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ASSESSMENT OF THE EFFECTIVENESS OF IEC PACKAGE ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF ORAL CANCER AMONG THE STUDENTS OF GOVERNMENT POST GRADUATE COLLEGE SANJAULI, SHIMLA: AN INTERVENTIONAL STUDY

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ABSTRACT

Oral cancer is the major health problem worldwide. It is the malignancy of oral mucosa which may develops on tongue, lips, floor of mouth and in other oral tissue. oral cancer is predominantly tobacco-related and the immense public health challenge can be meliorated through habit intervention. Ensuring that college students are knowledgeable about oral cancer will improve the efficacy of prevention, screening and management of it. The objective of this study conducted in 2021, was to evaluate the effectiveness of IEC package on prevention of oral cancer. A quantitative approach with one group pretest posttest design was used. This study included 100 samples of B.A. students. Samples were selected using convenient sampling technique. The research setting was Government Post Graduate College Sanjauli, Shimla. (H. P). The Socio Demographic Performa and structured knowledge questionnaires and Likert scale was used to collect the data. After assessing the pre-existing knowledge and attitude of the samples, IEC package on prevention of oral cancer was administered to the students. At the end post test was conducted. In analysis both descriptive and inferential statistical methods were used. The mean post-test knowledge scores (18.86) of the students were higher than their mean pre-test score (11.34). The mean post-test attitude scores (34) of the college students were higher than their mean pre-test score (22.65). The conclusion of the study revealed that the IEC package on prevention of oral cancer was effective in improving the knowledge and attitude of the college students regarding prevention of oral cancer.

Keywords: Oral Cancer, IEC Package, Effectiveness.

1. INTRODUCTION

Oral cancer is a mass or a tumor that develops in the lining of the mouth. It may be on the surface of the tongue, the insides of the cheeks, the roof of the mouth, or the lips or gums. Tumor scan also shows the progression of growth in the glands that produce saliva, the tonsils at the back of the mouth, and the part of the throat connecting the mouth to windpipe.[1]

Worldwide cancer patient's incidence rate is set to double by 2020, a report published by the World Health Organization. Currently 10 million new cancers are diagnosed each year worldwide, but unless there is an effective prevention campaign, the number will rise to 20 million in 17 years' time, says the report.[2]

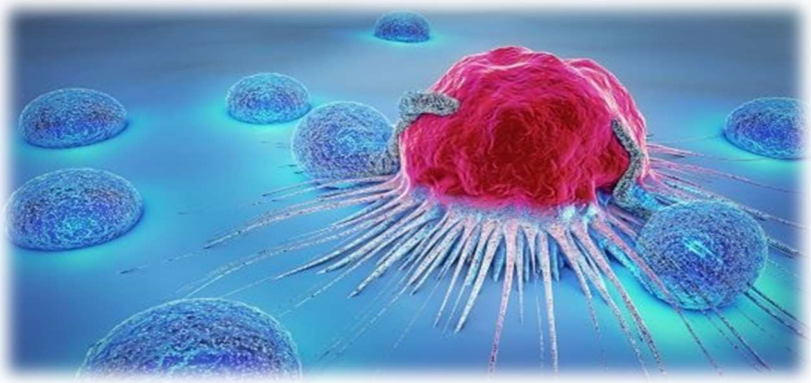

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Fig 1. depicting the proliferation of Cancer

In Himachal Pradesh state cases were recorded from patient file records at Shimla, Male: female ratio was 2.9:1. Most patients belonged to 51-60 years age group. 78% patients were smokers, out of which 81.5% smoked Bidis, 11.8% smoked cigarettes

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and 6.5% chewed tobacco. Tongue was the commonest site of occurrence. Histologically, 95.6% were squamous cell carcinoma out of which 57.4% were well differentiated. The relative frequency of oral cancer is low in the state of Himachal Pradesh which may be due to less prevalence of chewing tobacco [khaini, or any other chewable form].[4]

Most oral cancers are linked to tobacco use. All forms of tobacco use increase the risk for this cancer, including cigarettes, cigars, pipes, Bidis and smokeless tobacco (including chewing tobacco and snuff. Alcohol is also one of the main risk factors for oral cancer. "Betel quid and tobacco are often chewed together, or betel quid may contain tobacco. Squamous Cell Carcinoma (SCC) is the most common type of oral cancer.[5]

