

# A Dental-Anthropological Study of Health and Illness Behaviour Among Orang Asli of the Semai Tribe: The Perspective of Traditional Healers

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## Summary

This observational study investigates and describes the oral health beliefs and illness behaviour in the Semai tribe of Orang Asli community. Data was obtained from a "Key informant interview" method i.e. the village Tok Halaq (Traditional healer). Information about common oral diseases and conditions were illustrated with enlarged pictures of dental caries, periodontal disease, oral cancer and cleft. The most common oral problem was toothache. This is treated by self-medication. However if the pain still persist, the Tok Halaq was consulted to start traditional methods. He will identify the cause. If "germs" were thought to be the cause, he will ask the person to see a doctor. Otherwise, he attempts traditional treatment. If the effort failed after a few days, the person will be advised to see a doctor. It appears that the Tok Halaq plays an influential role in prevention, promotion and the healing process in this community. Hence any effort to promote oral health and prevent oral disease must seek their cooperation. Their beliefs on causes of common oral diseases are described in the text.

**Key Words:** Dental anthropology: Orang asli, Health, Illness behaviour

## Introduction

Orally-related illness behaviour of minority ethnic groups is a poorly researched area in most populations. This may cause problems when inappropriate strategies to promote their oral health are implemented. Therefore understanding their beliefs and values are essential to increase the chances of acceptance and success. "Optimum health" is a cultural value shared by all health care professionals. However not all patients share this value. Failure to understand this fact can result in defining patients who have values different than the

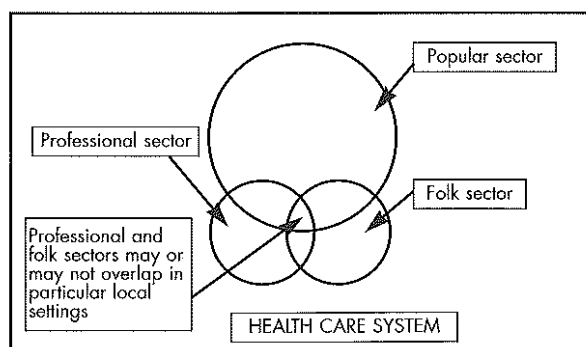
care provider leading to labeling their behaviour as "bad", "uncooperative" or "difficult". The cultural context of a patient's behaviour refers to the implicit and explicit tendencies of the subgroups to respond to stimuli according to their learned styles of coping. Each subgroup has its own unique way of seeing, interpreting and coping with its environment and the people in it<sup>1</sup>. For dental health, inequalities occur in different ethnic groups although their socio-economic and fluoridation status appear to be similar<sup>2</sup>. This suggests that their beliefs, culture and therefore habits may be an important variable of oral health status.

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Kleinman (1985)<sup>3</sup> on the basis of anthropological work suggested that typically there are three major arenas of care in what he calls the "local health care system": popular, folk and professional. The popular sector embraces self-care, including self-medication and self-help groups. The folk sector comprises "non-professional specialist" who offer some form of alternative or non-orthodox therapy. The professional sector comprises those who practice biomedicine (Figure 1).

In Peninsular Malaysia, the Orang Asli aborigines (OA) forms a very small minority (0.7%) of the total population<sup>4</sup>. Some live near to established mainstream communities but most continue to live in the deep hinterlands and only occasionally contact with the mainstream population. The government has been trying hard to serve these marginalised populations with better services including oral health care. However, the community hardly uses modern dental services even when these services are made available<sup>5</sup>. The reason is not well understood because very little is known about their traditional system of coping with ill-health, especially with regards to oral and dental health problems.

Many studies reported that generally the OA experienced many serious health problems<sup>6</sup>. These problems reflect underdevelopment such



**Fig. 1: The local health-care system: internal structure (From Scambler, 1991).**

as high infant and toddler mortality rate, infections and parasitic conditions like tuberculosis and malaria, and poor nutritional status, low growth and anaemia<sup>7</sup>. However, national data on oral health status is scarce. One study reported that the overall prevalence of dental disease in children was low. Their children had lower prevalence of dental caries for permanent teeth, but comparable levels of deciduous caries as compared to the mainstream population<sup>8,9</sup>. A study in an adult population found that the unmet dental need was high indicating poor utilization of dental services even when these were made available<sup>5</sup>.

