



A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HAZARDS OF SMOKING AMONG ADOLESCENTS OF SELECTED HIGH SCHOOLS IN SRINAGAR.

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ABSTRACT

Smoking is the single most important preventable cause of death. Cigarettes are smoked throughout the world; and are dominant form of tobacco use worldwide. The adolescent age is a critical period in the formation of the smoking habit. Most smokers start smoking during their adolescence or early adult years. The adverse effects of smoking are extensive. Exposure to environmental tobacco smoke on health of adolescents are well known and include increased risk for acute lower respiratory tract infections, effusions of the middle-ear & other non fatal diseases including periodontal disease, Impotence, male infertility and cataract. Aim: Aim of the study is to enhance the knowledge of adolescents regarding hazards of smoking and in turn, help the students to improve the quality of life by controlling the tobacco smoking. Materials and Methods: A Pre-experimental study was conducted using one group pre test post design to assess the level of knowledge of adolescents regarding hazards of smoking. The study was conducted in 2 selected schools of Srinagar (Radiant public school and Kashani memorial school). The sample was selected by Stratified proportionate Simple random sampling. The sample size was 80. Structured questionnaire was used to assess the knowledge of adolescents. Results and conclusion: The overall mean knowledge score 28.61 obtained by the subjects in post-test was higher than mean knowledge scores 20.18 in the pre-test and with the improvement score as 8.42. There was significant difference between pre-test and post-test knowledge score at $p \leq 0.05$. The results of the study revealed that that the planned teaching programme was significantly effective in improving the knowledge of adolescents regarding hazards of smoking. Hence the study concluded that improved knowledge regarding hazards of smoking helps the adolescents to take protective and preventive measures against tobacco smoking, which will, in turn, help the students to improve the quality of life by controlling the tobacco smoking, and thus the students can bring about the awareness among the public.

KEYWORDS : Planned teaching programme, Effectiveness, Knowledge, Adolescents, high schools, hazards of smoking.

Introduction

"SMOKING kills. If you're Killed, you've lost a very important part of your life."

---Brooke Shields---

Health is a state of complete physical, social and mental well being and not merely the absence of disease or infirmity.¹ There is an old saying, "Health is Wealth." It's our duty to preserve health to lead a healthy life. But some people fall into bad habits such as smoking tobacco. The personal decisions on behavior affect the prospects for good health and that ill health is not solely a consequence of ill fortune but frequently a direct consequence of behavior under individual's control.²

Early smoking evolved in association with religious ceremonies, as offering to deities, in cleansing rituals or to allow shamans and priests to alter their minds for the purpose of spiritual enlightenment.³ The Tobacco plant (*Nicotiana tobaccum*), which was originally cultivated in America thousands of years ago, spread throughout the world after the arrival of the first European settlers. In South Asia, tobacco is smoked in clay pipes called 'suipa' where as in North Africa, it is smoked in water pipes called 'shisha' or 'Hubbly bubbly'. Beedis are predominant form of tobacco use in India.

Smoking is the inhalation of the smoke of burning tobacco encased in cigarettes, pipes, and cigars. A smoking habit is a physical addiction to tobacco products.. Active smokers directly use cigarette, cigar or beedies for smoking. Passive smoking is the inhalation of smoke, called second hand smoke or environmental tobacco smoke, from tobacco products used by others.⁴

It has been found in developed countries that nearly one-half of school students who have reached the age of 18 have already established the habit of smoking.⁴ Teenagers are attracted by the smoke and the smoking style, which tempts them to smoke. Friends and colleagues also encourage non-smokers, to smoke just once. Smoking by parents, siblings, low self efficacy & lack of conscientiousness are the reasons for adolescents to develop smoking habit. Smoking in movies is the main reason for adolescents acquiring this habit⁵. In an initial estimate of factors responsible for the global burden of disease, tobacco contributed to 6% of deaths worldwide followed by alcohol at 1.5%

Need of the Study

"Adolescents are not monsters; they are just people trying to learn how to make it among the adults in the world, who are probably not so sure themselves" - VIRGINASTIR-

"Smoking is injurious to health," that is something written on all cigarette packs to warn the customers of deleterious consequences. It is common knowledge that cigarette smoking is the single major cause of cancer and cardiovascular diseases, contributing to hundreds of thousands of premature deaths each year.

Exposure to environmental tobacco smoke on health of adolescents are well known and include increased risk for asthma induction and exacerbation, acute lower respiratory tract infections, and effusions of the middle-ear. Smoking in pregnancy is associated with spontaneous abortions, still births, low birth weight babies. Besides the effects of environmental tobacco smoke on health, exposure to environmental tobacco smoke could be associated with significant economic costs due to increased health care services utilization⁶.