Signs of oral cancer include persistent mouth sores that do not heal, persistent mouth pain, a lump or thickening in the cheek a white or red patch on the gums, tongue, tonsil, or lining of the mouth ,a sore throat or persistent feeling that something is caught in the throat, difficulty swallowing or chewing, difficulty moving the jaw or tongue, numbness of the tongue or other area of the mouth, jaw swelling that makes dentures hurt or fit poorly , loosening of the teeth ,pain in the teeth or jaw, voice changes, a lump in the neck ,Weight loss and persistent bad breath.[6]

Oral cancer is a highly preventable disease and also very treatable, if caught early. If a person uses tobacco the person should immediately quit with that. Limited alcohol intake should be done. Not more than one drink per day if you're a woman or two drinks per day if you're a man. Stay out of the sun, especially between 10 am and 4 pm when sunlight is strongest. Always use lip balm with SPF 30 or higher. Eat lots of fruits and vegetables. Proper oral hygiene should be maintained by the individual. Water intake should be done in an adequate amount.[7]

2. METHODOLOGY

Research methodology is the significant part of any research study, which enables the researcher to project a blue print of the research understanding. It includes the strategy to collect and analyze the data to accomplish the research objectives. It includes research approach, research design, the setting, the population, and sample and sample technique, development and description of tool, procedure for data collection and plan for data analysis. The research approach adopted in the study was Quantitative research approach with one group pre-test posttest design. This study was conducted at Govt. Post Graduate college Sanjauli, Shimla, Himachal Pradesh, 2021. Population included college students of B.A (1st ,2nd and 3rd) year. A sample of 100 students was selected using a convenient sampling technique a type of non-probability sampling technique for assessment of knowledge and attitude. An inclusion criterion for sampling was students who were willing to participate and both male and female. The exclusion criterion for sampling was students who were sick or absent at the time of study. With the extensive review of literature and discussion with the experts structured knowledge questionnaires and Likert scale was developed to assess the knowledge and attitude of students regarding prevention of oral cancer. The tool of data collection consisted of three sections. Section-1: Demographic Variables to collect data about certain characteristics of sample population. Section -2: Structured knowledge questionnaires was developed to assess the knowledge. Section -3: Likert scale to assess the attitude of college students. In relation to Ethical approval, written permission was taken from Principal of Govt. Post graduate college Sanjauli, Shimla. Informed consent was taken from the college students. Assurance was given to the subjects regarding the confidentiality of the data collected. The tool was administered in the form of structured questionnaire and Likert scale, then on the same day a well-designed IEC package was administered to the students. After 7 days a mean post-test was conducted by using a same tool. After data collection the analysis of data was done using inferential and descriptive statistics.

3. RESULTS

SECTION A: Assessment of pre-test and post-test knowledge score of college students.

TABLE 1: Percentage Wise Distribution of Comparison of Pre-Test and Post Test Knowledge score.

N=100

KNOWLEDGE SCORE	PRE-TEST (%)	POST-TEST (%)
Below average (0-12)	66%	9%
Average (13-19)	34%	39%
Good (20-25)	0%	52%

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Table 1 depicts that, in pre-test 66 college students (66%) had below average knowledge,34 students (34%) had average knowledge and 0 students (0%) had good knowledge. In post-test 9 students (9%) had below average knowledge, 39 students (39%) had average knowledge, 52 students (52%) had good knowledge regarding prevention of oral cancer.

