Pre-experimental study to assess the impact of planned teaching program on knowledge regarding ill effects of smoking among adolescent boys in selected Higher secondary school District Budgam.

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Abstract

*Tobacco smoking is a risk factor for chronic diseases like cancer, heart disease, stroke, lung diseases and diabetes .Worldwide around six million people die from long-term exposure to first- or second-hand smoke annually. One effective approach to tobacco control is smoking cessation counseling and providing awareness among population by primary care givers and physicians especially adolescents who are the builders of nation. However, research suggests that smoking cessation counseling is not sufficiently implemented in primary care. In order to understand and address the discrepancy between evidence and practice, an overview of counseling practices health education is needed.Adolescence is a transitional stage of physical and psychological development that generally occurs during the period from puberty to legal adulthood. Adolescence is usually associated with the teenage years, but physical, psychological or cultural expressions may begin earlier and end later.As Nowadays adolescents are more prone to be the victim of the smoking. The adolescents are the cream of the nation. So it is our right to continue to awarenessand conduct health education programs regarding smoking. Therefore, On the basis of these views a study was conducted to assess the impact of planned teaching program on knowledge regarding ill effects of smoking among adolescent boys in selected secondary school of budgam.For which 30 subjects were selected bypurposive sampling technique. After data collection structured knowledge questionnaire was used to assess the knowledge among subjects. The data was analyzed by descriptive and inferential statistics by using chi-square and t-test.The findings revealed that the mean posttest knowledge score **27.07,** standard deviation **0.69**, was significant higher than mean pretest knowledge score **9.9,**standard deviation **1.16**among study subjects which indicated that planned teaching program was highly effective in enhancing the knowledge in adolescent boys at mean difference **17.17.**The study also concluded that there were statistically no significant association between demographic variables (p=0.000) of adolescent boys with their pre-test knowledge scores at 0.05 level of significance.*

Key Words: -Tobacco smoking, Knowledge, adolescents, planned Teaching Programme, Chronic Obstructive Pulmonary Disease, lung Cancer.

1. INTRODUCTION

Tobacco consumption is a preventable risk factor for non-communicable diseases such as chronic obstructive pulmonary disease and cardiovascular disease. Each year, around six million people die from long-term exposure to first- or second-hand smoke worldwide. Globally, one of the guiding instruments for tobacco control is the World Health Organization Framework Convention on Tobacco Control. The convention gives specific recommendations for a number of different tobacco control strategies that should be implemented, such as developing comprehensive smoking cessation guidelines and introducing warning labels on cigarette packages. One approach to reduce tobacco consumption that is recommended in guidelines for the treatment of tobacco dependence is to offer smoking cessation counseling in the primary care setting. Smoking cessation counseling by general practitioners has been shown to increase quit rates. The general practice is an appropriate setting for smoking cessation counseling for a number of reasons. First, GP's have suitable access to the target group because around 80% of the German population visit their GP at least once per year. Second, regular personal contact builds trust between GP's and patients and facilitates the provision of quit advice. Third, face-to-face contact allows for the delivery of individual smoking cessation advice.[1]

The adverse effects of cigarette smoke on human health are widely recognized. It is the main etiological agent in chronic obstructive pulmonary disease and lung cancer, and is a known human carcinogen. While the risks to human health from active smoking are accepted, evidence supporting the risk of involuntary exposure to environmental tobacco smoke has accumulated in recent years. It is the main source of toxicant exposure by inhalation in nonsmokers. Despite recent regulations, smoking in public enterprises is not uncommon. However, despite an occasional report on the effect of secondhand smoke in nonsmokers, little attention was given to this aspect of smoking until about 1970. Environmental tobacco smoke is now regarded as a risk factor for development of lung cancer, cardiovascular disease and altered lung functions in passive smokers. In general, children exposed to environmental tobacco smoke show deterioration of lung function, more days of restricted activity, more pulmonary infections, more days in bed, more absences from school and more hospitalization than children living in nonsmoking homes .[2, 3.]