However, no qualitative studies have been done concerning their beliefs and illness behaviour related to oral problems. Rahimah (1992)<sup>9</sup> noted in her observation that many villagers would never go to normal government dental clinics even if in pain. Rather they will turn to their traditional medicine man. Therefore some ethnographic knowledge is needed to understand how and why modern health services are perceived and used in a society<sup>10</sup>. This data is lacking in dentistry especially in the OA community.

Thus the aim of this study was to describe the beliefs and illness behaviour related to oral health problems in an OA community from the perspective of their traditional medicine man.

## Materials and Methods

There are three types of OA villages classified according to its accessibility and interaction with other communities i.e. easily accessed (16%), forest fringe (49%) and remote villages (35%)<sup>7</sup>. The study population is the Semai OA tribe in Pos Jernang, Perak. This area is classified as remote as it is situated about 17km from the nearest settlement in Sungkai, Perak. This area consists of five discrete villages surrounded by jungle and mountainous terrain. The only access is via 4-wheel drive traversing 17km of unpaved track. The population is 714 people of the Semai

tribe<sup>11</sup>. Each village has a population ranging from 120 to 173. Their socio-economy is below the poverty line<sup>4</sup>. There is no electricity or potable water supply. One primary school at Pos Jernang caters exclusively to OA children. However absenteeism of around 20% is reported to be rampant here<sup>12</sup>.

For this study, qualitative data was collected using the "key informant interview" method. The informant is the village traditional healer called the "Tok Halaq". This is because he is the most authoritative person consulted for any health problems affecting any villager. He decides the most appropriate action. Each village has only one traditional healer who is officially recognized by the social hierarchy. The headman (Tok Batin) was approached to identify the village Tok Halaq. An in-depth interview was conducted in the Malay language with the aid of an interpreter. It was tape recorded for ease of retrieval and later manually transcribed for analysis. The interview elicits information about causes, prevention and treatment of the most common oral conditions from the perspective of the Tok Halaq. Enlarged colour photographs of dental caries, periodontal disease, oral cancer and cleft-lip was used to illustrate the points. The Tok Halaq was also asked to demonstrate the traditional method he used to deal with a specific oral health problem.

## Results

### **The physical and social environment:**

Casual observation revealed that generally the standard of personal hygiene was poor. Tuberculosis and malaria is endemic. Many children have skin disease such as scabies. This is confirmed by verbal reports from the local OA health assistant.

The standard of oral hygiene seemed to be very poor. We observed almost all adults show evidence of overt plaque deposits, calculus and staining on the anterior teeth. However no quantitative data was collected in this study. Smoking with self-made rolled leaves with

tobacco inserts and betel nut chewing was very common among adult men and teenagers. Many children appear to be malnourished based on their size and stature. Tapioca was the staple food. Not many can afford processed foods, which are considered luxury items. Refined sugar was rarely used in foods or drinks. In conclusion the health problems observed may be considered as typically associated with poverty<sup>13</sup>.

**Interview study:** Four male Tok Halaqs from the villages of Kg. Sat, Kg. Kejau, Kg. Ras and Kg. Gamus were interviewed. One was not available despite many attempts. Their age ranged from 40 to 67 years. It was interesting to note that although they were from different villages, their belief system about oral health problems were remarkably similar. The following is a summary of their descriptions with minimal variations.

### **a) Frequency of Oral Health Problems**

There was a consensus that dental caries which resulted in dental pain was the most common oral problem they encountered in their respective community. All could recognize the picture shown and offered similar explanations as to the cause, symptoms and prevention methods. However, they were not familiar with the pictures of periodontal disease and oral cancers because they have never dealt with these conditions. Although they have seen cleft lip before but according to them it is an extremely rare occurrence. Hence the following report will only concentrate on their beliefs, causes and prevention of dental caries.

### **b) Perspectives on Cause of Dental Caries**

Dental caries is the most common cause of toothache. All of them offered similar explanations as to what caused the tooth to have "holes". The cause of the pain could be traced back to the person's failure to clear up firewood stumps at the place used for cooking while in the jungle. Black ants and termites eat the left over food and firewood stumps respectively.

This causes the person's teeth to rot and forms holes. The "throbbing pain" associated with toothache is felt when the insects are devouring the leftover wood.

