

Research Article

KNOWLEDGE LEVEL OF DENTAL STUDENTS FKG UNBRAH ABOUT THE TREATMENT OF STAINLESS-STEEL CROWN (SSC) IN PEDIATRIC PATIENTS AT DENTAL HOSPITAL BAITURRAHMAH

¹Sri Pandu Utami, ¹Leny Sang surya, ²Utmi Arma, ³Resa Ferdina, ⁴Hanifah Maharani Al Asad

¹Department of Pedodontics , Faculty of Dentistry Universitas Baiturrahmah, Padang, Indonesia

²Department of Oral Medicine , Faculty of Dentistry Universitas Baiturrahmah, Padang, Indonesia

³Department of Prostodontic , Faculty of Dentistry Universitas Baiturrahmah, Padang, Indonesia

⁴Undergraduate Program Faculty of Dentistry Universitas Baiturrahmah, Padang, Indonesia

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ABSTRACT

Introduction: Knowledge is the result of human sensing or the result of knowing someone about an object through the senses they have at the time. Sensing to produce knowledge is strongly influenced by the intensity of attention and perception of the object. Stainless Steel Crown (SSC) is a dental alloy (alloy) material which can be used for temporary or permanent fillings in the shape of dental anatomy. The research objective was to find out the level of knowledge of professional education students about SSC in pediatric patients at RSGM Baiturrahmah .

Materials and Methods: This is descriptive with a cross-sectional research design, sampling technique with total sampling. The population was taken from 50 professional education students at RSGM Baiturrahmah who carried out stainless-steel crown treatment with univariate analysis presented in the form of frequency distribution and data processing using the computerized SPSS program version of IBM 24.0 .

Results: The results of this study were obtained because they had received material about the treatment of SSC in pediatric patients and before they carried out the treatment, they had responded in advance regarding the stages of SSC treatment in pediatric patients.

Conclusion: That the results are in the good category with a percentage of 98% (49 people) of the population studied

Corresponding Author:

Sri Pandu Utami

Department of Pedodontics , Faculty of Dentistry Universitas Baiturrahmah

Padang, Indonesia

e-mail address: panduutamidrg@yahoo.co.id

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INTRODUCTION

Knowledge is the most important domain for the formation of one's actions, therefore behavior based on knowledge and awareness will last longer than behavior that is not based on knowledge and awareness.¹ Dentist Professional Education is a type of professional education that is directed at mastering knowledge and applying knowledge to the public in dentistry to produce dentists. Dentistry education is a form of education that consists of a unified whole which includes the stages of academic education and professional education, designed to produce graduates who have competence in dentistry. A holistic and humanistic approach to patients, accompanied by a high professionalism base and always based on ethical considerations.²

Knowledge is the most important domain for the formation of one's actions, therefore behavior based on knowledge and awareness will last longer than behavior that is not based on knowledge and awareness. Phase in this profession, students face more various kinds of diseases in the oral cavity and obstacles in the clinical world that they work on according to the disease cases. Implementation of the profession students carry out various practical activities professions that have been compiled in written guidelines so that students are able to achieve maximum competence. The educational phase of professional students will go through a *pre-clinic period* where the education period will be taken for 4 years, during the *pre-clinic period* students will know about dental and oral health. Dental and oral health is a part of body health that cannot be separated from one another.³

Caries is a disease of the hard tissues of the teeth, namely enamel, dentine and cementum, in the form of decayed areas on the teeth, occurring as a result of the process of gradually dissolving the surface minerals of the teeth and continuing to grow to the inside of the teeth. *Early Childhood Caries* (ECC) is a form of caries rampant associated with bottle feeding. In children aged less than three years, the appearance of a tooth surface covered with caries indicates the occurrence of severe early childhood caries which can also be called severe early childhood caries (SECC).⁴

Nicaral dental alloy which can be used for temporary or permanent fillings in the anatomical shape of teeth and is easily shaped to be adapted to teeth with extensive damage due to caries, crown fracture, enamel hypoplasia, or restorations after nerve treatment. Stainless Steel Crown is widely used in dentistry due to various considerations, namely the ease of installation, easy to obtain, inexpensive, and the small number of patient visits, thus providing technical advantages to the operator and economical for the patient. In addition, extensive decalcification on one surface is also an indication of SSC installation.⁵

