

**TITLE:**

**DETERMINANTS OF THE PRACTICE OF TRADITIONAL  
UVULECTOMY AS SEEN AT THIKA DISTRICT  
HOSPITAL:  
A SURVEY ON CHILDREN BELOW FIVE YEARS.**

**A Dissertation Submitted in part fulfillment of the requirement for the  
degree of Masters of Medicine in Ear, Nose and Throat-Head and Neck  
surgery in the University of Nairobi 2005**

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## **DEDICATION**

To my wife Polyne and my two sons Elias and Austine for bearing with me and giving me the reasons to soldier on despite hardships

## **APPRECIATION**

Special thanks go to my teachers for encouraging me and constantly correcting me whenever I strayed from the path;

To my supervisor for guiding me all the way through to the completion of this work;

The management, Thika district hospital for allowing me to do the research in their institution;

Mr Kubai, paediatric clinical officer in Thika hospital for assisting me identify the uvulectomists and the children.

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**DECLARATION**

**THIS DISSERTATION IS MY ORIGINAL WORK AND IT HAS NOT BEEN  
PUBLISHED OR PRESENTED FOR A DEGREE IN ANY OTHER  
UNIVERSITY OR INSTITUTION**

**SIGNED** .....



**Dr Samuel K. Ngugi**

**THIS DISSERTATION HAS BEEN SUBMITTED FOR EXAMINATION  
WITH MY APPROVAL AS A UNIVERSITY SUPERVISOR**

**SIGNED** .....



**Prof M Macharia**

## **Abstract**

The aim of the study was to establish the determinants of uvulectomy, the indications and complications as well as establishing the methods the traditional surgeons use to clean and/or sterilize instruments. This was a cross sectional descriptive study in a rural district hospital, in this case Thika district. It involved children of 5yrs and below. The respondent was the child's guardian/parent and a questionnaire was used to direct and record information. A total of 311 guardians/parents responded to the questionnaire. In addition 3 uvulectomists were interviewed

The results indicated that the mean age for uvulectomy was 9.7months with the youngest child being one week old. The main indication was vomiting after feeds (43%) while the main complication was infections. The methods used to clean and/or decontaminate equipments were not adequate to prevent cross-infections.

## **Introduction**

Traditional uvulectomy is an age old procedure involving partial or total amputation of the uvula. It is practiced in many parts of Africa, either as a therapeutic intervention or for traditional reasons. Indeed the observations in the ENT clinics are that more than half of the patients seen have had uvulectomy. However the procedure is unknown in Western or Asian communities. Though the procedure is prevalent in most communities, the magnitude of the practice is unknown especially in the Kenyan set-up. The practice is thought to be more prevalent in the rural areas as compared to the urban centres. The modern health worker comes to know about the procedure when the child has developed complications. Bleeding is the commonest complication encountered. The procedure is carried out by traditional healers and one would be wary of the risk of blood borne infection transmission especially HIV-AIDS.

## LITERATURE REVIEW

Traditional uvulectomy is a procedure that involves cutting away part or the whole of the uvula. It has been reported in several sub-Saharan African countries, in Maghreb and in Israel. However, epidemiological and anthropological data on this procedure are rare [1]. Very little is available in terms of literature on uvulectomy. This is mainly attributable to the fact that the practice is done mainly in traditional African settings. Indeed the traditional surgical practices are considered relevant particularly in the developing countries where, in addition to the dearth of orthodox medical services, institutions and personnel, it is relatively cheaper, socio-culturally accessible and acceptable [2]. In a milieu where modern health care is not available or accessible, decisions concerning health are influenced by the fact that people must create different ways to handle disease [3].

Traditional uvulectomy is done in a background where issues of cross-infection through instruments stained with body fluid are ignored. With the current HIV/AIDS epidemic, prevalence of Hepatitis and other blood borne infections, recent work has suggested that many of these infections are through medical exposure through traditional practices [4]. Regrettably, it is possible that the practice is more rampant among HIV patients owing to the oral manifestations associated with this condition.

Other traditional surgical practices include female genital mutilation on which the government has put a lot of effort in curbing, teeth extraction traditional tonsillectomies, milk letting, and uterus massage.

