

## THE ROLE OF MOTHERS REGARDING BEHAVIOR IN DENTAL HEALTH IN RELATION TO CONSUMING BETEL NUT IN LOW INCOME COMMUNITY EARLY EDUCATION CHILDREN IN KUPANG REGENCY INDONESIA

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### ABSTRACT

This research is based on the aim of identifying socio-cultural values in the health sector regarding dental health in consuming betel areca in parents whose children attend PAUD, as well as revealing the role of mothers in strengthening culture, especially the culture of consuming betel nut, which is appropriate for low-income communities in rural areas of Kupang Regency. The Aim of the research to analisa The role of the mothers regarding behavior in dental health in relation to consuming betel nut in low income community Early Education children. Method: This research is a quantitative and qualitative research. Mothers who have children under the age of five whose children attend PAUD intervention by UNISEF in the last 5 years. Respondents include parents and PAUD children in 5 regions representing the District . Kupang is District. Takari, Amfoang, Semau Amarasi and Fatuleu. Data collection methods include questionnaire interviews with mothers with children aged 3-5 years in each district analyzed. The selection for Low-Income Communities is people who receive BLT from the village. Result of this research is a model of the role of mothers in maximizing children's growth and development in areas that are claimed to be low in Kupang Regency. According to research, mothers must be experienced in dental health and betel nut because they are the ones who understand best, the main caregivers for their children and in this area most children consume betel nut which is dangerous for oral health and body health in general. Conclusion: Most mothers in the research area adhere to culture and customs and teach their children from an early age about consuming betel nut. Suggestion: To improve children's dental and oral health, it is very important to increase mothers' knowledge through socialization about dental health and the dangers of areca nut for general health.

**Keywords:** Mother's Role, Kesgilut and Betel Nut, Low Income Community

### INTRODUCTION

The habit of consuming betel nut is common in East Nusa Tenggara, especially the Timorese tribe. Areca nut is the fourth most commonly used social substance after nicotine, ethanol and caffeine (WHO, 2012). When consuming betel nut, adults usually chew the betel nut first, then betel flower and add lime, and sometimes use tobacco ( Ngadilah, et. al. 2019).

In other countries such as India, the country that consumes the most areca nut, provides betel nut commercially, areca nut is marketed in the form of areca nut with added sweetness and in an attractive form targeting young children. In West Timor packaging for children is not available. Children consume betel nut in the same form as their parents, but children usually do not use lime. The way to consume areca nut according to WHO (2012) is that areca nut is eaten together with

betel leaves that have been smeared with calcium hydroxide paste and then added cardamom, cloves, and other ingredients. Meanwhile, in West Timor, they consume betel nut by chewing the areca nut first, then the betel flower, then lime in the form of powder, a mixture of the three when chewed produces a red color and hypersalivation.

Poor areas such as East Nusa Tenggara have a heavier disease burden compared to other areas, behavior that harms public health. The behavior of consuming betel nut has been proven in many studies to cause damage to the oral cavity such as oral cancer and various systemic and communicable diseases including Tuberculosis and Hepatitis (WHO, 2012). Betel nut is addictive so if consumed from an early age it will become a permanent behavior until they grow up and even into old age. The way children who live in poverty communities start consuming betel nut is also very unique, besides there are also those who start consuming it in the same way as adults. Early education children whose parents are excessive in consuming betel areca will be followed by this behavior by their children. Betel nut greatly affects dental and oral health because it damages soft tissues such as the oral mucosa, periodontal tissue and even oral cancer. Data shows a very strong relationship between consuming betel nut and oral cancer (Warnakulasurya, 2022, Lin et.al., 2022).

The clinical characteristics of oral cancer in betel chewers show a very unique picture, both locally and systemically. In addition to local problems such as trismus, periodontitis, and submucous fibrosis of the oral cavity—which will lead to a poorer quality of life after treatment—patients who chew betel will also experience a greater burden of tumors, either synchronous or metachronous cancers, and cancer. The incidence of medical conditions such as hypertension, cardiovascular disease, gastrointestinal disease, type II diabetes mellitus, metabolic syndrome, obesity, and liver disease is higher compared to those who do not have the habit of consuming betel nut (chuang et.al., 2022)

The role of mothers towards children who consume betel nut can influence the oral hygiene and oral health of young children so that it can predict the health status of the children's teeth and gingiva and even their general health. Therefore, behavior consisting of the mother's knowledge, attitudes and actions regarding dental and oral health will determine the child's dental and oral health. Based on the things above and the absence of studies regarding the relationship between mother's behavior and children's chewing of betel nut, the author is interested in knowing the relationship between mother's behavior and child's chewing of betel nut. This research will be conducted on parents, especially mothers who have children aged 3 - 6 years (Early Education/PAUD) who chew betel and attend Early Education in Kupang Regency.

## **RESEARCH METHOD**

The subjects of this research were 205 pairs of mothers and children. The type of research used is an analytical observational research design with a cross sectional study design, namely studying the relationship between knowledge and the role of parents and PAUD living in poverty and chewing betel nut among children aged 3-6 years in Kab. Kupang, with this data collection is carried out at one time (point time approach.). This research was conducted in preschools in Oelnaineno village and Tanini villages, Paud Oelbiteno, Paud Nefoneke in Kupang Regency. The sample was carried out using multistage random sampling. The sample parents were willing to give permission by filling out an informed consent sheet and questionnaire. The selection of poverty communities was based on data on people who received assistance from the Government whose data was taken from the local government. The research data sources are primary and secondary data. Primary data was obtained from interviews using a questionnaire regarding the

knowledge and roles of parents and children who consume betel nut. Analysis was carried out using univariate and bivariate methods. Univariate analysis was carried out to determine the description of knowledge, attitudes and roles of parents regarding starting to consume betel nut in children. Bivariate analysis was carried out to see the relationship between independent and dependent variables, namely the relationship between knowledge and the role of parents and EEC / Early Education Children in Poverty Life using the chi square test. The value used to see whether there is a relationship between two variables is the p value, where  $p < 0.05$  means there is a significant relationship.

