A Study to Assess the Effectiveness of Structured Teaching Program on Oral Health Hazards of Tobacco among Adolescent of Selected School of Greater Noida

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Abstract: _Background of the study: Adolescence is a vulnerable group which is at high threat for the development of depression and anxiety. Behaviours like alcohol or medicine abuse, inordinate use of social media, academy absentism and dozer also occurs during this period._ Objectives: _the main objective of the research To the association between pre-test and post-test score selected demographic variable among the adolescent._Setting and design_: One group pre-test post test design was adopted. The study was conducted among 60 adolecent students of government high school, Salempur Gurjar, Greater Noida. Purposive sampling technique was used to select the samples._ Results: _The analysis revealed that between pre-test and post-test score selected demographic variable among the adolescent, which was none significant at the level of 0.05. The association between pre-test score selected demographic variable among the adolescent, which was all none significant at the level of 0.05, hence the stated hypothesis is rejected for the entire demographic variable. The association between post-test score selected demographic variable among the adolescent, which was none significant at the level of 0.05 except type of family and father occupation, hence the stated H3 is accepted only for types of family and father occupation and rejected for rest of the demographic variable._

Keywords: Effectiveness, structured teaching program, oral health, tobacco, adolescent

1. Introduction

Smoking affect the every body organ leading to heart, stomach, bladder, cervix diseases .Smoking also takes place due to peer pressure because it is the stage one gets most affected by friends. Tobacco and its health effects stress hormone corticosterone lower the effect of nicotine but under stress body needs it. Due to cigarette nicotine enters the lungs and with blood reaches the brain making it addicted.

The most common reason for children to start using are peer pressure, parental tobacco habit, and pocket money given to them. The marketing of tobacco play a quiet attractive role in developing countries, because there is little legislation against the marketing and distribution of tobacco products and smoking is still socially acceptable.

Objective:-
a) To assess the pre-test score regarding oral health hazards of tobacco among adolescence.
b) To assess the post-test score regarding oral health hazards of tobacco among adolescence.
c) To evaluate the effectiveness of STP on oral health hazards of tobacco among adolescence.
d) To explore the association between pre-test and post-test score selected demographic variable among the adolescence.

2. Methodology

Research approach: Quantitative approach was adopted.

Research design: One group pre-test and post test design was applied.

Sample: Adolencent student of government high school

Sample size: 60 Adolencent student of government high school

Sampling Technique: Purposive Sampling Technique was adopt to chose the participant.

Description of tool
Tool exclusively constructed by the investigator to assess the oral health hazards of tobacco among adolescent which are as follows: -

Tool- 1: Demographic Performa
It contained 10 items, which include age group, gender, religion, area of residence, type of family, father occupation, education, family income, eating habit, sleeping habit.

Tool- 2: Self Structured questionnaire
It section contain 25 question were included related to oral health hazards of tobacco and checking the STP effectiveness. For every correct answer there is score of 'one' giving to respondant and for every incorrect answer there is measuring of 'zero' given to respondant.

The obtained score were categorised as 1-8 as poor knowledge, 9-16 as average knowledge, 17-25 as good knowledge.

Data collection
- Formal administrative permission for conducting research study by the researcher is taken from the principal of Prakash College.
- Researcher now taken permission from principal of Government high school, Salempur gurjar, Greater Noida,

UP for conducting a research and sample collection in school.

- The main study was conducted between 15/04/2022 to 21/04/2022 at government high school,Salempur Gurjar, Greater Noida, UP.

- Pre- test: Data collection is a type of procedure that collect or gathered information from sample that are selected for research. On (15-04-2022) the pre test was given to adolescent to assess their level score regarding oral health hazards of tobacco. All the study objective and purpose are explained to sample and authority of school.

- Intervention: In this structured teaching program was administered after the pre-test on oral health hazards of tobacco on the same day of pre-test is (15/04/2022).

- Post-test: Post test was conducted on 7th day after pre testing. It took 32-35 minutes for completion of post-test procedure that is take to observed and check the knowledge regarding oral health hazards of tobacco and for evaluating effectiveness of STP.

Statistical analysis

Both descriptive and inferential statistics was adopt for analysis of data, with the help of SPSS 16 version. Descriptive statistics is used for analysis of demographic Performa assess the oral health hazards of tobacco among adolescent in terms of frequency and percentage. Frequency, percentage, mean and standard deviationis used to assess the oral health hazards of tobacco among adolescent. Paired "t" test was used to evaluate the effectiveness of STP. Chi square test used to check the association between pre test and post test score with demographical variable among adolescents.

3. Result

- Post test score shows that majority of samples i.e 37 (61.67%) had average knowledge and only 20 (33.33%) had good knowledge and 3 were having poor knowledge regarding oral health hazards of tobacco.

- Mean post–test knowledge score is (14.117) of adolescents and the standard deviation is 3.033.