In modern medical practice, uvulectomy has been done as part of treatment in snoring and mild obstructive sleep apnoea as in uvulopalatopharyngoplasty, Z-pharyngoplasty or single stage laser assisted uvuloplasty [5]. It has been used to treat a 4-year-old boy who had a history of persistent barking cough unresponsive to medical treatment since infancy. The cough was thought to be due to a long uvula in contact with the epiglottis hence causing constant irritation [6]. Other indications include tumours of the soft palate.

### **Anatomy**

The uvula lies on the posterior aspect of the soft palate overhanging towards the base of tongue. It is comprised of a pair of musculae uvula, which arises from just behind the hard palate. Its fibres lie adjacent to the midline between the two laminae of the palatine aponeurosis. It passes backwards and downwards to be inserted into the mucous membrane of the uvula. This muscle tenses and shortens the uvula. It is lined by stratified squamous epithelium with mucous and minor salivary glands.

Arterial supply is mainly from palatine branch of the ascending pharyngeal artery, the ascending palatine, a branch of the facial artery and supplemented by the lesser palatine branches of the descending palatine (maxillary artery). Venous drainage is to the pterigoid plexus and thence, through the deep facial vein to the anterior facial vein and into the internal jugular vein. The lymphatic drainage is partly by way of retropharyngeal nodes but chiefly direct to the upper deep cervical group of nodes.



The mucous membrane is innervated by the lesser palatine and glossopharyngeal nerves while the muscles are supplied by the pharyngeal plexus (a glossopharyngeal/vagal complex) [7, 8].

### **Functions**

The uvula serves as a pilot for eating and swallowing. It prevents the soft palate from being forced into the nasopharynx or mouth when it is resisting pressure differences between these and the oral part of the pharynx as in coughing or sneezing. It forms part of the soft palate and, together is important in deglutination (maintain the velopharyngeal closure. It acts as a temperature sensor on ingested foods/drinks hence protecting the upper aerodigestive system.

### **Indications**

The reasons behind the practice of traditional uvulectomy vary from one community to the other. Among the Hausa tribe in Niger and Barbers in Magrheb, it is done on the 7<sup>th</sup> day as part of the naming ceremony to prevent death due to swelling of uvula (prophylaxis). However most communities perform the ritual for all sorts of complains arising from the throat. Examples include failure to thrive and mental retardation, recurrent upper respiratory tract infections, thinning of the neck, inflammation of the uvula, pharyngitis and recurrent tonsillitis, child rejection of the breast, quenching thirst and tuberculosis [9].

All the above reasons can be explained by either normal physiological processes or can be attributed to common early childhood illnesses like upper respiratory tract infections, adenoid hypertrophy, chronic sinusitis, and otitis media, conditions that are quite prevalent especially among the under 5 yrs.

In Western medical practice, uvulectomy is done as a part of other surgical procedures as in uvulopalatopharyngoplasty. Partial uvulectomy has been used to successfully treat hereditary angioneurotic edema (HANE). This is a rare familial disease of C1 esterase inhibitor deficiency that produces recurring attacks of acute circumscribed non-inflammatory edema thus causing death by asphyxiation [10].

Uvulectomy has also been done in management of heavy snorers. The procedure involved inducing stiffening of the soft palate after removing the central strip of mucosa with carbon dioxide laser and uvulectomy. In this study, 22 patients were operated in which 18 (82%) of these showed marked improvement (median improvement of 75% at three months), 4 patients did not improve. Snoring did not improve in patients who did not undergo uvulectomy but had mucosal stripping. The conclusion in this study was that laser stripping combined with uvulectomy could reduce snoring to a tolerable level in 8 out of 10 heavy snorers. However the procedure is associated with a lot of pain for several days and hence poor acceptability [11]. Uvulectomy is also performed for redundant uvula, which breaches the laryngeal inlet. In such cases, the patient has a feeling of mass in the voice box, choking during sleep and has to clear the throat. In such patients, saliva originating from hyperactive mucoserous glands from the soft palate is directed right into the supraglottis.

## **EPIDEMIOLOGY**

In Kenya the practice is prevalent among many communities especially those living around central province. The peak age at uvulectomy in most communities is 5 years and below. In Ethiopia, 35% of the children undergo uvulectomy by the age of 5 yrs [12], while in Niger this accounted for 19.6%. In a survey done at Lagos University teaching hospital, uvulectomy was more frequently done in the third decade. It was also more common in the females than males [3]. Other studies though indicate that there is no variation in sex distribution. [2].