## RESULTS AND DISCUSSION

**Table 1. The number of mothers who consume betel nut at the Poverty Community for Early Education Children**

No	Parent betel chewing	F respondent	Chewing betel nut (%)	Who plays a role in teaching how to consume betel nut (%)	How to learn to consume betel nut for the first time in children	
					Olok from mum (%)	Try him/her self (%)
1	Father	20	79	11	96	4
2	Mother	195	95.12	89	80	20
	Total (T) average (A)	205 (T)	81 (A)	100 (T)	88 (A)	12 (A)

**Note:**

“Olok” means: Mother/father who consumes betel nut, when it is soft then take a little from the father/mother's mouth and put it in the mouth of the child who is still small 1 year - 3 year.

**Table 2. Mother's knowledge, mother's role regarding betel nut in Early Education children in Kupang Regency**

No	Grade knowledge	Knowledge about dangerous betel nut (%)	Knowledge about betel nut is dangerous for dental and oral health (%)	Knowledge about betel nut's relationship to systemic disease (%)	Knowledge about the relationship between betel nut and pregnancy (%)
1	Good	2.44	2.44	2.93	0
2	Average	1.46	1.95	2.44	0.98
3	Bad	96.10	95.61	94.63	99.02
	Total (%)	100	100	100	100

**Table 3: Behaviour Theory Lawrecc Green**

Lawrence Green	No (%)	Yes (%)	Total (%)
Mother's behavior regarding betel nut for gilut health and general health of her child	96.34	3.66	100

Predisposing factors involve beliefs, attitudes and knowledge	87	13	100
Enabling Factors Concerning support from family, environment, supporting facilities related to child difficulties, distance, cost and access to health facilities	82	18	100
Reinforcing factors positive influence from friends/ neighbors /community leaders, health workers	79	21	100

From the data above, it shows that the role of mothers in guiding their children regarding their dental health related to consuming betel nut is 89%, much greater than the role of other families or neighbors. The average is 96.34% of mothers' knowledge about dental and oral and systemic health. as well as pregnancy related to consuming betel nut in their children is bad as well as the behavior of mothers towards their children in guiding their children about their dental health related to betel nut still needs intensive guidance and counseling. This shows that the mother's behavior in maintaining the health of her child's teeth and mouth regarding consuming betel nut is influenced by the lack of assistance from health workers and community leaders. Reinforcing factors are the results of activities that influence a person's acceptance of positive or negative feedback and are socially supported after receiving input.

Therefore, social support, peer influence, and guidance and feedback from health services are Reinforcing factors. Knowledge is a set of facts and ideas that enable someone to understand a phenomenon and solve a problem. The experiences of other people, books, friends, parents, radio, television, posters, magazines and newspapers can all be used to gain knowledge (Kermel et.al. 2017) This research shows a lack of support from the family environment, home facilities related to Children's dental and oral health is very limited. Likewise, access to health facilities in terms of distance to dental and oral health service centers and costs. They feel that there is no transportation money to the dental service, so they feel toothache that cannot be tolerated any longer, they take painkillers, without understanding the cause. According to Varenne et.al.2011, Duijster et.al.,2013 that Lack of dental and oral health facilities at home, such as the inability to get toothpaste and toothbrushes specifically for children, as well as lack of access to health facilities for children's dental care due to financial or financial limitations (Gregory et.al., 2020) Enabling factors can be factors that cause obstacles or facilitators of behavior and environmental change.

According to Rocklage et al. 2017 and Xiao et.al., 2019 that Attitude is a person's closed reaction to certain stimuli or items, which includes aspects of that person's opinion and emotions. Attitudes are persistent sensations that are object-oriented (whether they are people, actions, or things), and judgments, good-bad aspects are inherent in the attitude structure. In this study, the mothers' attitudes and knowledge were in line because their knowledge about dental health was related to bad betel nut and was supported by their bad attitudes which would have an impact on their health.

Supporting characteristics of maternal behavior have a mutually supportive relationship. Supporting elements that influence mothers include the unavailability of dental cleaning facilities. This is the same as Bramanto's 2018 research, the absence of equipment that will be used to clean their teeth will subsequently affect their dental health. A positive relationship between the presence of Community Health Centers or Supporting Community Health Centers, health facilities in the community, the availability of health specialist dentists, and not there is socialization about dental health science and oral health services. (Chaffee et al., 2017, Dwiputri et.al. 2018)

There is also a positive relationship between the mother's very poor knowledge about dental and oral health in relation to consuming betel nut and the distance to health facilities and the lack of facilities for dentists and dental nurses in providing socialization to the community regarding the problems related to betel nut. According to Abiola and Adeniyil (2020) that the low utilization rate indicates that the trend in dental health service utilization has not improved in recent years, this further justifies the need to examine the factors that determine utilization, which can help design appropriate interventions to increase access to services dental health. Chen's research found that, in general, people who chew betel have worse perceived health risks than the rest of the population. Overall, empirical evidence suggests that health authorities can reduce the likelihood of people becoming betel chewers by increasing their knowledge about the adverse effects of betel chewing (chen et.al.2013).

## CONCLUSION

Dental disorders in children are a serious problem, betel nut should not be consumed by young children, and mothers play an important role in children's oral hygiene habits, regarding children who consume betel nut. According to the findings in this research, mothers stated that consultations with professional dentists were very difficult because they were associated with costs due to the conditions of poverty they suffered from and the long distance to dental health facilities were obstacles that were difficult to solve.

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