STM JOURNALS

International Journal of
Oncological Nursing and Practices

Volume 1, Issue 2, 2023
July—December
DOI (Journal): 10.37591/IJONNP

https://journals.stmjournals.com/ijonnp/

Review IJONNP

Oral Self-examination: An Approach for Early Recognition of Oral Cancer Among Factory Workers: An Experimental Study

Ellappunkal Binoy Ittyavira[1], Binu Babu[2,*]

Abstract

Background: *Cancer is a worldwide concern and ranks among the most dreaded illnesses across the globe. Oral cancers are one common cancer among all cancers.* ***Objectives****: To measure the existing knowledge concerning oral self-examination for timely recognition of oral cancer among factory workers and to develop and administer a planned health education programme of oral self-examination for early recognition of oral cancer among factory workers. 40 factory workers were selected from different factories.* ***Materials and methods:*** *The study employed a one-group pretest-post-test quasi-experimental design. A planned education programme was developed and implemented on the factory workers.* ***Results****: In the post-test after the planned health education programme, there was no sample in the poor knowledge group, 22 samples (55%) belong to the average knowledge group. And 18 samples (45%) got promoted to a good knowledge group. The knowledge score increased from 9.95 in the pretest to 19.8 in the post-test. The 't' test value is 21.445 and the p-value is 0.000 (<0.05), therefore, the planned health education programme was significantly effective in improving the knowledge of factory workers regarding oral self-examination for early recognition of mouth cancer. With a p-value below 0.05, the null hypothesis is rejected with a confidence level of 95.0%.* ***Conclusion****: The results of this study point out that the improved knowledge regarding oral self-examination will help the individual to identify oral cancer. Early recognition of cancer will help to increase survival and also reduces the struggles related to cancer.*

Keywords: Oral Cancer, chemotherapy, oral self-examination, planned health education programme

INTRODUCTION

Cancer is a disease that affects the body cells without considering where the cell is and also what the function is. Cancer in the oral cavity and mouth originates from different cells, constituting a type of oral cancer. Oral cancer is common cancer in the developed countries because people in those countries are having a common habit of chewing tobacco [1]. Chewing tobacco is one of the proven causes of oral cancer. The incidence rate of oral cancer around the world is approximately 270,000 and approximately 145,000 deaths [2, 3]. One-third of oral cancer is reported from India. Oral cancer is ranked as the third most prevalent cancer in India. Developing countries like India have many small factories, and the factory workers have a common habit of chewing tobacco or tobacco products like gutka and pan masala. Therefore, this study focused to identify the knowledge of factory workers regarding oral cancer and oral self-examination. Oral self-examination helps the individual to

***Author for Correspondence**
Binu Babu
E-mail: binuenchappanal@gmail.com

[1]Clinical Nurse, Medical and Oncology Unit, Sunnybank Private Hospital, Queensland, Australia
[2]Professor, Department of Nursing, Edappal Hospitals Nursing College, Kerala, India

Received Date: October 30, 2023
Accepted Date: December 12, 2023
Published Date: December 20, 2023

Citation: Ellappunkal Binoy Ittyavira, Binu Babu. Oral Self-examination: An Approach for Early Recognition of Oral Cancer among Factory Workers: An Experimental Study. International Journal of Oncological Nursing and Practices. 2023; 1(2): 22–26p.

identify oral cancer in an early stage. The timely recognition of oral cancer can help treat it easily and will not cause serious problems. This will help the healthcare team to initiate accurate treatment at right time [4, 5].

Aims and Objectives of the Study

- To assess the current knowledge regarding oral self-examination for early recognition of oral cancer among factory workers.
- To develop and administer a planned health education programme of oral self-examination for early recognition of oral cancer among factory workers.
- To assess the efficacy of a structured health education program in promoting timely identification of oral cancer through oral self-examination among factory workers.
- To find an association between knowledge score regarding oral self-examination for timely recognition of oral cancer and selected socio-demographic variable of factory workers.

