

Behavior of Maintaining Dental and Oral Health Among Dayak Paramasan Tribe in Kabupaten Banjar, South Kalimantan

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Abstract

Tribal communities tend to not pay attention to health problems, especially oral and dental health. They prioritize to fulfill the needs of everyday life, whereas the oral health can affect the quality of life. This study aims to determine the description of the behavior of maintaining dental and oral health among Dayak Paramasan tribe. Descriptively observational study with cross sectional approach was conducted in December 2015. Accidental sampling technique was employed and a total of 30 subjects from Dayak Paramasan tribes (aged 20-50 years) were selected. The variables studied were the behavior of maintaining dental and oral health using questionnaire measuring instrument. Data were presented in the form of frequency distribution tables. Results showed that 100% subjects had poor behavior in maintaining oral health. This situation is caused by low level of education and awareness about oral health, inadequate health facilities, long distance access to health care centers and the lack of health promotion.

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Introduction

Indonesia has a lot of rural areas scattered mainly outside Java Island. Most of the inhabitants in the rural areas outside the Java Island have low education and socioeconomic level. They commonly live in remote and backward villages along the river and hill. It lacks means of transportation and has no access to the outside world. This situation affects their behavior on dental and oral health. They tend to not pay attention to health issues especially on dental and oral health. They prioritize more on fulfilling their daily needs, whereas dental and oral health can influence quality of life of individual and health in general.

Health status is affected by the interaction of health awareness, socio-culture, demography, economy, education and politic. Beliefs, customs, myths, practices related to health and disease also affect rural people's health behavior. Tribal communities are still largely illiterate,

undeveloped, isolated (insulated) from the surrounding area with low level of education and economy, most of them live in remote inaccessibility hills.¹

Most of the failures oral health programs are caused by the lack of government attention to the rural community in the aspect of education, where the education levels are low. Most of them are illiterate so that they neither know nor understand the knowledge about oral health, low level of behavior in maintaining oral health, inadequate health facilities, the cost of expensive dental care and difficulties to access the area.^{2,3}

From the explanation above, the writer want to observe the behavior of Dayak Pramasan tribal communities in Kabupaten Banjar in maintaining dental and oral health.

Materials and methods

This research is observational descriptively using cross sectional approach on rural society Dayak Paramasan tribe in Kabupaten Banjar to those subjects whose age ranging from 20-50 years old in December 2015. Accidental sampling technique was employed and a total of 30 subjects were selected. Observed variable was behavior of maintaining

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dental and oral health by using questionnaire as means of measurement. Data are presented descriptively in the form of frequency distributive tables.

Results

The result of this research of behavior of maintaining dental and oral health in rural society Dayak Paramasan tribe in Kabupaten Banjar in the age of 20-50 is as following:

Respondents in the age of 20-30 years old are 11 (36,7%), in the age of 31-40 years old are 8 (26,7%) and in the age of 40-50 years old are 11 (36,7%). Most respondents are 20-30 and 40-50 years old (Table 1). Male respondents are 21 (70%) and female respondents are 9 (30%). Most respondents are male respondents (Table 2).

Age					
20-30 years old		31-40 years old		40-50 years old	
Total	%	Total	%	Total	%
11	36,7	8	26,7	11	36,7

Table 1. Respondent Characteristics by Age.

Gender			
Male	%	Female	%
21	70	9	30

Table 2. Respondent Characteristics by Gender.

Education									
Uneducate	%	Elementar	%	Junior	%	Senior	%	College/Universi	%
d		y School		High		High		ty	
		School		School		School			
15	50	15	50	0	0	0	0	0	0

Table 3. Respondent Characteristics by Education Level.

Uneducated respondents are 15 (50%) and fifteen remaining respondents (50%) are elementary school graduates while Junior High School and Senior High School graduates can't be found. Most respondents are elementary school graduates and uneducated persons (Table 3). Unemployed respondents are 4 (13,3%), and twenty six (86,7%) respondents

work as farmers. On the other hand, respondents working as trader and civil servant are not found. Most respondents work as farmers (Table 4).

Occupation							
Unemployed	%	Farmer	%	Seller	%	Civil	%
						serva	
						nt	
4	13,3	26	86,7	0	0	0	0

Table 4. Respondent Characteristics by Occupation.

Distance between Public Health Center and Home							
0-5 km	%	6-10 km	%	10-15 km	%	≥15 km	%
0	0	23	76,7	7	23,3	0	0

Table 5. Respondent Characteristics by The Distance between Public Health Center and Their Homes.

Behavior of Maintaining Dental Health					
Buruk	%	Sedang	%	Baik	%
Poor		Moderate		Good	
100	100	0	0	0	0

Table 6. Respondent Characteristics by Their Behaviour of Maintaining Dental Health.

The total of respondents whose house are 6-10 km away from public health center are 23 (76,7%), and seven remaining respondents' houses (23,3%) are 10-15 km away from public health. Respondents whose houses are less than 5 km and ≥ 15 km away from public health center can't be found. In most respondents, the distance between their houses and public health centers is about 6-10 km (Table 5).