- The obtained mean difference was found to be statically significant as evident from the obtained 't' value (17.82) for df (59) at 0.05 level of significance. This shows that obtained mean differences was a true difference and not by chance. H1 & H2 hypothesis were accepted . It can be inferred that the Structured Teaching Program for adolescents was effective method for improving the knowledge of adolescents.

4. Discussion

The finding of the study had been discussed in terms of objective, hypothesis and results obtained by other investigators in the same aspect.

1) To evaluate the effectiveness of STP on oral health hazards of tobacco among adolescence.

2) **The relation with the first objective: To assess the pre-test score regarding oral health hazards of tobacco among adolescence.** Pre-test knowledge was assessed by close ended knowledge questionnaire. The mean pre - test knowledge score (5.833) with Standard deviation (2.001).

3) **The relation with the second objective: To assess the post-test score regarding oral health hazards of tobacco among adolescence -** Post-test knowledge was assessed by close ended knowledge questionnaire. the mean pre - test knowledge score (14.117) with Standard deviation(3.033).

4) **The relation with the third objective: To evaluate the effectiveness of structured teaching program on oral health hazards of tobacco among adolescence.** The mean post – test knowledge score of adolescents (14.117) was higher than the mean pre –test knowledge score (5.833) with the mean difference of 8.284. The obtained mean difference was found to be statically significant as evident from the obtained 't' value (17.82) for df (59) at 0.05 level of significance . that means obtained mean differences was a true differences and not by chance.

5) **The relation with the third objective: To explore the association between pre-test and post- test score selected demographic variable among the adolescence**- The chi square value obtained to findout the association between pre test and post test knowledge score with their selected demographic data. Result shows that There is no significance association between pre test knowledge score with selected demographic variable. In relation to post test The chi square value obtained to find out the association between post knowledge score with their selected demographic data. Result shows that there is a association between type of family and father occupation and post test knowledge score with $X^2 =16.155$, Df =4 and $X^2 =16.815$ with Df =6 and There is no significance association between post test knowledge score with other selected demographic variable.

5. Conclusion

There is a significant difference between pre-test and post-test mean score(8.284) ,which means H1 hypothesis accepted & the post-test mean (14.117) is higher than pre-test mean (5.833) which shows that H2 hypothesis accepted the obtain t1 value (17.82) for df(59) at 0.05 level of significance shows that the structured teaching program was effective for improving adolescent's knowledge regarding oral health hazard of tobacco. The chi-square shows that there was a significant association between post-test score with father occupation and type of family which means H3 hypothesis was accepted , but there was no significant association between pre-test score with selected demographic variable which means H3 hypothesis rejected in relation of this statement.

Conflict of interest statement
None

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no	knowledge	Pre-test F	Post-test f
1.	Good knowledge	00 (0%)	20(33.33%)
2.	Average Knowledge	02(3.33%)	37 (61.67%)
3.	Poor Knowledge	58 (96.67%)	03 (5%)

Mean, mean differences, standard deviation of difference, standard error of mean difference and 't' value of pre – test and post – test knowledge scores of adolescents , N = 60

Knowledge Score Sample Group	Mean	Mean Difference	SE MD	't'
Pre test	5.83	8.284	0.465	17.82
Post test	14.117			

Frequency and percentage distribution of demographic variables of the samples, N =60

Demographic profile	Description	Frequency	Percentage (%)
Age group	12-13 years	21	35%
	14-15 years	27	45%
	16-17 years	12	20%
	18-19 years	00	00%
Gender	Male	25	41.66%
	Female	35	58.34%
	Other	00	00%
Religion	Hindu	50	83.33%
	Muslim	08	13.34%
	Sikh	01	1.66%
	Other	01	1.66%
Area of Residence	Urban	02	3.33%
	Rural	57	95%
	Slum	01	1.66%
Type of Family	Joint Family	36	60%
	Nuclear Family	23	38.33%
	Separated family	01	1.66%
Father Occupation	Self employed	24	40%
	Un-employed	05	8.33%
	Government employed	07	11.66%
Education	Private job	24	40%
	Illiterate	00	00%
	Primary school	29	48.33%
	High school	31	51.66%
	Senior secondary school	00	00%
Family Income in rupees	Less than 10,000/-	40	66.66%
	11000-20,000/-	15	25%
	21000 – 30000 /-	04	6.66%
	Above 30000	01	1.66%
Eating habit	Vegetarian	43	71.66%
	Nonvegetarian	07	11.66%
	Eggetarian	10	16.66%
Sleeping habit	Less than 3 hours	14	23.33%
	More than 3 hours	04	6.66%
	Less than 8 hours	31	51.66%
	More than 8 hours	11	18.33%

Showing assessment of knowledge regarding oral health hazards of tobacco among adolescents, N=60

S.	Level of assessment of	Experimental group