LITERATURE REVIEW

A survey was conducted on tobacco use and oral health in the year 2000 among 300 factory workers at Hoshiarpur, Punjab, India. Questionnaire interviews were conducted to obtain information about tobacco habits. The study concluded that the occurrence of and the use of tobacco products was 100% among the factory workers. 66% of the workers had white lesions, a risk factor for precancerous condition. 20–30% of the samples had ulcerated lesions, burning sensation and difficulty in mouth opening [6].

An interventional study was focused on for prevention of oral cancer among the tobacco users in India. The sample size was 36,471; habitual tobacco chewers and also cigarette and beedi users were selected by interview technique from the rural side population of India. The result shows that the follow-up rate was 97%. The initial 5 years' results served as the basis for the control group, and a follow-up study spanning 10 years was carried out. The study concluded that education against tobacco use should be a needed and real approach to prevent of mouth cancers [7].

An interventional study was led to identify the role smoking behaviours for prevention of oral cancer between the Indians who leaves in villages. The sample size was about 12,212, and populations were selected from the rural areas of Ernakulum district, Kerala, India. The samples were selected by using a screening survey. The result shows that the stoppage of the smoking practice was considerably higher in the intervention group (9.4%) compared to the control group (3.2%). The population's habits were identified through the application of logistic regression analysis. The study concluded that applying behavioural intervention was helpful to all categories of citizens to quit smoking [8].

METHODOLOGY

The research design employed was a quasi-experimental one-group pretest-post-test design.

- *Variables:* In this study, the variables used are mentioned below:
  - *Independent variable:* information about oral self-examination provided through a planned health education programme.
  - *Dependent variable:* knowledge of factory workers regarding oral self-examination for early recognition of oral cancer.
- *Setting of the study:* The study was conducted in a selected factory and convenient sampling technique is used.
- *Sample size:* Sample size was 40.
- *Research tool:* Questionnaire was used as research tool.

RESULTS

Section I: Description of Demographic Data.

- *Age:* In this study, 40% of the sample comprises 16 members aged 21–30 years, 30% includes 12 individuals aged 41–50 years, and 20 and 10% consist of 8 individuals each in the age groups of 31–40 and 51–60 years, respectively.

- *Gender:* The findings indicate that maximum people of 36 in frequency (90%) samples are males and only 4 members (10%) are females.
- *Educational qualification:* In this study, maximum people i.e. 21 in frequency (52.5%) have completed their secondary education, whereas only 2 samples (5%) belong to the diploma category. The number of samples who completed their primary education, secondary education and graduation are 5 (12.5%), 9 (22.5%), and 3 (7.5%) respectively.
- *Monthly income in rupees:* 22 samples (55%) of the study earn less than 5000/month, 13 samples (32.5%) earn between 5001 and 10000/month, 4 members of the sample get between 10001 and 150000 as monthly income and only 1 sample (2.5%) earns more than Rs. 15000 monthly.
- *Working hours per day:* The findings indicate that 28 samples (70%) work for 6 to 8 h/day in the factory whereas the rest 12 samples (30%) work for 8 to 10 h in the factory.
- *Personal habits:* In this study, 23 members (57.5%) did not have any bad habits, whereas 5 samples (12.5%) of the study had all mentioned bad habits like smoking, chewing tobacco, eating pan and alcoholism. The numbers of the sample having only smoking as a bad habit were 2 (5%). 8 samples (20%) have a habit of only chewing tobacco. The number of people having only the habit of eating pan is one (2.5%) and alcoholism is also one (2.5%).
- *Previous knowledge about oral self-examination:* The finding of the study indicates that 17 samples (42.5%) of the study had knowledge about oral self-examination and 23 samples (57.5%) did not have any knowledge about oral self-examination.
- *Source of information about oral self-examination:* The findings revealed that 6 samples (15%) got the information about oral self-examination through television, 4 samples (10%) obtained information through family members, and whereas other 4 samples (10%) revealed that the source of information about oral self-examination is through health care professionals. 1 (2.5%) and 2 (5%) samples received their information through newspapers and friends respectively. 23 samples (57.5%) did not have any knowledge about oral self-examination.