The total of respondents classified as bad category behavior in maintaining dental health are 30 (100%). On the other hand, respondents who have behavior of maintaining dental health with average and good category are not found (Table 6).

Discussion

Most of respondents are male whose age ranging from 20-30 years old and 40-50 years old. Most of respondents are elementary school

graduates, uneducated persons and farmers. The average distance between public health service and their houses is about 6-10 km. All the respondents are classified into bad behavior category in maintaining dental and oral health. Oral diseases make significant contributions to the global burden of disease. The underlying cultural beliefs and practices might have influence on the oral health. Tribals are people living in isolation with their traditional values, customs, beliefs and myth intact.⁴

Rural populations have lower dental care utilization, higher rates of dental caries, lower rates of insurance, low education level, low socioeconomic level, high of unemployment, higher rates of poverty, less water fluoridation, fewer dentists per population, the cost of expensive dental care and greater distances to travel to access care than urban populations.^{5,6,7,8}

The same research as Singh (2012), was conducted to determine the oral health knowledge, attitude and behaviour among urban and rural population in Sunam, India with 1760 total population, comprising of 892 (50.7%) males and 868 (49.3%) females. The rural population consists of 929 (52.8%) compared to 831 (47.2%) from urban area. He said that the level of knowledge, attitudes and behaviors inland communities about oral health is low compared to urban areas. The mean knowledge score of rural population was 6,84, whereas urban population was 9,02. The mean attitude score of rural population was 3,98, whereas urban population was 4,64. The mean behaviour score of rural population was 3,78, whereas urban population was 5,29. Urban people had higher level of oral health knowledge, attitude and behaviour compared to rural.⁹

The research which was done by Azodo et al (2015), about status of oral cleanness and behavior of maintaining oral cleanness in rural society reported that only few people brush their teeth two times or more regularly (19,5%), most of them brush their teeth once a day (74,7%). People seldom see dentists to check their teeth condition (5,8%). The level of oral cleanness of rural society is low and behavior of maintaining oral cleanness is bad.¹⁰ Solanki, et al (2014) who conducted similar research about knowledge, behavior, and perception differences on dental and oral health between urban and rural society in Jodhpur city showed that simple behavior of maintaining dental and oral health like brushing

teeth twice a day regularly was not daily habit of people in rural area. The habit of brushing teeth by using toothpaste in rural society was still low (22,4%). People who brush their teeth in correct time are only 16,4% from all research samples. Beside that, the use of mouthwash in rural area was also still low (31,4%). They neither know nor use dental floss to help maintaining dental cleanness. The knowledge, behavior and perception about dental and oral health in rural area were worse than urban area thus it need to be enhanced. Introduction and education program on dental and oral health were needed to alter lifestyle of pertinent rural society so that it can increase the degree of the health.¹¹

Over the years, the mobilization and acculturation of the tribal has brought a dramatic change in lifestyle and values in society. The slow development along with high levels of poverty and poor access to available health care facilities made the rural population susceptible to various health problems.¹²

Research on Iruligas tribe by Kanadakuppe et al showed 29.94% of the Iruligas tribe required referral needs according to the different needs of care preferred for different oral diseases. Most Iruligas settlements were a group of some remote villages, there was no access by road, and long distances between villages. Most people used public transport which were not available in all villages. Trips to such places were usually done by walking through the Handi-Gundi hills and forests. This situation coupled with the expensive cost travel make Iruligas people reluctant to seek dental treatment.¹³

Tribal society groups usually inhabit remote villages, they generally live in underdeveloped environments, many in forest areas inland along rivers and hills without any communication facilities with other tribes or the outside world, they tend to be isolated. They have very low level of education and socioeconomic status, many of whom are illiterate, less awareness of health, incorrect behavioral health, the lack of use of health services, lack of medical facilities, the vast majority do not have access to dental services because the distance to health services are far from their homes and they have no health insurance as well. Rural inhabitants had varied health problems such as high susceptibility to the development of caries and difficulties to

implement health care programs for inhabitants.^{2,10,14,15,16}

Such rural society conditions would affect their dental and oral health. Data collected showed dental and oral health conditions were bad between tribes in the hills. Average number of caries using DMF-T index was 6.53, where in the component M was 5.5. The main factors to explain this situation is characteristic of the society and isolated lifestyle. Rural tribes do not fully accept the health service. Dental caries and periodontal disease treatments are expensive. Distances from the health care center forced them to stay in the village and look for a traditional herbal medicine. Most rural communities have traditional knowledge of medicinal plants and they prefer to use traditional medicine as a first aid for treating diseases such as cough, toothache or bleeding gums.¹⁷

Conclusions

Behavior of maintaining dental and oral health among Dayak Paramasan tribe in Kabupaten Banjar is bad categories.

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Declaration of Interest

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