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A Study to Evaluate Effectiveness of Structured Teaching Programme on Knowledge and Attitude of Students Regarding HIV/Aids in Selected Colleges of Bagalkot

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Abstract **Original Research Article**

Background: Health is considered as a basic parameter to life. There are many things that can affect the health of the living organism, including the physical state of the body as well as the mind and the mental state. Being healthy equates to many positive attributes. It means more efficiency, more productivity at work, a better understanding of the environment as well as better longevity [1]. The human body in its entirety should be able to function properly. If any of the organs or organ systems do not function properly, giving to rise to signs and symptoms of not being well, then it is said that the state of health is not good. However, the human body has this ability to repair itself and attack any foreign body entering it, thanks to the specialized functions that are performed within the body [2]. ***Materials and Methods:*** Study approach was a qualitative study and follow the examination plan as pre-exploratory, for example one gathering pre –test and post –test without control group. The population associated with this investigation was students studying at selected colleges at Bagalkot. Test size is 50 (Total) students were redeemed for the investigation. Further information was gathered by organized shut finished information poll. ***Results*:** The knowledge level of the students regarding HIV showed that in pretest score, majority (80%) of the sample had poor knowledge, 20% had average knowledge and none of the good knowledge on HIV/aids where as in post test score all of them had very good knowledge on HIV/aids. The attitude level of students regarding HIV/aids showed 23.33% had below average and only 3.33% had good level of performance on HIV/aids where as in posttest all of them had good level of performance on HIV/aids. ***Interpretations and conclusions:*** The findings of the study have certain important implications for the nursing profession such as nursing practice, nursing education, nursing research, and nursing administrations.

Keywords: HIV/aids, students, structured teaching programme, Knowledge, attitude.

INTRODUCTION

The human immunodeficiency virus (HIV) has emerged as the single most form challenge to public health, human rights, and development in the new millennium Spreading knowledge and awareness about HIV is one of the key strategies utilized in the prevention and control of HIV/AIDS worldwide. Inadequate knowledge and risky practices are major hindrances in preventing the spread of HIV. In many countries, sexually transmitted diseases (STD) and unplanned pregnancies are frequently observed among adolescents [3].

During the last century, and especially during the last few decades of that century, the early onset of puberty and initiation of sexual relationships were observed to occur at decreasing ages in many industrialized nations, whereas the average age of marriage increased. Thus, many adolescents began having sexual relationships with one or multiple sexual partners prior to marriage, and this facilitated the spread of STD and HIV, in many countries a significant proportion of youth initiate sexual activity by the age of 15 years. hence, adolescents in general are at a higher risk of contracting HIV through sexual transmission [4].

MATERIALS AND METHODS

Pre-experimental one group pre-test post-test design was used to determine effectiveness of structured teaching programme on HIV/aids among students. The study was conducted at selected Colleges at Bagalkot.

Participants: Sample consist 50 students studying in commerce Stream of Basveshwara commerce College in Bagalkot.

Sampling techniques: Simple random sampling technique was used to select the sample. There were 100 students from first year and second year of commerce stream. In that 52 students from first year and 48 students from second year were selected by usage of random selection method.

Description of Data Collection:

Section 1: Socio Demographic Factors: Demographic performance consisted of students age, gender, type of family, religion, father education status, mother education status, monthly family income, area of residence, have you received any information about HIV and aids, if yes, the source of information.

Section 2: Structured Knowledge questionnaire on HIV and aids had 26 items. The subjects were instructed to tick mark (□) on the space provided towards the correct response. The scoring was done by just counting the correct responses and according to the total score obtained. The highest possible score was 26. It was arbitrarily classified into three levels: [0-9(Poor)], [10-19, (Average)], [20-26, (Good)].

Section 3: Likert's scale used on HIV and aids had 10 items. The investigator would observe the performance of HIV and aids and places a tick mark (□) in the appropriate column as indicated by agree, strongly agree, uncertain, disagree, strongly disagree. The scoring was done by giving '1' mark for the correct performance and '0' mark for the incorrect responses. The highest possible score was 10. It was arbitrarily **classified into three levels:** [0-3 (poor)], [4-7 (average)], [8-10 (good)].

Data Collection: The data was collected from 31/07/2024 to 10/08/2024.The exact time and data planned with college authority and was communicated to the respondents. The investigator approached principal of Basveshwara commerce college at Bagalkot.

Variables Under the Study:

Dependent variables: The dependent variable refers to the level of knowledge and attitude regarding HIV/aids among students in selected colleges at Bagalkot.

Independent variables: structured teaching programme.

Statistical Analysis:

Data was collected using a demographic performance and structured knowledge questionnaire consisting of 26 questions and also using a HIV/Aids Likert's Scale that consisted of 10 questions.