Section II: Effectiveness of Planned Health Education Programme

Objective 1: To evaluate the current knowledge regarding oral self-examination for early recognition of oral cancer among factory workers

In the pretest, 25 subjects (62.5%) belong to poor knowledge group and 15 samples (37.5%) belong to average knowledge group. In the post-test after the planned health education programme, there was no subject in poor knowledge group, 22 subjects (55%) belong to average knowledge group. And 18 samples (45%) got promoted to good knowledge group (Figure 1).

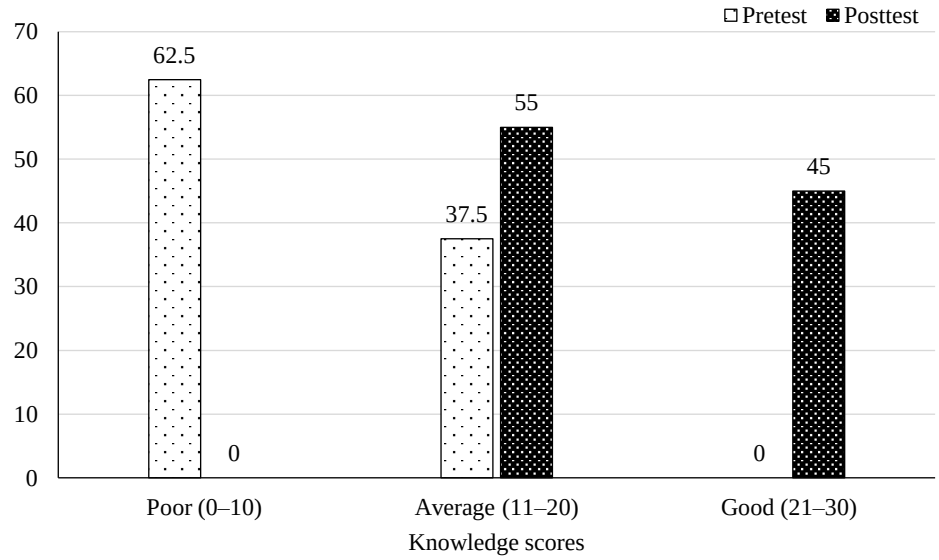

Figure 1. Distribution of knowledge score in pre and post-test.

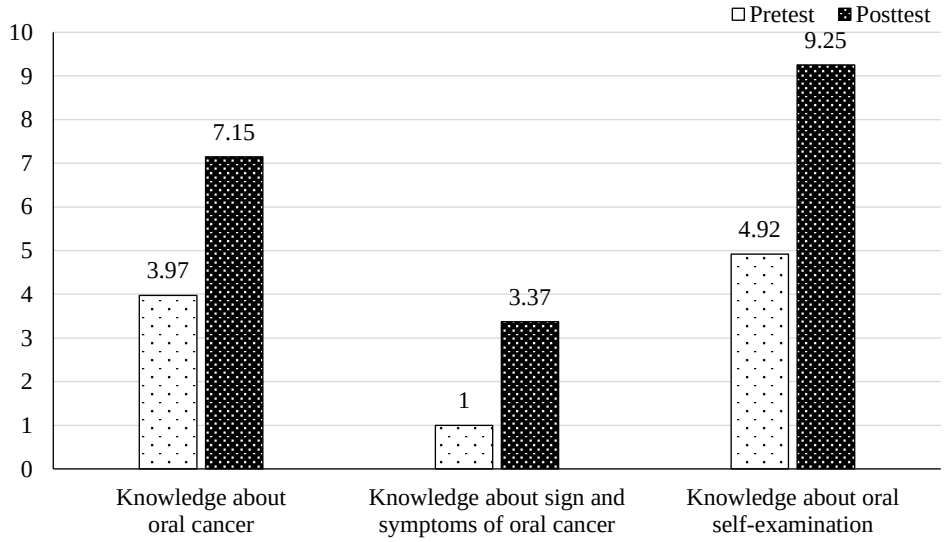

Figure 2. Area wise distribution of pre and post-test scores.

