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### Development of method for information delivering of dental cutting according to the health rules to sanggings in tabanan regency in 2018

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#### ABSTRACT

Bali Island as the main tourist destination of Indonesia, is famous for its natural beauty which is supported by its cultural uniqueness that is very closely related to Hinduism, one of which is the tooth-cutting ceremony. Tooth cutting ceremony is a ceremony that must be carried out by Hindus, full of meaning, ethical values, ritual, and religious, so it needs to be preserved. If the process of cutting teeth is carried out in accordance with the health method, then there is no fear and doubt to cut teeth so that the tradition of cutting teeth can be steady and sustainable.

The purpose of this research is to develop a method of delivering information on cutting teeth according to the health method to the recipients in Tabanan district in 2018. This research is a quasi-experimental design approach with pre and post with control group approach. Where there are two groups, namely the treatment and control groups. The treatment group was given counselling with audio-visual media (video bondres) after the pre-test, while the control group was still given treatment in the form of counselling with the treatment of manual tooth-cutting in accordance with the health method after the pre-test. Analysis that carried out was univariate frequency distribution, percentage and bivariate with homogeneity, and normality tests using Kolmogorov Smirnov because respondents were more than 50 respondents, results were not normally distributed so the statistical tests used Wilcoxon signed Ranks test and Mann Withney test. Of the two counselling methods through videos and booklets to increase competent knowledge about the method of cutting teeth in accordance with the health method in Tanbanan Regency showed a significant increase ( $p = 0,000$ ), from both methods of education it was found that the method with the booklet was more effective. It is hoped that Parisada Hindu Darma will print tooth-cutting manual in accordance with the health method to be distributed to the recipients to increase knowledge, so that the congregation will be more comfortable in carrying out the tooth-cutting ritual.

**Keywords:** Tooth-cutting, Sangging, Health method

#### PREFACE

Bali Island as the main tourist destination of Indonesia, is famous for its natural beauty which is supported by its cultural uniqueness that is very closely related to Hinduism, one of which is the

tooth-cutting ceremony. Tooth cutting ceremony is a ceremony that must be carried out by Hindus, full of meaning, ethical values, ritual, and religious, so it needs to be preserved.

The results of Widayanti's research (2010) found complaints that occurred after cutting teeth in Bangli Subdistrict, among others: the tooth that was got sanggih was felt aching (92,9%), pain after got sanggih (47,1%), tooth changed position or rotate (5,3%), tooth become tenuous (23.4%), teeth died or changes colour (9.4%), and tooth shakes (16.5%). According to Ingge (2002) thermic stimulation is the stimulation received by the teeth in the form of excessive heat when the teeth are inlaid and using metal objects that are rubbed on the teeth must leave trauma to the support brace. Sagung (2016) found that sanggih is a hereditary profession, with a moderate level of knowledge about health and teeth so it needs efforts to increase health knowledge, as well as oral health of the Sanggih during the mepandes (cut teeth) ceremony.

At this ceremony there are four things to consider. The first treatment on the teeth, it is cutting, or levelling four incisors and two left and right canines in the maxilla, chiselled three times, sharpened and levelled (Sudarma, 2009). Secondly there is the spread of the disease through breath, saliva, blood (Duhita R, 2012). Third is the person who performs the tooth-cutting ceremony called Sanggih, fourth is the tools used to cut teeth.

Efforts to make a sanggih able to absorb new information, understand dental and oral health, how to maintain personal hygiene so that transmission of disease from sanggih or those with teeth cut off helps solve public health problems. What method is more effective to convey information about cutting teeth according to the health method? So that the purpose of this study is to develop methods for delivering tooth-cutting information in accordance with the health method to the sanggih.

## RESEARCH METHOD

This is a quasi experimental design with a pre and post with control group approach. Where there are two treatment groups and a control group. The

treatment group was given counselling with audio-visual media (video bondres) after the pre-test, while the control group was given treatment in the form of counselling with the treatment of manual tooth-cutting in accordance with the health method after the pre-test.

Sanggih population in each sub-district is not known certainty, because there is no definite data about sanggih, but according to the person responsible for culture in the sub-district (majelis alit), the number of sanggih in one sub-district is more than 50 so researchers search for samples using the Sugiono's formula (2005) so as to get a sample of at least 27 people, to maintain the lack of data, the researchers added 10% of the total sample so that the samples to be searched were 30 respondents each. The sample in this study was the one that met the inclusion criteria. Inclusion criteria: a member of a local traditional village, at least 25 years old, male and female sex, able to read and write, willing to be a sample. The exclusion criteria were: being sick so unable to implement a tooth-cutting, not being willing to be a sample

Research by using univariate analysis of frequency distribution, presentation and bivariate with homogeneity test and normality test using Kolmogorov Smirnov because the respondents were more than 50 respondents. If the results are not normally distributed, the statistical test uses the Wilcoxon signed Ranks test and the Mann Withney test, whereas if the data is normally distributed then it is tested by the independent t-test statistical test.