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 earlier they start to smoke, the more likely they are to become regular smokers. 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, therefore, need to identify relevant factors associated with smoking among adolescents in order to better public health environment aimed at preventing smoking. The study revealed the effectiveness of structured teaching programme on knowledge of adolescent boys regarding the adverse effect of active and passive smoking. Samples were selected by convenient sampling technique and this study was conducted in selected secondary school, Udaipur. Total 80 adolescent boys were selected. The pilot study was conducted; final data was collected, analyzed and interpreted by using descriptive and inferential statistics. In pre-test majority of the participants 47(58.8%) were having inadequate knowledge, 33 (41.2%) were having moderately adequate knowledge and none of participants were having adequate knowledge. Whereas In post-test majority of the participants 57(53.3%) were having moderately adequate knowledge, 23(28.8%) were having adequate knowledge and none of the participants were having inadequate knowledge. The

mean post-test knowledge score 11.87 with mean percentage (59.35%) was greater than the mean pre-test knowledge score 6.2 with mean percentage (31%). The mean difference between pre-test and post-test score was 5.67 with the mean percentage of (28.35%). Paired t calculated value is 19.87 p<0.05 is significant at 0.05% level.[4]

The use of dental implants has revolutionized the treatment procedure for over last 25 years. Implants now have been widely accepted by patients as their treatment plan and have become a routine procedure by dental surgeons. Owing to the remarkable success, there have been various researches going on to find out factors responsible for the failure of implants. With the growing use of tobacco among patients, its ill effects on bone quality and quantity it arises a keen interest to associate effect on the success of implants. To establish a relationship between smokings's and implant success and its long term survival and compare the result with non-smokers based on the literature. Relevant clinical studies and reviews published in English literature published between 1990 and 2012 were reviewed. The articles were located through EBSCO host and manually through the references of peer reviewed literature. Most of the literatures supported the fact that smoking is a prominent risk factor affecting the success of implants. Studies reported that implant failure and its complications associated are twice in smokers as compared to non-smokers. Literatures also revealed that maxillary implant are more affected than mandibular in smokers. Studies suggested that effects of smoking were reversible in smokers who followed the smoking cessation protocol prior to the procedure. Smokers have a greater chances of implant failure and more prone to the complications following implants and related procedures. Surgeons should stress on counseling of patient willing for implant for smoking cessations protocols.[5]

A large volume of data has accumulated on the issues of tobacco and health worldwide. The relationship between tobacco use and health stems initially from clinical observations about lung cancer, the first disease definitively linked to tobacco use. Almost 35 years ago, the Office of the Surgeon General of the United States Health Service reviewed over 7000 research papers on the topic of smoking and health, and publicly recognized the role of smoking in various diseases, including lung cancer. Since then, numerous studies have been published that substantiate the strong association of tobacco use with a variety of adverse human health effects, most prominently with cancer and cardiovascular diseases. Cigarette smoking is regarded as a major risk factor in the development of lung cancer, which is the main cause of cancer deaths in men and women in the United States and the world. Major advances have been made by applying modern genetic technologies to examine the relationship between exposure to tobacco smoke and the development of diseases in human populations. The present review summarizes the major research areas of the past decade, important advances, future research needs and federal funding trends.[6]

As part of the Global Burden of Disease Study carried out by the Harvard University School of Public Health in 1997 , it was projected that mortality and morbidity from tobacco use will increase by almost threefold worldwide in 20 to 25 years. Similar predictions have been made by the Oxford University Center headed by Sir Richard Doll, who was one of the first researchers to link cigarette smoking with lung cancer in the 1950s . Cancer, cardiovascular diseases and chronic obstructive pulmonary disease continue to be the main health problems associated with cigarette smoking. An extensive database has

accumulated, which has consistently documented a relationship between smoking and these specific diseases. The strength of the association is further demonstrated by measuring the RR and the presence of a dose-response relationship (ie, direct relationship between the intensity of exposure to cigarette smoke and the risk of disease). According to a 2004 Centers for Disease Control and Prevention report, approximately 2600 people die of cardiovascular disease in the United States every day, which translates into one death every 33 s. Furthermore, the likelihood of dying from heart disease increases fourfold as a result of smoking. The cost of heart disease and stroke in terms of health care expenses and lost productivity was estimated at US$351 billion in the United States alone in 2003[7-9.]