Research on the success of restoration has been proven to preserve *primary teeth* as long as possible in the oral cavity. One of factor that affect success is the proper method of crown restoration. Supporting research experience in the field of SSC restoration, especially in terms of crown restoration methods, is still very much needed so that correct crown restoration will increase the success of crown use, especially in children.⁶

Case report conducted at RSGM Sultan Agung Semarang in 2014 regarding management perforation Corona in pulpectomy of *primary* teeth prove that perforation treatment Non-surgical coronal pulpectomy of *primary* teeth performed with final closure with SSC has a good advantage because SSC has saliva resistance. Stainless Steel Crown (SSC) treatment is one of the materials that has been given to pre-clinical students at FKG UNBRAH in the "*Oral Disease in Children*" block in 6th semester. The importance of dental and oral health in early childhood, the level of knowledge of FKG UNBRAH professional education students about treatment SSC in children is very interesting to study.⁷

Based on this background, the purpose of this study was to find out how the level of knowledge of professional education students at FKG Unbrah RSGM Baiturrahmah about SSC in pediatric patients.

MATERIALS AND METHODS

The type of research used was descriptive research with a *cross-sectional* research design, according to previous research, categorizing a person's level of

knowledge into three levels based on percentage values, to assess how the level of knowledge of FKG UNBRAH professional education students regarding SSC treatment in pediatric patients by giving a questionnaire to the research sample. The research population was taken from all FKG Unbrah professional education students class of 2020 who had undergone SSC treatment of 50 people. The sample in this study were FKG Unbrah professional education students batch 2020.

This research will be conducted at RSGM Baiturrahmah, when the research will be carried out in February 2023 with the number from the Ethical Commission "Ethical Approval" No. 050/ETIK/FK-UNBRAH/03/02/2023. The tools and materials used in this study were *smartphones* and questionnaire materials in the form of a *Google form*.

FKG UNBRAH professional education students about the treatment of SSC in pediatric patients with a questionnaire tool. The research was conducted with the following procedures: Make a data collection design using a questionnaire, arrange for a permit to the academic Faculty of Dentistry, Baiturrahmah University to conduct a *validity test* research questionnaire at RSGM Baiturrahmah, then conduct *validity* and *reliability tests* questionnaire.

The questionnaire used as a research measurement tool needs to be tested for validity and reliability. The respondents used for the trial should have the characteristics of the respondents from the place where the research was carried out, in order to obtain a distribution of measurement results close to normal, the number of respondents for the trial according to previous research, at least 30 samples taken from populations outside the sample. In this study, 30 samples were taken to test the validity and reliability. The validity test technique used in this study is correlation *Pearsons Product Moment* is assisted by the IBM version of the SPSS application program 24.0 with a significant level of 10%. The questionnaire is said to be valid if the r count is greater than the r table (0.361). Questions that are already valid are tested for reliability, the reliability test technique used in this study is with a coefficient reliability *Alpha*

Cronbach is assisted by the IBM SPSS 24.0 application program. The test results are said to be reliable if *r alpha* is greater than the constant (0.6) and can be used as a data collection tool with following procedures: arrange for a permit to the academic of the Faculty of Dentistry, Baiturrahmah University to conduct research at the Baiturrahmah General Hospital, look after *Ethical Clearance* research, researchers gave questionnaires to research respondents via *mobile phones*. Then the researcher explained the questionnaire that the respondent would fill out online, if the respondent was willing to fill out the questionnaire, he was allowed to fill out *informed consent*. If the respondent has filled out *informed consent* then the researcher will then give a questionnaire "level of knowledge about SSC". After all data collection procedures were completed, the researcher performed data processing and data analysis. Make conclusions and compile reports on research results. Data analysis was performed univariately where the data that has been collected is processed and presented in the form of tables and percentages. The questionnaire is good enough to describe the required data.

