

Full Length Research Paper

False teeth still a public health problem among children in Kanungu district - South Western Uganda 2006

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False teeth among children are a Public Health problem which has not received adequate attention in Uganda. This study was therefore developed as a community-based descriptive cross-sectional carried out in Kanungu District using qualitative methods of data collection among caregivers of children, Community Owned Resource Persons and Service providers. The objectives of the study were to examine family knowledge on false teeth, paying special attention to the age bracket which is perceived to be commonly affected by false teeth, signs and symptoms and identifying management practices as well as preventive measures of false teeth within this community. False teeth are a common problem among children mainly affecting children of two years old with no sex differences. It is believed to be caused by witchcraft and at times it comes on its own. This disease causes diarrhea, Acute Respiratory infection (ARI), fever and loss of appetite, restlessness and vomiting which are also believed to be key signs and symptoms for the disease. It seems there are no home remedies for the treatment of false teeth. "Oral/dental surgery" was identified as the common form of treatment of "false teeth and rubbing of teeth. The safety of the instruments used during surgery and their sterility plus the procedures used during surgery was not known to the participants. The side effects on the health of the child were identified which ranged from severe bleeding, distortion of dentition, to eruption of teeth. Preventive measures like the use of local herbs were identified. In conclusion, False teeth are still a community Oral Health problem among children which needs emergency action especially in this era of AIDS/HIV.

Key Words: False teeth, Paediatric Oral surgery, Dangers and risks

INTRODUCTION

Traditional pediatric oral surgery has been in existence in Uganda for quite a long time. In 1966, Pidbong noted that in Uganda, the extraction of primary canines in young children was done by witch doctors or other non-dental personnel. However, up to date, studies have been done by Anguyo (1993), Odit (1994), and Twiromwe (1994). In all these studies, the concept of false teeth (Ebiino) still prevails in the communities. In South-Western Uganda however, Bwengye (1989) found that false teeth (Ebiino) is believed to cause diarrhea especially in younger children.

With the improvement of health services in rural areas under the decentralization process, Kambuga Hospital, a rural hospital in Kanungu District was among the beneficiaries of the program. Under the decentralization arrangement, hospitals are supposed to prioritize their problems which are then funded by the Ministry of local

government through block grants. Among these include purchase of drugs, motivation of health workers, maintenance of vehicles, feeding the patients, maintenance of compounds and buildings. With such necessities in place, there was marked improvement in health care services' delivery to this community.

With the availability of good services, Kambuga Hospital had a tremendous improvement in health services delivery and an influx of patients. Among the common health problems identified on the pediatric ward was the concept of false tooth (Ebiino-local term) its presentation and the management practices.

Despite all the studies done in Uganda the community has remained non-participatory as regards the concepts of false teeth. Greater understanding in how the community perceives false teeth are important in developing appropriate health education material and

control measure against these concepts in communities. The perceptions and beliefs on false teeth; their causes, signs/symptoms, management practices and preventive measures are directly or indirectly known by medical personnel to be contributing to the morbidity and mortality among children. Therefore, the current study was developed to find in-depths information as regards false teeth (Ebiino) in this community.

OBJECTIVES

The general aim of the study was to describe the beliefs regarding “false teeth” (Ebiino) among this rural community so as to design an intervention program to address the problem.

Specific Objectives

1. To identify the demographic characteristics of age groups which are perceived to be commonly affected by the “false teeth”.
2. To identify the perceived cause, signs and symptoms of false teeth.
3. To identify management practices as well as preventive measures of false teeth.

METHODOLOGY

The study was cross-sectional descriptive using qualitative methods of data collection specifically using focus group discussions and In-depths interviews conducted in Kanungu District.

Study Area

The study was carried-out in Kanungu District. This district has 10 Subcounties and of these 50% of the Sub counties were selected. This is statistically representative of the sub counties. These were selected based on the observations on the Pediatric ward records and identified as the key sub counties where the problem is believed to be common. These included Kihiki, Kayonza, Nyamirama, Mpungu and Kambuga.

Sampling and Study Population

Convenience sampling was used in the study to select the study participants. The criterion for inclusion in the study was willingness to participate in the study. The study population included care-takers of children and anybody directly or indirectly responsible for the children. These included; Mothers, Fathers, Health workers In-charges of health units in the study area who included, Nurses, Midwives, Medical assistants and Community resource persons who included Traditional Birth Attendants and Traditional Healers.

Data Collection

The data collection team consisted of the principal investigator, who is the dental surgeon, two public health dental officers, one

attached to Kambuga Hospital. Prior to the study, a pre-visit was done to the study communities.

