Knowledge of dental and oral health in patients treated by students of Dentistry Professional Program

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ABSTRACT

Introduction: Behaviors is to maintain oral health in a person will be begin to improve the person's knowledge about oral health. Dental health promotion to patients can be done by professional program students. These efforts are made individually, while in the dental chair or commonly known as chairsidetalk. This study was a descriptive study with survey technique. Data was collected using a questionnaire sheet. The purpose of this study to assess knowledge of oral health in patients who treated by professional dentistry program students RSGM FKG UNPAD. **Methods:** This study was a descriptive study with survey technique. Sample of this study were patients who were treated by dentistry professional program students RSGM FKG UNPAD, which was purposive random sampling method, and the number of samples obtained were 224 patients. **Results:** The results shows that patients treated in the dentistry professional program students RSGM FKG UNPAD have a good level of knowledge, total of 116 respondents (51.79%), the second highest frequency of 82 respondents (36.61%) had a level of knowledge and at least enough of the respondents were 26 respondents (11.61%) had a level of knowledge is lacking. **Conclusion:** Conclusions the study are patients who had received care from the dentistry professional program students in RSGM FKG UNPAD has a good level of knowledge about oral health.

Keywords: Behavior, Knowledge, Patient, Professional program students

INTRODUCTION

According to the Household Health Survey SKRT 2004, the caries prevalence in Indonesia reaches 90.05%, and this is classified as higher compared to other developing countries.[1]

Based on the results of the Basic Health Research 2007, dental caries suffered by 72.1% of Indonesia's population, and in the past 12 months as many as 23.4% of Indonesia's population complained of oral problems. Of these, only 29.6% sought help and received treatment from health workers.[2]

The data above shows that the dental and oral health condition of Indonesian is low and needs attention, one of which can be due to the Indonesian population's lack of getting information about oral health. Explained that the emergence of dental and oral health problems in the community was one of them, behavioral or attitude factors ignoring dental and oral hygiene.[3]

This behavior arises because of the lack of public knowledge about oral health. Oral and dental health is important to consider because it can endanger someone if being ignored. One case that was reported by the Washington Post that

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a 12-year-old child died due to one of his teeth abscess.[3] Complications arise, where bacteria from abscessed teeth have spread to the brain causing brain abscess (odontogenic in origin).[2]

Based on this explanation it is important to increase one's oral health knowledge so that one's attitude and skills are formed later to maintain and improve the degree of oral health. According to Benjamin Bloom, presented by Notoatmodjo (1997), new behavior arises because of the interaction between knowledge, attitudes, and skills, and knowledge is the initial domain of behavior that is then followed by attitudes and skills.[3]

Improving dental and oral health in Indonesian society is one of the responsibilities of health practitioners. According to the Indonesian Medical Ethics Code (KODEKI), clause 8 states that in carrying out their work, a doctor must pay attention to the interests of the community and pay attention to all aspects of comprehensive health services, including promotive, preventive, curative, and rehabilitative efforts.[4]

Students of the professional program or commonly referred to as coass in Dental Hospital of Universitas Padjadjaran (RSGM UNPAD), they are one of the cadres in the field of dental and oral health, these students in their duties in the clinic not only make treatment and recovery efforts to their patients but also have the responsibility to increase the degree dental and oral health of the patient.[5]

Efforts to improve the degree of dental health of these patients can be done by providing Dental Health Education (DHE) to patients so that patients know about dental and oral health. Dental Health Education is dental and oral health education given to someone or the community so that they know how to care for and maintain their dental health. DHE to patients can be given formally through pre-post operation (chairside-talk) advice when giving treatment.[4]

This oral health knowledge is expected to be able to shape the attitudes and skills of patients in maintaining their own dental and oral health so that it can ultimately improve the degree of oral health.[6] Based on this background, the authors are interested in conducting research on dental and oral health knowledge in patients treated by dental professional students.

METHODS

This research is a descriptive study which is a study that describes a situation as clearly as possible without any treatment of the object under study. This descriptive study uses survey techniques.[7]
The population for this study were all patients treated by dental professional students at the Dental Hospital of Universitas Padjadran in February 2012. The population criteria in this study were: patients who had received at least two treatments, male and female, were willing to fill up the questionnaire.

