

# “A STUDY TO ASSESS THE EFFECTIVENESS OF AUDIO-VISUAL DISPLAY ON KNOWLEDGE REGARDING THE USE AND ILL EFFECTS OF TOBACCO PRODUCTS AMONG ADOLESCENT BOYS IN SELECTED SCHOOLS AT KANPUR, UTTAR PRADESH”

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## Abstract

The present study is to assess the effectiveness of audio-visual display on knowledge regarding the use and ill effects of tobacco products among adolescent boys in selected school at Kanpur, Uttar Pradesh. The objectives of the study are to assess the pre-test level of knowledge regarding the use and ill-effect of tobacco products among adolescent boys. To find out the association between pre-test knowledge score regarding the use and ill effect of tobacco products among adolescent boys with their selected demographical variables. To determine the effectiveness of audio-visual display regarding the use and ill effect of tobacco products among adolescent boys. The research design adopted for the study was Quasi Experimental one group pre-test and post test research design were used. The result of the study shows in pre-test and post-test level of knowledge, in pre test among the subject 38 sample (63.33%) had inadequate level of knowledge, 16 sample (26.67%) had moderate and 6 sample (10%) had adequate level of knowledge and In post test among the subject 6 sample (10%) had inadequate level of knowledge, 10 sample (16.67%) had moderate and 44 sample (73.33%) had adequate level of knowledge. It was concluded that the findings of this study highlight the value of integrating audio-visual elements into educational strategies for tobacco prevention. The significant gains in knowledge suggest that such multimedia tools can be highly effective in conveying important health information to adolescents' boys, making them a valuable addition to tobacco education programs. By presenting information in an engaging and interactive format, audio-visual displays can help bridge knowledge gaps and promote healthier behaviors among young people.

## INTRODUCTION

Tobacco use is a major worldwide public health problem. It is now by far the largest preventable cause of death in the world. Although there is a health warning on every packet of cigarettes in India indicating that Smoking is injurious to health, these warnings are illegibly printed. On the other hand, attractive and catchy tobacco advertisements are very common. Thus, the use of tobacco products including cigarettes, Gutka, Khaini, cigar and Jarda is increasing in the country.

Adolescents are the most vulnerable population to initiate tobacco use. It is now well established that most of the adult users of tobacco start tobacco use in childhood or adolescence. There has been a perceptible fall in smoking in the developed countries after realization of harmful effects of tobacco. The tobacco companies are now aggressively targeting their advertising strategies in the developing countries like India. Tobacco smoking is an addictive behaviour associated with over five million deaths per year. The World Health Organization projects that the number of deaths per year attributable to tobacco smoking will rise to eight million by 2030. Tobacco use is a major preventable cause of morbidity and mortality, killing an average of one person every six seconds, and is responsible for one in ten adult deaths worldwide.

**Keywords:** Assess, Effectiveness, Audio visual display, Tobacco products, Adolescent boys.

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## NEED OF THE STUDY

The majority of parents do not want their children to smoke, for obvious reasons. Fortunately, parents can take a number of effective actions to protect their children from starting to smoke and to help the child those who are addicted. Initially, being good parents and role models is important, but it takes much more to prevent children from smoking. Parents must also work against pro-smoking influences outside the home, including efforts to ensure that schools are doing their best to prevent and reduce youth smoking.

In tackling the worldwide health crisis that is tobacco, nurses must first adopt the principle that prevention is better than cure. One approach is to actively discourage young people from starting to use tobacco. Nurses can encourage peer-led prevention programmes for young people in which peers teach the social consequences of smoking. Films and videos which portray the short-term effects of tobacco use such as bad breath, smelly clothing, decreased athletic ability, and which detail the financial cost of smoking, are also a useful teaching medium for this group. Materials highlighting the long-term dangers of smoking such as cancer and other diseases may not seem relevant to younger people, but can be effective with adults. Nurses can also use their influence as health promoters to encourage smoking bans in schools, colleges and universities.

**PROBLEM STATEMENT:** A study to assess the effectiveness of audio-visual display on knowledge regarding the use and ill effects of tobacco products among adolescent boys in selected school at Kanpur, Uttar Pradesh.

