selected colleges in Guwahati, Assam. The Undergraduate students were degree students of 5th semester of Arts, Science and Commerce stream. Non-probability convenience sampling technique was used. The Undergraduate students were selected on the basis of inclusion criteria. Pre-test Knowledge and Attitude were assessed using structured knowledge questionnaire and 5-Point Likert scale. Soon after the pre-test Structured teaching program was administered, the post-test was conducted after seventh day.

RESULTS

In conclusion it was found that in the pretest Knowledge, 48% had adequate Knowledge regarding Geriatric care and after Structured teaching program, 93% had adequate Knowledge. The pretest mean score of Knowledge was 14.76 ± 3.93 and the post-test mean score was 19.55 ± 2.55 . The mean difference score was 4.79 with mean difference percentage 19.96%. The computed paired “t” test value of $t=15.557$ was statistically significant at $p<0.001$ level which clearly indicated that Structured teaching programme on Knowledge regarding Geriatric care administered among Undergraduate students was effective in improving the level of knowledge among them in the post test. In the pretest Attitude, 51% had desirable Attitude towards Elderly and after Structured teaching program, 98% had desirable Attitude. The pretest mean score of Attitude was 87.58 ± 7.46 and the post-test mean score was 100.14 ± 9.73 . The mean difference score was 12.56 and the mean difference percentage was 10.47%. The calculated paired “t” test value of $t=12.778$ was statistically significant at $p<0.001$ level which clearly denoted that Structured teaching programme on Geriatric care administered among Undergraduate students was effective in improving the level of Attitude in the post test.

CONCLUSION

Through this study, the investigator concluded that the Structured teaching programme was effective in providing good Knowledge regarding Geriatric care and increased the Attitude towards Elderly among the Undergraduate students in selected colleges of Guwahati, Assam.

KEY WORDS

Effectiveness, Knowledge, Attitude, Structured teaching program, Elderly, Geriatric care, Undergraduate students, College

1. INTRODUCTION

Globally, the elderly population will double (2.1 billion) by 2050.¹ In India, the elderly population is expected to increase its share to 12.5% and 20% by 2026 and 2050 respectively.² Old age is a sensitive phase that need extra care and comfort to lead a healthy life. Apart from increased risk of diseases in old age, there were various other issues that lead to the deterioration of the health of the elderly. The inability of the younger family members to understand the various complex needs (physical, emotional, nutritional and financial) lead to them regarding the elderly individuals as a burden.³ Findings revealed that one in every six senior citizens faces abuse globally, the prevalence of elder abuse in India ranges between 9.6 to 61.7% across different states, although the actual figures may be much higher than reported.⁸

2. NEED OF THE STUDY

According to the World Health Organization (WHO) World Report on Ageing and Health (2022) 80% of older people will be living in low- and middle-income countries by 2050. The population is ageing much faster than in the past. Between 2015 and 2050, the world's population over 60 years will nearly double from 12% to 22%.⁹

According to the United Nations Population Fund (UNFPA) report on India's Ageing Population, India has the highest number of young people and ageing is rapidly progressing. The current elderly population of 153 million is expected to reach 347 million by 2050.¹⁰

India is becoming the second largest global population of elderly citizens. Therefore, there is a need to understand ageing and age-related changes to identify the health needs of the elderly.¹¹

Based on the report of The National Health Systems Resource Centre in Health Dossier 2021, 8% of the total population in Assam are elderly people aged 60 years and above. 77.0% of elderly females and 42.0% elderly males living in rural areas are economically fully dependent on others. Whereas in urban areas, 65% of elderly females and 24% elderly males are economically fully dependent on others. Poor health among the elderly is reported as 38% for men and 41% for women, which are above the national average of 31% for both.¹²