There was a significant difference in the mean score regarding awareness about oral self-examination for early recognition of oral cancer before and after the planned health education programme was given (Figure 2). The mean pretest score of knowledge increased from 9.95 to 19.8 in the post-test. The 't' test value is 21.445 and the p-value is 0.000 (<0.05), therefore the planned health education programme is significantly effective in improving the awareness of factory workers regarding oral self-examination for early recognition of oral cancer. With a p-value below 0.05, the null hypothesis is rejected with a confidence level of 95.0%.

Section III: Association Between Pretest Knowledge Score and Selected Socio-demographic Variable

The research identified a connection between the pretest knowledge score and various socio-demographic variables, including age, gender, educational qualification, monthly income, working hours, personal habits, prior knowledge of oral self-examination, and the source of information on oral self-examination. The association was determined using a Chi-square test.

DISCUSSION

The current study strives to develop and administer a planned health education programme of oral self-examination for early recognition of oral cancer among factory workers because the majority of factory workers are not professionals and also not sufficiently educated to understand the health impacts of tobacco products, hence they are using more tobacco products compared to the professional [9–11].

To strategize and execute cancer control initiatives, a comparable study carried out in Kerala was examined. Gathering information on the community's baseline habit patterns is essential. A questionnaire method was employed to select a sample size of 146 children and teenagers from the coastal area of Trivandrum, India. The findings indicate that 29% of the study subjects had a habit of tobacco chewing, 2% were smokers, and 3% had a habit of drinking. The study concluded that the habit pattern was connected with education and number of children per family [12].

CONCLUSION

The study concluded that the factory workers are not conscious about their health so that they are ignoring the protective measures. The study found that they have poor knowledge regarding oral cancer and oral self-care. The results of this study identified that the knowledge improvement of factory workers regarding oral self-examination will help them to identify oral cancer in an early stage. Early recognition of cancer will help to increase the chances of survival and disease-free life.

REFERENCES

1. Vinod J. Help fight these Cinderella cancers what dentist can do. BDA News. 2007 Sep; 20(9): 29–30.
2. Delfino M, Daycancer ME. We live and die by radiation. Mobeta publications; 2006.
3. Mike T, Dave R. Oxford hand book of cancer nursing. Oxford university press publication; 2007.
4. Ahmedin DVM, Freddie Br. Global cancer statistics. CA Cancer J Clin. 2011 Mar; 61(2): 69–90.
5. Nandan Sambhavani A, Dhruval Shah. (2011 May 31). Gujarat, India have high rates of head and neck cancer. [Online]. DNA daily news and analysis.
6. Smeltzer Suzzanne C, Brenda Bare. Brunner and Suddarth's, Text book of medical surgical nursing. 11th Edn. Lippincott William and Wilkins publications; 2007.
7. Edwards B, Shin H. Cancer incidence in five continents. Lyon: International agency for research on cancer (IARC scientific publications); 2009. Available at: http://www-dep.iarc.fr/ accessed on 6 Jan 2009.
8. Gupta PC. An intervention study of tobacco chewing and smoking habits for primary prevention of oral cancer among 12,212 Indian villagers. IARC Sci Publ. 1986; (74): 307–318.
9. Balaram P, Sridhar H, Rajkumar T, Vaccarella S, Herrero R, Nandakumar A, *et al*. Oral cancer in southern India: the influence of smoking, drinking, paan-chewing and oral hygiene. Int J Cancer. 2002 Mar; 98(3): 440–445.
10. Mathew B, Shankarynaryan R. Evaluation of mouth self-examination in the control of oral cancer. Br J Cancer. 1995; 71(3): 397–9.
11. Malaowalla M, Silverman Jr, Mani J, Bilimoria F, Lowell M. Oral cancer in 57518 industrial workers of Gujarat, India. J Cancer. 1976 Apr; 37(4): 1882–1886.
12. Kaur R. A Survey on Tobacco use and oral health. Indian J Community Med. 2010 Jan; 35(1): 34–39.