## OBJECTIVES

- To assess the pre-test level of knowledge regarding the use and ill effect of tobacco products among adolescent boys.
- To find out the association between pre-test knowledge score regarding the use and ill effect of tobacco products among adolescent boys with their selected demographical variables.
- To determine the effectiveness of audio visual display regarding the use and ill effect of tobacco products among adolescent boys.

## OPERATIONAL DEFINITIONS

**Assess** - In this study, It refers to evaluate the knowledge regarding the use and ill effect of tobacco products among adolescent boys by using self structured knowledge questionnaire.

**Effectiveness** - In this study, It refers to the result or outcome which in this study is the increase in awareness towards tobacco use and ill effects among adolescent boys.

**Audio visual display** - In this study, it refers to the putting up of material which contains health information regarding the use and ill effects of

tobacco products which enables to see, hear, and interact and gain information. The materials included video, pictures, chart and live experience of the people, which make the learning experience more concrete.

**Use and ill effects of tobacco products** - In this study, It refer to, the continuous use of tobacco products like cigarettes, bidie and all it's bi-products that can cause severe problems or damage to the health of the adolescent boys.

**Adolescent boys-** In this study, it refer to a boys between ages 13 and 17.

**School** - In this study, It refer to an institution where adolescent boys go to be educated.

## HYPOTHESIS

### NULL HYPOTHESIS

H01- There will be no significant difference between pre-test and post-test knowledge score regarding the use and ill effects of tobacco products among adolescents.

H02- There will be no significant association between pre test knowledge score of use and ill effects of tobacco products among adolescent boys with their selected socio demographic variables

### RESEARCH HYPOTHESIS

H1- There will be a significant difference between pre-test and post-test knowledge score regarding the use and ill effects of tobacco products among adolescents.

H2- There will be a significant association between pre test knowledge score of use and ill effects of tobacco products among adolescent boys with their selected socio demographic variables

### VARIABLES:

**Independent variable:** In this study, the independent variable is audio visual display knowledge regarding the use and ill effects of tobacco products.

**Dependent variable:** In this study, the dependent variable is knowledge of adolescent boys towards using tobacco products.

**Extraneous variable:** In this study, demographic variable is age, religion, educational qualification, family history of adolescent boys and previous exposure to educational programmes regarding use and ill effect of tobacco products.

### ASSUMPTIONS

- The Adolescents may have limited knowledge regarding the health hazards of tobacco products.
- Regular usage of tobacco products leads to addiction, & various health problems.
- Using tobacco products can be prevented by self-motivation through various education measures.
- Usage of tobacco products among adolescent boys may be influenced by various factors such

as family background, environment, peer group etc.

#### **DELIMITATIONS**

- The study is limited to 4-6 weeks period only.
- Adolescent boys from the Premlal H.S. school and Arya Bhatt inter college.
- Adolescent boys aged between 13 -17 years.

#### **METHODOLOGY- MATERIALS AND METHODS**

**SOURCE OF DATA:** The data was collected adolescent boys from Premlal H.S. school and Arya Bhatt inter college Kanpur

#### **Inclusion criteria**

- Who are in the age group between 13 to 17 years.
- Who can understand Hindi and English.

#### **Exclusion criteria**

- Who were not interested to participate in the study.
- Who were not available at the time of data collection

**RESEARCH DESIGN:** The research design adopted for the study was Quasi Experimental one group pre-test.

**RESEARCH APPROACH:** An evaluative approach was used in this study

**SETTINGS OF THE STUDY:** The study was conducted in Premlal H. S. School and Arya Bhatt inter college which is situated in jaroli, Kanpur

**POPULATION:** 15 adolescent boys

**TARGET POPULATION:** adolescent boys attending school at Kanpur U.P.

**ACCESSIBLE POPULATION:** adolescent boys studying in Premlal H.S. and Arya Bhatt school at Kanpur, Uttar Pradesh.

**SAMPLE:** adolescent boys from Premlal H.S. school and Arya Bhatt inter college Kanpur who fulfils the inclusion and exclusion criteria

**SAMPLE TECHNIQUE:** simple random sampling Technique was used to collect samples

**SAMPLE SIZE:** The sample size comprised of 60 adolescent boys from the Premlal H. S. school and Arya Bhatt inter college of Kanpur, Uttar Pradesh

**TOOL OF RESEARCH:** The tools used for the study were a structured questionnaire. The techniques used for data collection was interview. The structured questionnaire consisted of two parts.