As per the Global Health Estimates data of the year 2019, the leading causes of the DALYs (Disability-adjusted life years) lost in the elderly are due to non-communicable diseases like ischemic heart diseases, stroke, and diabetes. Approximately 45% of India's disease burden is projected to be borne by older adults in 2030, who with high levels of chronic conditions will represent a much greater share of the total population.¹³

The awareness on 'Elder Abuse' in India is very low. The reality is that it is usually hidden and 'normalized' within the closed walls of homes and nursing homes with the abusers being immediate family members and caregivers. The survey conducted in 2014, confirms that half of India's elderly (50%) reported experiencing abuse, of which 77% identified their abuser within their families. In 2022, another survey was conducted across 22 cities which surprisingly found that 35% of elders in India suffered abuse by their own sons, 21% by daughters-in-law and only 2% of them were abused by their house help, who was not a family member. The most common type of abuses reported by the elderly ranged from 'disrespect' and 'verbal abuse' to 'neglect' and 'physical violence'.⁷

As mentioned in one of the reports of Sputnik India, one in every six senior citizens faces abuse globally, the prevalence of elder abuse in India ranges between 9.6 to 61.7% across different states, although the actual figures may be much higher than reported. Data reveals that only one in every twenty-four cases of elder abuse is reported in the country.¹⁴

Times of India, 2015 June 15 reported as per the survey in the year 2014 Guwahati has one of the highest rates of elders' abuse among 12 Tier II cities in the country. The elders face abuse 'almost daily'.¹⁵

According to the report, 'Elder Abuse in India 2018 – Changing Cultural Ethos and Impact of Technology' –released by HelpAge India, the perception the amounts of elder abuse in Guwahati is – disrespecting parents 77%, beating and slapping 34%, verbal abuse 67%, economic exploitation 34%, unwelcome or forcible sexual contact 8% and neglect 40%. However, the national average was – disrespect 51%, beating and slapping 20%, verbal abuse 42%, economic exploitation 24%, unwelcome or forcible sexual contact 6%, and neglect 31%. Significantly, the national average portrays a relatively lower average than that of Guwahati city. This is an indicator to the growing incidents of elder abuses in the city. Old age has been regarded as that phase of the life when people because of physical decline, can no longer carry out their household works and becomes a victim for elder abuse at the hands of their children and grandchildren. 82% of those abused do not report the matter. The core reasons for not reporting are to maintain confidentiality (52%) of family matter or lack of awareness on how to deal with problem (34%). 73% elders feel that their adult children are too occupied on their phone, 78% elders agree that constant addiction to social media have decreased their families bonding. Surprisingly, more than 50% of the abusers are skilled workers and working professionals.¹⁶

On 13 June 2018, one of the major recommendations made in the third meeting of the National Council of Senior Citizen was inclusion of compulsory counselling session on Inter-generational bonding as a part of the school curriculum/syllabus.¹⁷

The investigator was interested in conducting this study among the undergraduates as this is an area that hasn't been researched to a great extent except among medical and paramedical students. The investigator believed that caring for the elderly is the responsibility of every member in the family and the society. The Investigator was aware that Geriatric care is not part of the syllabus in general education. Therefore, she believed that Knowledge about Geriatric Care will definitely improve the life style of the Elderly and change the Attitude of the younger generations towards them.

3. OBJECTIVES OF THE STUDY

1. To assess the pre-test and post-test level of Knowledge regarding Geriatric care among the Undergraduate students in selected Colleges of Guwahati, Assam.
2. To assess the pre-test and post-test level of Attitude towards Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.
3. To assess the Effectiveness of Structured teaching program on Knowledge regarding the Geriatric care and Attitude toward Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.
4. To assess the correlation between Knowledge regarding Geriatric care and Attitude towards Elderly among the Undergraduate students in selected colleges of Guwahati, Assam.
5. To find the association of Knowledge regarding Geriatric care with selected demographic variables.
6. To find the association of Attitude towards Elderly with selected demographic variables.