### **The Procedure of Uvulectomy**

Uvulectomy is a traditional procedure among various African communities. It is the partial or radical removal of the palatine uvula.

This is an art carried out by traditional healers. They usually do not have any formal education. The skills are usually passed on along the family lines i.e. from father to son. There is thus no standard way of performing the procedure.

In Nigeria barbers carry out the procedure.

Among the various tribes in Nigeria the uvula is usually removed with a homemade sickle shaped knife or a pair of scissors [3]. In Ethiopia the uvula is often snared with a loop-ending sling and then cut with a knife [13]. The patient is then fed on roasted dried maize or bread crusts. This is supposed to prevent bleeding and promote healing.

In Kenya, all these instruments are in use depending on where the surgeon learnt.

Frequently, the operation is done crudely, removing the whole of the soft palate.

The procedure is not carried out in modern health facilities.

### **Complications**

A proper audit of the complications resulting from uvulectomy has not been compiled owing to the fact that few people go to hospitals while majority avoid hospitals for fear of being ridiculed by the health workers. Others may be too ill to reach hospital or the parents don't attribute the ailments to uvulectomy. In Niger where, by the age of 5 years, 19.6% of the population will have had an uvulectomy done, severe complications of uvulectomy account for 7.8 per 1000 cases of hospitalization for children below 15 years of age [1].

Bleeding accounts for the majority of the complications accounting for over 55% of all reported cases in Nigeria [3]. However, infections were found to be the commonest followed by bleeding in Ethiopia [14] Bleeding may be immediate postoperative due to resection of the vessels or from the soft palate musculature. Since the procedure is carried out in a wake patient and without any analgesia and given the inaccessibility of the soft palate, it is not possible to obtain good haemostasis. Bleeding can also occur later due to reactive process and infections. Either way the bleeding may be profuse leading to death.

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In Kano, Nigeria, traditional uvulectomy is the leading cause of death due to neonatal tetanus among the traditional surgical practices [3].

Infections may be confined to the uvula stump or can extend to the surrounding tissues hence epiglottitis, acute otitis media, tonsillitis or may be disseminated as in tetanus, HIV/AIDS and septicaemia. Sometimes infections can lead to disseminated intravascular coagulation or endotoxic shock [4].

Damage to the soft palate is of varying degree. Cases of bifid palate and complete amputation of the soft palate have been reported. This may result to velopharyngeal insufficiency. Other complications include aspiration of the cut tissues and blood [3].

In infants, uvulectomy was found to influence weight gain negatively in children [14]. There is a theoretical risk that if adenoidectomy is done on a child who has undergone uvulectomy that they may develop velopharyngeal insufficiency. Though a lot of emphasis is put on the importance of musculus uvulae in velopharyngeal closure all assessments including air escape with a modified tongue anchor technique, production of speech sounds, trans nasal nasopharyngoscopy and radiological screening, did not show significant effect on the velopharyngeal status in subjects with normally formed soft palate [13].

It was observed that people who have had uvulectomy in uvulopalatopharyngoplasty developed complications, which include stenosis of the pharynx, tubal disorders and regurgitation of food through the nose. Other complications encountered include obstructive feeling in the throat, disorders of sense of taste and difficulties in disgorging

fish bones while eating fish. Sometimes post uvulectomy patients burn their throat even after sensing food and \ or soup was not so hot in the oral cavity. [15].

## **AIMS AND OBJECTIVES**

### **MAIN OBJECT**

Establish the determinants of the practice of traditional uvulectomy in children of 5 years and below in Thika district

### **SPECIFIC OBJECTIVES:**

1. To determine the main indications for traditional uvulectomy.
2. Determine the complications arising from the procedure and how they are managed.
3. Determine the methods used to clean, decontaminate and sterilize equipment

## **METHODOLOGY:**

This was a cross-sectional descriptive, prospective study. It was carried out in a District hospital where there was perceived high prevalence of the practice, in this case Thika District hospital. Though the hospital is in an urban centre, it mainly serves the rural communities. The District also has one of the highest incidences of HIV/AIDS in the country. The study involved children of five years or below, who had had their uvula cut. All children attending paediatric and well baby outpatient clinics had a throat examination. The parents / guardian of those found to have had their uvula resected were requested to fill in a questionnaire about uvulectomy (Appendix 1). The survey also involved interviews with traditional surgeons to have an understanding on instruments used and the decontamination / sterilizing procedures and how they dealt with or prevented complications. This was done using a standardized questionnaire (appendix 2). The interviews were carried out in a language that the parent / guardian best understood. Five uvulectomists were identified but only three were interviewed. the other two declined to participate in the study.