**PART - I:** This part was designed to collect demographic data which include variables like age, family income, parental education, parental occupation, religion and place of residence.

**PART - II:** This part was designed to assess the knowledge on using tobacco products & its use and ill effects before and after intervention. There were 25 questions that were focused on different aspects such as facts about tobacco products, factors

influencing using tobacco products and information on effects, treatment & prevention.

#### **RESULTS:**

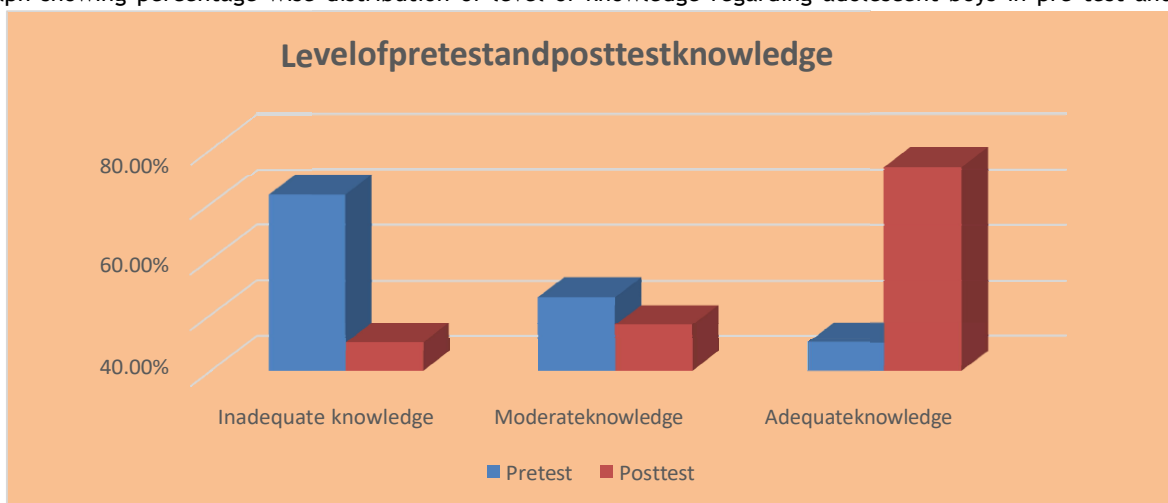
#### **SECTION A: DISTRIBUTION OF ADOLESCENTS ACCORDING TO THEIR DEMOGRAPHIC VARIABLES**

1. according to age shows that majority 32 (53.34%) of adolescent boys were from 15-16 year age group, 19 (31.66%) 17-18 years age group and 9(15%) were 13-14 year age group.
2. religion shows that highest 41(68.33%) of adolescents belong to hindu religion, 14(23.33%) belong to muslim religion and lowest 2(3.33%) adolescents belong to Christian religion.
3. standard of studying shows that highest 32(53.33%) of adolescents studying in 10th standard, 11 (18.33%) studying in 12th standard, 9 (15%) studying in 9th standard and lowest 8(13.34%) adolescents studying in 11th standard.
4. place of residence shows that majority 26 (43.33%) of adolescents were from city, 18(30%) maha-nagar, 9(15%) town and 7(11.67%) were from village.
5. family monthly income shows that majority 41 (68.37%) family had monthly income of Rs. 10,000 to 20,000/- followed by 14 (23.33%) families had income below Rs. 10,000/-, 3 (5%) families with monthly income of Rs. 20,001 to 30,000 and only 2 (3.33%) families with income of Rs. 30,000
6. parent's education shows that majority of the parents 21 (35%) are graduate, 20 (33.33%) had completed their primary education, 15 (25%) parents were illiterate and only 4 (6.67%) parents had secondary education.
7. parents occupational status shows that majority 29 (48.34%) were having Business, 17 (28.33%) were in government job and 14 (23.33%) were having private job.
8. habit of tobacco consumption shows that None of the participant was having the habit of smoking.
9. according to their use and ill effects of tobacco products shows that majority 39 (65%) adolescents boys were having knowledge about ill effects of tobacco products and 21 (35%) boys were having no knowledge about ill effects of tobacco products.
10. source of information shows that majority 12(30.76%) adolescent boys had knowledge from health promotion, 11 (28.20%) had information from friends, 9 (23.07%) had knowledge from parents and only 7 (17.97%) had information from mass and media.