The tool and the structured teaching programme were validated by 7 experts. Reliability of the structured knowledge questionnaire was established using Karl Pearson's (α=0.028) and that of observational Likert scale was r=0.310 Pilot study was conducted on 5 selected PU students. The main study was conducted among 50 randomly selected collages of students from 31.07.2024to10.08.2024. Following the pretest, structured teaching programme was administered and post-test was conducted on the 8th day of administration of structured teaching programme.

RESULT

The study was begun with selection of 50 students who are presented in selected College at Bagalkot. All the students were screened for eligibility criteria. Researcher has allocated to subjects to the group.

Table 1: Description of Socio- demographic characteristic of sample

Sl no	Socio demographic factor	Frequency	Percentage
1	**Age**		
	Below 16	3	6
	16-17	26	52
	17-18	20	40
	19 and above	1	2
2	**Gender**		
	Male	26	52
	Female	24	48
	Transgender	0	0
3	**Type of family**		
	Joint	28	56
	Nuclear	22	44
4	**Religion**		
	Hindu	44	88

	Muslim	4	8
	Christian	0	0
	Others	2	4
5	**Father education status**		
	Not received any formal education	9	18
	Primary education	20	40
	Secondary education	8	16
	PUC or higher secondary	10	20
	Degree or above	3	6
6	**Mother education status**		
	Not received any formal education	15	30
	Primary education	14	28
	Secondary education	9	18
	PUC or higher secondary	10	20
	Degree and above	2	4
7	**Monthly family income**		
	Less than 10000	20	40
	10000-20000	13	26
	20000-30000	11	22
	30000 and above	6	12
8	**Area of residence**		
	Rural	39	78
	Urban	11	22
9	**Have you received any information about HIV and AIDS**		
	Yes	23	46
	No	27	54
10	**If yes, the source of information**		
	Mass media-TV, radio, news paper	27	54
	Contact with health personnel	1	2
	Information from friends	12	24
	Any other	10	20

Table 2: Assessment of pre-test knowledge and attitude regarding HIV/aids among students of selected colleges at Bagalkot, N=50

Test	Level of knowledge	Number (f)	Percentage (%)
Pre-test knowledge	**Good**	0	0%
	Average	19	38%
	Poor	31	62%
Total		50	100%

Percentage wise distribution of students in pre-test reveals that out of 50 students, highest percentage (62%) of students had poor knowledge followed by lowest percentage (38%) Of students had average knowledge, none of the students had good knowledge regarding HIV/aids.

Table 3: Percentage wise distribution of students according to the levels of knowledge pre-test attitude. N=50

Test	Level of knowledge	Number (f)	Percentage (%)
Pre test attitude	**Good**	1	2%
	Average	26	52%
	Poor	23	46%
Total		50	100%

Percentage wise distribution of pre-test attitude level of students showed that out of 50 students highest percentage (52%) of students had average attitude,46% of students had poor attitude.1 student had good attitude regarding HIV/aids.

PART 3: To evaluate the effectiveness structured teaching programme on knowledge and attitude of HIV/aids among students at Bagalkot.

Section I: Comparison of knowledge level of students in pre-test and post-test. N=50

Table 4: Comparison of knowledge level of students in pre-test and post-test

Level of knowledge	Pre-test		Post-test	
	Number of respondents	Percentage (%)	Number of respondents	Percentage (%)
Good	0	0%	27	54%
Average	19	38%	23	46%
Poor	31	62%	0	0%
Total	**50**	**100%**	**50**	**100%**

Knowledge wise comparison of students in pre-test revels that. Out of 50 students, highest percentage (62%) of students had poor knowledge, (38%) of students had average knowledge. However, after administration of structured teaching programme (54%) of students had good knowledge ,46% of students had average knowledge.

Section II: Comparison of attitude level of students in pre-test and post-test, N=50

Table 5: Comparison of attitude level of students in pre-test and post-test

Level of skill	Pre-test		Post-test	
	No. of respondents	Percentage (%)	No. of respondents	Percentage (%)
Good	1	2%	45	90%
Average	23	46%	5	10%
Poor	26	52%	0	0%
Total	**50**	**100%**	**50**	**100%**

Section III: Area wise effectiveness of STP on HIV/aids. N=50

Table 6: Area wise effectiveness of STP on HIV/aids

Knowledge area	Max. score	Pre-Test (O_1)		Post-Test (O_2)		Effectiveness (O_2- O_1)	
		Mean ±SD	Mean %	Mean ±SD	Mean%	Mean ±SD	Mean%
General information about of hiv/aids.	06	2.17 ± 1.11	4.34%	4.88± 0.60	9.76%	2.71 ±0.51	5.42%
Knowledge related to hiv/aids.	20	6.17 ±1.31	12.34%	14.64±1.19	29.28%	8.47± 0.12	16.94%
Total	**26**	8.34± 2.42	**16.68%**	19.52±1.79	**39.04%**	**11.17±0.63**	**22.34%**

