IT Ages The Relation between Self-rated Oral Health and the Behavior

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Abstract. The purpose of this study was to determine if self-rated IT ages oral health differed according to self-reported oral health behaviors in Korean adolescents. The raw data of ‘The 6th Youth Health Behavior Online Survey’ carried out by the Korea Center for Disease Control and Prevention were analysed. Independent t-test, one-way ANOVA, and Logistic regression analysis were used to assess the relationships between oral health behaviors and self-rated oral health (n=73,238). Oral health behaviors had stronger influence on daily toothbrushing habits. In particular, participants who brushed their teeth in the morning and participants who brushed their teeth more than 3 times a day were more likely to have good self-rated oral (p< .001). Korean adolescents with high self-rated oral health reported practicing good oral health behaviors. These results highlight the need for the further practicable oral health education programs.

Keywords: IT ages, korean adolescents, perceived oral health, selfrated oral health, daily toothbrushing eabits, dental treatment experiences.

1 Introduction

When IT ages oral health policy has established or planed, objective oral health dynamic indicators such as Decayed Missing and Filled Permanent Teeth (DMFT index) or Community Periodontal Index of Treatment Needs (CPITN) have been used[1]. Self-rated health means the objectification about health status[2] perceived internally by selecting one among Excellent, Very Good, Good, Average, or Poor about own health status[3]. This is widely used for the health status evaluation of individual and participants as a self-recording method[2],[3]. Self-rated health might be a more accurate estimation method about life quality and well-being than a clinical disease assessment conducted by medical workers[4], and used as a dynamic indicator or a treatment need or result indicator regarding the burden for oral diseases. Furthermore, self-rated health is recommended as an essential item for evaluating the collective life quality as well as displayed its excellent estimation ability for defining future health status[5], especially about life and death matters[6]. Generally, IT ages adults or
seniors are used for the study about self-rated health and daily habit. As getting older, people have higher interests about health and sense the necessary about health life. It indicates that they have much higher interests about the necessary about health life habit; especially they have any disease [7,8,9]. Hence, in this study, I plan to explore an appropriate oral health behavior of the youth fitted with a right cognition.

2 Study Target Materials and Methods

The raw data of ‘The 6th Youth Health Behavior Online Survey’ carried out by the Korea Center for Disease Control and Prevention were analysed. Independent t-test, one-way ANOVA (n = 73,238). In this study, collected data was converted into code and entered for an actual analysis; and SPSS v19.0 was used for the process and analysis. The statistical analysis method for data analysis is as follows.

3 Study Result

3.1 Self-Rated Oral Health According to Dental Treatment Experiences

<table>
<thead>
<tr>
<th>Number of dental treatments in the past 12 months</th>
<th>N (%)</th>
<th>Self-rated oral health</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>26,234 (35.1)</td>
<td>3.13 (0.94)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>One</td>
<td>22,703 (31.3)</td>
<td>3.12 (0.90)</td>
<td></td>
</tr>
<tr>
<td>Two</td>
<td>12,002 (16.7)</td>
<td>3.14 (0.90)</td>
<td></td>
</tr>
<tr>
<td>Three</td>
<td>4,270 (5.8)</td>
<td>3.06 (0.94)</td>
<td></td>
</tr>
<tr>
<td>Four or more</td>
<td>8,029 (11.0)</td>
<td>2.95 (0.98)</td>
<td></td>
</tr>
</tbody>
</table>

Received sealant treatment*  
No 27,530 (59.2) 3.15 (0.92) <.001  
Yes 19,474 (40.8) 3.00 (0.91)

Received fluoridation treatment *  
No 42,085 (90.0) 3.08 (0.91) <.001  
Yes 4,919 (10.0) 3.14 (0.96)

Received scaling treatment *  
No 33,295 (69.8) 3.10 (0.91) <.001  
Yes 13,709 (30.2) 3.07 (0.94)

Received oral health education in school  
No 55,954 (78.0) 3.10 (0.93) <.001  
Yes 17,284 (22.0) 3.13 (0.92)

*47,004 subjects with dental treatment experience in the last 12 months.

Fig.1. Self-Rated Oral Health According to Dental Treatment Experiences
35.1% of participants reported that they had not received any dental treatment in the last 12 months. Self-rated oral health differed according to the frequency of dental treatment (p<.001; fig 1). Independent t-test and one-way ANOVA indicated that self-rated oral health was equal in participants who received dental treatment no times (3.13 (0.94), n=26,234), once (3.12 (0.90), n=22,703) or twice (3.14 (0.90), n=12,002) a year, but higher in these participants who received dental treatment three (3.06 (0.98), n=4,270) or more than four (2.95 (0.98), n=8,029) times a year (fig 1). Subjects that received sealant, fluoridation or scaling in the last 12 months had higher self-rated oral health than subjects that did not receive these treatments (p<.001; fig 1). Only 22% of participants reported receiving oral health education in school within the last 12 months. These participants showed higher self-rated oral health (3.13 (0.92), n=17,284) than participants that reported not receiving oral health education (3.10 (0.93), n=55,954, p<.001; fig 1).

4 Proposal

The total percentage of participants who rated their oral health as average or below average was higher than the results from the similar studies conducted abroad[10], [11], where the proportion ranged from 20% to 50%. This indicates that Korean adolescents rate their oral health as lower than adolescents in other countries. The reasons for this are not immediately clear, and more detailed comparative studies on socio-cultural or international differences in relation to the level of self-rated oral health are needed to understand this difference. Although there are no reports on how many times per day to brush teeth in order to prevent plaque formation, experts generally recommend brushing twice a day to prevent plaque formation and control bad breath[24]. Individuals who are prone to rapid formation of plaque and tartar must brush their teeth more often[12].

We are found that IT ages the likelihood of having good self-rated oral health was higher in participants who reported brushing their teeth at least 3 times a day than in those who did not.

5 Result

In summary, IT ages self-rated oral health differed according to self-reported daily toothbrushing habits and individual treatment experiences. We suggest that providing oral health education in schools is an important oral health policy factor that will teach adolescents the proper methods of toothbrushing and help them to adopt good toothbrushing habits.

This research is limited by the fact that it was not possible to analyze and apply weight to the subjects based on the raw data such that the result might tend to be biased. It was also difficult to compare the relationship between oral condition and oral diseases. In addition, self-rated oral health can be presented values according to race, cultural background, socio-economic factors, objective oral condition, oral
health knowledge and oral health behaviors. Follow-up studies are also needed to identify investigate the relation between self-rated oral health and other factors.

References