The population is known to be 1300 patients, and the level of precision used is 10%, so the sample taken based on the Isaac and Michael's table is 224 respondents (Sugiyono, 2011). The sampling technique used in this study is by using purposive random sampling, the selection of a group of subjects is based on certain characteristics or traits. Someone or something is taken as a sample because it is considered that someone or something has the information needed for research.

RESULTS

This research was conducted at the Dental Hospital of the Universitas Padjadjaran, Bandung, in February 2012. This study was aimed at knowing the dental and oral health knowledge of respondents treated by professional program students, by distributing questionnaires to 224 patients. Based on a questionnaire distributed to 224 respondents namely respondents who were treated by students of the dental professional program at the Dental Hospital of the Universitas Padjadjaran, Bandung, the author obtained the characteristics of respondents consisting of age, gender, education level, and occupation.

Table 1. Characteristics of Respondents based on Age

Age	F	%
< 20 years old	64	28,57
20-35 years old	107	47,77
36-50 years old	37	16,52
> 50 years old	16	7,14
Total	**224**	**100**

Table 2. Characteristics of Respondents based on Gender

Gender	F	%
Male	65	29,02
Female	159	70,98
Total	**224**	**100**

Table 4.2, can be seen that from 224 respondents who were treated at the Dental Hospital of Universitas Padjadjaran, 159 respondents (70.98%) were female, while the rest were male as many as 65 respondents (29.02%).

Table 3. Characteristics of Respondents based on Level of Education

Level of Education	F	%
Elementary school	19	8.48
Junior high school	29	12.95
Senior high school	128	57.14
Diploma	10	4.46
Bachelor degree	37	16.52
Master	1	0.45
Total	**224**	**100**

Table 4.3 above, obtained information that the majority of the respondents as many as 128 respondents (57.14%) are senior high school graduates, the second-highest frequency is bachelor graduates as many as 37 respondents (16.52%), junior high graduates as many as 29 respondents (12.95%), Elementary graduates as many as 19 respondents (8.48%), Diploma as many as 10 respondents (4.46%) and at least were master graduates only 1 respondent (0.45%).

Table 4. Characteristics of Respondents based on Occupation

Occupation	F	%
Student	137	61.16
Private employee	29	12.95
Entrepreneur	6	2.68
Farmer	19	8.48
Housewife	33	14.73
Total	**224**	**100**

From Table 4.4 above, it can be seen that the majority of respondents as many as 137 respondents (61.16%) are students, housewives as many as 33 respondents (14.73%), who work as private employees as many as 29 respondents (12, 95%), farmers as many as 19 respondents (8.48%) and at least of the respondents who work as entrepreneurs as many as 6 respondents (2.68%).
The results of research on dental and oral health knowledge that has been treated by professional students at the Dental Hospital of Universitas Padjadjaran, by distributing questionnaires to 224 respondents, are as follows:

Table 5. Knowledge Regarding Dental and Oral Health Care Programs Students Have Performed in Dental Hospital of University Padjadjaran

No.	Question	True		False	
		F	%	F	%
1	Order of layers of dental crown	95	42,41	129	57,59
2	Tooth function	194	86,61	30	13,39
3	Types of tooth	207	92,41	17	7,59
4	Definition of plaque	87	38,84	137	61,16
5	Causes of dental caries	183	81,70	41	18,30
6	Sign of dental caries	114	50,89	110	49,11
7	How to handle oral and dental disease	215	95,98	9	4,02
8	Definition of calculus	165	73,66	59	26,34
9	Minimal frequency of tooth brushing	188	83,93	36	16,07
10	Corect time for tooth brushing	153	68,30	71	31,70
11	Characteristics of good toothpaste	210	93,75	14	6,25
12	Other tools for cleaning tooth	162	72,32	62	27,68
13	Correct brushing technique	120	53,57	104	46,43
14	Time to replace a toothbrush	107	47,77	117	52,23
15	Handling dental caries	198	88,39	26	11,61

16	Right time to visit the dentist	193	86,16	31	13,84
17	Things to do after eating if there is no toothbrush	210	93,75	14	6,25
18	Bagian gigi yang harus dibersihkan/ disikat	204	91,07	20	8,93

From Table 4.5, it is obtained that most of the respondents treated by dental professional program students at Dental Hospital of Universitas Padjadjaran, as many as 215 respondents (95.98%) know how to handle dental and oral diseases. In addition, most of the 137 respondents (61.16%) did not know the meaning of plaque.

