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A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING REDUCTION OF SECONDHAND SMOKE EXPOSURE AMONG ADULTS RESIDING AT PALLITHOTAM COASTAL AREA, KOLLAM

Elizabeth Jose, Feba T. K., Jasmy Joseph, Jerin Robert, *Jeslin Mary Kunjumon and Amala L.

Fourth Year B.SC Nursing Students,
Assistant Professor, Community Health Nursing Department, Bishop Benziger College of Nursing, Kollam, Kerala, India.

***Corresponding Author: Jeslin Mary Kunjumon**

Fourth year B.sc Nursing Students, Assistant Professor, Community Health Nursing Department, Bishop Benziger College of Nursing, Kollam, Kerala, India.

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ABSTRACT

Introduction: The research work undertook was "A study to assess the effectiveness of video assisted teaching programme on knowledge regarding reduction of secondhand smoke exposure among adults residing at Pallithottam coastal area, Kollam". The objectives of the study were to assess the knowledge regarding reduction of secondhand smoke exposure among adults, to assess the effectiveness of video assisted teaching programme on knowledge regarding reduction of secondhand smoke exposure among adults and to find out the association between pre-test knowledge score regarding reduction of secondhand smoke exposure among adults and selected demographic variables. **Materials and Methods:** The researchers used pre experimental one group pretest post test research design. The study was conducted among 60 adults residing at Pallithottam coastal area Kollam. The samples were selected by using non probability purposive sampling technique. The researchers collected the data using self structured knowledge questionnaire and the data was analysed using descriptive and inferential statistics**.** **Result:** The study results showed that the mean post test knowledge score 15.91 with SD 2.76 was significantly higher than the pretest mean score 9.26 with SD 2.04 with a mean difference of 6.65 Since the calculated paired 't' value 16.41 was greater than the table value (1.67) at 0.05 level of significance. So video assisted teaching programme was effective in improving the knowledge regarding reduction of secondhand smoke exposure among adults. There was no significant association between pretest knowledge score and selected demographic variables such as Age, Sex, Education, Occupation, Smoking habit, any smokers at home, exposure to passive smoking, days per week of exposure, Place of exposure to second hand smoke, desired permitted smoking area at home and there was significant association between pretest knowledge score and selected demographic variables such as education.

KEYWORDS: Effectiveness, Video –assisted teaching programme, Secondhand smoke exposure.

INTRODUCTION

In the 21st century, the pervasive presence of second hand smoke remains an undeniable concern in our lives. As we navigate this era defined by rapid changes and innovations, the issue of second hand smoke, stemming from the consumption of tobacco by others, continues to hold a significant place in the realm of public health. In this exploration of the current state of second hand smoking, we delve into the multifaceted health consequences, examining its impact on individuals' well-being and the communities they inhabit. Amid shifting societal norms and ongoing efforts to reduce tobacco-related harm, the challenges posed by second hand smoke endure.

Second-hand smoke (SHS), which is also called environmental tobacco smoke (ETS), is the combination of side stream smoke given off by a burning tobacco product and mainstream smoke exhaled by a smoker It occurs when individuals who do not smoke themselves are inadvertently exposed to the toxic substances present in the smoke emitted from burning tobacco products, such as cigarettes, cigars, or pipes. Mainly focuses both adults and children in various ways.

OBJECTIVES

- To assess the knowledge regarding reduction of secondhand smoke exposure among adults.
- To assess the effectiveness of video assisted teaching programme regarding reduction of secondhand smoke exposure among adults.

- To find out the association between pre-test knowledge score regarding reduction of secondhand smoke exposure among adults and selected demographic variables.

HYPOTHESIS

H_1: There will be significant difference between the mean pre- test knowledge score and mean post-test knowledge score regarding second hand smoke exposure in among adults after administrating video assisted teaching programme.

H_2: There will be significant association between the pre-test knowledge score regarding second hand smoke exposure among adults and selected demographic variables.

MATERIALS AND METHODS

Research approach: Quantitative research approach.
Research design: Pre- experimental one group pre -test Post -test research design.
Sample: 60 Adults in selected community area, Kollam.
Sampling technique: Purposive sampling technique.
Setting: Community area, Pallithottam, Kollam, Kerala.
Data collection method: Using a self-structured Knowledge questionnaire.