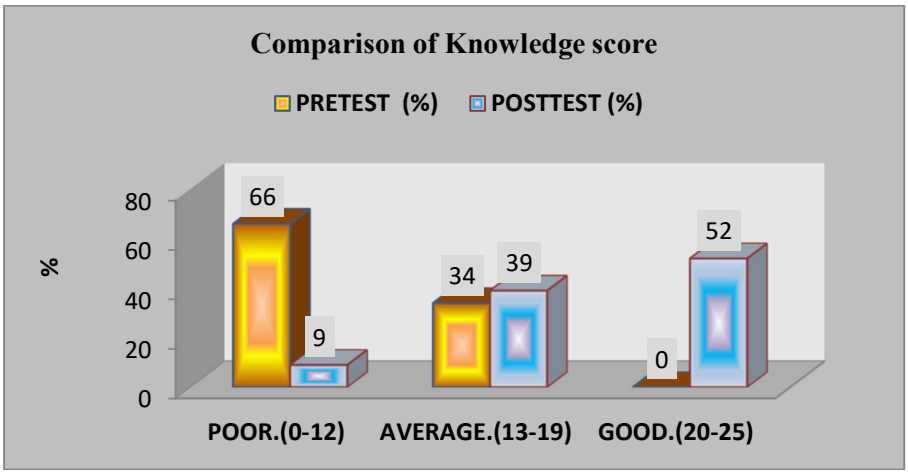

Fig No. 2 Comparison of knowledge score

Fig no. 2 depicts that, in pre-test 66 college students (66%) had below average knowledge,34 students (34%) had average knowledge and 0 students (0%) had good knowledge. In post-test 9 students (9%) had below average knowledge, 39 students (39%) had average knowledge, 52 students (52%) had good knowledge regarding prevention of oral cancer.

TABLE 2: Frequency and Percentage Wise Distribution of Comparison of Pre-Test and Post-test attitude score.

N=100

ATTITUDE SCORE	PRE-TEST (%)	POST TEST (%)
Negative attitude (8-20)	15%	2%
Positive attitude (21-40)	85%	98%

Table 2 depicts that, in pre-test 15 students (15%) had negative attitude and 85 students (85%) are having positive attitude and in post-test 2 students (2%) had negative attitude and 98 students (98%) are having positive attitude regarding prevention of oral cancer in govt. post graduate college.

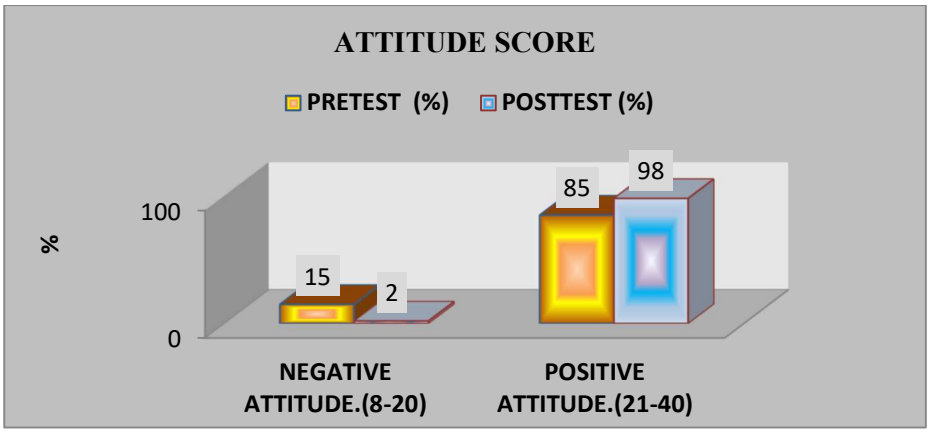

Fig 3 comparison of attitude score.

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Fig 3 depicts that in pre-test 15 students (15%) had negative attitude and 85 students (85%) are having positive attitude and in post-test 2 students (2%) had negative attitude and 98 students (98%) are having positive attitude regarding prevention of oral cancer in govt. post graduate college.

Table 3: Score Gain (Effectiveness of IEC Package) In knowledge score

N=100

Diagram Showing Individual Score Gain (Effectiveness))						
Mean%	Pre-test Knowledge	Post-test Knowledge	Difference	Pre-test Knowledge Score %	Post-test Knowledge Score %	Difference%
Average	11.34	18.86	7.52	45.36	75.44	30.08

The data represented in table shows pre-test and post-test knowledge scores obtained by students. The mean post test score 18.86 (75.44%) is higher than mean pre-test knowledge score 11.34 (45.36%) with the mean difference of 7.52 (30.08%). The score revealed the effectiveness of IEC package.