## **SAMPLE SIZE**

The sample size for this study was estimated using the following sample size formula for a one-sample situation [16, 17]

$$n = \frac{(Z_{1-\alpha/2})^2 P (1-P)}{d^2}$$

Where,

n = minimum sample size

$Z_{1-\alpha/2} = 1.96$  at 95 % confidence interval

P = estimated prevalence from other studies

d = margin of precision error (0.05)

Prevalence of uvulectomy from other studies is between 19 and 35%

Therefore,

$$n = 1.96 * 1.96 * 0.55 * 0.75 / 0.05 * 0.05 = 288.12$$

Say 300

## **Data management**

All data from the questionnaire schedule was coded and then entered into a computer data base.

It was cleaned, verified and analyzed using the scientific statistical package software version 11. Data was analyzed into means and rays and presented in the form of tables, pie chart and graphs. Assistance of a statistician was sort.

## RESULTS

A total of 311 children were identified to have undergone uvulectomy. Table 1 shows the distribution of the parent/guardians who responded to the questionnaire by gender.

*Table 1: Frequency of respondents by gender*

| Respondent | Frequency | Percent |
|------------|-----------|---------|
| Mother     | 305       | 98.1    |
| Father     | 5         | 1.6     |
| Other      | 1         | .3      |
| Total      | 311       | 100.0   |

The main respondent in this study was the mother, probably because it is the mother who mainly accompanies their young children to hospital.

### Sex

The sex distribution of the children whose parents responded to the questionnaire is as shown in table 2.

*Table 2; Sex distribution of the children*

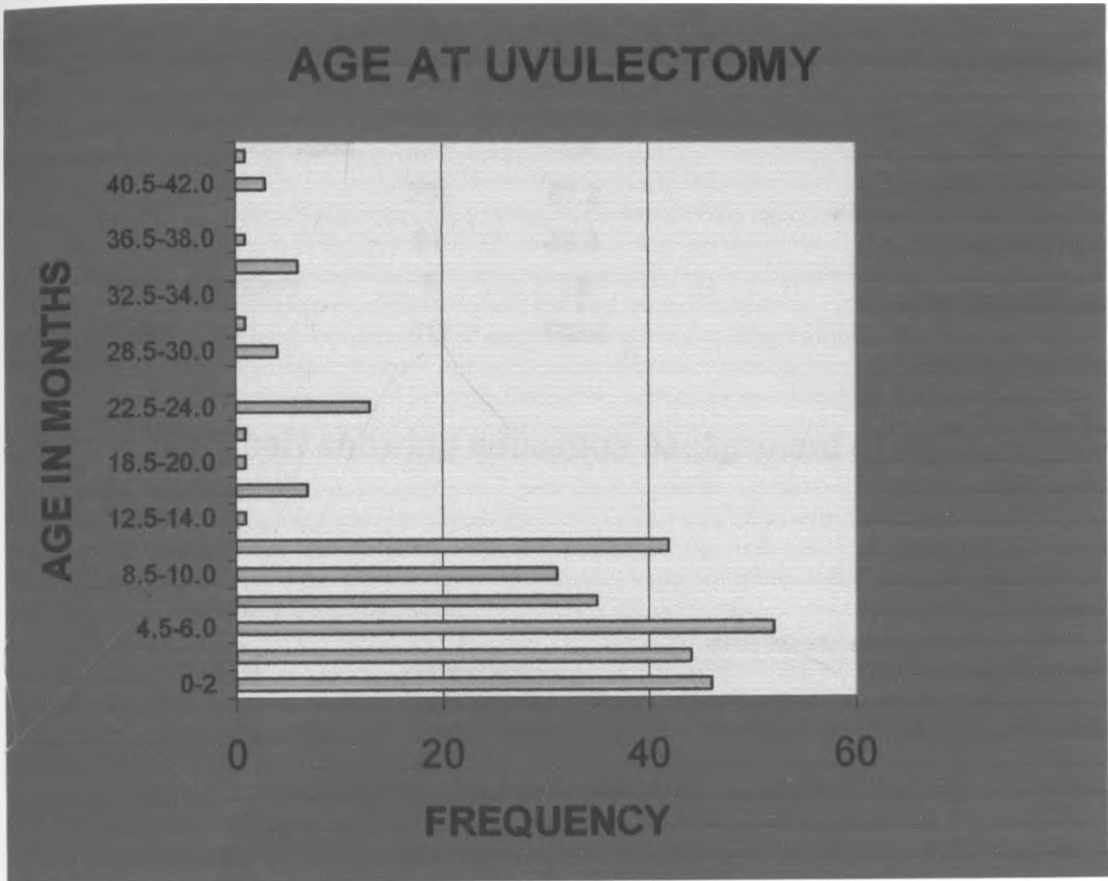
|        | Frequency | Percent |
|--------|-----------|---------|
| Male   | 161       | 51.8    |
| Female | 150       | 48.2    |
| Total  | 311       | 100.0   |