4. METHODS AND MATERIALS

Quasi-Experimental (One group Pre-test and Post-test) design was used to accomplish the objectives. Study was undertaken on 100 Undergraduate students of selected colleges in Guwahati, Assam. The Undergraduate students were degree students of 5th semester of Arts, Science and Commerce stream. Non-probability convenience sampling technique was used. The Undergraduate students were selected on the basis of inclusion criteria. Pre-test Knowledge and Attitude were assessed using structured knowledge questionnaire and 5-Point Likert scale. Soon after the pre-test Structured teaching program was administered, the post-test was conducted after seventh day.

5. DESCRIPTION OF THE TOOL:

The tool consisted of three sections, section I, section II, section III and section IV.

Section I: Demographic Data

The demographic data was developed by the researcher to collect the data regarding the selected personal variables of Undergraduate students of selected colleges of Guwahati, Assam. This forms the Section I of the tool and contains basic information about the Undergraduate students of selected colleges of Guwahati, Assam viz age, gender, educational status, type of family, number of elderly in the family, the details of the elderly member (where they live, age and gender).

Section II: Structured questionnaire to assess the Knowledge regarding Geriatric care among the Undergraduates

Structured questionnaire was developed by the researcher to assess the Knowledge of samples regarding Geriatric care. The steps adopted for the selection of items and preparations of the questionnaire were as follows:

- Review of research and books related to Geriatric Care
- Expert's opinion and suggestion to decide on the area to be included
- A blue print was prepared and knowledge items were developed for the structured knowledge questionnaires.

The questions included were

1. definition of Elderly
2. physiological
3. psychological changes
4. pathological
5. social
6. economic problems
7. elderly abuse and
8. Geriatric care.

This section consisted of 24 questions and each question had one correct answer out of the four options. For each correct response a score 1 (one) is given and for each incorrect answer a score of 0 (zero) is given. The maximum score for knowledge is 24 and minimum score is zero.

Knowledge score:

The level of knowledge was interpreted in the following way:

The scores were converted into percentage and were arbitrary categorized as

Inadequate Knowledge: = $\leq 33\%$ (≤ 8 scores)

Moderately adequate Knowledge: = 34% - 65% (9- 15 scores)

Adequate Knowledge: = $\geq 66\%$ (≥ 16 scores)

Section III: 5 Points Likert scale to assess the Attitude

This section consists of 5-point Likert Scale.

In this study 5-point Likert Scale was prepared consisting of 24 statements regarding Attitude toward elderly. There are 5 columns in front of the items where the participant had to put the ($\sqrt{}$). It includes both positive and negative statements. For each choice a score is given as follow:

- **Positive statement:** Strongly agree- 5 marks, Agree- 4 marks, uncertain-3 marks, disagree- 2 marks and strongly disagree- 1mark.
- **Negative statement:** Strongly agree- 1 mark, Agree- 2 marks, uncertain-3 marks, disagree- 4 marks and strongly disagree- 5 marks

Attitude score:

The scores were converted into percentage and were arbitrary categorized as

Undesirable Attitude: = $\leq 33\%$ (≤ 40 scores)

Moderately desirable Attitude: = $34\%-65\%$ (41- 78 scores)

Desirable Attitude: = $\geq 66\%$ (≥ 79 scores)

Section IV: Structured teaching program

In this study, the Structured teaching program was a planned educational program on Geriatric care which includes: introduction, definition of Elderly, physiological & psychological changes, spiritual changes, pathological, social, & economic problems, Elderly abuse and Geriatric care.

The structured teaching program was prepared for a period of 40 mins.