Focus group discussion

In all the areas two focus groups were always conducted with the care givers of the children, and the health workers at the health units visited in those areas. This gave a total of 16 focus groups. On the pediatric ward, children who were believed to be having “false teeth” were observed and the children who have ever had false teeth (Ebiino) were also observed. The focus groups consisted of 10-12 participants. All the numbers of each focus group consisted of mothers and fathers except for the health workers in the various health units who were of the same category. The sessions were conducted using a topic guide to direct the discussion. Proceedings were recorded on paper. Discussions lasted between 40 minutes to an hour.

Key informant (In-depth, individual) Interviews

These were conducted at the end of each focus group discussion. The same topic guide was used for the focus group discussion. This was done for participants who seemed to be more knowledgeable during the sessions. Informal discussions were also conducted with the participants during the course of the data collection and additional data obtained. Key informants included 4 mothers and 4 fathers from four villages and 5 health workers. The key informants were mainly requested to clarify on some ideas not clear during the discussions.

Data Analysis

During analysis of data, themes were developed according to the topic guide. Manual coding of the data and analysis was done. The information collected was through informal discussion. Observations and notes taken during the sessions were compared and proceeding compiled.

RESULTS

Demographic Characteristics

In most of the focus group discussions, it was noted from the participants that “Ebiino” (false teeth) is common among young children affecting both sexes equally. The age most commonly affected was noted to be from day one up to one year and in some instances up to two years. Some participants noted that some children are born with them.

“Some children are born with “Ebiino”. After two weeks you see a child suffering from “Ebiino”. (FGD Mothers)

Perceived Causes

In various groups, participants had various views concerning the cause of false teeth. Some participants had a belief that they were foreign to the area of study.

“They came from Acholi, Bunyoro and Buganda.” (Father).

Some participants noted that it is a “disease” of younger children and has been in the area for “fifteen years”. However, others believed that “there are some bad people who throw these false teeth (Ebiino) in the path or at the hospital gate where pregnant mothers pass. When the expectant mother walks over them, then the child she is expecting will have false teeth.” Those in-charge of the pediatric ward noted that “some mothers have a belief that when they are carrying their babies on the back and they happen to walk over “Ebiino”, the child they are carrying is bound to catch them.” Others were ignorant of the causes of false teeth.

Community recognized Signs and Symptoms

In all the groups, participants noted that the child with false teeth (Ebiino) always have cough, diarrhea, fever, vomiting and swelling of the gums. In some cases, the “*child will be very weak*” and will be unable to breast feed and those who are on the weaning diet usually have no appetite at all. Some of the participants noted that “*false teeth are the cause of these diseases.*”

Community Management practices

Management of false teeth (Ebiino) according to participant’s ranges from surgical extraction of the false teeth to rubbing of “false teeth” using local herbs whose names were not disclosed. Surgical extraction of the “Ebiino” is done by using sharp instruments like razor blades, umbrella wires, “Empindu”, pliers, a sharp knife and bicycle spokes. A white substance which is believed to be the false teeth is removed from the patient’s mouth.

“We usually take them to the village where there are experts in extracting “Ebiino” using Empindu”. (Mother)

“Something white is removed from the child’s mouth”. (Father)

It was noted that the people who trained the local people oral surgeons came from Tooro (neighboring district in the area of study). In all these procedures, the participants noted that they had never seen these people sterilizing their instruments and “no anesthesia of any kind was given to the children.”

“We have never seen them sterilizing the instruments they use”. (Mother)

Rubbing of the false teeth (Ebiino) is done by using local herbs. However participants do not disclose the names of these herbs.

“We do not know the names of these herbs. The herbs were just shown to us” (Local oral surgeon)

The participants noted that the cost of treating a false tooth ranges from 1500-3000 Ush for each tooth removed or rubbed. (ie 1 - 2 US Dollars).

Participants noted that after the surgical procedure, the care-takers of the children are sometimes advised to go to the hospital “for an injection in order to reduce the pain.” At times no advice is given.

Some participants noted that, sometimes, they first take these children perceived as having false teeth to Health units and when there is no improvement, they take them to the villages for false teeth extraction. In fact, one participant was very eager to find out the cause and treatment of the false teeth (Ebiino).

“Why is it that when we take them to the hospital they do not get cured of this disease, “Ebiino” even when the injections are administered?”

Recognized side effects following extraction/rubbing of the False teeth

Participants in the various focus group discussions noted some immediate and long term effects on the health of the child after rubbing or surgery of the false teeth.