Section IV: Effectiveness of STP on attitude of HIV/aids. N=50

Table 7: Significant difference between the pre-test knowledge and post-test knowledge scores of students of selected colleges at Bagalkot, N=50

Area	Max. score	Pre-Test (O_1)		Post-Test (O_2)		Effectiveness (O_2- O_1)	
		Mean ±SD	Mean %	Mean ±SD	Mean%	Mean ±SD	Mean%
Attitude	10	3.8± 1.48	7.6%	8.68±0.99	17.36%	4.88±0.49	9.76%

The overall findings shows that the post-test attitude score (8.68±0.99) which was 17.36%of total score was more when compared to the pre-test attitude score (3.8± 1.48) which was 7.6%of total score. The effectiveness of STP in this area was mean attitude score was 4.88 with SD ± 0.49which was 9.76% of total score. Hence it indicates that STP was effectiveness in enhancing the knowledge of students.

Table 8: Significant difference between the pre-test attitude and post-test attitude scores of students of selected colleges at Bagalkot. N=50

Test (Knowledge)	Mean	Mean Diff	SD Diff	Paired t-value	Table value
Pre-test (O_1)	**8.34**	**11.18**	**0.63**	**37.74**	**1.96**
Post-test (O_2)	**19.52**				
Test (attitude)	**Mean**	**Mean Diff**	**SD Diff**	**Paired t-value**	**Table value**
Pre-test (O2-o1)	**4.88**	**5.4**	**0.49**	**16.93**	**1.96**

As calculated "t" value (16.93) was much higher than table value (1.96) for degree freedom 49 and 5% level of significance. There is a positive significant difference (16.93) between Pre –test and Post –test knowledge scores, hence null hypothesis H_1 is accepted.

Table 9: To find out the association between knowledge and socio-demographic variables, a research hypothesis was formulated. N=50

SI No	Socio demographic variables	Df	Chi-square-value	Table value	P-value	Association
1	Age	**1**	0.46	3.84	0.49	NS
2	gender	**1**	0.07	3.84	0.79	NS
3	Type of family	**1**	0.01	3.84	0.92	NS
4	religion	**1**	0.63	3.84	0.42	NS
5	Father education status	**1**	0.5	3.84	0.47	NS
6	Mother education status	**1**	0.17	3.84	0.68	NS
7	Monthly family income	**1**	0.01	3.84	0.92	NS
8	Area of residence	**1**	0.07	3.84	0.79	NS
9	Have you received any information about HIV and aids	**1**	0.06	3.84	0.80	NS
10	If yes, the source of information	**1**	0.39	3.84	0.53	NS

(Table 9) shows the findings related to association between the knowledge and socio-demographic variables of students and found that there was no significant association between knowledge and any of the socio-demographic variables. Hence H_3stated is rejected.

Table 10: To find out the association between attitude and socio-demographic variables, a research hypothesis was formulated. Hypothesis was tested by using Chi-square test. N=50

SI. NO	Socio demographic variables	Df	Chi-square-value	Table value	P-value	Association
1	Age	**1**	0.02	3.84	0.88	NS
2	gender	**1**	0.33	3.84	0.56	NS
3	Type of family	**1**	0.02	3.84	0.92	NS
4	religion	**1**	0.36	3.84	0.5	NS
5	Father education status	**1**	0.03	3.84	0.86	NS
6	Mother education status	**1**	0.99	3.84	0.31	NS
7	Monthly family income	**1**	0.03	3.84	0.86	NS
8	Area of residence	**1**	0.18	3.84	0.67	NS
9	Have you received any information about HIV and aids	**1**	0.89	3.84	0.34	NS
10	If yes, the source of information	**1**	0.49	3.84	0.48	NS

(Table 10) shows the findings related to association between the attitude and socio-demographic variables of students and found that there was no significant association between attitude and any of the socio-demographic variables. Hence H_3stated is rejected.

CONCLUSION

The findings of the study concluded that the students lacked adequate knowledge and attitude regarding HIV/aids and the structured teaching programme administered by the investigator helped them to improve the knowledge and attitude on HIV/aids. The effectiveness of structured teaching programme was tested in terms of gain in knowledge and attitude and the findings showed that it was statistically significant at 0.05 level. The findings of the study concluded that the structured teaching programme was effective in improving the knowledge and attitude of the students regardless of their any personal characteristics. All the subjects had again in knowledge and attitude compared to their pre-test knowledge scores.

FUTURE PROSPECT

About 86% of people with HIV worldwide have been tested and know their status. Testing is the essential first step to accessing treatment. The future of HIV/aids students is promising, with more accessible treatments and prevention options. HIV/ aids will continue to be major public health concern in the future, and health education will be important for preventing the spread of the disease and helps to gain knowledge in students.

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Research concept: prof. Jayshree Itti, Ms. Deepika Dasar
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Materials: all researchers
Data collection: all researchers
Data analysis and: interpretations: all researchers
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Writing articles: all researchers
Critical Review: all researchers
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