Inclusion criteria

The people who are
• Either male or female
• In the age group of 20-59 years.
• Residing in century nagar, pallithottam
• Exposure to second hand smoke.
• Smokers at home

Exclusion criteria

The people who are
• Exposed to previous formal education regarding reduction of second hand smoke exposure.
• Not willing to participate in the study.
• Age over 60 years.

Data collection process

The data collection began after obtaining administrative approval and consent from Principal of Bishop Benziger College Of Nursing, Kollam. The data were collected through self structured Questionnaire.

Ethical approval and informed consent

The researchers got permission from the Institutional Ethical Committee to Conduct the study and got consent from the subjects before data collection.

Tools

Section A – Demographic Proforma which includes Age, Sex, Education, Occupation, Smoking habit, Any smokers at home, Exposure to passive smoking, Days per week of exposure, Place of exposure to smoking, Desired permitted smoking area at home.

Section B – Self Structured knowledge questionnaire to assess the knowledge regarding reduction of second hand smoke exposure among people.

Reliability

The researchers established reliability of the tool by using test-retest method.

Reliability co-efficient calculated was 0.84 for the self structured knowledge questionnaire indicating that the tool was reliable.

Analysis

1. Descriptive statistics

Demographic variables were analyzed using frequency And percentage.

2. Inferential statistics

Chi square test was used to find out the association between pre test Knowledge score and selected demographic variables. And paired 't' test was used to Analyse the effectiveness of structured teaching programme.

RESULTS

Percentage distribution of participants as per demographic variables

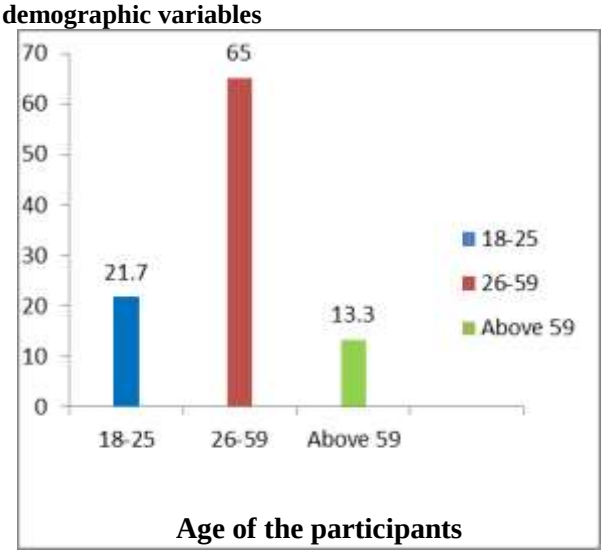

Figure 1: Percentage wise distribution of sample according to age of the participants.

Figure 1 shows that out of 60 sample 21.7% belonged to 18-25 years of age, 65% belonged to 26-59 years of age and the rest belonged to above 59 years of age.

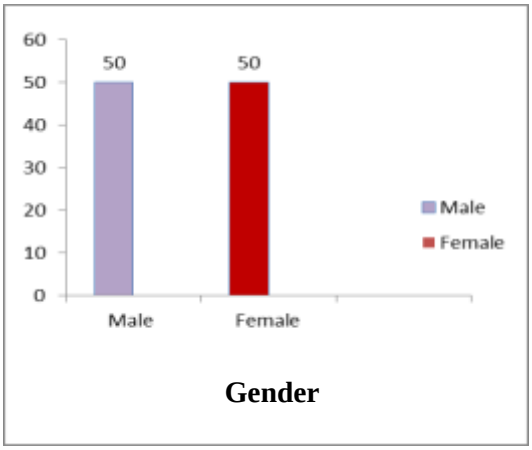

Figure 2: Percentage wise distribution of sample according to the gender of the participants.

Figure 2 shows that out of 60 sample 50% were males and 50% were females.

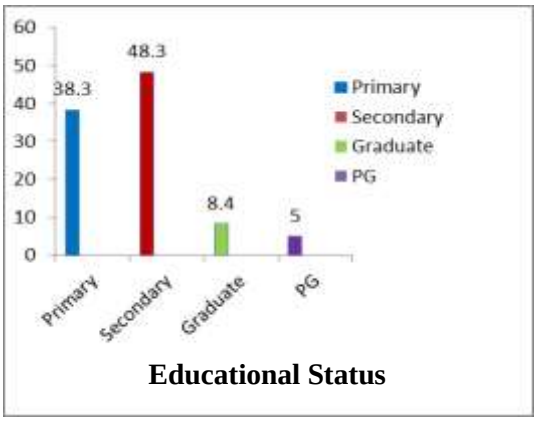

Figure 3: Percentage wise distribution of sample according to the educational status of the participants.

