

## A study on the recognition of oral cancer and oral health care in adults

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**Abstract.** This study was performed as there is a necessity to prevent oral cancer and reduce its mortality according to the research on the knowledge about oral cancer as well as the level of recognition. Moreover, the prevention of other diseases related to oral cavity is important for oral health care, and in order to prevent these diseases the difference between the incidence of oral disease and oral cancer based on the degree of knowledge about oral health, in other words the correlation between oral cancer and the degree of knowledge on oral health was studied. 298 adults residing in Gangwon province who consented to the purpose of this study were selected as subjects in this study from September 2014. The mean recognition of oral cancer was  $19.98 \pm 6.59$  points, and the mean oral health care was  $23.49 \pm 5.87$ . Acknowledgement of oral cancer was statistically significantly high at younger age ( $F=2.76$ ,  $p=.042$ ) and was significantly high with higher level of education ( $F=2.62$ ,  $p=.035$ ). Oral health care was significantly higher in female ( $t=-3.77$ ,  $p=.000$ ), in the group with high level of education ( $F=5.00$ ,  $p=.001$ ), in nonsmokers ( $F=4.23$ ,  $p=.000$ ), and in a group of people who exercised regularly ( $t=4.09$ ,  $p=.000$ ). Based on the result of this study, the education about oral cancer is necessary as the recognition of oral cancer declined with lower age, oral health care was well managed in females and oral health was good with higher level of education.

**Keywords:** oral cancer, oral health care, prevent oral cancer

### 1 Introduction

With the development of the society, the interest in oral health had increased apart from health in general. With the social development and improved living standards, interest on dental caries or periodontal diseases had increased [1]. The most threatening mortality risk in Korea is cancer, and the number of people who die from cancer is increasing annually [2].

Among them, the occurrence of oral cancer has increased globally, and has been raised as a significant issue consisting of 4-5% of all cancer [3]. It's been reported that oral cancer tend to occur in elderly people in the past, but oral cancer in younger

people had been reported to have increased from smoking and drinking [4]. However, studies on people's knowledge about oral cancer and the level of recognition have not been established due to the lack of opportunities for the general people to access information about oral cancer.

Thus, this study was performed for the need to prevent oral cancer and reduce its mortality. Moreover, as it is important to prevent other oral cavity related diseases for oral health care, the difference between the incidence of oral disease and oral cancer based on the degree of knowledge about oral health.

## **2. Methods**

298 adults residing in Gangwon province who consented to the purpose of this study were selected as subjects in this study. The subjects were provided a self-administered survey for data research for 2 weeks from September 2014. SPSS 18.0. program was used for statistical analysis of the survey.

## **3. Results**

### **3.1. General characteristics of study subjects**

177 subjects were between the ages 40-59. 113 subjects were male and 185 subjects were female. 131 had religion and 185 without. Most of the subjects were married, and 134 subjects were high school graduates, being the most majority. 169 subjects responded as "intermediate" for their economical status. 228 subjects responded as non-smokers and 177 subjects responded 'Yes' to drinking. 183 subjects responded 'No' to exercise.

### **3.2. Recognition of oral cancer of subjects and the degree of oral health care**

The mean recognition of oral cancer of subjects was  $19.98 \pm 6.59$  with the minimum of 4 and the maximum of 39. The mean oral health care was  $23.49 \pm 5.87$ , with minimum of 10 and the maximum of 48.

### **3.3. Recognition of oral cancer of subjects and the degree of oral health care according to general characteristics**

The recognition of oral cancer was statistically significantly high at lower age ( $F=2.76$ ,  $p=.042$ ), and was significantly high with higher level of education ( $F=2.62$ ,  $p=.035$ ) (Table 2). Oral health care was significantly high in female ( $t=-3.77$ ,  $p=.000$ ), in the group of higher education ( $F=5.00$ ,  $p=.001$ ), in nonsmokers ( $F=-4.23$ ,  $p=.000$ ), and in the group of people who exercise regularly ( $t=4.09$ ,  $p=.000$ ).

### **3.4. Correlation between the recognition of oral cancer and the degree of oral health care**

The recognition of oral cancer and oral health care showed statistically significant static correlation ( $r=.148$ ,  $p=.011$ ).

## **4 Discussion**

Among various diseases of oral cavity, oral cancer is the one which the cause is not clear and prevention is more important [5]. The area of exposure is the most obvious of the body regions for oral cancer. As modern medicine tends to evolve into the emphasis on prevention rather than treatment, public health activities on oral cavity are being actively carried out [6]. Accordingly, it has been reported that the prevention of oral cavity diseases or early detection through regular check-up is important through improving oral cavity related diseases as well as the bad oral condition.

From recognition improvement of oral health among people, education on oral hygiene is performed. Oral hygiene education here indicates the accomplishment process to change the attitude or behaviors towards oral health, so that individuals or the public can accomplish self-oral health care and to obtain interest or knowledge [7]. However, although people's recognition on oral health has improved with the development of media, economic growth, and the development of medical industry compared to the past, it still remains insignificant [8].

The mean recognition of oral cancer was  $19.98 \pm 6.59$  points, and the mean oral health care was  $23.49 \pm 5.87$ . Acknowledgement of oral cancer was statistically significantly high at younger age ( $F=2.76$ ,  $p=.042$ ), and was significantly high with higher level of education ( $F=2.62$ ,  $p=.035$ ). Oral health care was significantly higher in female ( $t=-3.77$ ,  $p=.000$ ), in the group with high level of education ( $F=5.00$ ,  $p=.001$ ), in nonsmokers ( $F=-4.23$ ,  $p=.000$ ), and in a group of people who exercised regularly ( $t=4.09$ ,  $p=.000$ ).

Based on the study result, recognition of oral cancer appeared lower at younger age requiring education on oral cancer. Oral health care was well managed in female subjects and showed good level of health status in people with higher level of education. Non-smokers and subjects who exercised regularly showed well managed oral health.

Therefore, professionals in dentistry need to take responsibility to make an effort, and social effort to prevent oral cancer and oral health is thought necessary.

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