A repository for the collection, analysis, validation and dissemination of all smoking and health-related data was established by the World Health Organization. The data received from various member countries were compiled into a book entitled *Tobacco or Health: A Global Status Report, 1997*. This report showed smoking prevalence and other tobacco use-related data from various countries and presented an analysis. It is estimated that there are approximately 1.1 billion smokers worldwide, of which 900 million are men and 200 million are women. The sex ratio of men to women is 2:1 for developed nations and 7:1 for developing nations. Smoking prevalence in men and women averages 42% and 24%, respectively, for developed countries, and 48% and 7%, respectively, for less developed countries. In comparison, approximately 47 million people smoke cigarettes in the United States , and smoking prevalence in the United States is estimated at 28% and 23% for men and women, respectively. The Surgeon General's report in 2004 concluded that in the United States, cigarette smoking has caused 12 million deaths since 1964, at a cost to the nation of approximately US$157.7 billion each year. There has been a significant decline in the consumption of cigarettes in the United States since 1964. The production of cigarettes continues at a steady pace mainly to meet export demands, which continue to rise due to increasing tobacco use in the rest of the world, especially in far eastern and southeastern Asia. On the basis of consumption and disease incidence trends, it is predicted that there will be an epidemic of tobacco-related diseases in various countries of the world in the next 20 to 30 years.[10-12.]

From the above findings, it was found that tobacco smoking is the most common habit of adolescents boys. Nowadays tobacco smoking become the utmost risk factor for the development of lung cancer in developing and developed countries. So the people belonging to medical profession should need to educate and assess the whole population regarding the ill effects of smoking to prevent them from occurrenceof chronic diseases. Health professionals play a vital role in framing the structured knowledge and awareness among people. So the researcher felt that there is need to impart knowledge and decided to administer planned teaching programmeregarding ill effects of smoking among adolescent boys in selected higher secondary school.

2. OBJECTIVES OF THE STUDY

1. To assess the pre-test knowledge score regarding ill effects of smoking among adolescent boys in selected higher secondary school of Budgam.

2. To assess the post-test knowledge score regarding ill effects of smoking among adolescent boys in selected higher secondary school of Budgam.

3. To evaluate the effectiveness of planned teaching programmby comparing pretest and posttest knowledgescore regarding ill effects of smoking among adolescent boys in selected higher secondary school of Budgam.

4. To find the association between pretest knowledge score of adolescent boys regarding ill effects of smoking with selected demographic variables (age,Area of residence, type of family and source of information).

3. METHODOLOGY

A pre-experimental study design was conducted to assess the knowledge regarding ill effects of smoking among adolescent boys in selected secondary school of Budgam. 30 subjects were selectedby purposive sampling technique. Structured Knowledge questionnaire was adopted to collect the information from the participants in selected higher secondary schoolBudgam. The tool consisted of demographic variables (age, area of residence, type of family and source of information). Prior to data collection informed consent was obtained from the participants. The data was analyzed using descriptive and inferential statistics.