Figure 3 shows that out of 60 sample 38.3% had primary level of education, 48.3% had secondary level of education, 8.4% had graduate level of education and 5% had PG level of education.

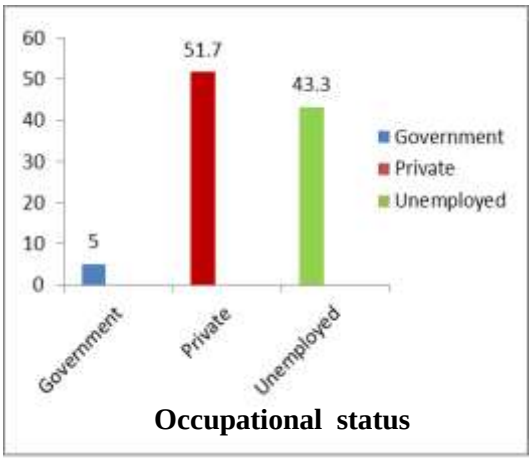

Figure 4: Percentage wise distribution of sample according to the occupational status of the participants.

Figure 4 shows that out of 60 sample, 5% of them were government employees, 51.7% were private employees and 43.3% were unemployed.

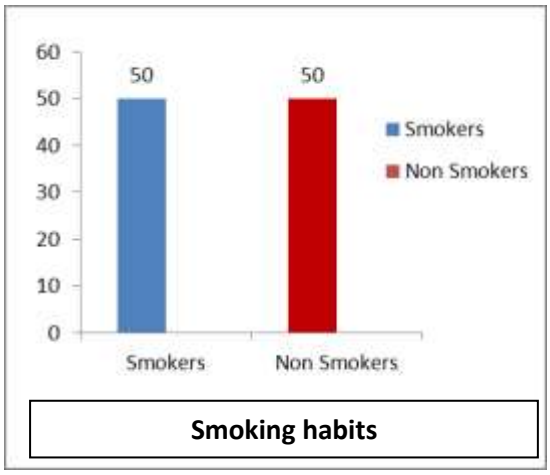

Figure 5: Percentage wise distribution of sample according to the smoking habits of the participants.

Figure 5 shows that out of 60 sample 50% of them were smokers and 50% were non-smokers.

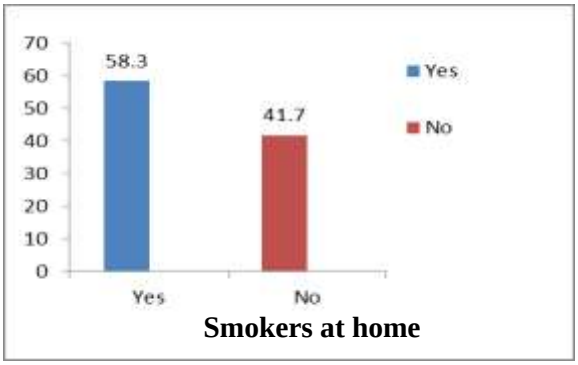

Figure 6: Percentage wise distribution of sample according to those who smoke at home in the participants.

Figure 6 shows that out of 60 sample 58.3% were those who smoke at home and 41.7% were don't smoke at home.

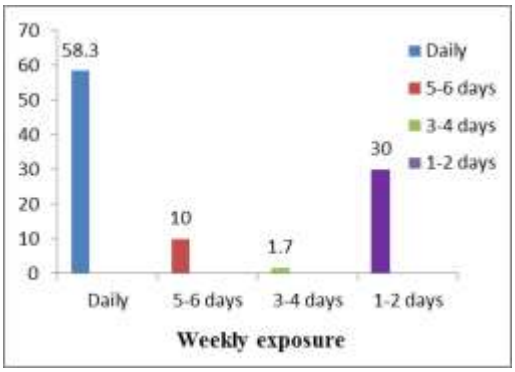

Figure 7: Percentage wise distribution of sample according to weekly exposure of smoke in the participants.

