

Oral hygiene status students of Faculty of Dentistry Universitas Padjadjaran batch 2007 and 2011

Stevi Mega Arista*, Riana Wardani*, Anne Agustina Suwargiani*

***Department of Dental Public Health, Faculty of Dentistry Universitas Padjadjaran, Indonesia**

ABSTRACT

Introduction: Oral hygiene could be influenced by four factors, there are enviromental, behavior, health service, and hereditery factors. The mayor factors are enviromental and behavior factors. Behavior factors influenced by the level of education a person which affect to the status of individual oral hygiene. The aim of this research was to describe oral hygiene status on students at Faculty of Dentistry, Universitas Padjadjaran class of 2007 with class of 2011. **Methods:** This type of research was descriptive research using the survey method were obtained through clinical examination. The sampel were collected by way of proportional sampling and samples were 142 students. **Results:** Oral hygiene index of students of Faculty of Dentistry, Universitas Padjadjaran class of 2007 to be 0,62. The result of this research indicated that the oral hygiene index of students of Faculty of Dentistry, Universitas Padjadjaran class of 2011 to be 1,19. **Conclusion:** Oral Hygiene status of students of Faculty of Dentistry Universitas Padjadjaran class of 2007 were in the good category and the Oral Hygiene Index of students of Faculty of Dentistry Universitas Padjadjaran class of 2011 were in the medium category.

Keywords: Calculus index, oral hygiene, plaque index.

INTRODUCTION

Health is an important factor in supporting social welfare and improving the quality of human life. Health is a healthy condition, physically, mentally, spiritually and socially that allows everyone to live productively socially and economically.¹ The healthy conditions mentioned above also include conditions that are free from dental and oral diseases. Tooth and mouth disease is closely related to dental and oral hygiene, especially plaque on teeth. Plaque is the main cause of dental caries and periodontal disease is most common in the community, so the human oral

cavity requires more care than other body parts. The rest of the food can be left in the mouth, especially between the teeth. If the leftovers are not cleaned, they will decay and form a layer of plaque. The results of the food spoilage process will damage the tooth structure and supporting tissues and also be toxic.²

Oral health conditions are said to be good if the teeth are free of plaque and calculus. Plaque and calculus are very important in the pathogenicity of caries and periodontal disease. Dental plaque is a soft deposit consisting of a collection of bacteria that multiply in a matrix that is formed and is firmly attached to the surface

of a tooth or other hard surface including fixed or removable restorations. Plaque can be removed by brushing teeth. Calculus is a hard deposit formed by the mineralization process of dental plaque²

According to Blum (1974) there are 4 factors that can affect an individual's health status, namely environmental factors, behavioral factors, health service factors, and hereditary factors. Behavioral factors can be influenced by one's level of education. The higher the level of one's education, the more aware of the importance of maintaining health.⁴

Healthy behavior is all the actions of someone in maintaining and improving their health. One factor to get healthy behavior is through health education. Health education is an effort or activity to help individuals, groups or communities in increasing the ability (behavior) to achieve optimal health.⁵ Health education produces a form of healthy behavior. This also applies to oral health, so that health education will affect the status of one's oral hygiene.⁵ Oral hygiene status is a condition that describes cleanliness that occurs in the oral cavity including teeth which are hard tissue, and other supporting tissues.⁶

FKG UNPAD students in 2007 have more knowledge and knowledge about oral health because they have been studying at FKG UNPAD longer than FKG UNPAD students in 2011, so they have more knowledge and awareness about how to maintain oral health and hygiene than Student Force 2011. From the description above, the author intends to find out the picture of dental and mouth hygiene of FKG UNPAD students in 2007 with FKG UNPAD students in 2011, through the status of dental and oral hygiene. The 2007 batch is the first batch that uses a competency-based curriculum system and the 2011 batch is the fifth batch who uses a competency-based curriculum. The aim of this research was to describe oral hygiene status on students at Faculty of Dentistry, Universitas Padjadjaran class of 2007 with class of 2011.

METHODS

This type of research is a descriptive study with a survey method. Descriptive is a method of research carried out with the main purpose of describing a situation. Survey is a descriptive

method of research conducted on a group of objects that are usually quite a lot in a certain period of time. The population in this study were the regular FKP UNPAD Force students in 2007, amounting to 80 people and the force in 2011 which totaled 139 people. The sample selection is based on proportional sampling technique which is used when the population has proportionally inhomogeneous members or elements.⁷ The number of samples used in this study is 142 samples, the above figures are obtained based on the formula are as follows.