4. **RESULTS:Fig-1:- Frequency Distribution of Subjects According To Their Age.**
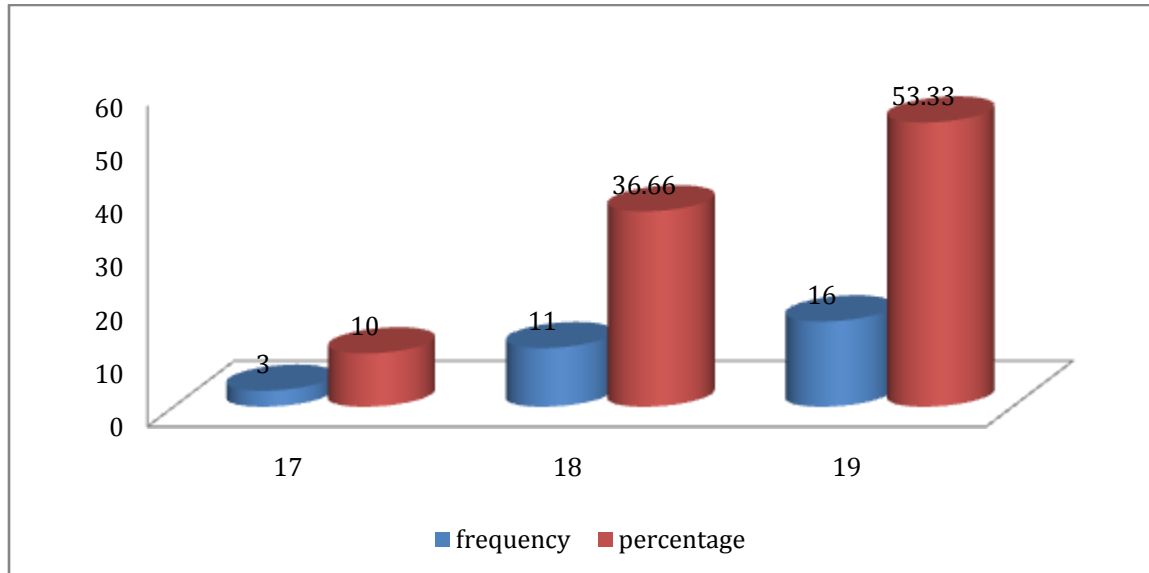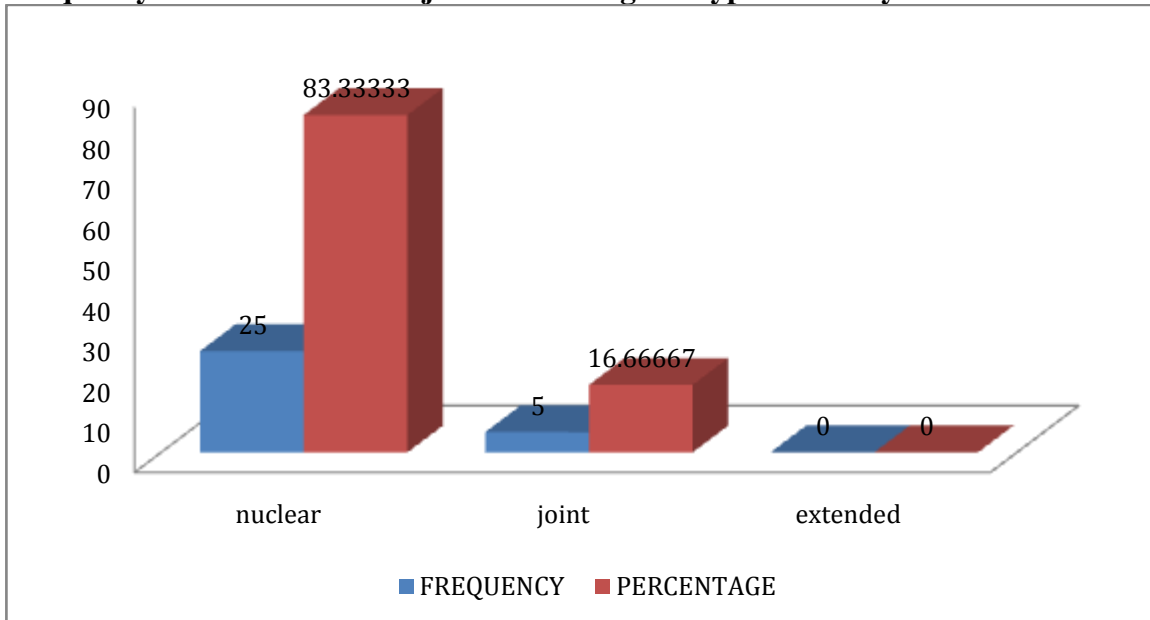

The data presented in figure 1 revealed that out of 30 study subjects most of the subjects were **16(53.33%)** in the age group of 19 years, 11**(36.66%)** in the age group of 18 years and 3(10%) in the age group of 17 years.

