A Study to Assess the Effectiveness of Self Instructional Module on Knowledge and Attitude Regarding Tobacco Chewing among Adolescents in Selected Government Schools in Rural Area of Indore City

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1. Background of the Study

This study was carried out to find out the awareness of adolescents on knowledge and attitude regarding tobacco chewing. Tobacco Use is the single largest cause of disease and premature death in the world. Being the only consumer product which kills one half of its regular users, tobacco is directly responsible for 5.4 million deaths annually. In India, tobacco is responsible for over 8 lakh deaths each year. Tobacco use normally starts as a temporary pleasure that become a costly and risky past time when it ends up in addiction or with serious medical problem. The best success with quitting is when it occurs early. As I mentioned in the beginning of the module, every quitter should be proud of kicking either by self or with help as well as encourage others to quit , This study help to increase knowledge regarding tobacco chewing ,its effects, and help adolescents to quit tobacco chewing.

2. Need of the Study

According to a survey conducted by WHO in 2014 it was found out that approximately, 250 million adults consume smokeless tobacco in the 11 countries of the WHO South-East Asia Region, which constitutes 90% of global smokeless tobacco users. This figure is in addition to the 250 million smokers in the Region. Given the high number of users and the serious health consequences of tobacco use, countries in the Region have set a target for a 30% reduction in prevalence of current tobacco use in persons over 15 years of age.

The first global estimates of the burden of disease due to use of smokeless tobacco by adults was recently revealed, based on data from 115 countries. Worldwide, smokeless tobacco was found to cause 250,000 deaths a year, with the majority (74 percent) occurring in India.

3. Problem Statement

"A Pre experimental study to assess the effectiveness of self-instructional module on knowledge and attitude regarding tobacco chewing among adolescents in selected government schools in rural area of Indore city 2016-2017."

Objectives of the study
- To assess the pretest knowledge regarding tobacco chewing among adolescents in selected government schools
- To assess the pretest attitude regarding tobacco chewing among adolescents in selected government schools
- To assess the effectiveness of self-instructional module on knowledge and attitude regarding tobacco chewing among adolescents in selected government school
- To find out the significant association between pre-test knowledge and attitude score with selected demographic variables.

Hypothesis
- RH1:-The mean post-test knowledge & attitude scores of the adolescent's regarding tobacco chewing will be significantly higher than mean pre-test knowledge & attitude scores.
- RH2:- There is a significant association between pre-test knowledge & attitude score of the adolescent's regarding tobacco chewing with selected demographic variables.

4. Conceptual Framework

The conceptual framework of this study is based on **Imogene King's Theory of Goal Attainment Model.** The present study is a pre-experimental study on knowledge and attitude of adolescent on tobacco chewing. The conceptual framework adopted for the study is based on king's goal attainment theory with the concepts of perception, goal setting, action, interaction and transaction first introduced by Imogene kings in 1960s.

5. Research Methodology

Research Design
In this present study the investigator has adopted Pre-experimental one group pre-test, post- test design

Population: In this study population consisted of adolescents who are going to school in various government schools of Indore city and who met the inclusion criteria of the study.

Sampling technique: Non probability convenient sampling technique

Sample size: 60

Setting : The study was conducted in Maharaja Shivaji rao govt. senior secondary school chimanbag Indore, Govt. high school baroli Indore, Government middle school narval Indore, Government nutan senior secondary schools chimanbag Indore.

Description of tool

Tool: Structured questionnaire to assess the knowledge of adolescents regarding tobacco chewing. It consisted of three parts:

Total item was 20, with 20 total score. Arbitrary classification on knowledge score was done as excellent, good, average and poor. The tool for data collection consisted of the following two parts:

Section A: demographic data
Section B: Structured questionnaire
Section C: Self structured likert scale
Section A: demographic data

The demographic data included the following:
A. Adolescent: This section contained 06 items for obtaining the information regarding adolescent's age, gender, family income, type of family, previous knowledge about tobacco chewing, history of consumption of tobacco product in year.

Section B: Structured questionnaire for assessing the knowledge of adolescents regarding tobacco chewing. This section of the tool consisted of 20 items related to content matter. A multiple choice question required respondents to make a choice between more than two or three response alternatives.

In this study self structured multiple choice questions was considered appropriate for assessing knowledge score. The test items were objective type consisting of multiple choice questions (MCQs) with one correct answer. Every correct answer was awarded a score of one (1) and every wrong answer was assigned a zero (0) score. The maximum total score of knowledge questionnaire was 20 Score was graded as follow:

Scores	Remarks
0-5	Poor
6-10	Average
11-15	Good
16-20	Excellent

Section C: (Self structured likert scale)- likert scale is a composite measurement scale used to measure attitude, value and felling of the people that involve summation of score on the set of positive and negative declarative statement regarding measuring variables to which respondents are asked to indicate their degree of agreement and disagreement.