RESULTS

This research was conducted on FKG UNPAD students in 2007 with the force in 2011. Characteristics of FKG UNPAD students in 2007 according to gender, there were 12 men and 40 women who were responsive. Characteristics of FKG UNPAD 2011 student respondents by sex, there were 15 men and 75 women who were responsive.

The results of the examination of the status of oral hygiene in UNPAD FKG Students Force 2007 and 2011 are as follows: Table 1 shows that the average oral hygiene status of FKP UNPAD students in 2007 was included in both categories and the average oral hygiene status of FKP UNPAD students in 2011 was included in the moderate category.

Table 2 shows that the plaque index of the 2007 FKP UNPAD Students showed the highest percentage in the good category and a little in the

Table 1. Average plaque index, calculus index, ohi-s fkg unpad students force of 2007 and 2011 which were classified according to who criteria

Average	2007	2011
Plaque index	Good	44
Calculus index	Medium	6
OHI-S	Bad	2

Table 2. Frequency distribution of plaque index (greene and vermillion) of 2007 fkg unpad students who were criticized based on who criteria

Plaque Index	criteria	Frequency (f)	%
0.0-0.6	Good	44	84
0.7-1.8	Medium	6	11
1.9-3.0	Bad	2	5
Total		52	100

medium and bad category.

In Table 3 it can be seen that the plaque index in the 2011 FKP UNPAD Students showed mostly in the good and moderate categories and

Table 3. Frequency distribution of plaque index (greene and vermillion) on fkg unpad students of 2011 who were criticized based on who criteria

Plaque index	criteria	Frequency (f)	%
0.0-0.6	Good	38	42
0.7-1.8	Medium	50	56
1.9-3.0	Bad	2	2
Total		90	100

Table 4. Frequency distribution of calculus index (greene and vermillion) in fkg unpad 2007 batch class students, which were classified according to who criteria

Calculus index	criteria	Frequency (f)	%
0.0-0.6	Good	49	94
0.7-1.8	Medium	3	6
1.9-3.0	Bad	0	0
Total		52	100

Table 5. Frequency distribution of calculus indexes (greene and vermillion) in fkg unpad 2011 class of students which are classified according to who criteria

Calculus Index	criteria	Frequensi (f)	%
0.0-0.6	Good	36	40
0.7-1.8	Medium	50	56
1.9-3.0	Bad	4	4
Total		90	100

Table 6. Distribution of ohi-s frequency of fkg unpad 2007 batch units which are classified according to who criteria

OHI-S	criteria	Frequency (f)	%
0.0-1.2	Good	47	90
1.3-3.0	Medium	5	10
3.0-6.0	Bad	0	0
Jumlah		52	100

Tabel 7. Distribusi frekuensi ohi-s mahasiswa fkg unpad angkatan 2011 yang dikriteriakan berdasarkan kriteria who

OHI-S	criteria	Frequency (f)	%
0.0-1.2	Good	30	33
1.3-3.0	Medium	56	62
3.0-6.0	Bad	4	5
Jumlah		90	100

very few in the bad categories.

Table 4 shows that the calculus index for the 2007 FKP UNPAD students showed the highest percentage in the good category and a little in the medium category. Table 5 shows that the calculus index in the 2011 FKP UNPAD Students showed mostly in the good and moderate categories and a little in the bad categories.

Table 6 shows that the index of oral hygiene in FKG UNPAD students in 2007 showed the highest percentage in the good category and a little in the medium category. Table 7 shows that the oral hygiene index in the 2011 FKP UNPAD Students showed mostly in the good and moderate categories and a little in the bad categories

DISCUSSION

The results of the study conducted by the author there are differences in the results of the plaque index, calculus index, and also the index of oral hygiene between 2007 and 2011 Class of Students. %, bad as much as 6%. The average plaque index is 0.47 which is included in both categories. In table 4.3, it can be seen that the plaque index of FKG UNPAD 2011 students consisted of 42% good category, 56% moderate, 2% bad. The average plaque index is 1.19 which is included in the medium category.