6. DATA COLLECTION PROCESS:

The data collection period was scheduled from 10th September 2024 to 03rd October 2024. A formal written permission was obtained from Registrar, Principal and Dean of selected five colleges; Cotton University, Handique Girls' College, B. Borooah College, Pandu College and Royal School of Life Science of Royal Global University, A brief self-introduction and the purpose of the study were explained to the samples prior to data collection; keeping in mind the ethical aspect of the research, the data were collected after obtaining informed written consent of the samples. A pre-test and post-test were conducted for the data collection. Firstly, a pre-test was conducted, immediately after the pre-test the Structured teaching program regarding Geriatric care for 40 minutes was given; after 7 days a post-test of Knowledge and Attitude was conducted. The pre-test was assessed on Knowledge regarding Geriatric care and Attitude towards Elderly. Similarly, the post-test too was assessed on Knowledge regarding Geriatric care and Attitude towards Elderly.

7. RESULTS:**SECTION-I**

- **Frequency and percentage distribution of demographic variables of the Undergraduate Students.**

Table 1: Frequency and percentage distribution of demographic variables of the Undergraduate Students.

n = 100

Demographic Variables	Frequency (f)	Percentage (%)
Age in years		
19- 22 years	98	98
23- 26 years	1	1
27-30 years	1	1
Gender		
Male	35	35.0
Female	65	65.0
Educational status		
B.A	34	34.0
B.Com.	30	30.0
B.Sc.	36	36.0
Present residence		
Urban area	90	90.0
Rural area	10	10.0

Demographic Variables	Frequency (f)	Percentage (%)
Type of family		
Nuclear	51	51.0
Joint	46	46.0
Extended	3	3.0
Do you have any elderly family members?		
Yes	45	45.0
No	55	55.0
If yes, where do they live?		
At home	39	86.7
In an old age home	-	-
With the extended family/ relatives	6	13.3
Elderly age		
61 – 70	15	33.3
71 – 80	18	40.0
81 – 90	9	20.0
91 – 100	3	6.7
Gender		
Male	16	35.6
Female	29	64.4

The table 1 denoted that out of 100 Undergraduate students, majority i.e. 98% were of age group 19-22 years, 65% were female, 36% had educated up to B.Sc., 90% were residing in urban area, 51% belonged to nuclear family, 55% had no elderly family members, 86.7% had the elderly family members staying at home, 40% of elderly family members were aged between 71 – 80 years and 64.4% of the Elderly were female.

SECTION-II

Table 2: Frequency and percentage distribution of pre-test and post-test level of Knowledge regarding Geriatric care among Undergraduate students.

n = 100

Level of Knowledge	Pretest		Post Test	
	F	%	F	%
Inadequate Knowledge ($\leq 33\%$)	5	5.0	-	-
Moderately adequate Knowledge (34 – 65%)	47	47.0	7	7.0
Adequate Knowledge ($\geq 66\%$)	48	48.0	93	93.0

The above table 2 showed that in the pre-test, 48% had adequate Knowledge regarding Geriatric care, 47% had moderately adequate Knowledge and 5% had inadequate Knowledge and after the intervention, 93% had adequate Knowledge and 7% had moderately adequate Knowledge regarding Geriatric care.

SECTION-III

Table 3: Frequency and percentage distribution of pre-test and post-test level of Attitude regarding Geriatric care among Undergraduate students.**n = 100**

Level of Attitude	Pretest		Post Test	
	F	%	F	%
Undesirable Attitude (≤ 83 score)	1	1.0	-	-
Moderately desirable Attitude (84- 99 score)	48	48.0	2	2.0
Desirable Attitude (≥ 100 score)	51	51.0	98	98.0

The above table 3 showed that in the pretest, 51% had desirable Attitude towards Elderly, 48% had moderately desirable attitude and 1% had undesirable Attitude and after the intervention, 98% had desirable Attitude and 2% had moderately desirable Attitude towards Elderly.

SECTION-IV

Table 4: Effectiveness of Structured teaching programme on Knowledge regarding Geriatric care among Undergraduate students.**n = 100**

Knowledge	Median	Mean	S.D	Mean Difference & %	Paired “t” test & p-value
Pre-test	15.0	14.76	3.93	4.79	t =15.557 p=0.0001, S***
Post-Test	20.0	19.55	2.55	(19.96%)	

***p<0.001, S – Significant

The table 4 showed that the pre-test mean score of Knowledge was 14.76 ± 3.93 and the post-test mean score was 19.55 ± 2.55 . The mean difference score was 4.79 with mean difference percentage 19.96%.