In this study self structured five point likert scale was considered appropriate for attitude score. A series of 10 statements were made. Scoring of the likert scale is done on the basis of level of respondent's agreement with statement. For a positive statement get higher score five (5) if there is agreement with statement. However in case of negative statement, respondents get higher score (5) if there is disagreement with statement. Maximum total of the attitude score was 50 score was graded as follow

Scores	Remarks
10-20	Poor
21-30	Average
31-40	Good
41-50	Excellent

Development of self-instruction module (SIM)
The SIM was developed stepwise according to the planned objectives. The SIM for adolescents was developed by the investigator after reviewing the literature, seeking opinion of the experts and from personal experiences.

The steps involved in the development of SIM were:
1) Preparation of first draft of SIM.
2) Content validation of SIM.
3) Preparation of final draft.

Description of the self-instructional module
The final draft of self-instructional module covered the following areas: Introduction, types of tobacco chewing, reasons for chewing tobacco/smoking, effects of tobacco use on the body, withdrawal symptoms of tobacco chewing / smoking, how to quit tobacco chewing / smoking, tobacco cassation management .

Procedure for Data Collection
In order to conduct the research study in the government school a written permission was obtained from the principal of Maharaja Shivaji rao govt. senior secondary school chimanbag Indore, Govt. high school baroli Indore, Government middle school narval Indore, Government nutan senior secondary schools chimanbag Indore.

The data collection period extended from 22/07/2017 to 10/08/2017. The date, time and place were confirmed after discussing with theprincipal, my guide and co-guide. Investigator decided to take 5-10 adolescents as sample per day for pre-test, treatment and post-test. Each day data were collected in the scheduled plan, school teachers helped in convincing the adolescents for participating in study.

Before the pre-test the purpose of the study was explained and the confidentiality of the subjects was assured. Consent was obtained from adolescents regarding participation in the study. The post test was done 4-7 days after the pre-test .This way data were collected for 20 days till August10[th] 2017.60 samples were taken from Maharaja Shivaji rao govt. senior secondary school chimanbag Indore, Govt. high school baroli Indore, Government middle school narval Indore, Government nutan senior secondary schools chimanbag Indore.

All respondents co-operated well with the investigator during data collection period. Technique of preparing module they found easy and smooth, the data collection process was terminated after thanking the respondents for their cooperation and patience. The data collected and compiled for data analysis.

6. Findings of the Study

The findings were discussed under the following sections:-

Section I: Frequency and percentage distribution of selected sample characteristics
It was found out that the majority samples, 24(40%) were from 16-17 years age group, 15(25%) and 19(31.7%) sample were from 13-15 and 18-19 years age group respectively. And 02(3.3%) sample found were from 10-12 years of age.

It was observed that the present study comprises of 50 (83.3%) males and 10 (16.7%) females.

The investigator found out that, out of 60 samples 11(18.3%) of samples were under the category of income 3001–6000Rs. 09(15%) of samples were having income between less than 3000 (Rs). 25(41.7%) samples were earning from 6001-9000 (Rs). and 15(25%) were in category of more than 9000 Rs.

After the analyses, it shows that most of the samples, 20(33.33%) samples were belong to nuclear family. 25(41.7%) are from joint family. 12(20%) were from the extended family and only 3(5%) were found the three generation of family.

The present study also focuses the 23 (38.33%) of the sample had a previous knowledge about tobacco chewing by family or friend. Most of the sample i.e. 36(60%) had information through mass media or television. No one had information through social worker. And last 01(1.7%) adolescents reports he had no previous knowledge about tobacco chewing.

It was also observed that from the selected samples 24(40.00%) of the sample had history of consumption of tobacco product from 1-2 yrs. 33(55%)had a history of less than 1 yrs. 01(1.7%) had sample uses tobacco the 3-4 yrs. And last 02(3.3%) adolescents had 4 yrs of history of chewing tobacco product.

Section II: Comparison of the pre-test score and post test score among the samples
The participants were given a questionnaire regarding knowledge about tobacco chewing, which consisted of 20 questions they were given 1 number for each correct answer and 00 for a wrong answer. These score were than graded in four categories – Poor (0-5), Average (6-10), Good (11-15), and Excellent (16-20).

The pre-test score of sample show that majority 30(50%) in average range, follow by 28 (46.7%) sample that had a poor and only 02 (3.3%) sample had a good score.

After the self instructional module was given to the adolescents than again post test was conducted with the same knowledge questionnaire, it can be clearly seen that 3(5%) sample had poor, 8(13.3%) average score, 28(46.7%) were in good score and 21(35%) adolescents is excellent score.

Also an attitude questionnaire had administered to assess the perception of subject selected from adolescents regarding tobacco chewing. A series of 10 statement were made scoring of the likert scale is done on the basis of level of respondent agreement with statement.

Each question was ranked between strongly agree (5) to strongly disagree (1) and each adolescents had to tick the most appropriate rank for each question. Then all ranks were added and then grades as Poor (10-20), Average (21-30), Good (31-40), and Excellent (41-50).