Immediate effects

The child may have prolonged bleeding, swelling of the jaws, crying all the time due to pains and inability to feed or breast feed for almost two days. Some of the children develop fever especially those who are not taken to the hospital immediately as advised by the surgeons.

Long term effects

Sepsis, especially at the site of removal of the “Ebiino” was noted to be common and the dentition of the child is interrupted. There is normally eruption of teeth at the site of extraction, mal-alignment of the teeth, cracked teeth, delayed eruption, and some mothers noted that such children are in most cases not “bright.” Some children when they are matured “develop psychological torture due to bad teeth.”

Preventive measures

“Ebiino” disease is said to be prevented by using local herbs. It was noted that there are some native medicine which are given to mothers so that the children they bear do not get the false teeth (Ebiino). Some participants had negative view about the use of local herbs in the prevention of “Ebiino”.

“Sometimes, the local herbs are used by the mothers but the children still get the false teeth.”

Among the preventive measures mentioned included egg shells which are “smoked” by an expectant mother so that the child she bears does not get the false teeth.

Observation on eleven children who had false teeth removed on the pediatric ward at the hospital:

A total of 11 children were observed on the pediatric ward. 3 out of 11 were neonates, 6/11 were between three to six months; 2/11 were between 6 months and one year. 6/11 children had diarrhea; high fever, vomiting and loss of appetite. The history revealed that no mother reported that false teeth were removed and they were advised to take the child to hospital. It was on Intra-oral examinations of the children that surgical scars were observed that mothers admitted that false teeth were removed and they were advised to take the child to the hospital to reduce the fever.

7 out of the 11 children were clinically diagnosed as having acute gastroenteritis. Simple laboratory stool examination indicated presence of *Ascaris* in 4/11 patients. 4/11 children were diagnosed as having Protein Energy-Malnutrition (PEM) with Acute Respiratory infection (ARI). The children who had been diagnosed as having gastroenteritis were managed with junior co-trimoxale, ORS (Oral Rehydration Salts). They improved after one week and then discharged. The children who were diagnosed as having ARI with PEM were also treated empirically with a course of crystalline penicillin and were advised on diet. They spent 4 - 7 days on the pediatric ward and were discharged. There was no follow-up made, as the mothers were coming from very far.

Five children between the ages of 7-10 years were observed to have had false teeth at sometime during their childhood. 2/5 children were missing the lower canines and were above 8 years. 3/5 had mal-alignment of teeth and 2/5 had all the lower anterior canines missing.

DISCUSSION

This was community based, qualitative study exploring indigenous knowledge on “Ebiino” (false teeth) and their management in rural Kanungu district, in South-Western Uganda. The main ethnic group in the area is Bakiga/Banyankole, who speak Runyankole/Rukiga. Respondents in this study included care-takers of children; Mothers/Grandparents, Fathers, and health workers with some bio-medical training including nursing aides.

This study has revealed that false teeth are still a Public Health problem in this area. This study has also shown a well developed indigenous knowledge concerning “false teeth” in this community together with a listing of

treatment and perceptions about causes and preventive measures. Respondents generally agreed that the concept of false teeth (Ebiino) is still a big problem in the area. In all the groups, it was mentioned that the children are the most vulnerable to this “disease” condition especially those below two years of age. However, studies which have been done in other parts of the country (Odot 1994, Twiromwe 1994, Anguyo 1993,) also show that this is the age that is commonly affected and vulnerable to this “disease.”

Cause of the Ebiino disease or false teeth are not known to most of the participants. The theories forwarded by the participants seemed to lack clear definitions. Most participants were relating false teeth causes to witch craft and others thought it is a “disease” whose cause is not known. This, however, is similar to observations made by Twiromwe (1994) among traditional dental/oral surgeons. However, in the studies done in Northern Uganda by Odit 1994 and Anguyo (1994), false teeth were associated with witch craft, but in this study, it is recognized as a disease. This “foreign disease” has been in the area for almost two decades. This shows that this local community has some well developed knowledge concerning the pattern of false teeth disease, and its distribution. It would be better to quantify these observations and make a more conclusive observation as regards causes and patterns of distribution.

The signs and symptoms noted in this community have a connection with other people who have done some research on false teeth and its effects on the health of the child. Most people in this community believe that the false teeth cause other diseases like diarrhea, ARI, vomiting and high fever, which are noted to be signs/symptoms. These diseases are however attributed to “false teeth” and “not” regarded as signs and symptoms of false teeth. The signs and symptoms of false teeth are however included among the Top Ten killer diseases among children (WHO/UNICEF 1995). It would be better, therefore, to study in detail whether the causes of these conditions are actually due to false teeth and not mere signs/ symptoms of false teeth as perceived by the community.