## RESULT AND DISCUSSION

Based on the results of a study of 33 sanggih people from the video intervention group and 30 from the booklet group, it is discovered that the average age in the booklet group is  $51,7 \pm 9,02$ , the average age in the video group is  $59,69 \pm 9,00$ . To find out how long become sanggih, and what is the sanggih's level of education can be seen below

Distribution of Characteristics of Research Subjects				
Characteristic	Video/treatment		Booklet/Control	
	n	%	n	%
Age				
32-48	3	9,09	11	36,67
49 – 65	23	69,70	17	56,67

66 - 82	7	21,21	2	6,66
How long has become a sangging				
0 -10	19	57,58	24	80
11-20	9	27,27	3	10
21 - 30	5	15,15	3	10
Education				
Elementary	10	30,3	1	3,3
Junior High	16	48,5	20	66,3
Senior High	7	21,2	9	29,4

The table above shows that the age of most sangging is between 49-65 years, the length of being a sangging is 1-10 years, with the most education being senior high school education.

### Knowledge about cutting teeth in accordance with the rules of health in the sample before and after treatment

Changes in knowledge about cutting teeth in accordance with the rules of health in the sample before and after treatment can be seen in the table below:

#### Distribution of Knowledge Level of the video group and booklet group before and after treatment

Level of Knowledge	Video/treatment		Booklet/Control	
	n	%	n	%
<b>Before</b>				
Failed	2	6,06	3	10,00
Less	6	18,18	5	16,67
Enough	7	21,21	5	16,67
Good	13	39,40	14	46,66
Very Good	5	15,15	3	10,00
	<b>33</b>	<b>100,00</b>	<b>30</b>	<b>100,00</b>
<b>After</b>				
Failed	0	0,00	0	0,00
Less	0	0,00	0	0,00
Enough	3	9,09	0	0,00
Goof	13	39,39	6	20,00
Very Good	17	51,52	24	80,00
	<b>33</b>	<b>100,00</b>	<b>30</b>	<b>100,00</b>

The table above shows that in the group of videos and booklets, the level of knowledge before treatment is the level of knowledge that fails, but after treatment an increase in knowledge is very good.

## Dental and oral health knowledge of sangging in the video group and booklet groups before and after treatment

Distribution of dental and oral health knowledge of the sangging in the video group and treatment groups before and after treatment

Variable	Mean Rank	Sum of Rank	Z	Sig (p) (2-tailed)
Video Knowledge	16.48	478.00	-	0.000
/treat pre Knowledge	9.00	18.00	4.5	
ment post Knowledge			45	
Booklet Knowledge	15.00	435.00	-	0.000
et pre Knowledge	0.00	0.00	4.7	
/Cont Knowledge			20	
rol post Knowledge				

In the table above, it can be seen that the results of the analysis of the knowledge of tooth cutting in accordance with the health methods of the sangging in the video/Marga group, the knowledge before and after the sign score = 0,000 and in the booklet/Kediri group of knowledge before and after, there is a change with the score of sign = 0,000.

### Analysis of changes in dental and mouth health knowledge of the sanggings before and after the training.

To find out the changes that occurred before and after treatment in the video and booklet groups, the Man – Whitney test was performed, which can be seen below.

Distribution of knowledge before and after the booklet and video group				
Variable		Mean	Sum of Rank	Sig (p) (2-tailed)
Knowledge pre	video	65,60	1052.50	0.961
	booklet	65.00	963.50	
Knowledge post	video	77,73	1203.00	0.001
	booklet	85,33	813.00	

From the table above, we can see that the knowledge before treatment of the video group and booklet group is the same as  $p = 0,961$ , but after treatment there is a difference in the knowledge of the booklet and video group with a sign score = 0,001

## DISCUSSION

Research conducted on 63 sanggings (30 booklet groups and 33 video groups) in Tabanan district, found the average age in the video group was  $59,690 \pm 9,00$  the average age of the booklet group was  $51,73 \pm 9.02$ . Judging from the

distribution of the age of the sangging more at the age of 45-65 years. The average length of being able to be sangging in the video group was  $13,27 \pm 11,29$  while the average length of being able to be sangging in the booklet group was  $7,57 \pm 9,26$ . Most of the video groups (57.58%) and booklets (80%) have become a sangging for 0-10 years. Judging from the distribution of education, the largest sample of junior high school education is in the video group (48,5%), while the rest is elementary school education, only a few are in senior high school education, and the booklet group (66.3%), while the rest is in senior high school

education, only one with elementary school education.