Plaque is a soft deposit that consists of a collection of bacteria that multiply in a matrix that is formed and is firmly attached to the surface of a tooth or other hard surface including fixed or removable restoration.³ Plaque can be controlled using mechanical devices such as toothbrushes, interdental brushes, and floss tooth. Plaque Index can be a measure of someone in how to control plaque in their oral cavity⁹ (Houwik, 1993). Students of FKG UNPAD 2007 and 2011 who had moderate or even poor plaque index scores did not care much about controlling plaque.

Table 4 shows that the calculus index in FKP UNPAD 2007 students consisted of the good category as much as 96%, while as much as 6%. The average calculus index is 0.17 which is included in both categories. In table 4.5, it can be seen that the calculus index in FKP UNPAD 2011 students consisted of 40% in the good category, 56% in the medium category, and 4% in the poor category. The average calculus index is 1.21 which falls into

the medium category.

Calculus is a hard deposit formed from plaque mineralization and is usually covered by a layer of plaque that does not undergo mineralization³ (Carranza, 2002). Calculus cannot be removed by gargling or by brushing teeth, but can be removed by scaling with the help of a dentist (Manson and Eley, 1993). UNPAD FKG Angkatan 2007 students who have moderate calculus index values and FKP UNPAD 2011 students who have moderate calculus index scores and even poor means they have less concern in controlling calculus where calculus can be eliminated by scaling.

Table 6 shows that the oral hygiene index of FKG UNPAD students in 2007 consisted of 90% of the good category, 10% of the moderate category. The average oral hygiene index is 0.62 which is included in both categories. In table 7 it can be seen that the oral hygiene index for FKG UNPAD students in 2011 consisted of 33% good category, 62% moderate, and 21% bad. The average oral hygiene index is 1.95 which belongs to the medium category.

The results of the study can be seen that the oral hygiene status of FKG UNPAD students in 2007 is included in the good category, while the oral hygiene status of FKG UNPAD students in 2011 is included in the moderate category. This is in accordance with Blum's theory which states that the higher the level of one's education, the more aware of the importance of maintaining health, especially maintaining oral health. A person's level of education can affect one's mindset about how to maintain and maintain oral and dental hygiene. The higher the level of one's education, the higher the knowledge gained about the importance of maintaining oral health.⁴

This is consistent with research conducted by Seba. states that there is a significant relationship between education level and hygiene status¹¹. The same thing has also been mentioned by research conducted by Aryanto (2003) which states that there is a significant relationship between the level of education with the level of dental and oral health¹². The oral hygiene status of FKG UNPAD students in 2007 is categorized as good because they have been studying at FKG UNPAD longer than the FKG UNPAD students in 2011 so that they have more knowledge and knowledge about dental and mouth health than FKG UNPAD students in 2011 so that most students have

knowledge and high awareness to behave healthily in an effort to improve the degree of oral health. The oral hygiene status of FKG UNPAD students in 2011 was categorized as being caused by the majority of students still lacking the knowledge and awareness to behave healthily in an effort to improve the degree of oral health.

Knowledge and knowledge about dental and oral health were obtained from courses in FKG UNPAD. UNPAD FKG students in 2007 have received all courses in FKG UNPAD, while students in 2011 have only received basic courses in the fields of medicine and dentistry, such as anatomy, chemistry, physics, biology, itmk, and basic courses the other. The 2007 class year students all had to take the pre-coalition period where they were required to do peer-to-peer scoring, this can be seen from the well-categorized calculus index. Both of these classes use a competency-based curriculum where each subject taught by each student is required to search for and study the course materials themselves so that students have more knowledge and knowledge to learn.

The results of oral hygiene status that have been achieved in 2007 FKP UNPAD students in good category, but in the plaque index there are still some students who are included in the moderate and even bad categories so that their oral hygiene needs to be improved by adding knowledge and knowledge about dental and mouth health by following the seminars held at the clinical registry. The results of oral hygiene status in the 2011 category of FKG UNPAD, should be improved by increasing knowledge about dental and mouth health by attending education at the Faculty of Dentistry, Padjadjaran University.

CONCLUSION

Oral Hygiene Index of students of Faculty of Dentistry Universitas Padjadjaran class of 2007 were in the good category and the Oral Hygiene Index of students of Faculty of Dentistry Universitas Padjadjaran class of 2011 were in the medium category.

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