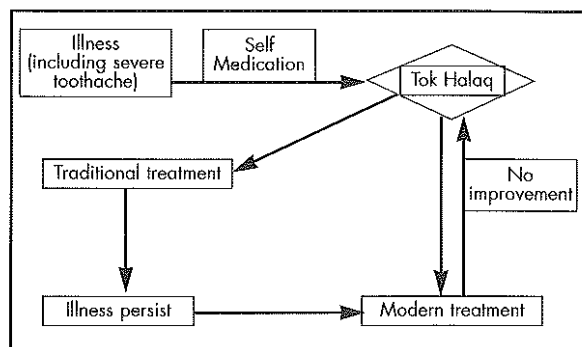
Therefore to prevent the teeth from rotting, the Orang Asli is expected to clear up and bury all traces of food and firewood stumps after every sojourn while in the jungle. The only way to cure the toothache is for the patient to return to the campsite to find and burn the rest of the leftover firewood.

However if the problem of rotten teeth affects a member in a household (e.g. the women folk or a child) then the firewood remnants used for cooking in the house would have to be totally replaced with new batch of firewood to prevent further destruction of the tooth. This may or may not be accompanied by a traditional ceremony called the "sewang". This ceremony is usually carried out at night and only members of the household are allowed to participate aimed at appeasing the spirits of the house.

### c) Illness Behaviour Related to Toothache

In general, the coping strategy used by the Semai Orang Asli when a member falls ill for any reason or when the family could not do anything to help the sick person then the first person they sought for advice was the Tok Halaq. He will determine the cause of disease based on his perception and experience whether it is of natural cause (e.g. germs) or supernatural (e.g. spirits). All the Tok Halaqs are very familiar with modern terms like "malaria" and "kuman" as a result of health education talks given by the Health department.

Based on the history related by the sick person and the family, if he is sure that "germs" most probably caused the condition he will refer the case to the local Health Assistant at the Pos so that the case is sent to the Government health clinic in Sungkai town for management. However if he is unsure, he will attempt traditional treatment, which consist of "sewang", use of traditional



**Fig. 2: A model of illness behaviour of the Semai Orang Asli tribe.**

herbs or potions and abstinence from certain foods or activities (pantang). If the effort failed after a few days, the person will be advised to see a doctor. However, if the doctors treatment is perceived to be ineffective in curing the patient, the patient will be brought back to the village and continued to be treated using traditional methods. In this case the Tok Halaq is satisfied that the case is not caused by ordinary germs ("kuman"). This model is also applicable in the case of toothache, which provokes illness behaviour. The model is illustrated in Figure 2.

### d) Self-care Methods in Response to Toothache

In the case of toothache, the most important immediate concern is to relieve the pain. Two traditional methods commonly used by them were demonstrated to the researchers by the Tok Halaq as described in Table I.

## Discussion

The sample size of key-informants in this study is admittedly small (only 4 Tok Halaqs). It was not possible to randomize. However, it is felt to be sufficient because the information given is consistent and corroborates with each other and no new categories emerged (saturation of categories). In addition they represent what

**Table 1**  
**Traditional Methods for Treating Toothache**

Method	Description
1. Using latex collected from certain jungle trees	The tree trunk and bark of certain jungle trees is slashed with a parang to obtain its sap. The trees are locally known as the "Cemakah" (producing a light yellow sap) and "Perah" (producing a white sap which looks like latex of the rubber tree). The sap or latex is massaged onto the cheek while some is filled into the hole in the tooth until it hardens to cover the holes. The "filled" holes provide relief for the toothache.
2. Using hot bamboo sap obtained from burning a piece of bamboo	A short piece of bamboo (about 1 foot long) is burnt at one end over a hot iron machette (or "parang"). The heat causes hot sap contained in the bamboo to boil and trickle down on to the heated parang. A small amount of this hot sap is massaged onto the cheek while some is also put into the hole of the offending tooth. It is believed that the sap can relieve or cure the toothache.

Kleinman (1985)<sup>3</sup> termed the "non-professional specialist or expert who offer some form of alternative or non-orthodox therapy" to their respective village community. Hence they may be few in numbers but their influence affects every villager in the close knit isolated community. The Tok Halaqs' experiences provide useful qualitative insights regarding the oral health beliefs among the Semais.

It was anticipated that it would be difficult to gain their cooperation since they are generally shy and secretive towards outsiders. Hence, a lot of time and patience was taken to build their trust and confidence. This took many visits over several months to be established. Appointing a respected local Semai as a guide and interpreter ensured that our intention was well explained. As a result full cooperation from the community as well as the Tok Halaq was obtained without reservations. They shared their experiences and views willingly without restraint.