Table 6. Knowledge of Dental and Oral Health of Respondents Cared for by Students of the dental profession program in Dental Hospital of Universitas Padjadjaran Level of Knowledge

Level of Knowledge	F	%
Good	116	51,79
Sufficient	82	36,61
Poor	26	11,61
Total	**224**	**100**

Based on the table above, information is obtained that most of the respondents who were treated by students of the dental professional program at the Dental Hospital of Universitas Padjadjaran had a level of dental and oral health knowledge in the good category, as many as 116 respondents (51.79%), the second-highest frequency was 82 respondents (36.61%) had a sufficient level of knowledge, and at least 26 respondents (11.61%) had a lack of knowledge.

DISCUSSION

The results showed the most respondents were patients between the ages of 20 to 35 years (Table 4.1), which was 107 respondents (47.77%). Most patients who were respondents (Table 4.2) were female respondents, as many as 159 respondents (70.98%). Table 4.3 shows the majority of respondents, as many as 128 respondents (57.14%) were high school graduates, and most respondents were students with a total of 137 respondents (61.16%). Based on Table 4.5 (question no. 1), it shows that most of the respondents, namely 129 respondents (57.59%), did not know about the order of the crowns of the teeth. Knowledge of dental anatomy is important because, to explain further about the process of an illness, prevention, and treatment, patients should first know about dental anatomy, so that patients become more understanding about the state of their teeth.

Table 4.5 (question no. 3) shows 207 respondents (92.41%) answered correctly statements about various teeth, and (question no. 4) 194 respondents (86.61%) answered correctly about tooth function. This shows that most respondents in the Dental Hospital of Universitas Padjadjaran have good knowledge about the types of teeth and tooth function.

A total of 137 respondents (61.16%) in Table 4.5 (question no. 5) answered incorrectly about the definition of plaque, while 165 respondents (73.66%) answered correctly the notion of calculus or tartar (question no. 8). Most of the respondents think that plaque has the same meaning as calculus or what is commonly referred to as tartar.

Plaque is a layer of biofilm that attaches to teeth, this layer is formed due to the interaction of bacteria with teeth, then through physical and physiological interactions between different bacterial species in microbial masses. If the plaque undergoes a mineralization process it will form a hard layer on the teeth called calculus, or commonly known as tartar.[5]

Lack of knowledge about the definition of plaque can be caused by respondents not getting an explanation from students who care for, or it can also be caused by the information given is not understood by respondents. In this case, effective communication is needed between the doctor and the patient, so there is no difference in perception between the two. Communication can be effective if the message is received and understood as intended by the sender of the message, the message is followed up with an act by the recipient of the message and there are no obstacles to it.[6]

One of the goals of communication relevant to the profession of doctor and dentist is to help provide choices in efforts to resolve patient health problems. Guiding patients to the true

understanding of the disease/problem they face.[7] In Table 4.5 (question no. 5) shows 183 respondents (81.70%) know about the causes of cavities, 198 respondents (88.39%) know the treatment for cavities (question no. 15), and 215 respondents (95.98%) correctly answered the question about how to handle teeth and mouth (question no. 7). Almost all respondents know that if a tooth and mouth hurt, it should be treated by a dentist and not treated alone. This is in line with research conducted, which is about simulating services in Sadang Serang that if someone is stricken with the disease usually that person goes to the doctor or other health care facilities to check his health.

Table 4.5 in (question no. 6) also shows as many as 110 respondents (49.11%) did not know the initial signs of cavities, even though this knowledge is very important to be improved, so patients can find out if their teeth have started to show the initial symptoms of cavities, they can immediately go to the doctor to get treatment and not wait until the disease continues.

Based on Table 4.5 (question no. 9), 188 respondents (83.93%) correctly answered the question about the minimum frequency of brushing teeth, 153 respondents (68.30%) knew the right time to brush their teeth (question no. 10), 210 respondents (93.75%) knew the characteristics of good toothpaste (question no. 11), which contained fluoride, and 193 respondents (86.16%) answered correctly the question about the right time to visit the dentist (question number 16). These knowledge respondents get not only from students who care, but they also get from television advertisements, because these things are often mentioned in toothpaste advertisements and toothbrushes on television.