During the pre-test, it can be clearly seen the majority poor 33 (55%), average 23 (38.33%), good 04 (6.67%) of adolescents obtaining score.

The same questionnaire was repeated after when the self instructional module was read by the adolescents. It can be clearly seen that adolescents majority excellent 44 (73.34%), good 14 (23.33%), average 02 (3.33%) of adolescents obtaining score.

Section III: Effectiveness of self instructional module to acquire the knowledge regarding tobacco chewing and its product
The mean and standard deviation of the pre-test and post-test quality of life scores were compared using the sample "t" test. The "t" value calculated for knowledge score was 12.126 at a DF of 59. The p value obtained was p=0.05. Thus, we can conclude that there was a highly significant improvement in the knowledge score after administering of self instructional module among adolescent in selected government schools of Indore city.

For the attitude score, when the mean and SD of pre-test and post-test were compared and "t" test was applied. It can be clearly seen that the "t" value was 21.206 and p value was 0.001 which clearly show that self instructional module was very effective in increasing the attitude of adolescents.

Section IV: Association between pre-test score with knowledge score and attitude score with selected demographic variables.
In order to find the relationship between pre-test knowledge and selected demographic variables chi-square test was used.
- **Association with age group**
  Computed ($\chi^2_6 = 13.6$) shows that there is a significant association at p>0.05 between age and pre-test knowledge score.
- **Association with gender group**
  Computed ($\chi^2_6 = 2.07$) shows that there is no significant association at p>0.05 between gender and pre-test knowledge score.

- **Association with family income**
  Computed ($\chi_6^2 = 15.64$) shows that there is a significant association at p>0.05 between family income and pre-test knowledge score.
- **Association with type of family**
  Computed ($\chi_6^2 = 1.39$) shows that there is no significant association at p>0.05 between type of family and pre-test knowledge score.
- **Association with previous knowledge about tobacco chewing**
  Computed ($\chi_6^2 = 30.88$) shows that there is a significant association at p>0.05 between previous knowledge about tobacco chewing and pre-test knowledge score.
- **Association with history of consumption of tobacco chewing**
  Computed ($\chi_6^2 = 32.94$) shows that there is a significant association at p>0.05 between history of consumption of tobacco chewing and pre-test knowledge score.

In order to find the relationship between pre-test attitude score and selected demographic variables chi-square test was used.

- **Association with age group**
  Computed ($\chi_6^2 = 13.12$) shows that there is a significant association at p>0.05 between age and pre-test attitude score.
- **Association with gender**
  Computed ($\chi_6^2 = 0.47$) shows that there is no significant association at p>0.05 between gender and pre-test attitude score.
- **Association with family income**
  Computed ($\chi_6^2 = 9.68$) shows that there is no significant association at p>0.05 between family income and pre-test attitude score.
- **Association with type of family.**
  Computed ($\chi_6^2 = 22.81$) shows that there is a significant association at p>0.05 between type of family and pre-test attitude score.
- **Association with previous knowledge about tobacco chewing**
  Computed ($\chi_6^2 = 40.1$) shows that there is a significant association at p>0.05 between previous knowledge of tobacco chewing and pre-test attitude score.
- **Association with history of consumption of tobacco chewing**
  Computed ($\chi_6^2 = 48.62$) shows that there is a significant association at p>0.05 between history of consumption of tobacco chewing and pre-test attitude score.

7. Conclusion

The present study attempted to find out the effectiveness of self instructional module regarding harmful effects of tobacco chewing among adolescent in selected government schools in Indore city. On the basis of the findings the following conclusion was drawn , it was found out that , majority of samples , it can be clearly seen that 3(5%) sample had poor ,8 (13.3%) average score , 28(46.7%) were in good score and 21 (35%) adolescents is excellent score.

Hence, the intervention, "Self Instructional Module"was effective in acquiring knowledge regarding tobacco chewing among the adolescent in selected government school.

8. Major Findings of the Study

- Majority samples were at the age group i.e. 24(40%) were at 16-17 yrs.
- It mainly comprises of 50 (83.3%) males and 10 (16.7%) females.
- Majority of samples that is 25 (41.7%) were had family income between 6001-9000/-
- Majority of samples, 25(41.7) belongs to joint family.
- Majority of samples had previous information about tobacco chewing 36(60%) through mass media / television
- Majority of samples, like 33(55%) had history of tobacco chewing less than 1 year.

The pre-test score of sample show that majority 30(50%) in average range, follow by 28 (46.7%) sample that had a poor and only 02 (3.3%) sample had a good score.

After the self instructional module was given to the adolescents than again post test was conducted with the same knowledge questionnaire, it can be clearly seen that 3(5%) sample had poor ,8 (13.3%) average score , 28(46.7%) were in good score and 21 (35%) adolescents is excellent score.

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