The table indicates that there was no significant sex variation among the children.

## Age

The age of children found to have undergone uvulectomy is as shown in figure 1

**Figure 1: Age frequency distribution in months.**



The youngest child to have undergone uvulectomy in this study was one week old while the oldest was 60 months. The mean age was 9.74 months. 80% of the children in the study had had their uvula cut by the age of one year.

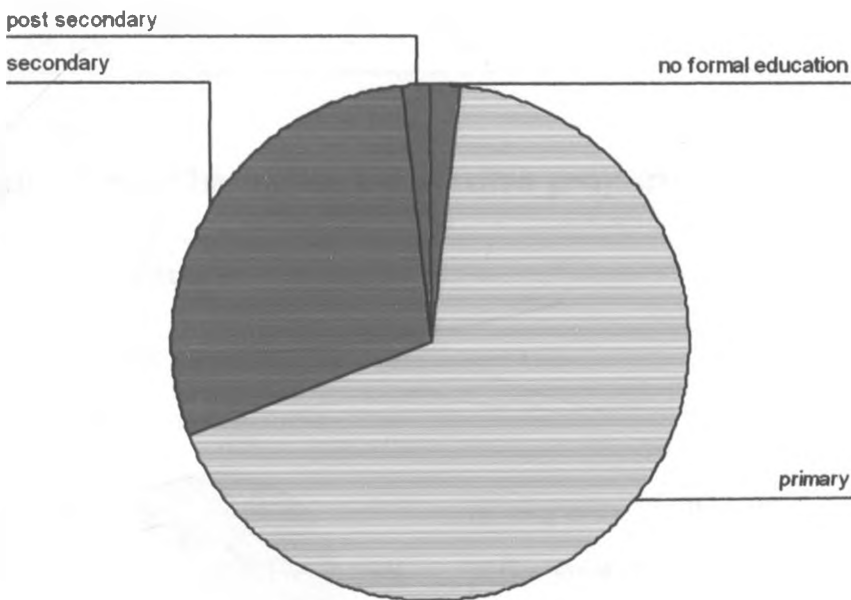
## Education background

Table 3 and figure 2 indicates the education background of the parent/guardian of the above children.

**Table 3: Education background of the respondents n=311**

| <b>Education background</b> | Frequency | Percent |
|-----------------------------|-----------|---------|
| No formal education         | 6         | 1.9     |
| Primary                     | 209       | 67.2    |
| Secondary                   | 91        | 29.3    |
| Post secondary              | 5         | 1.6     |
| Total                       | 311       | 100.0   |

**Figure 2: Pie chart showing education background of respondents**



Most parents/guardians whose children had undergone uvulectomy were of primary school level of education accounting for 67.2%. Only 5 (1.6%) had post secondary education. This shows that education level is a factor in deciding on uvulectomy with more mothers of lower level of education taking their children for uvulectomy. The tests

of significance to indicate whether the respondent's level of education was a significant contributor to the child undergoing uvulectomy could not be applied owing to the fact that the majority of respondents were of primary school level of education, (67.2%) compared to 1.6% who had post secondary level.