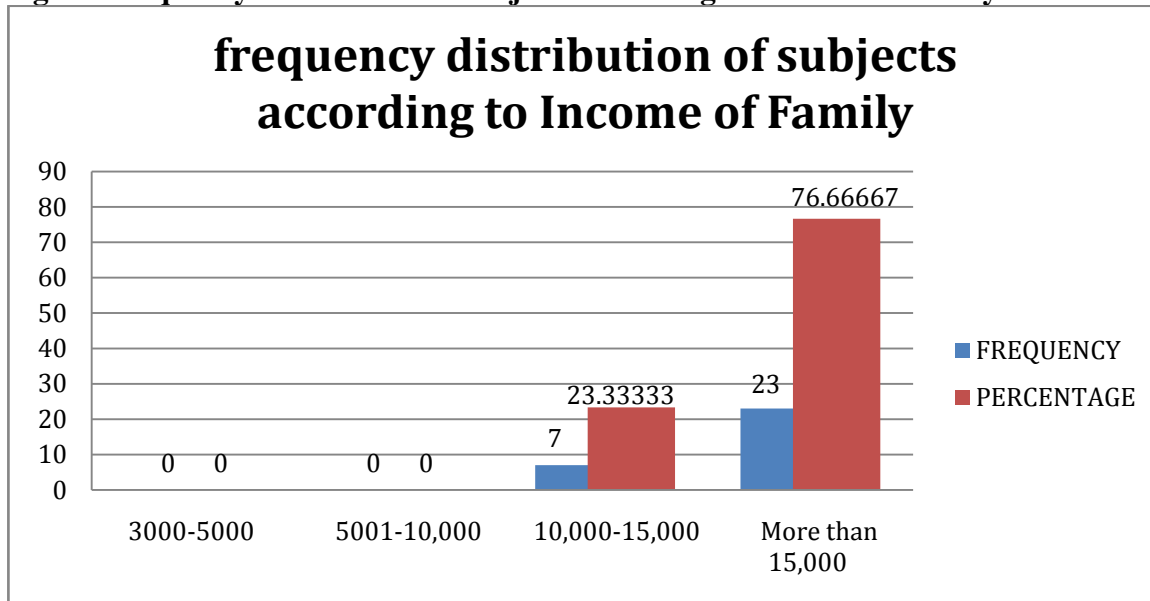**Fig-2:- Frequency Distribution of Subjects According To Area OfResidence.**
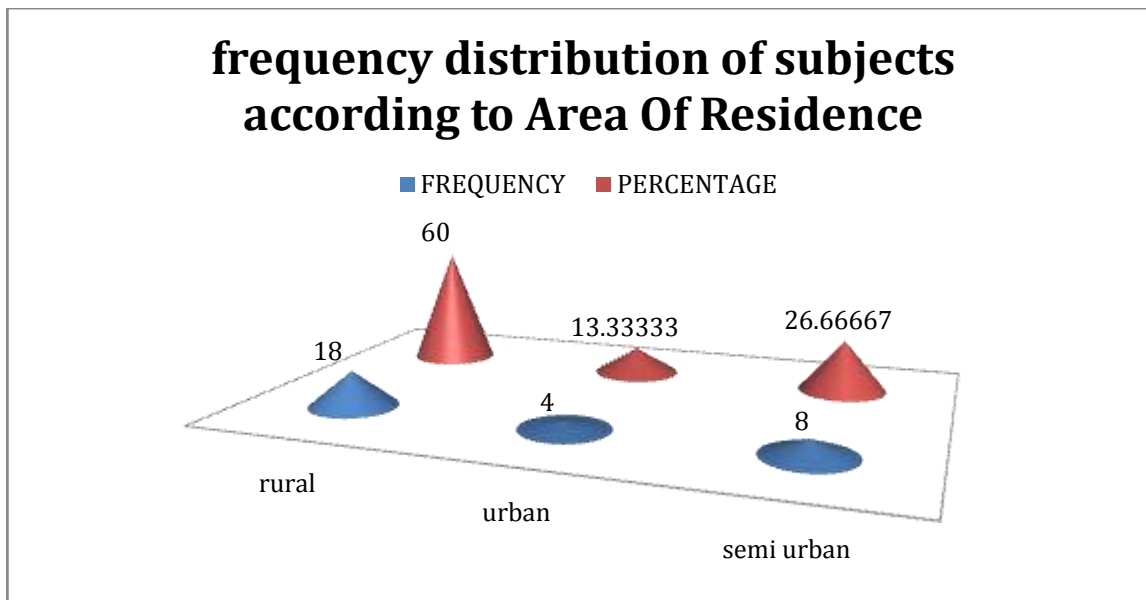
The data presented in figure 2 revealed that maximum number of study subjects **18(60%)**, **8(26.66%)**and **4(13.33%)**were belonged to rural area, semi urban and urban area respectively.