From this study, it is clear that oral/dental surgery is the major form of treatment of false teeth or (Ebiino). This however, has a similarity to studies done in other parts of Uganda by Odit 1994; Odu 1992; Pindbong 1996; and the instruments used varying from use of razor blades, sharp knives, Empindu (local terminology), bicycle spokes, umbrella wires to use of pliers. In this study, most participants noted that they have never seen any of the instruments being sterilized prior to surgery or after surgery. This is very dangerous to the health of the child especially in this era of HIV. In fact, it might be one of the leading causes of HIV infection. It would be better to study this in details. Another form of treatment identified was use of local herbs whose names were not identified. Participants did not witness the washing of the herbs prior to rubbing on the false teeth or washing of hand by

therapists. This lack of sterility in the procedure might be contributing to the spread and acquisition of other infections from the healers to the patients.

Other forms of treatment like taking a child to a health worker when suspected of having false teeth is a good habit which needs to be promoted in this community. Advice given by some traditional dental/oral surgeons like taking the child to a health unit or health worker "to reduce the fever" should be encouraged. It would be better to take the child to a health worker prior to extraction. Effects on the child's health noted by the participants due to extraction/rubbing, like delayed eruption of teeth, non-eruption of teeth, severe bleeding, distortion of dentition (pattern of the tooth eruption) show that mothers/care-takers of children are aware of the dangers which can be caused by false teeth extraction or rubbing.

However, due to the association of false teeth with other diseases, these effects are out weighed by the disease which might claim the child's life. It would be better, since we are advocating for the integrated management of the sick child, that these ideas and concepts be incorporated in the study modules. Costs incurred during the course of treatment are almost the same as that charged in health units through cost sharing. Approximately 1 - 2 US dollars (1 US dollar = 1200 UG shs). This indicates that the community is willing to contribute some funds for their oral health care. Preventive measures identified in this study need to be studied in details. It seems there might be some inherent or indigenous knowledge which might assist in the control of some of these concepts.

LIMITATIONS OF THE STUDY

- The study was a small scale qualitative one. There were no observations made on the surgery being done, or rubbing of false teeth. This implied relying on the respondents for the validity of the information.
- The study had no adequate funding, therefore, financial constraints hindered involving a bigger sample due to lack of adequate logistics. For instance, transportation of researchers to various areas of the study community was hard since there was no adequate transport.
- Since the various groups both male and female participants were in the same group, this had an influence on the participation and general willingness to give information.
- Methodological sampling was difficult because of the widely scattered population in the study area due to the terrain. This made both identification and the bringing together of participants difficult.

Despite those problems, efforts were made to adequately collect the required information included in this report.

CONCLUSION

1. The concepts and beliefs of "false teeth" (Ebiino) are still wide spread in this community.
2. The children below two years are still more vulnerable to these beliefs in this study community.
3. There is a still a strong association of "false teeth" (Ebiino) as a cause of diarrhea, ARI, fever, loss of appetite and malnutrition in children in this community.
4. The patterns and distribution of false teeth in this community is known by the natives.
5. Traditional pediatric oral/dental surgery is still wide spread in this community.
6. The community is aware of the long and short term effects on the health of the child due to false teeth extraction/rubbing.
7. The community knowledge on preventive methods of false teeth is still scanty.

RECOMMENDATIONS

Many recommendations were forthcoming from the participants. Some of these ideas have been adopted into recommendations. As the study findings are also being read and circulated other better recommendations may also be adopted.

Community oral health information systems

From the study it is clear that the community oral health information system is not up to date. It would be better if a strong community oral health information system is developed. This should be done by oral health personnel already in the communities in collaboration with other health workers. The system should be developed in such a way that, information concerning oral-health in communities including children with false teeth is properly documented.

Training of community resource person in oral Health

It would be better at all levels of training of community resource persons, the basic concepts on oral-health be taught the trainees. Most of the people extracting/rubbing the false teeth are traditional birth attendants and traditional healers. An oral health worker in these communities can assist in such training in collaboration with health education departments in the district.

Role of traditional oral/dental surgeons

The role of traditional oral/dental surgeons should be recognized by the District Health Teams like TBAs/THs. This would help in identifying these people and assisting

them with basic instruments and basic training in management of simple tooth problems and when to refer to qualified dental personnel and identification of risk factors associated with development of oral health problems.

Research and collaboration in oral health researches on false teeth

It seems the concept of false teeth is widely spread. It would be better other researchers on indigenous knowledge of false teeth be done in other parts of Uganda on a regional basis. Also, histological findings are similar to that of the normal bud.

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