### **Measuring the score of pre-test and post-test in the video group**

The difference between pre-test and post-test in the treatment group can be seen by using paired t-test. In paired t-test, the data is said to be a difference between the pre-test and post-test scores if the p score  $<0,05$  (Sopiyudin Dhlan, 2008: 69). After testing, the results show that  $p = 0,000$  ( $p <0,01$ ). Giving counselling with video to the sangging gives positive results to the increase in the knowledge of the sanggings.

Video media is one way to increase the knowledge of the sanggings about tooth-cutting in accordance with the health method. Media as one that can be used to channel messages, stimulation of thoughts, feelings, day-to-day, and will so that they are encouraged in the learning process. In accordance with the FISUI Broadcasting Centre (2005: 2) which states that film/video is one of the effective learning media, there is a tendency to increase ownership of electronic devices such as television, personal computers, and mobile phones.

This research is in line with the research of Anita DH and Sri H (2017) which states that the use of counselling with audio-visual media is very effective to add knowledge to someone who will further enhance positive values or attitudes so that they can be directly practiced on values or attitudes and will practice to positive direction.

The results of this study are in accordance with the opinion of Hosland (in Notoadmodjo, 2007) which states that behaviour change is essentially the same as the learning process. The learning process of individuals consisting of: stimulus given to individuals, if the stimulus has received attention, then proceed to the next course to process 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 an effect the actions of these individuals.

### **Difference between Pre-test and Post-test Score in Booklet Group**

The difference in the pre-test and post-test scores in the booklet group can be determined by conducting a t-test. Based on the analysis it was found that  $p = 0,000$  ( $p <0,01$ ). The provision of

counselling with booklets to the sanggings gave positive results to the increase in the knowledge of the sanggings.

This study is in line with the research of Hadi, et al (2011) states that there is an increase in cognitive, affective and psychomotor after being given health education using printed media. Susanti (2011) also stated that there was a significant improvement after being given a health education intervention using printed media by 81,46%. This was because printed media could display images and languages that were better understood by the target. Research by Wahyuni, Sarma and Pulungan (2007) shows the results that there is a significant relationship between counselling provided with the mass media by changing behaviour ( $p = 0.009$ ).

### **Difference between Pre-test and Post-test Score in the video and booklet groups**

From the Man-Whitney analysis of sanggings' knowledge, it shows that the mean in the treatment and control groups before treatment is almost the same as the score of  $p = 0,961$ , but after treatment, there is a significant change with the score of  $p = 0,001$ . This shows that the treatment in the form of counselling by using videos or booklets is very important to increase the knowledge of the sanggings when carrying out tooth-cutting. From the results of research, counselling using booklets is more dominant than using videos in increasing the knowledge of the sanggings in tooth-cutting according to the health method. This study is in line with the research of Sri, Junaiti and Sukihananto (2016) which states that counselling with printed media is a dominant factor in hypertension care.

According to Kerta (2008) a sangging is a person in charge of cutting tooth during the process of tooth-cutting. A sangging who is usually hereditary does not look at the level of education, age, length of time he is capable, and the level of ability, so it can be ascertained that the understanding and level of acceptance of information is also very different. According to Hamidjoyo and Latuher in Ida (2014), states that the media are all forms of intermediaries used by humans to convey ideas, thoughts, or opinions expressed to the intended recipient. The principle of using media is that no media is suitable for all kinds of learning, there is no media that must be

used to exclude other media, so the use of media must be carefully prepared.

## CONCLUSION AND SUGGESTION

Of the two counselling methods through videos and booklets to increase knowledge about the ability to cut tooth according to the health method in Tanbanan Regency shows a significant increase ( $p = 0,000$ ). From both methods of education, it was discovered that the method with the booklet was more effective.

## SUGGESTION

There is a need for counselling on dental and oral health with a more comprehensive method with a combination of extension media. In this research, counselling by using media booklets is more effective, so it is expected that Parisada Hindu will print tooth-cutting manual in accordance with the health method to be distributed to the sanggings to increase knowledge, so that the followers will be more comfortable in carrying out the ritual of tooth-cutting.