**Fig-3:- Frequency Distribution of Subjects According To Type of Family.**

The data presented in figure 3 revealed that maximum number of study subjects **25(83.33%)**, **5(16.66%)** and **0(0%)** were belonged to nuclear and joint families and neither subject was belonged to extended family respectively.

Fig-4:- Frequency distribution of subjects according to Income of Family.

The data presented in figure 4 revealed that maximum number of study subjects **23(76.66%)** were having income more than 15,000 and **7(23.33%)** were having income 10,000-15,000 and no subject was found having income 3000-10000 respectively.

**Fig-5:- Frequency Distribution Of Subjects According To Source Of Information.**

Frequency distribution of subjects according to Source Of Information
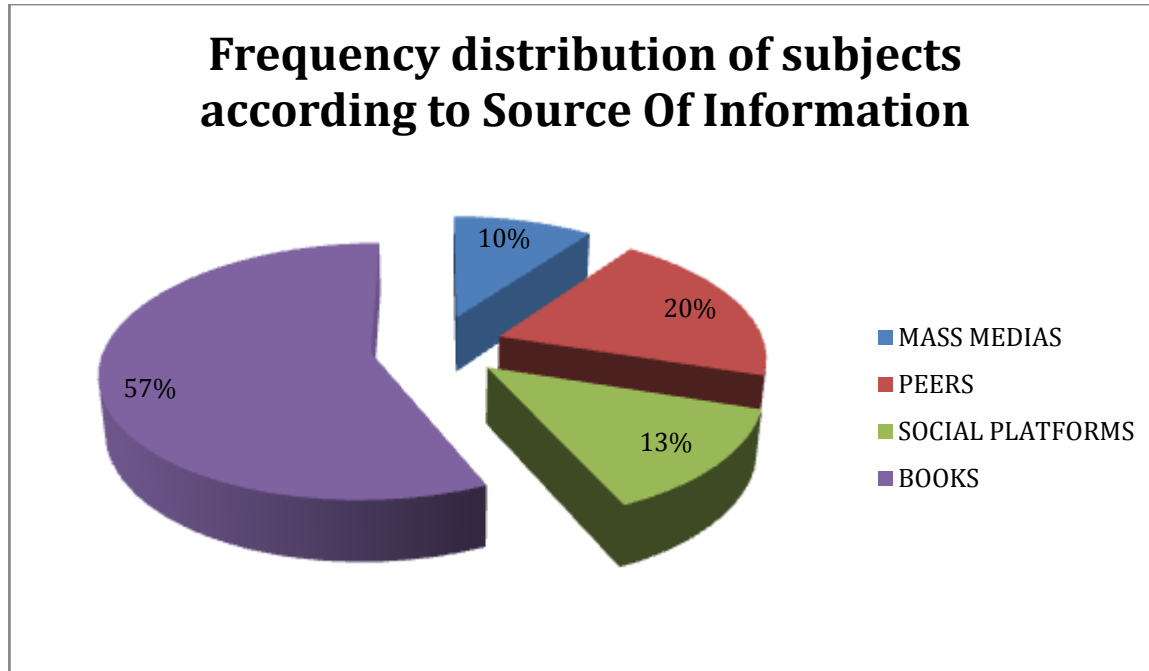
The data presented in figure 5 revealed that source of information of maximum number of study subjects **17(57%), 6(20%), 4(13%)**, and **3(10%)** were having books, peers, social platforms and mass medias respectively.