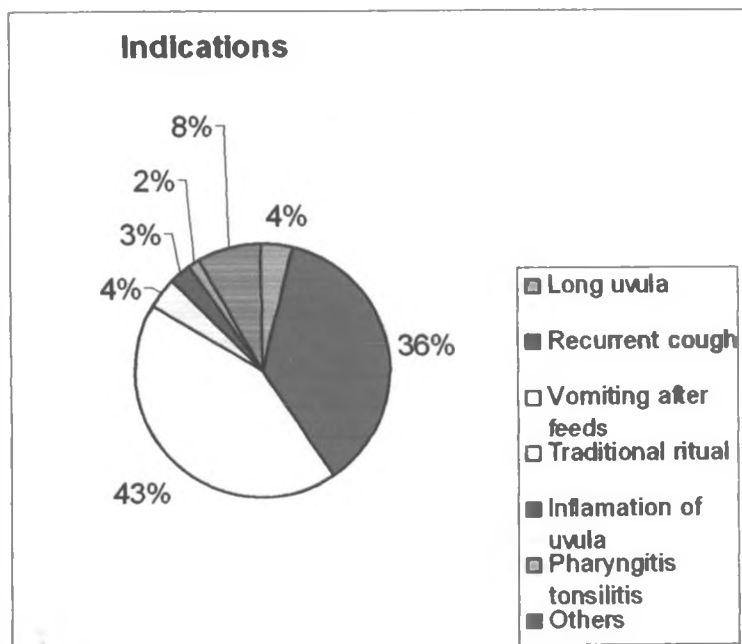
### Indications

Table 4 shows the frequency of indications for uvulectomy.

**Table 4; Indications for uvulectomy**

| Indication              | Frequency |
|-------------------------|-----------|
| Vomiting after feeds    | 182       |
| Recurrent cough         | 154       |
| Long uvula              | 18        |
| Traditional ritual      | 17        |
| Inflammation of uvula   | 12        |
| Pharyngitis tonsillitis | 7         |
| Others                  | 34        |

**Figure 3: Pie chart showing relative proportions of the indications**



The main indication was vomiting after feeds followed by chronic cough both accounting for over 80% of all indications.

### **Persons suggesting uvulectomy**

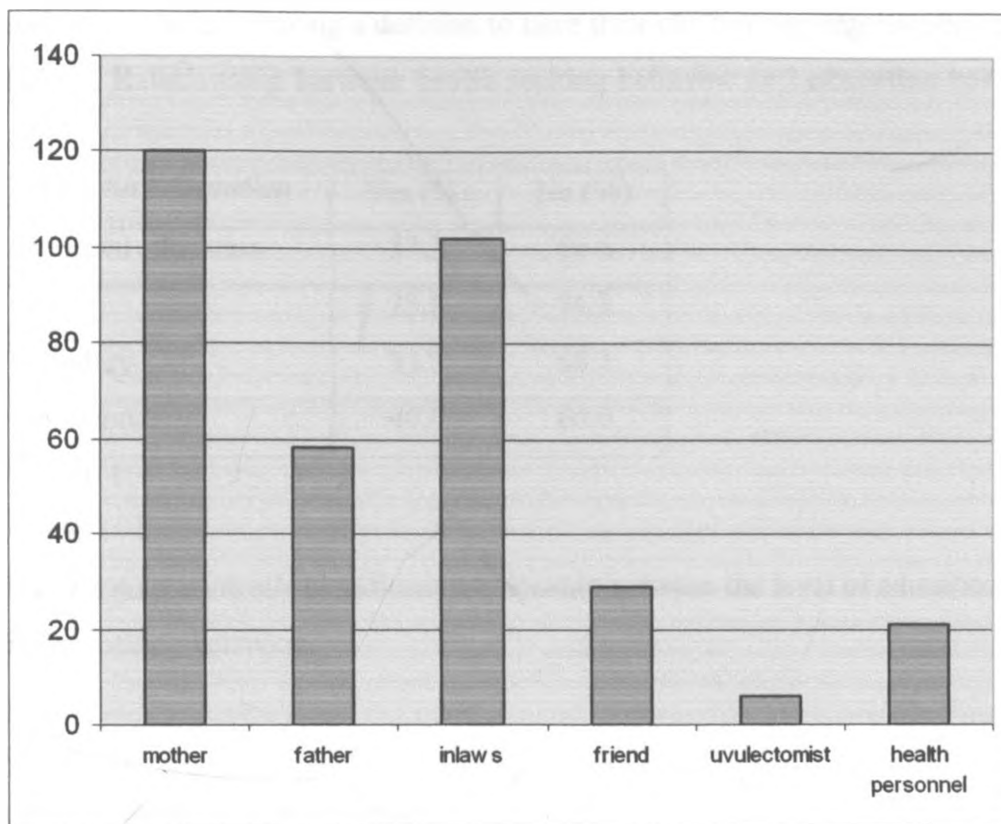
Table 5 shows the frequency of the persons suggesting uvulectomy.

