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Efforts to Improve Knowledge of Dental and Oral of Sangging in Mepandes Ceremony in Kerambitan District Bali Province, Indonesia

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ABSTRACT

One of the unique culture and loaded with religious meanings that need to be preserved is a tooth filing ceremony. Cutting teeth (Mepandes) is a ritual that must be performed by someone who is Hindu. At this ceremony is no treatment that is cutting measures or leveling the four incisors and two canines left and right in the upper jaw, three times chiselled, honed and leveled. From those actions raised complaints and no access to the spread of disease as health professionals need to think about health measures to prevent the spread of the disease and reduce complaints after cutting teeth Based on such thought. Researchers are interested in examining efforts to improve the knowledge of oral health of the sangging at the time of tooth filing ceremony (Mepandes). The study design with pretest-posttest control group (pretest - posttest with control group Design) with a large sample used in this study were 15 people on each - each treatment and control group, were selected by simple random sampling, the results of the data analyzed using analysis of Man - Whitney. Based on such thought, researchers interested in examining efforts to improve oral health knowledge of the sangging at the time of tooth filing ceremony (Mepandes).

Based on the comparison as there are no significant differences in knowledge between control and treatment groups ($p > 0.05$) before being given treatment. But after being given treatment/training, the treatment group had an average score higher than controls ($p < 0.01$). The assessment results in the treatment group the mean score of 48 at the beginning of the study and increased to 74.6. Based on the results of their research needs education about oral health with a more comprehensive method with a combination of media outreach.

Keywords: *knowledge, dental health, sangging*

INTRODUCTION

Cutting teeth (*Mepandes*) is a ceremony to be performed to someone Hindu. The purpose of mepandes ceremony contains the meaning of purification of a child as it returns to adult nature, so that it can understand the essence of being human. This ceremony is an obligation as parents to give their children moral message that is to kill six enemies (*Sad Ripu*) in the human being which

is evil and enough to be considered even as an enemy within oneself. At this ceremony, cutting or leveling four incisors and two left and right canine teeth on the upper jaw, sculptured three times, honed and leveled by a *sangging*^{1,2}.

According stimuli received by the teeth in the form of excessive heat when the teeth cut and using metal objects rubbed on teeth must leave trauma on periodontal tissue³. Riskesdas data shows dental and oral health problems, especially the periodontal tissue that caused by tartar in Bali province, is 68.6%, which is higher than the incidence in Indonesia at 67.2%⁴.

This is supported by reasect about the complaints that occurred after mepandes in Bangli regency, such as: stiffened teeth aching (92.9%), pain after cut

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(47.1%), teeth changed positions or rotated (5.3%), teeth become tenuous (23.4%), tooth decay or discoloration (9.4%), and loose tooth (16.5%)⁴. In addition to dental complaints, in the era of globalization many things can happen, including the spread of diseases such as TB, hepatitis, and AIDS. Other risk factor that can effect actions of the individu are being a male, older age, coming from a not well off or poor family background, tooth brushing,as smoking, diabetes, and hypertension and malocclusion^{6,7,8}

According) the spread of the disease can be called through the breath, saliva, blood⁹.

Sangging is a very noble profession, passed on from generation to generation without training, to the present without the monitoring of the unity of PHDI (Hindu Dharma Council of Indonesia).As professionals,they should have knowledge about the teeth, diseases that can be transmitted or transmitted through tooth cutting and how to avoid transmission of disease.

Knowledge is the result of knowing and this occurs after people make sensations to a particular object¹⁰. Almost all knowledge is obtained through the eyes and ears. With increased knowledge can also increase the behavior of a person in action because according to Green, behavior is affected by three predisposing factors, supporting factors and reinforcement factors¹¹.

MATERIALS AND METHOD

The study was carried out with Pretest - Posttest with contol group Design. The population in this research is all sangging in Kerambitan sub-district, Tabanan regency. To calculate the number of samples of researchers using the formula Pocock ¹².

$$n = \frac{2\sigma^2}{(\mu_1 - \mu_0)^2} x J(\alpha, \beta)$$

$$n = \frac{2x12^2}{15^2} x10,5$$

$$n = 13,44$$

The data that have been collected then statistically analyzed: paired data and the type of data is non-parametric then analyzed by Wilcoxon test. In order to know the change of knowledge and behavior that happened before and after the treatment was done Mann - Whitney test.

RESULTS

Table 1: Subjects Characteristics

Characteristics	Treatment		Control	
	n	%	n	%
Age				
38-49	1	6,7	1	6,7
50-61	12	80	11	73,3
62-72	2	13,3	3	20
Duration of sangging profession				
0-10	8	53,3	7	46,7
11-20	4	26,7	5	33,3
21-30	3	20	3	20
Level of education				
Elemntary	7	46,7	6	40
Secondary	4	26,7	4	26,7
High	4	26,7	5	33,3

In Table 1 can be seen that the sangging age is between 50-61 years, *Duration of sangging being 1-10*, with the most education being elementary education.