RESULTS AND DISCUSSION

Based on the results of research on the level of knowledge of FKG Unbrah professional education students about SSC in pediatric patients by first presenting the sex characteristics of 50 students.

The results of the study obtained the distribution of sex frequencies FKG Unbrah professional education students can be described as follows:

Table 1. Gender Frequency Distribution

Gender	f	%
Man	12	24
Woman	38	76
Total	50	100

Table 1 can be concluded that of the 50 FKG Unbrah professional education students, the most gender was female, namely 38 people (76%).

The research results obtained frequency distribution the level of knowledge of FKG Unbrah

professional education students regarding SSC care in pediatric patients can be described as follows:

Table 2. Frequency Distribution Level of Knowledge of FKG Unbrah Professional Education Students about SSC Treatment in Pediatric Patients

Knowledge	f	%
Good	49	98
Enough	1	2
Not enough	0	0
Total	50	100

Table 2 can be concluded that of the 50 FKG Unbrah professional education students, the most knowledge was good, namely 49 people (98%) about SSC in pediatric patients.

The results of the study obtained an overview of knowledge based on gender of FKG Unbrah professional education students regarding SSC care in pediatric patients can be described as follows:

Table 3. Description of Knowledge Based on Gender

Gender	Knowledge						Total	
	Good		Enough		Not enough			
	f	%	f	%	f	%	f	%
Man	12	100	0	0	0	0	12	100
Woman	37	97.4	1	2.6	0	0	38	100
Total	49	98	1	2	0	0	50	100

Table 3 can be concluded that in the female sex, all of them had good knowledge about SSC care in pediatric patients, namely (100%) and males also had the most good knowledge about SSC in pediatric patients, namely (97.4%) and there was 1 person (2.6%) with sufficient knowledge.

The results of the study were about the level of knowledge of FKG Unbrah professional education students about SSC care in pediatric patients where it was found that most students had good knowledge of SSC in pediatric patients as evidenced by the answers to the questionnaire all answers were answered correctly as all respondents had received material about treatment SSC, have used SSC treatment in clinical practice, know the meaning of SSC and also know, if SSC treatment can preserve milk teeth with extensive caries cases, it is quite

powerful caries, fracture all of these questions were answered correctly by the respondents.

FKG Unbrah professional education students about SSC in pediatric patients, this is inseparable from the existence of this theme that has been studied and practiced before. The results of this study support the previous study regarding the level of knowledge of dental medical procedures in Mulawarman University dental students.⁸ It was found that Mulawarman University Dentistry students had a good level of knowledge and as much as 70.3%, this was because students had received previous education.

Health with a high percentage, this is because the results of the student's assessment of the level of knowledge of professional education students FKG Unbrah there are no students who have less knowledge. This is because dental students receive material regarding dental treatment procedures before carrying out treatment. They have previously made a response regarding the treatment that will be carried out to the patient, which is adequate because the material is part of the curriculum.⁹ In research conducted shows the level of knowledge in health students is prepared so that they can become professional health workers in the future so that knowledge about dental and oral health is better.¹⁰

Table 2 shows the results between the sexes and the level of knowledge in which all of them had good knowledge about SSC care in pediatric patients, namely 100% and males also had the most good knowledge about SSC in pediatric patients, namely 97.4% and there were 1 person 2.6% with sufficient knowledge. The results obtained that the level of knowledge cannot be determined based on gender. Both men and women can have good or poor knowledge.¹⁰

Basically, the ability to understand knowledge between men and women is the same, apart from that the number of male and female respondents in this study is much different, so it cannot be used as a homogeneous comparison.

CONCLUSION

Based on the results of the research that was conducted on the level of knowledge of FKG Unbrah professional education students about SSC treatment in pediatric patients, it was concluded that the results were in the good category with a percentage of 98% (49 people) and the population studied. The results of this study were obtained because they had received material about the treatment of SSC in pediatric patients and before they carried out the treatment, they had responded in advance regarding the stages of SSC treatment in pediatric patients.

For future researchers, they can develop more research on SSC treatment more broadly, because the results of this study still have many shortcomings and there are still many variables that have not been studied. It is hoped that the results of this study can be further refined by including other variables related to SSC treatment.

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