**SECTION-B: DISTRIBUTION OF ADOLESCENTS BOYS ACCORDING TO THE PRE-TEST AND POST-TEST LEVEL OF KNOWLEDGE ON USE AND ILL EFFECT OF TOBACCO PRODUCTS**

S. No.	Level of knowledge	Pretest		Posttest	
		Frequency	Percentage(%)	Frequency	Percentage(%)
1	Inadequate knowledge	38	63.33%	6	10%
2	Moderate knowledge	16	26.67%	10	16.67%
3	Adequate knowledge	06	10%	44	73.33%

Bar graph showing percentage wise distribution of level of knowledge regarding adolescent boys in pre-test and



post-test..

**SECTION-C: EFFECTIVENESS OF AUDIO VISUAL DISPLAY ON KNOWLEDGE REGARDING THE USE AND ILL EFFECTS OF TOBACCO PRODUCTS**

n=60

S. No.	Levels of knowledge	Mean	Mean difference	Df	Sd	t'test value	value 'p'
1	Pretest	11.81	7.39	59	5.32	8.21	2.00
2	Posttest	19.2			4.51		

**SECTION-D: ASSOCIATION BETWEEN THE LEVEL OF PRE-TEST KNOWLEDGE SCORE REGARDING THE USE AND ILL EFFECTS OF TOBACCO PRODUCTS WITH THE SELECTED SOCIO DEMOGRAPHIC VARIABLE OF ADOLESCENT BOYS.**

S. No.	Socio Demographic Variables	Adequate Knowledge	Moderate Knowledge	Inadequate Knowledge	Chi Square Value	Significant / Non Significant
1	Age in years					
	a) 13-14	1	5	3	$\chi^2=7.63$ df=4 P=0.05	NS
	b) 15-16	3	4	25		
	c) 17-18	2	7	10		
2	Religion					
	a) Hindu	4	8	29	$\chi^2=5.41$ df=6 P=0.05	NS
	b) Muslim	2	5	7		
	c) Sikh	0	2	1		
	d) Christian	0	1	1		
3	Standard of studying					
	a) 9 <sup>th</sup> std	1	6	2	$\chi^2=38.73$ df=6 P=0.05	S
	b) 10 <sup>th</sup> std	3	1	28		
	c) 11 <sup>th</sup> std	2	0	6		
	d) 12 <sup>th</sup> std	0	9	2		
4	Place of residence					
	a) City	3	7	16	$\chi^2=5.38$ df=6 P=0.05	NS
	b) Town	2	2	5		
	c) Village	1	3	3		
	d) Maha Nagar	0	4	14		

5	Family monthly income					
	a) Rs. <10000	2	7	5	$\chi^2=9.61$ df=6 P=0.05	NS
	b) Rs. 10001-20000	3	8	30		
	c) Rs. 20001-30000	1	0	2		
	d) Rs. >40000	1	1	1		
6	Education of parents					
	a) Illiterate	3	5	7	$\chi^2=5.28$ df=6 P=0.05	NS
	b) Primary education	2	3	15		
	c) Secondary education	0	1	3		
	d) Graduate	1	7	13		
7	Occupational status of parents					
	a) Unemployed	0	0	0	$\chi^2=9.69$ df=6 P=0.05	NS
	b) Private	2	7	5		
	c) Business	3	3	23		
	d) Government	1	6	10		
8	Habit of consuming tobacco products by adolescent boys					
	a) Yes	0	0	0	$\chi^2=0$ df=2 P=0.05	NS
	b) No	6	16	38		
9	Any previous information about the use and ill effect of tobacco products?					