Table 2: Knowledge level distribution

Knowledge level	Treatment		Control	
	n	%	n	%
Before				
Fail	6	40	5	33,3
Bad	3	20	4	26,7
Enough	4	26,7	4	26,7
Good	1	6,7	1	6,7
Very good	1	6,7	1	6,7
	15	100	15	100
After				
Fail	0	0	5	33,3
Bad	4	26,7	4	26,7
Enough	2	13,3	4	26,7
Good	2	13,3	1	6,7
Very good	7	46,7	1	6,7
	15	100	15	100

Table 2 shows that the level of knowledge before treatment is by the fail knowledge level but after training the knowledge gained is very good, while the control group the level of knowledge does not change.

Table 3: Distribution of dental and mouth health knowledge of sangging

Variable		Mean Rank	Sum of Rank	Z	Sig (p) (2-tailed)
Treatment	Pre knowledge	8.00	120.00	- 3.494	0.001
	Post knowledge	0.00	0.00		
Control	Pre knowledge	4.00	20.00	-1.134	0.257
	Post knowledge	4.00	8.00		

Table 3 can be seen that the results of dental and oral health knowledge analysis of sangging knowledge control group before and after the value of sign = 0.257 and in treatment groups before and after the value of sign = 0.001.

Table 4: Distribution of Dental and Mouth Health Behavior of Sangging

Variable		Mean Rank	Sum of Rank	Z	Sig (p) (2-tailed)
Treatment	Pre behavior	8.00	120.00	- 3.494	0.000
	Post behavior	0.00	0.00		
Control	Pre behavior	2.00	6.00	-1.732	0.83
	Post behavior	0.00	0.00		

From Table 4 can be seen that behavioral analysis of dental and mouth behavior of sangging behavior control group before and after with sig value = 0.83 and treatment group before and after value of sig = 0.000.

Table 5: Knowledge distribution

Variable		Mean Rank	Sum of Ranks D	P Value
Pre knowledge	Treatment	15.03	225.50	0.769
	Control	15.97	239.50	
Post knowledge	Treatment	20.07	301.00	0.004
	Control	10.93	164.00	

In Table 5 can be seen that the knowledge before treatment mean Rank treatment group and control group is equal to p = 0.769, but after treatment there is difference of control group knowledge and treatment with value of sign = 0.004.

Table 6: Behavior distribution

Variable		Mean Rank	Sum of Ranks D	P Value
Pre behavior	Treatment	14.60	219.00	0.503
	Control	16.40	246	
Post behavior	Treatment	22.93	344.00	0.000
	Control	8.07	121.00	

Table 6. It can be seen that the behavior before treatment of Rank Rank of treatment group and control group is equal to p = 0.503, but after treatment there is difference of control group behavior and treatment with value of sign = 0,000

DISCUSSION

Sangging is a person who cut the teeth during mepandes ceremony. A sangging is usually hereditary

regardless of education level and level of ability. The age distribution of the sangging is older, the average being sangging 0-10 years old, the most is basic or elementary education¹³.

Knowledge of sangging followed by behavioral changes. It can be seen that there is difference of mean score of behavior on before and after treatment group (p <0,01). Interview and counseling approach to sangging give positive result to the increasing of

sangging behavior. The results of this study closely match the opinion of Hosland which states that behavior change is essentially the same as the learning process. The learning process in the individual consists of: the stimulus given to the individual, if the stimulus has received attention (accepted) then proceeded to the next process of processing the stimulus so that there is a willingness to act (attitude) with the support of facilities and encouragement from the environment then the stimulus has the effect actions of the individual (behavior change)¹¹. Jack at all wrote that collaborative relationships between researchers and health extension-makers, initiated early and maintained throughout a research project, promote both the efficient conduct of a study and increase the likelihood of knowledge transfer and exchange¹⁴⁻¹⁷. In the experimental group; 6 months of intervention achieved improvements in HIV/AIDS related knowledge. After 12 months; HIV/AIDS-related knowledge reached near maximal scores. Attitude and most behaviors scores were significantly improved¹⁸⁻²¹.

The professionalism of a sangging increases with understanding of health before taking action to others such as maintaining personal hygiene and self-protection so as not to infect or infecting others. If the cutting process is carried out in accordance with the health method, then there is no fear and doubt to cut the teeth so that the tradition of cutting teeth can be established in Bali and Balinese culture can be sustainable²⁰⁻²³.

CONCLUSION

The training package that is accompanied by counseling to increase the knowledge and behavior of the sangging in performing the cuttings significantly improves the knowledge and behavior of the sangging in the cutting process. In the control group there was no significant change in the knowledge and behavior of sangging in the cutting process. At the end of the study the treatment group was higher than the control group.

Conflict of Interest: All author declare that there is no any conflict of interest within this research and publication including the financial agency.

Ethical Clearance: Obtained from the University committee and respondent agreement

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