Table 1:- MEAN, DIFFERENCE OF MEAN, STANDARD DEVIATION AND PAIRED 'T-VALUE' OF PRE TEST AND POST TEST KNOWLEDGE SCORE

Group	PRE TEST	POST TEST	MEAN DIFFERENCE		t value	significance at 0.05
Mean	9.9	27.07		df = 29		
SD	1.16	0.69	17.17		-79.89373129	significant
SEM	0.21	0.13				
N	30	30				

Fig-6:- Mean, Difference of Mean, Standard Deviation And Paired 'T-Value' Of Pre Test And Post Test Knowledge Score
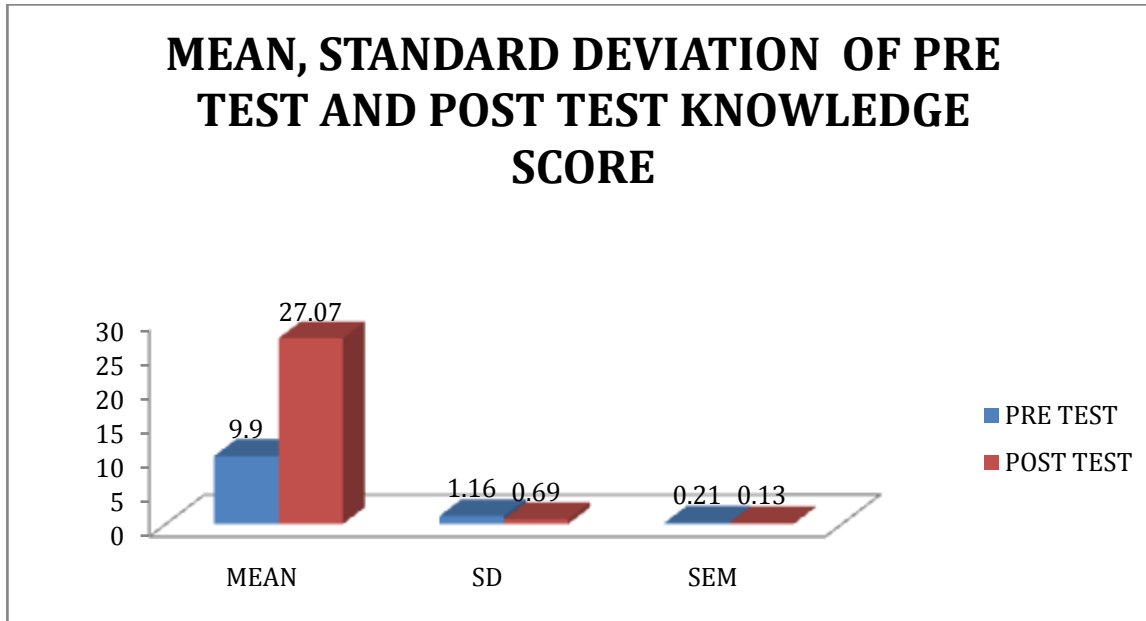
- The data presented in figure 6 revealed that the mean posttest knowledge score **27.07** was significant higher than mean pretest knowledge score **9.9**in study group which indicated that planned teaching program was highly effective in enhancing the knowledge in experimental group at mean difference **17.17.**

5. RECOMMENDATION

The Following studies can be undertaken in relation to present study
- A similar study need to be undertaken with a large number of samples for better generalization.
- A similar study can be conducted by seeking other variables.
- A true Experimental research approach can be used.
- The study can be conducted among middle school boys to assess their knowledge.
- Setting can be changed by involving more secondary and higher secondary schools andcolleges.
- A comparative study can be conducted to assess the knowledge and attitude regardingregarding ill effects of smoking among adolescent boys inother higher secondary schools of other districts of jammu and Kashmir.
- A comparative study can be conducted between adolescent boys and adults relatedill effects of smoking.

6. CONCLUSION

The following conclusions were drawn on the basis of the findings of the study.

- Pretest findings showed the Knowledge among adolescent boys in selected higher secondary school were found below average regarding ill effects of smoking among adolescent boys.
- There was improvement in knowledge of study subjects after the implementation of planned teaching programmregarding ill effects of smoking among adolescent boys.
- The planned teaching programmewas found effective in improving the knowledge regarding ill effects of smoking as it was evident from posttest knowledge score and when compared with pretest knowledge score.
- There was statistically no significant association between pre-test knowledge score with demographic variables (age, area of residence, type of family and source of information) at ($p > 0.05$). Hence H_2 was rejected for these variables at 0.05 level of significance.
- This indicated that planned teaching Programme can remain effective if provided regular basis to pre-adolescents, adolescents and adults in order to increase the knowledge regarding ill effects of smoking because this age is more prone to develop the habit of smoking and can lead to fatality of life.

7. AKNOWLEDGEMENT

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