The computed paired “t” test value of $t=15.557$ was statistically significant at $p<0.001$ level which clearly indicates that Structured teaching programme on Knowledge regarding Geriatric care administered among the Undergraduate students was effective in improving the level of Knowledge among them in the post test.

SECTION-V

Table 5: Effectiveness of Structured teaching programme on Attitude regarding towards Elderly among Undergraduate students.**n = 100**

Attitude	Median	Mean	S.D	Mean Difference & %	Paired “t” test & p-value
Pretest	88.0	87.58	7.46	12.56	t =12.778 p=0.0001, S***
Post Test	99.5	100.14	9.73	(10.47%)	

***p<0.001, S – Significant

The table 5 showed that the pre-test mean score of Attitudes was 87.58 ± 7.46 and the post-test mean score was 100.14 ± 9.73 . The mean difference score was 12.56 and the mean difference percentage was 10.47%.

The calculated paired “t” test value of $t=12.778$ was statistically significant at $p<0.001$ level which clearly denotes that Structured teaching program on attitude regarding Geriatric care administered among the Undergraduate students was effective in improving the level of Attitude among them in the post-test.

SECTION-VI

Table 6: Correlation between pretest Knowledge and Attitude regarding Geriatric care among Undergraduate students.**n = 100**

Variables	Mean	S.D	Karl Pearson's Correlation "r" & p-value
Knowledge	14.76	3.93	r = -0.043 p=0.668, N.S
Attitude	87.58	7.46	

N.S – Not Significant

The table 6 showed that the pre-test mean score of Knowledge was 14.76 ± 3.93 and the pre-test mean score of Attitudes was 87.58 ± 7.46 . The calculated Karl Pearson's Correlation value of $r = -0.043$ showed a poor negative correlation which was not statistically significant at $p < 0.05$ level.

SECTION-VII

Table 7: Correlation between post-test Knowledge regarding Geriatric care and Attitude towards Elderly among Undergraduate students.**n = 100**

Variables	Mean	S.D	Karl Pearson's Correlation "r" & p-value
Knowledge	19.55	2.55	r = 0.610 p=0.0001, S***
Attitude	100.14	9.73	

*** $p < 0.001$, S – Significant

The table 7 showed that the post-test mean score of Knowledge was 19.55 ± 2.55 and the post-test mean score of Attitude was 100.14 ± 9.73 . The calculated Karl Pearson's Correlation value of $r = 0.610$ showed a moderate positive correlation which was statistically significant at $p < 0.001$ level which clearly inferred that after the administration of Structured teaching programme on Knowledge regarding Geriatric care the Knowledge among the Undergraduate students ultimately increased their Attitude towards Elderly.

SECTION-VIII

Table 8: Association of pre-test level of Knowledge regarding Geriatric care among Undergraduate students with their selected demographic variables.**n = 100**

Demographic Variables	Inadequate Knowledge		Moderately Adequate Knowledge		Adequate Knowledge		Fisher Exact test p-value
	f	%	f	%	f	%	
Age in years							p = 0.008 (S**)
19- 22 years	4	4	47	47	47	47	
23-26 years	0	0	0	0	1	1	
27- 30 years	1	1	0	0	0	0	
Gender							p = 0.131 (N.S)
Male	2	2	21	21	12	12	