## REFERENCES

- [1]. Agus Riyanto 2011. Aplikasi Metodologi Penelitian Kesehatan. Yogyakarta: Maha Medika.
- [2]. Anita Dyah Listyarini dan Sri Handriyastuti., Penyuluhan Dengan Audio Visual Meningkatkan Perilaku Hidup Bersih Anak Usia Sekolah. *The 5 th Erecol Proceeding*. 2017, ISBN 978-979-3812-42-7
- [3]. Chin, J.,2000. Manual Pemberantasan Penyakit Menular. Jakarta: Imfomedika.
- [4]. Duhita Rinendy, 2012, Hubungan Pengetahuan dan Sikap Mahasiswa Profesi dengan Tindakan Pencegahan Penyakit Menular di Rumah Sakit Gigi dan Mulut Universitas Jember (skripsi).
- [5]. Hadi,C., Sugiarto., Mula, K.Y dan Rahmah, Z. Pengaruh Penyuluhan Kesehatan dengan Media Komik tanggap DBD terhadap peningkatan pengetahuan dn sikap terhadap pencegahan DBD di SDN Banjarejo, Kabupaten Kediri. Faculty of Medicine Brawijaya University Malang (Tesis) 2011.
- [6]. Handnyanawati H. Pemanfaatan Multimedia Sebagai Media Penyuluhan Kesehatan Gigi. *Indonesia Journal of Dentistry*. 14(3), 2007, 177-180
- [7]. Kementerian Kesehatan RI, 2013. Riset Kesehatan Dasar. BalitbangKes, Jakarta.
- [8]. Mubarak W I, Chayanti N, Rozikin K., Saupradi. *Promosi Kesehatan*, Yogyakarta: Graha Ilmu 2007.
- [9]. Nazir, M,2005. *Metodologi Penelitian*. Bogot : Ghalia Indonesia
- [10]. Notoatmodjo, S.. *Metodologi Penelitian Kesehatan*, Jakarta: Rineka Cipta 2002.
- [11]. Notoatmodjo. *Pendidikan Perilaku*, Jakarta: Rineka Cipta 2003.
- [12]. Notoatmodjo, *Promosi Kesehatan*, Jakarta: Rineka Cipta 2005.
- [13]. Nuryani, S., *Anatomi/ Fisiologi Gigi*, Surabaya: Akademi Kesehatan Gigi 1997.
- [14]. Putri M.H, Herijulianti E, Nurjannah N, Ilmu Pencegahan Penyakit Jaringan Keras dan Jaringan Pendukung Gigi, Jakarta: EGC 2015.
- [15]. Sea, F., 2000, *Ilmu Penyakit Gigi dan Mulut*, Denpasar: Akademi Kesehatan Gigi.
- [16]. Silitonga,A.B., t.t., Penerapan Metode Demonstrasi dan Metode Latihan pada Pembelajaran Pembungkusan, (online), available: <http://educare.efkipunla.net/index.php?> 2008.
- [17]. Siti Amanah., Makna Penyuluhan dan Transformasi Perilaku Manusia. *Jurnal Penyuluhan*. Maret 3, 2007, 1858-2664
- [18]. Sri, H.,Juniati,S., dan Sukihananto. (2016) Penyuluhan kesehatan melalui media cetak berpengaruh terhadap perawatan hipertensi pada usia dewasa di kota Depok. *Jurnal Keperawatan Indonesia, volume 19No 3 Nopember 2016, hal 161-168. pISSN 1410-4490, Eissn 2354-9203. DOI : 10.7454/jki.v19i3-469*
- [19]. Sudarma, Pengertian dan Makna Potong Gigi, (online), available: <http://dharmaveda.wordpress.com> (2009, Oktober 05) 2009.
- [20]. Sudarsana I.B. Putu, *Makna Upacara Potong Gigi*, Bali: Panakon Publishing 2008.
- [21]. Sugiyono. *Statistik untuk Penelitian*. Bandung: CV Alfabeta 2005.
- [22]. Sopiyo Dahlan. 2018. *Statistik Untuk Kedokteran dan Kesehatan* . Jakarta: Bina Mitra Press . gio.
- [23]. Syah, M., 2007, *Psikologi Belajar*, Jakarta: Raja Grafindo Persada.

- [24]. Wahyuni, E.S.,Sarma,M. dan Pulungan,I.. Faktor-faktor yang berhubungan dengan perilaku membaca dalam memperoleh informasi gaya hidup sehat . Jurnal Penyuluhan , 3(2), 2007, 100-109.
- [25]. Yudi, R.S, Insi,F.D.A, Irvan, A, 20016. Film yang Efektif sebagai Media Promosi Kesehatan bagi Masyarakat. *JSK*, 2(2), 2016.
- [26]. Zakaria,R.K. Vonny,N.S.W, Pauli1096-1102na, N.G, 2016. Perbandingan efektifitas pendidikan kesehatan gigi menggunakan Media Vidio dan Flip Chart terhadap Peningkatan Pengetahuan Kesehatan Gigi dan Mulut Anak. *Jurnal e-Gigi (Eg)*, 4(2), 2016.

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