Another problem was finding when the Tok Halaq would be available. One of the Tok Halaqs from Kampong Tidong could not be interviewed even after adequate arrangements were made because he was out collecting rattan in the jungle for long periods of time. However we assumed that his opinions would not be too far off from

the others because the views of other Tok Halaqs from different villages seem to corroborate with each other. Thus it is thought that the findings are quite reliable.

Scambler (1991)<sup>14</sup> noted that symptoms that present in a "striking" way (such as toothache in this study) are more likely to be interpreted as illness and more likely to receive prompt attention than those which present less dramatically. However given the quantity of symptoms and illness experienced by people it is apparent that most are treated by self-medication. Most families have some knowledge of how to treat common illnesses<sup>15</sup>. This also applies in treating toothache in the Orang Asli community as described in Table I.

Awang (1990)<sup>16</sup> observed that in the Malay community, professional or folk care will only be used when the family members consider an illness to be serious and believe that it is beyond the capability of self-care. A similar finding was also observed in the Semai Orang Asli in the present study.

Among the four oral conditions investigated, dental caries was the most common problem as reported by the Tok Halaq. Mahadi (1998)<sup>5</sup> found similar findings in his survey of adult Orang Asli

of the Temiar tribe in Kuala Kangsar. One possible reason could be due to the fact that dental caries and toothache was the most easily recognized and can significantly disrupt one's life routine. On the other hand, oral cancers and clefts seemed to be very rare conditions according to the perception of the Tok Halaqs.

As far as dental caries was concerned, although their belief on how the tooth become rotten was remote from the scientific explanation, nevertheless its rationale may be related to the maintenance of environmental cleanliness and hygiene in general. This may be considered as a positive belief that is quite harmless to oral health. However, there is a need to try to relate this belief to include personal hygiene in addition to the established belief of caring for the environment. This could be used as the basis of health education messages for health promoters to reach the Semai Orang Asli community.

The traditional methods described in treating toothache, were palliative in the scientific sense. When holes in the tooth are covered by any means (e.g. hardened latex in this case) the toothache or sensitive part becomes isolated temporarily from further irritants such as foods and drinks. This could explain its "curative" obtunding effects. However, the decayed part would remain untreated.

It is most probable that the materials used in treating the toothache possess some form of analgesic properties. It was claimed by the Tok Halaq that the "Perah" fruit tree has many properties that could be used to treat a multitude of diseases including fevers. The "perah" fruit is claimed to be toxic if taken without proper preparation. The fruits must be immersed in running water (stream) overnight before it can be safely consumed. Therefore a study to establish the pharmacological properties of these natural products is recommended.

In a community where modern health facilities including dental treatment are not easily accessible, alternative care should be made

available, especially in cases of emergency pain relief. The Tok Halaq could play a role in primary oral health care. They could be involved in promoting healthier oral self-care practices. Some form of basic health education and training could be organized in the community.

For periodontal disease, although the researchers saw many overt clinical cases of large calculus deposits in the majority of adults, the Tok Halaq was not aware of any problems it might pose. This could be due to the low impact of periodontal disease on their routine life as compared to toothache due to caries. In addition, we did not come across any edentulous adult or elderly during our casual observation there.

It is perplexing that oral cancer is seldom encountered in this community despite the common habit of betel quid chewing laced with tobacco, lime and betel nut. These are known risk factors for oral cancer and precancer lesions in this region<sup>17</sup>. A national study reported the prevalence of oral precancerous lesions were highest among indigenous communities and Indian estate workers who habitually chew betel quid<sup>18</sup>. Since betel quid chewing was extensively practiced in this community, awareness of oral cancer is important. Self-examination on how to detect early signs of oral cancer should be taught to the Tok Halaq and the community in general. It is recommended that a survey of oral cancer/pre-cancerous lesions be carried out in this community to ascertain its incidence.

Finally the health promotion strategy should turn to improving the environment in which they live to enable them to practice a healthier lifestyle. For instance to get water to clean themselves up more often was difficult enough, let alone to brush their teeth several times a day and before sleeping. There were other more pressing basic needs to be fulfilled such as getting adequate food, clothes and a better housing condition. Buying toothbrushes and toothpaste must be very low in their order of priority. Hence the relevant agencies need to improve the overall

economic, educational and social needs of the Orang Asli. These will definitely lead to a better health and hence their overall quality of life in the long-term.

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