	a)Yes	3	9	27	$\chi^2=1.74$ $df=2$ P=0.05	NS
	b)No	3	7	11		
10	If yes source of information					
	a)Health promotion	3	2	7	$\chi^2=9.01$ $df=6$ P=0.05	NS
	b)Mass and Media	0	4	3		
	c)Parents	2	7	0		
	d)Friends	1	3	7		

The above table shows that there was no significant association between pre-test knowledge score with selected demographic variables like Age, Religion, type of family monthly income, education of parents, occupation status of parents, habit, any previous information except the standard of studying. Hence, research hypothesis (H<sub>2</sub>) was rejected and Null hypothesis (H<sub>02</sub>) was accepted.

#### SUMMARY:

The result shows that In pre-test among the subject 38 boys (63.33%) had inadequate level of knowledge, 16 boys (26.67%) had moderate and only 6 boys (10%) had adequate level of knowledge. In post-test among the subject 6 boys (10%) had inadequate level of knowledge, 10 (16.67%) boys had moderate and 44 boys (73.33%) had adequate level of knowledge mean pre-test knowledge score (11.81) was lesser than mean post-test score (19.2). The mean difference between pre-test and post-test score was (7.39). Hence research hypothesis H<sub>1</sub> was accepted and null hypothesis H<sub>01</sub> was rejected. This indicates that there is significant difference between pre-test and post-test knowledge score. "audio visual display" was very helpful to increase the knowledge of audio visual display about fetal we tobacco products. In the association of socio-demographic variable with the pre-test knowledge score religion, education occupation, monthly income, previous knowledge, there were no significant association with the pre-test knowledge score except standard of studying. So, here Null hypothesis H<sub>2</sub> was rejected and research hypothesis H<sub>02</sub> was accepted.

**NURSING IMPLICATION:** Location of the study can be seen in the area of nursing services, nursing

education, nursing administration, and nursing research, community health nursing.

**Nursing Services:** The implication of nursing services that the nurses play an important role in the audio visual display help the adolescent boys to update their knowledge. The finding of the study can be disseminated to motivate motivated nurses to awareness program.

**Nursing Education:** The nurses educate can recommended this topic to the students for health education activities to increase the knowledge level about the ill effect of tobacco use among the adolescent boys. The findings will help the nursing students to understand the need to be equipped with adequate knowledge.

**Nursing Administration:** The findings of the study help the nurse administration to take appropriate measures shout providing knowledge to audio visual display tobacco products. Continuous quality assessment can be done to assist the quality of education provided to the adolescent boys.

**Nursing Research:** Nursing practice need to be based on scientific knowledge because nurses are facing lots of challenges while delivering health service to the people. That has encouraged further study regarding use and ill effects tobacco products. The study findings help to motivate and initiate for the research related to the effectiveness of audio visual display on knowledge regarding the use and ill effects of tobacco products among adolescent boy

**Community Health Nursing:** Nurses have extended and expanded roles of promotive, preventive, curative and rehabilitative services for individuals, family as well as community. Nurses can provide

information regarding use of tobacco and its ill effects to improve the knowledge of community people.

#### RECOMMENDATIONS

- A study can be undertaken with a large sample to generalize the findings.
- An experimental study can be undertaken with control group.
- A study can be conducted to assess the knowledge and attitude among adolescent boys regarding tobacco products.
- A similar study can be conducted using the other strategies like SIM, STP, PTP etc.

**CONCLUSIONS:** Audio visual display module was effective in improving the level of knowledge of adolescent boys. It is the most importance means of creating awareness and increasing their knowledge regarding the use and ill effect.

The finding of the study revealed that there is an association of socio-demographic variable with the pre-test knowledge score except age, there were significant association with the pre- test knowledge score.

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