Figure 7 shows that out of 60 sample, 58.3% of the participants were daily exposed to smoke, 10% were exposed to smoke for 5-6 days, 1.7% of them were exposed to smoke for 3-4 days and 30% were exposed to smoke for 1-2 days.

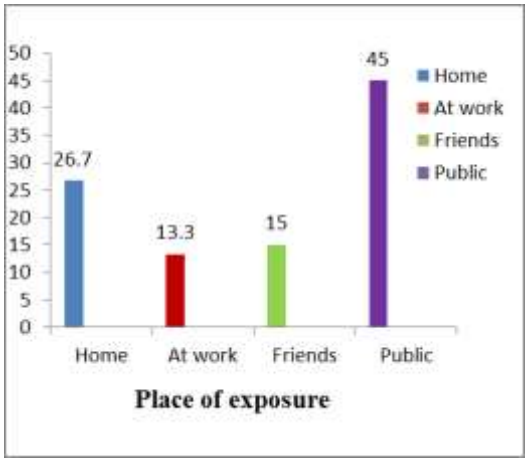

Figure 8: Percentage wise distribution of sample according to place of exposure in the participants.

Figure 8 shows that out of 60 sample, 26.7% were exposed to smoke at home, 13.3 % of them were exposed to smoke at work, 15% were exposed to smoke from friends, and 45% of them were exposed to smoke from public places.

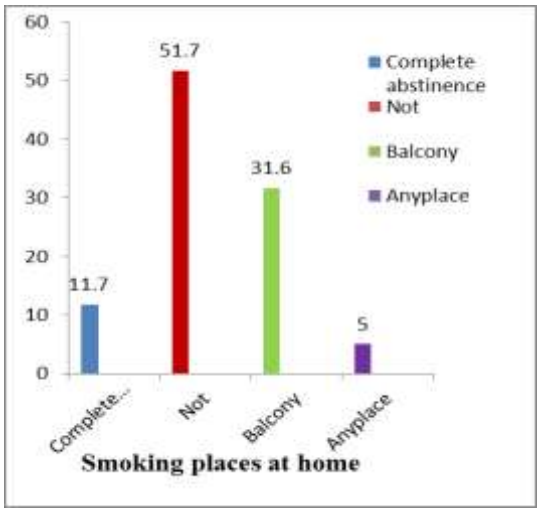

Figure 9: Percentage wise distribution of sample according to places at home for smoking places at home in the participants.

Figure 9 shows that out of 60 sample, 11.7% were completely abstinenced from smoking at home, 51.7% of them did not smoke at home, 31.6% smokes in balcony, and 5% of them smokes at any place in the house.

The study was conducted at Pallithottam, coastal area, Kollam, Kerala. A total of 60 adults were participated. Totally, 21.7% belonged to 18-25 years of age, 65% belonged to 26-59 years of age and the rest belonged to above 59 years of age. The study results shows that 11.6% of adults had poor knowledge, 86.6% of adults had moderate knowledge, 1.66% of adults had good knowledge regarding secondhand smoke exposure in pre-test. After giving video assisted teaching programme as an intervention, 86.7% had good knowledge, 13.3% had moderate knowledge and none of them had poor knowledge regarding secondhand smoke exposure among adults in post-test. the mean post-test knowledge score 15.91 was greater than the mean pre-test knowledge score 9.26 regarding reduction of secondhand smoke exposure among adults. The mean difference between pre-test and post-test knowledge score was 6.65. The paired `t´ value was 16.4, it was greater than the table value (1.67) at 0.05 level of significance. Hence the video assisted teaching programme was effective in improving the knowledge regarding secondhand smoke exposure among adults.

Evaluation of the effectiveness of structured teaching programme on knowledge regarding reduction of secondhand smoke exposure among adults.

Knowledge score	Mean	Standard deviation	Mean difference	Paired 't' value
Pre test	9.26	2.04	6.65	16.41
Post test	15.91	2.76		

t=1.96,*significant at 0.05 level of significance.