Studies have proven that even second hand smoke effect becomes the cause of death. Moreover, the dangers of smoking are not confined to the smoker himself, the non-smoker affected by his side is also affected by the act of smoking⁷.

It was also identified by investigator's personal experience that smoking is becoming more common especially among adolescents, they need to be informed about hazards of smoking on health. Hence the investigator felt that there is a need to increase the level of knowledge of adolescents (boys and girls) regarding hazards of smoking on health in selected high schools of Srinagar through planned teaching Programme with attractive audio-visual aids.

Statement of the problem

"A Study To Assess The Effectiveness Of Planned Teaching Programme On Knowledge Regarding Hazards of Smoking Among Adolescents Of Selected High Schools in Srinagar."

Objectives:

1. To assess the pre-test knowledge scores regarding hazards of smoking among adolescents of selected high schools in Srinagar
2. To assess the post-test knowledge scores regarding hazards of smoking among adolescents of selected high schools in Srinagar after planned teaching programme.
3. To compare pre test and post test knowledge scores regarding hazards of smoking among adolescents Of selected high schools in Srinagar
4. To determine the association of pre-test knowledge scores of adolescents regarding hazards of smoking with their selected demographic variables (age of adolescents, gender, educational

status of father, educational status of mother, residence, type of family ,family income)

Hypothesis:

- 1) H¹: There is significant difference between pre-test knowledge and post test knowledge scores regarding hazards of smoking among adolescents at ≤0.05 level of significance.
- 2) H²: There is significant association between pre-test knowledge scores of adolescents regarding hazards of smoking with their selected demographic variables (age of adolescents, gender, educational status of father, educational status of mother, residence ,type of family, family income) at ≤ 0.05 level of significance

Conceptual frame work.

The conceptual framework of study was based on 'Imogene Kings Goal Attainment Theory (1971).⁸

Materials and Methods

The research design used in this study was Pre- experimental in nature. The study was conducted at selected 2 high Schools of District Srinagar, Kashmir. The sample of 80 adolescents on the basis of inclusion and exclusion criteria were selected by using stratified proportionate simple random sampling. The tool used for the study was structured knowledge questionnaire which consists of section I (Demographic Performa: age of adolescents, gender, educational status of father, educational status of mother, residence ,type of family, family income and section II (consisting of 36 items related to knowledge assessment regarding hazards of smoking .The content validity of structured knowledge questionnaire was ensured by submitting the tool to the experts in the field of community health nursing, psychiatric nursing , child health nursing, clinical psychology A pilot study was conducted on 10% of total sample size in Kashani Memorial school. Reliability of tool was established by Karl Pearson's Correlation coefficient. The reliability of tool was calculated and it was 0.99

Results and Findings

In this study, 80 adolescents participated. The data and the findings were entered in a master data sheet followed by the analysis and interpretation using descriptive statistics (i.e. frequency, percentage, mean, median and standard deviation) and inferential statistics (i.e. t-test and ANOVA) according to the objectives of the study. The results obtained were presented in the following headings:

Section I: Findings related to Demographic variables.

Table 1: Shows Frequency and percentage distribution of subjects according to demographic variables.

Variables	Frequency(f)	Percentage (%)	
Age	Less than 15 years	45	56.3
	Greater than 15 years	35	43.8
	Total	80	100
	Gender	Male	40
	Female	40	50
	Total	80	100
Educational status of father	Illiterate	8	10.0
	Middle pass	12	15.0
	Secondary	23	28.7
	Higher secondary	11	13.8
	Graduate	21	26.3
	PG	5	6.3
	Total	80	100.0
Educational status of mother	Illiterate	26	32.5
	Middle pass	21	26.3
	Secondary	13	16.3
	Higher secondary	7	8.8
	Graduate	9	11.3
	PG	4	5.0
	Total	80	100.0
Residence	Rural	33	41.3
	Urban	47	58.8
	Total	80	100.0

Type of family	Nuclear	40	50.0
	Joint	40	50.0
	Total	80	100.0
Family income per month	Less than 10000	25	31.25
	10000 to 30,000	37	46.25
	Greater than 30,000	18	22.5
	Total	80	100.0

Section II. Knowledge of subjects regarding hazards of smoking before and after implementation of planned teaching Programme.

Table2: Shows Mean, Median, S.D, Range of pre -test and post-test knowledge scores of subjects regarding hazards of smoking. N=80

Knowledge Scores	Mean	Median	Standard deviation	Minimum	Maximum	Range
Pre test score	20. 18	21.00	3.99	9.00	28.00	19.00
Post test score	28.61	29.00	3.46	19.00	34.00	15.00

Comparison of pre- test and post -test Mean knowledge scores of subjects regarding hazards of smoking.