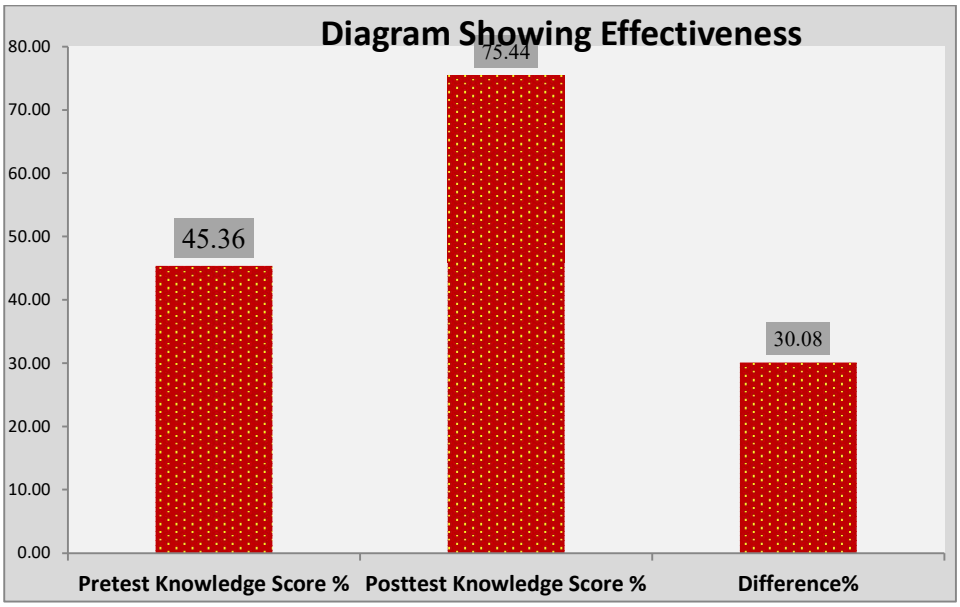

Fig: 4 Effectiveness of IEC package

Fig 4. depicts mean percentage of Pre-test and Post-test knowledge scores of students regarding prevention of oral cancer showing effectiveness of IEC package.

Table 4: Score Gain (Effectiveness of IEC Package) In attitude score

Diagram Showing Individual Score Gain (Effectiveness)						
Mean%	Pre-test Attitude	Post-test Attitude	Difference	Pre-test Attitude Score %	Post-test Attitude Score %	Difference%
Average	22.65	34.00	11.35	56.63	85.00	28.38

The data represented in table shows pre-test and post-test attitude scores obtained by students. The mean post test score 34.00(85.00%) is higher than mean pre-test attitude score 22.65(56.63) with the mean difference of 11.35 (28.38%). The score revealed the effectiveness of IEC package.

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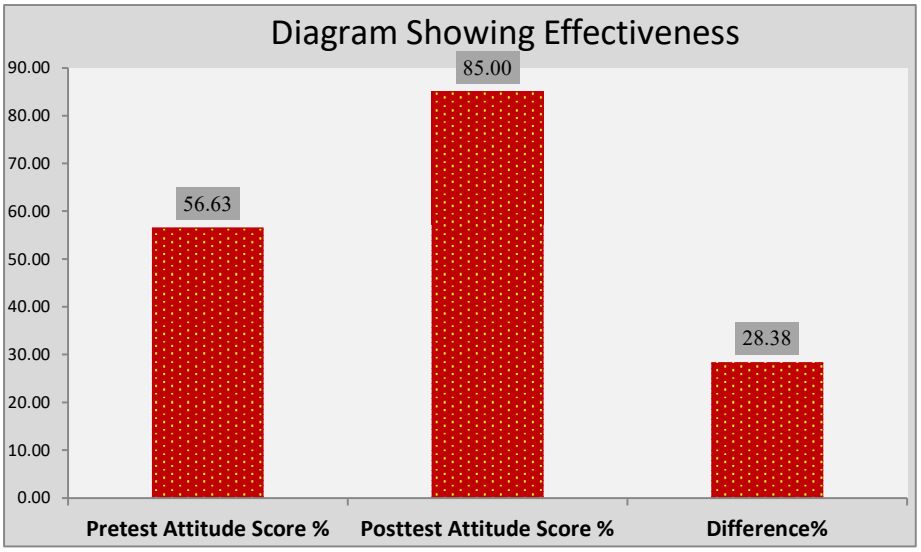


The data represented in figure 5: shows pre-test and post-test attitude scores obtained by students. The mean posttest attitude score 34(85%) is higher than mean pre-test attitude score 22.65(56.63) with the mean difference of 11.35 (28.38%). The score revealed the effectiveness of IEC package.

TABLE 5 Table Showing Correlation between knowledge and attitude:

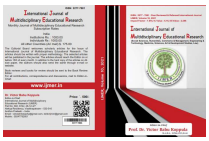
Correlation	Post knowledge	Pre attitude	Post attitude
Pre knowledge	0.02(0.30)	0.15(0.06)	0.02(0.78)
Post knowledge	-	0.05(0.56)	0.04(0.8)
Pre attitude	-	-	0.12(0.20)

This table depicts that no significant correlation was observed between knowledge score and attitude score.