Demographic Variables	Inadequate Knowledge		Moderately Adequate Knowledge		Adequate Knowledge		Fisher Exact test p-value
	f	%	f	%	f	%	
Female	3	3	26	26	36	36	
Educational status							
B. A	0	0	19	19	15	15	
B.Com.	5	5	22	22	3	3	p = 0.0001 (S***)
B.Sc.	0	0	6	6	30	30	
Present residence							
Urban area	4	4	42	42	44	44	p = 0.513 (N.S)
Rural area	1	1	5	5	4	4	
Type of family							
Nuclear	2	2	33	33	26	26	p = 0.866 (N.S)
Joint	3	3	22	22	21	21	
Extended	0	0	2	2	1	1	
Do you have any elderly family members?							p = 1.000 (N.S)
Yes	2	2	21	21	22	22	
No	3	3	26	26	26	26	
If yes, where do they live?							p = 0.235 (N.S)
At home	2	4.4	20	44.4	17	37.8	
In an old age home	-	-	-	-	-	-	
With the extended family/ relatives	0	0	1	2.2	5	11.1	
Elderly age							p = 0.807 (N.S)
61 – 70	1	2.2	9	20	5	11.1	
71 – 80	1	2.2	7	15.6	10	22.2	
81 – 90	0	0	4	8.9	5	11.1	
91 – 100	0	0	1	2.2	2	4.4	
Gender							p = 0.223 (N.S)
Male	2	4.4	7	15.6	7	15.6	
Female	0	0	14	31.1	15	33.3	

***p<0.001, **p<0.01, S – Significant, N.S – Not Significant

The Table 8 showed that the demographic variables age (**p=0.008**) and educational status (**p=0.0001**) had shown statistically significant association with Knowledge regarding Geriatric care among Undergraduate students at p<0.01 and p<0.001 level respectively and the other demographic variables had not shown statistically significant association with Knowledge regarding Geriatric care among Undergraduate students at p<0.05 level.

SECTION- IX

Table 9: Association of pre-test level of Attitude regarding Geriatric care among Undergraduate students with their selected demographic variables.

n = 100

Demographic Variables	Undesirable Attitude		Moderately desirable Attitude		Desirable Attitude		Fisher Exact test p-value
	F	%	F	%	f	%	
Age in years							p = 0.004 (S**)
19-22 years	1	1	47	47	50	50	
23-26 years	0	0	1	1	0	0	
27-30 years	0	0	0	0	1	1	
Gender							p = 0.163 (N.S)
Male	0	0	13	13	22	22	
Female	1	1	35	35	29	29	
Educational status							p = 0.0001 (S***)
B.A	0	0	11	11	23	23	
B.Com.	1	1	2	2	27	27	
B.Sc.	0	0	35	35	1	1	
Present residence							p = 1.000 (N.S)
Urban area	1	1	43	43	46	46	
Rural area	0	0	5	5	5	5	
Type of family							p = 0.551 (N.S)
Nuclear	0	0	27	27	24	24	
Joint	1	1	20	20	25	25	
Extended	0	0	1	1	2	2	
Do you have any elderly family members?							p = 0.542 (N.S)
Yes	1	1	20	20	24	24	

Demographic Variables	Undesirable Attitude		Moderately desirable Attitude		Desirable Attitude		Fisher Exact test p-value
	F	%	F	%	f	%	
No	0	0	28	28	27	27	
If yes, where do they live?							
At home	1	2.2	17	37.8	21	46.7	p = 1.000 (N.S)
In an old age home	-	-	-	-	-	-	
With the extended family/ relatives	0	0	3	6.7	3	6.7	
Elderly age							
61 – 70	0	0	5	11.1	10	22.2	p = 0.741 (N.S)
71 – 80	1	2.2	9	20	8	17.8	
81 – 90	0	0	5	11.1	4	8.9	
91 – 100	0	0	1	2.2	2	4.4	
Gender							
Male	0	0	5	11.1	11	24.4	p = 0.259 (N.S)
Female	1	2.2	15	33.3	13	28.9	

***p<0.001, **p<0.01, S – Significant, N.S – Not Significant

The Table 9 showed that the demographic variables age (**p=0.004**) and educational status (**p=0.0001**) had shown statistically significant association with Attitude towards Elderly among Undergraduate students at p<0.01 and p<0.001 level respectively and the other demographic variables had not shown statistically significant association with Attitude towards Elderly among Undergraduate students at p<0.05 level.