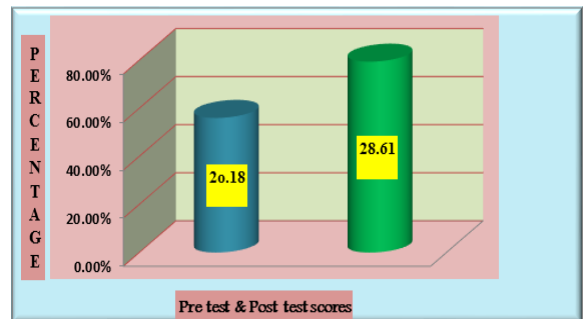
To test research hypothesis, following Null Hypothesis was formulated.

H0 : There is no significant difference between the pre test and post test knowledge scores regarding hazards of smoking among adolescents.

Table 3: N=80

Knowledge scores	Mean ± Standard deviation	Mean Difference	P Value
Pre test score	20.18±3.99	8.42	≤0.001
Post test score	28.61±3.46		

Figure 1:



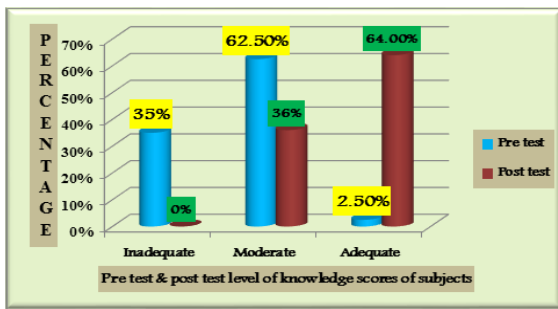
The data in table 3 and figure 1 showed that over all pre-test score mean 20.18 as against post-test score mean of 28.61 with mean difference of 8.42. The difference between the two scores (56% v/s 79.40%) showed a significant association (p value ≤ 0.001). Hence the Null hypothesis (H0) is rejected and on contrary Research hypothesis H1 “There is significant difference between pre-test knowledge and post test knowledge scores regarding hazards of smoking” among adolescents is accepted.

Table 4: Shows Comparison between pre -test & post -test Level of Knowledge of subjects regarding hazards of smoking

N=80

Level of Knowledge	Percentage Score	Pre test		Post test	
		Frequency	%age	Frequency	%age
Inadequate	≤50%	28	35%	0	0%
Moderate	51-75%	50	62.5%	29	36%
Adequate	>75%	2	2.5%	51	64%
Total		80	100%	80	100%

Figure 2:



The data in the table 4 and figure 2 showed that in pre- test 35% having inadequate, 62.5% having moderate and 2.5% having adequate knowledge and in post- test 64.% having adequate, 36% having moderate and no one was having inadequate knowledge regarding hazards of smoking.. This indicates that Planned Teaching Programme was effective in increasing knowledge regarding hazards of smoking.

Section III: Findings related to association of pre –test knowledge scores of subjects with their selected demographic variables.

Here the researcher tests the null hypothesis H0 that there is no significant association between pre-test knowledge scores of subjects with their selected demographic variables

Table 5: N=80

Variables	Category	Pre test mean / standard deviation	Mean difference	P value
Age	Less than 15 years	20.00±4.15	0.42	0.57
	Greater than 15 years	20.42±3.82		
Gender	Male	20.90± 3.54	1.42	0.11
	Female	19.47 ± 4.32		
Educational status of father	Illiterate	18.25±5.11	0.66	0.11
	Middle pass	18.91±5.38	0.78	
	Secondary	19.69±3.06	3.03	
	Higher secondary	22.72±1.95	2.25	
	Graduate	20.47± 3.90	1.33	
Educational status of mother	PG	21.80±4.08	3.55	0.03
	Illiterate	18.03±4.82	3.49	
	Middle pass	21.52± 2.83	0.83	
	Secondary	20.69±3.61	0.59	
	Higher secondary	21.28±3.54	0.38	
Residence	Graduate	21.66±2.17	1.41	S*
	PG	20.25±4.34	2.22	
	Urban	20.65±4.41	1.14	
Type of family	Rural	19.51±3.25	1.14	0.05
	Urban	20.65±4.41		
Family income/month	Nuclear	20.82±3.90	1.27	0.15
	Joint	19.55±4.03		
Family income/month	Less than 10000	18.92±4.23	1.89	0.16
	10000 to 30,000	20.81±4.15	0.15	
	Greater than 30,000	20.66±2.97	1.74	

Note: N.S –Not significant. S*–Significant at p≤0.05 level

The data presented in Table 5 indicates that there is significant association of pre test knowledge scores with demographic variable as Educational status of mother (p=0.01) at p≤ 0.05 level and no association was found with variables as Age , Gender, Educational status of father, residence, Type of Family, Family income. Hence the investigator accepted the Null hypothesis (H0 : There is no significant association between pre test knowledge scores of subjects with their selected demographic variables) & rejects the Research hypothesis (H2: There is significant association between pre-test knowledge scores of adolescents regarding hazards of smoking with their selected demographic variables i.e. age of adolescents, gender, educational status of father, educational status of mother, , residence, type of family, family income) at p≤0.05.