DISCUSSION

It concentrates on the findings derived from the statistical analysis. The objectives of the study were to and compare the pre-test and posttest level of knowledge and attitude on prevention of oral cancer: The finding of the study matched with the results of other researcher's study. Harish Kumar et.al. (2017) conducted a comparative study to assess oral health knowledge, attitude, and practices among dental and medical students in Eastern India. The aim of the study to compare oral health knowledge, attitude, and practice among dental and medical students in a Health care centre at Bhubaneswar, Odisha, India. Materials and Methods: One hundred and fifty BDS and MBBS students each from Kalinga institute of Dental Sciences and Kalinga Institute of Medical Sciences of KIIT University, Bhubaneswar respectively, were invited to participate in this survey using a self-administered structured questionnaire in English comprising 27 questions, which was designed to evaluate the oral health knowledge, attitude, and practices. The obtained data was analysed using the Statistical Package for the Social Sciences version 20 software. Results: On comparison of the scores of knowledges, attitude, and practice, the mean knowledge score was significantly higher among dental students than medical students. The study also showed that female students (both dental and medical) had better oral health knowledge and showed better oral health practices than male students. Karl Pearson's correlation coefficient test showed that, although dental students had better knowledge and attitude towards oral health, there was a lack of adequate practice among them. Conclusion: Further emphasis on oral health is necessary in undergraduate training to improve oral health knowledge, attitude, and practice among dental and medical students as they will act as role models for oral health education among individuals and community at large.[8]

The other objective was to find out the correlation between knowledge and attitude, but there was no correlation found between knowledge and attitude regarding prevention of oral cancer. The third objective was to find out the association, with respect to association post-test knowledge and attitude score the Chi-square value shows that there was no significant association between the knowledge score and attitude score with their socio demographic variable.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CONCLUSION

The conclusion of the study revealed that there was a significant improvement in knowledge and attitude regarding prevention of oral cancer among students of Government Post Graduate College Sanjauli, Shimla H.P.

LIMITATIONS

1.The study was limited only to the students of Government Post Graduate College Sanjauli, Shimla, H.P.
2. The was limited to only Bachelor of arts student.

RECOMMENDATIONS

The following studies can be conducted in future related to oral cancer:

- A quasi-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of oral cancer among school students at selected schools.
- A descriptive survey to find out the prevalence rate of oral cancer among general population.
- A comparative study between urban and rural students to assess their knowledge and attitude regarding prevention of oral cancer.
- An exploratory study to assess the associated risk factor of developing oral cancer among general population.

REFERENCES

1. https://zana.com/a/oral-cancer-introduction.3268 viewed on 22-3-2020.
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1125643/ viewed on 22-3-2020.
3. https://www.nursingcenter.com/ncblog/july-2019/cancer-cells-vs-normal-cells viewed on 22-3-2020.
4. http://www.jiaphd.org/article.asp?issn=2319-5932;year=2009;volume=7;issue=14;spage=107;epage=113;aulast=Fotedar;type=0 viewed on 22-3-2020.
5. Canadian Cancer Society [Internet]. [cited 2021 Jan 23]. Available from: https://www.cancer.ca/en/region-selector-page/?url=%2Fen%2Fcancerinformation%2Fcancertype%2Foral%2Frisks%2F%3Fregion%3Dab%2520viewed%2520on%252022-3-2020.
6. https://www.cancercenter.com/cancer-types/oral-cancer/symptoms viewed on 3-6-2020.
7. https://scholar.google.co.in/scholarq=oral+Cancer+Research+studies+to+assess+the+knowledge&hl=en&as_sdt=0&as_vis=1&oi=scholart#d=gs_qabs&u=%23p%3DiQxJrFCu7RkJ viewed on 4/7/2020.
8. Harish kumar,Sharda A, Shetty S. A comparative study of oral health knowledge, attitude and behaviour of non-medical, para-medical and medical students in Udaipur city, Rajasthan, India. Int J Dent Hyg [Internet]. 2010 May 1 [cited 2021 Jan 23];8(2):101–9. Available from: http://doi.wiley.com/10.1111/j.1601-5037.2009.