CONCLUSION:

In conclusion it was found that in the pretest Knowledge, 48% had adequate Knowledge regarding Geriatric care and after STP, 93% had adequate Knowledge. The pre-test mean score of Knowledge was 14.76 ± 3.93 and the post-test mean score was 19.55 ± 2.55 . The mean difference score was 4.79 with mean difference percentage 19.96%. The computed paired “t” test value of $t=15.557$ was statistically significant at p<0.001 level which clearly indicates that Structured teaching programme on Knowledge regarding Geriatric care administered among the Undergraduate students was effective in improving the level of Knowledge among them in the post test.

In the pretest Attitude, 51% had desirable Attitudes towards Elderly and after the intervention, 98% had desirable Attitudes. The pretest mean score of Attitudes was 87.58 ± 7.46 and the post-test mean score was 100.14 ± 9.73 . The mean difference score was 12.56 and the mean difference percentage was 10.47%. The calculated paired “t” test value of $t=12.778$ was statistically significant at p<0.001 level which clearly denoted that Structured teaching programme on Geriatric care administered among the Undergraduate students was effective in improving the level of Attitude among them in the post test.

In the correlation between pretest Knowledge regarding Geriatric care and Attitude towards Elderly the pretest mean score of Knowledge was 14.76 ± 3.93 and the pretest mean score of Attitudes was 87.58 ± 7.46 . The calculated Karl Pearson’s Correlation value of $r= -0.043$ shows a poor negative correlation which was not statistically significant at p<0.05 level. In the correlation between post-test Knowledge regarding Geriatric care and Attitude towards Elderly the post-test mean score of Knowledge was 19.55 ± 2.55 and the post-test mean score of Attitudes was 100.14 ± 9.73 . The calculated Karl Pearson’s Correlation value of $r=0.610$ showed

a moderate positive correlation which was statistically significant at $p < 0.001$ level. This clearly inferred that after the administration of Structured teaching programme on Knowledge regarding Geriatric care among the Undergraduate students, their knowledge regarding Geriatric care increased, simultaneously affecting their towards Elderly in a positive manner.

The association of pretest Knowledge regarding Geriatric care among Undergraduate students with their selected demographic variables shows that the demographic variables age ($p = 0.008$) and educational status ($p = 0.0001$) has statistically significant association with pretest level of Knowledge regarding Geriatric care among Undergraduate students at $p < 0.01$ and $p < 0.001$ level respectively and the other demographic variables has not shown statistically significant association with pretest level of Knowledge regarding Geriatric care among Undergraduate students at $p < 0.05$ level.

The association of pretest Attitude towards Elderly among Undergraduate students with their selected demographic variables shows that the demographic variables age ($p = 0.004$) and educational status ($p = 0.0001$) has statistically significant association with pretest level of Attitude towards Elderly among Undergraduate students at $p < 0.01$ and $p < 0.001$ level respectively and the other demographic variables has not shown statistically significant association with pretest level of Attitude towards Elderly among Undergraduate students at $p < 0.05$ level.

Through this study, the investigator concluded that the Structured teaching programme was Effective in providing Knowledge regarding Geriatric care and increased the Attitude towards Elderly among the Undergraduate students in selected Colleges of Guwahati, Assam.

RECOMMENDATIONS:

On the basis of the findings of the study it is recommended that

1. A similar study can be undertaken for a larger sample for a longer period of time thus broad generalization will be possible.
2. The study could have been conducted in more than 5 settings for better generalization of the findings.
3. A similar study can be conducted to evaluate the effect of teaching with other methods such as information booklet and video assisted programme.
4. A comparative study can be conducted between families of the rural and urban community.

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