Discussion

The findings of the study revealed that knowledge level of adolescents regarding hazards of smoking is inadequate and there is a great need to

improve this knowledge. In pre- test knowledge scores 28(35%) were having inadequate knowledge, 50(62.5%) were having moderate knowledge and 2(2.5%) were having adequate knowledge regarding hazards of smoking. This reveals that majority of adolescents were having moderate knowledge, so they need to be educated and informed regarding hazards of smoking.

The present results were supported by the findings of a descriptive study conducted by Chand M (2005) in Vantmuri village to assess the knowledge towards tobacco consumption among adolescents. The findings revealed that 94% of the adolescents had average knowledge regarding tobacco effects on health and 30% had poor knowledge regarding tobacco by products.76% of adolescents had knowledge that tobacco users had risk to get Tuberculosis.9.Results of the study concluded that knowledge regarding effects of tobacco on health among adolescents is insufficient & prior information is necessary to create awareness to take preventive measures against tobacco smoking.

The findings in post- test revealed that majority of the adolescents, 51(64%) were having adequate knowledge, 29(36%) were having moderate knowledge & no one was having inadequate knowledge regarding hazards of smoking after implementation of planned teaching Programme. A comparison group study was conducted in Department of Nursing, California University in America to evaluate the effect of educational intervention on adolescent practices for smoking.90 adolescents were selected randomly to choose voluntarily either to receive a mailed pamphlet (n=50) or to attend a educational programme (n=40).Results of the study showed that in 90 adolescents, 50 subjects had practices of recurrent smoking. The study concluded that compared with the mailed pamphlet the educational programme had significant improvement in recommended practices.¹⁰

The overall mean knowledge score 28.61 obtained by the adolescents in post- test was higher than mean knowledge score 20.18 in the pre-test and with the improvement score as 8.42 There was significant difference between pre-test and post- test knowledge score at p<0.05. This indicates that Planned Teaching Programme was highly effective in enhancing the knowledge of adolescents regarding hazards of smoking. The present findings of the study were supported by a study conducted by Sreevani R (2005) in Tamaka, Kolar among adolescent students to assess the effectiveness of planned teaching programme regarding adverse effects of smoking on knowledge gain. The findings revealed that a significant difference between pre test and post test knowledge scores of the adolescents (t=19.18, p≤0.001).Therefore it could be concluded that planned teaching programme is effective in gaining knowledge scores on tobacco smoking among adolescents.¹¹

The association of demographic variables with pre test knowledge scores by using ANOVA revealed that there is statistically significant association with variable as educational status of mother (p=0.01) at p≤0.05 level and no association was found with variables as Age , Gender, Educational status of father, residence, Type of Family, Family income. Hence the research hypothesis (H2: There is significant association between pre-test knowledge scores of adolescents regarding hazards of smoking with their selected demographic variables (age of adolescents, gender, educational status of father , educational status of mother, residence, type of family, family income) is rejected.

Similar results were found in a study conducted by Sreevani R(2005) in Kolar when there was no association between age, religion, educational status of parents, their occupational status ,type of family, income of family and source of information.¹¹

From the above findings, it can be concluded that the knowledge level of adolescents regarding hazards of smoking can be enhanced by conducting different teaching Programmes. By imparting this kind of knowledge it can help prevent onset of smoking among adolescents& can improve their quality of life. Furthermore, from the above findings it has been seen that there was significant association between pre- test knowledge and mother's educational status i.e., those whose mothers were highly qualified were having good knowledge regarding hazards of smoking. So, we can reveal that mother's education level and knowledge have great impact on child's knowledge and behavior

Recommendations:

- Similar study may be replicated on large samples to generalize the findings.
- A comparative study may be conducted between urban & rural adolescents.

- A study may be conducted on degree college students, health clinics & community organisations that have access to adults & want to have an impact on health of community.
- A descriptive study can be conducted on knowledge regarding hazards of smoking.
- A study can be conducted by including additional demographic variables like religion, occupation of parents etc.
- Manuals, information booklets and self-instruction module may be developed in areas of hazards of smoking among high school students.

Conclusion:

Based on the findings of the study it can be concluded that there was evident increase in the knowledge scores in all the areas included in the study after administration of PTP. Thus it was proved that PTP was effective for creating awareness regarding hazards of smoking among adolescents of selected high schools in Srinagar.

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