In addition, knowledge such as the habit of brushing teeth has been implanted in the family and has become a habit since childhood. Based on Appendix 6 (Table 1), 122 respondents (54.46%) stated that they got dental and mouth health knowledge from television and 105 respondents (46.88%) got it from their families.

Table 4.5 (question no. 13) shows 104 respondents (46.43%) did not know how to brush their teeth properly, and as many as 117 respondents (52.23%) did not know the time to replace a toothbrush (question no. 14). Professional program students (koas) should give a clearer explanation about this because this is often not taught in the family and advertisements on television. The results of the study in Table 4.5 (question no. 12) also showed that 162 respondents (72.32%) knew of other tools besides brushes and toothpaste to clean teeth, namely dental floss and tongue cleaners. Based on Table 4.5 (question no. 17), it shows that 210 respondents (93.75%) knew that after eating no toothbrush, you should rinse your mouth. Gargling can help maintain oral hygiene and health. In the same table (question no. 18), it was also shown that as many as 204 respondents (91.07%) had good knowledge about the part of the tooth that had to be brushed, ie the entire surface.

The results of the study in Table 4.6 show a description of the dental and oral health knowledge of respondents who were treated by dental profession students at the Dental Hospital of Universitas Padjadjaran. From this table, we can see the results that show that the level of dental and oral health knowledge of respondents treated by dentistry profession program students at the Dental Hospital of Universitas Padjadjaran is quite good, as many as 116 respondents (51.79%). This can be supported by the characteristics of respondents, where the highest level of education is high school, which is 128 respondents (57.14%) and the second most with a number of 37 respondents (16.52%), namely graduates. Most respondents work as students, as many as 137 respondents (61.16%).

Good dental and oral health knowledge is also due to the fact that most dental professional program students always provide explanations about dental and oral health to their respondents. This is shown in Appendix 6 (Table 1), as many as 158 respondents (70.54%) of respondents knew dental and oral health knowledge information from dentists at RSGM, in this case, meant students of the dental profession program, or commonly referred to as koas.

Appendix 6 (Table 2) shows that 125 respondents (55.5%) of respondents stated that doctors who treat at dental hospital always explain dental and oral health to their respondents at each visit, as many as 92 respondents (41.07%) stated the doctor who treated him had provided knowledge of dental and oral health, but not every visit, and as many as 7 respondents (3.13%) stated

never. Each respondent in a dentist's practice must be encouraged to carry out daily dental and oral health maintenance programs.[5] This effort can be made through promoting dental health to individual respondents while in a dental chair or commonly known as chairside-talk.[8]

Based on research, in general, respondents who were treated at Dental Hospital of Universitas Padjadjaran already knew and understood dental and oral health, but it still needed to be improved again, this is shown in appendix 6 (Table 3) regarding the provision of dental and oral health knowledge by doctors. Appendix 6 (Table 3) shows that the majority of respondents, 154 respondents (27.23%) stated that the treating doctor provided only a part of dental and oral health knowledge. The second highest frequency states that doctors provide all explanations and information about dental and oral health as many as 61 respondents (27.23%) and at least those who say no at all as many as 9 respondents (4.02%).[9]

This shows that the majority of respondents thought that of all the questions on dental and oral health knowledge given to respondents, only a portion of them had been given by students of professional or national programs. In line with the theory according to Skinner (1938), knowledge is a closed behavior (covert behavior), which in turn will cause inner responses in the form of attitudes of individuals towards known objects, then responses will appear in the form of actions or practices of objects, this practice is an overt behavior or open behavior.[9]

Students of the dentistry profession program (koas) should increase the promotion of dental health to individual patients, and the provision of this knowledge should be accompanied by teaching aids, so that the delivery will be more easily understood by patients. It is hoped that after the patients are given oral and dental health knowledge, they can maintain their oral and dental health independently so that the degree of their oral health can improve.

CONCLUSION

The results of research on dental and oral health knowledge of patients treated by medical professional program students, it can be concluded that the knowledge is included in both categories.

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