The data presented in this table 3 shows that the mean post test score (9.26) was greater than mean pre- test score (9.32) on knowledge regarding reduction of secondhand smoke exposure among adults. The mean

difference between pre test and post test knowledge score was 6.65. The paired 't' value 16.41 was greater than the table value (1.96), so the structured teaching programme was effective. Hence the hypothesis (H_1) which states that there will be significant difference between the mean pretest and mean post test knowledge score regarding reduction of secondhand smoke exposure was accepted. It shows that structured teaching programme was effective in increasing the knowledge regarding reduction of secondhand smoke exposure among adults.

Association between the pretest knowledge score and selected demographic variables.

Sl.No	Demographic variables	pretest knowledge score			df	Chi square test	Table value	Level of significance
		Poor	Moderate	Good				
1.	Age 18-25 26-59 Above 59	 1.51 4.55 0.93	 11.26 33.8 6.93	 0.21 0.65 0.13	6	5.73	12.5	0.05
2.	Gender Male Female	 3.5 3.5	 26 26	 0.5 0.5	2	0.71	5.99	0.05
3.	Education Primary Secondary Graduate Post graduate	 2.68 3.38 0.58 0.35	 19.9 25.13 4.33 2.6	 0.38 0.48 0.08 0.05	6	14.66	12.59	0.05
4.	Occupation Government Private Unemployed	 0.35 3.61 3.03	 2.6 26.8 22.5	 0.05 0.51 0.43	4	2.59	9.49	0.05
5.	Smoking Yes No	 3.5 3.5	 26 26	 0.5 0.5	2	0.77	5.99	0.05
6.	Smokers at home Yes No	 4.08 2.91	 30.3 21.6	 0.58 0.41	2	1.38	3.99	0.05
7.	Weeks per exposure Daily 5-6 days 3-4days 1-2days	 4.08 0.7 0.11 2.	 30.3 5.2 0.86 15.6	 0.58 0.1 0.01 0.3	6	0.96	12.59	0.05
8.	Place of exposure Home At work Friends Public	 1.86 0.93 1.05 3.15	 13.8 6.93 7.8 23.4	 0.26 0.13 0.15 0.45	6	5.19	12.59	0.05
9.	Place at home for smoking Complete abstinence Not Balcony Anyplace	 0.81 3.61 2.21 0.35	 6.06 26.8 16.4 2.6	 0.11 0.51 0.31 0.05	6	12.55	12.59	0.05

There was significant association between pretest knowledge score and demographic variables such as Education. There was no significant association between pretest knowledge score and demographic variables such as Age, Gender, Occupation, Smoking habit, Any smokers at home, Exposure to passive smoking, Days

per week of exposure, Place of exposure to smoking, Desired permitted smoking area at home.

DISCUSSION

The present study revealed that out of 60 sample, 11.6% of adults had poor knowledge, 86.6% of adults had moderate knowledge, 1.66% of adults had good knowledge in pre-test. After giving video assisted teaching programme as an intervention, 86.7% had good knowledge, 13.3% had moderate knowledge and 0% have poor knowledge regarding secondhand smoke exposure among adults in post-test.

The above findings are supported by a national cross-sectional study was conducted among a representative sample from 28 primary schools in all four educational zones of Mauritius in 2017. Data analysis was performed on 389 questionnaires. Pearson correlation testing revealed a significant association between knowledge of SHS and behaviour towards exposure to SHS. This study showed that nearly two-thirds of teachers had good knowledge of the health dangers of SHS and applied this knowledge in their behaviour by keeping away from cigarette smoke.

The present study shows that the mean post test score 15.91 was greater than mean post test score 9.26 on knowledge regarding reduction of secondhand smoke exposure among adults. The mean difference between pre test and post test knowledge score was 6.65. The paired 't' value 16.41 was greater than the table value 1.96, so the structured teaching programme was effective in improving the knowledge regarding reduction of secondhand smoke exposure among adults.

The above findings are supported by an experimental study conducted among high school children in a selected higher secondary school, Nagercovil. There was no significant relationship between pre-test knowledge scores and selected demographic variables like age, gender, religion, residence, type of family, education income, previous knowledge and source of information. The study concluded that video assisted teaching programme was shown effective in improving the knowledge regarding ill effects of tobacco use among high school children.

CONCLUSION

Secondhand smoke exposure has been causally linked to lung cancer, respiratory and cardiovascular diseases, and other serious illness in adult nonsmokers, infants, and children. In the United States, at least 30 percent of all cancer deaths each year are caused by cigarette smoking and secondhand smoke exposure.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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