**Table 5: Frequency of persons suggesting uvulectomy**

| Person               | Frequency |
|----------------------|-----------|
| Mother               | 120       |
| Paternal grandmother | 102       |
| Father               | 58        |
| Friend               | 29        |
| Health personnel     | 21        |
| Traditional healer   | 6         |

The results indicate that the mother of the child was the most influential person in matters of traditional uvulectomy. The in-laws particularly the paternal grandmother is more influential than the father of the child. Traditional healers seem to have the least say in matters pertaining to uvulectomy decision. They are only consulted to perform the procedure.

**Figure 4; bar graph presentation of persons suggesting uvulectomy**



**Health information**

Table 6 indicates the health information seeking tendencies on indications of uvulectomy before resulting to uvulectomy

**Table 6 Respondents seeking Health information**

| <i>Sort health information</i> | Frequency | Percent |
|--------------------------------|-----------|---------|
| Yes                            | 88        | 28.3    |
| No                             | 223       | 71.7    |
| Total                          | 311       | 100.0   |



Only 88(28.3%) of the respondents sort advise from the health provider on indications for uvulectomy before making a decision to have their children undergo uvulectomy.

**Table7; Relationship between health seeking behavior and education background**

| <b>Sort health information</b> | <b>Yes (%)</b> | <b>No (%)</b> |
|--------------------------------|----------------|---------------|
| No formal education            | 33.3           | 66.6          |
| Primary                        | 25.8           | 74.2          |
| Secondary                      | 33.3           | 66.7          |
| Post secondary                 | 40.0           | 60.0          |

$X^2=2.014$

$P>0.05$

There is no statistically significant relationship between the level of education and the health seeking behavior.

**Improvement after uvulectomy**

**Table 8: Frequency of respondents indicating improvement after uvulectomy**

| Response | Frequency | Percent |
|----------|-----------|---------|
| Yes      | 269       | 86.5    |
| No       | 43        | 13.5    |
| Total    | 307       | 100     |

Majority of the respondents reported improvement in their children 269 (86.5%) after uvulectomy.

**Table 9: Frequency of respondents indicating improvement sustainability n=269**

| Improvement sustained | Frequency | Percent |
|-----------------------|-----------|---------|
| Yes                   | 234       | 86.9    |
| No                    | 35        | 13.1    |
| Total                 | 269       | 100     |

Of the 269 respondents who indicated improvement, 234(86.9%) reported that the improvements were sustained beyond six weeks. There was a statistically significant relationship between improvement and improvement sustainability. ( $X^2=267.3$ ,  $p<0.01$ )

## Complications

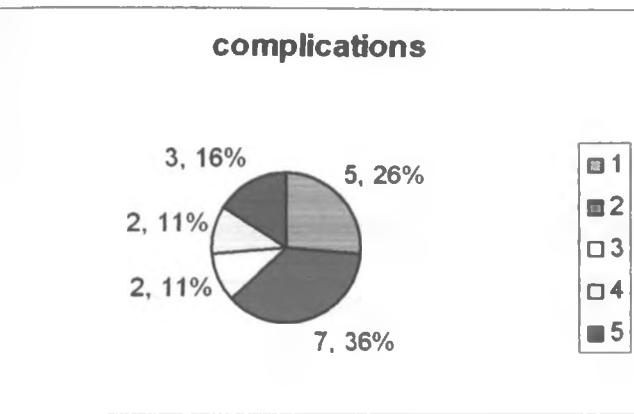
Table 10 shows the frequency of the respondents indicating that their children developed complications after uvulectomy.

**Table 10: Complications after uvulectomy**

| Response | Frequency | Percent |
|----------|-----------|---------|
| Yes      | 20        | 6.4     |
| No       | 291       | 93.6    |
| Total    | 311       | 100.0   |

20 (6.4%) children were reported to have developed complications. However none required admission to a hospital.

**Figure 5: Pie chart showing frequency of complications**



1. Bleeding
2. fever/infections
3. regurgitation of food
4. weight loss
5. Others

The most common complication was infections accounting for 36% of all complications.

Table shows the actions taken by the respondent after the complications

**Table 11; action taken after development of complications**

| Action taken    | frequency | percentage |
|-----------------|-----------|------------|
| Home treatment  | 9         | 45         |
| Health facility | 8         | 40         |
| Uvulectomist    | 3         | 15         |

Majority of the parents/guardian of the children who developed complications did not seek any form of treatment. They adopted a wait and see attitude.

## Believe in uvulectomy

Tables 12 and 13 shows the believes in uvulectomy and the reasons why they belief respectively

*Table 12; Respondents by believe in uvulectomy*

| Response | Frequency | Percent |
|----------|-----------|---------|
| Yes      | 218       | 71.1    |
| No       | 93        | 29.9    |
| Total    | 311       | 100     |

Over 71% of the respondents still believe in traditional uvulectomy

**Table 13: Reasons for believing in uvulectomy n=217**

| <i>Reason</i>                      | Frequency | Percent |
|------------------------------------|-----------|---------|
| Improvement in previous uvulectomy | 107       | 49.3    |
| Family belief                      | 37        | 17.1    |
| Proper indications                 | 31        | 14.3    |
| Prevent infection                  | 27        | 12.4    |
| Improves feeding                   | 13        | 6.0     |
| Prevent hoarseness of voice        | 2         | 0.9     |
| Total                              | 219       | 100.0   |

The single most important reason why the respondent would still go for uvulectomy is because the index child improved upon undergoing the procedure

**Table 14; Reasons for not believing in uvulectomy n=93**

| Reason                                   | Frequency | Percent |
|--|-----------|---------|
| No improvement in<br>Previous uvulectomy | 32        | 34.4    |
| Just doesn't believe in it               | 27        | 29.0    |
| Well informed now                        | 14        | 15.1    |
| Advised against by<br>mother             | 12        | 12.9    |
| Fear of infection                        | 8         | 8.5     |
| Total                                    | 93        | 100.0   |

For those that no longer believe in uvulectomy 93(28.9%), they gave reasons as no improvement on previous operation 32(34.4%), well informed 14(15.1%) or just don't believe in the practice 27(29.0%).

**Table 15; Relationship between the level of education and believe in uvulectomy**

| Believe in uvulectomy | Yes (%) | No (%) |
|-----------------------|---------|--------|
| No formal education   | 66.7    | 33.3   |
| Primary               | 72.2    | 27.8   |
| Secondary             | 63.7    | 35.2   |
| Post secondary        | 69.8    | 29.9   |

$X^2=4.513$

$P>.05$

There is no significant relationship between the level of education and the believe in uvulectomy

## RESULTS OF THE INTERVIEW WITH THE UVULECTOMISTS

There were five (5) uvulectomists identified in the district but only three (3) agreed to be interviewed. They were a retired dresser who also doubled as a subordinate in a health institution, Enrolled nurse while the third was a primary school dropout with no formal training. He had learnt the procedure from his father.

The dresser also used to do male circumcisions

The following were the indications they found necessary to perform uvulectomy

- Failure to thrive
- Chronic cough
- Choking especially at night
- Running nose



The instruments they used include scissors, artery forceps and snares (wire loop).

The enrolled nurse decontaminates the instruments using water and jik and then autoclaves them after the procedure.

The dresser boils the instruments after every case while the primary school drop out boils them at the end of the day. In between patients, he rinses them with methylated spirit or savlon.

Two of the uvulectomists indicated that they had not encountered any complications while one said that he accidentally cut the tongue.

All the three uvulectomists screen their patients. Among the contra-indications include.

- Short uvula
- Tonsilar hypertrophy
- Fever
- Oral thrush

## **DISCUSSION**

A total of 311 parents/guardians were interviewed.

There was no significant gender disparity among the children being taken for uvulectomy.

Of the 311 children who had uvulectomy done, 67.2% of their parents/guardians were of primary school standard. However it was not possible to correlate the level of education with the practice of uvulectomy owing to the sampling technique ie no equal numbers from each education sub group could be obtained in significant proportions

There were six children who had undergone the procedure at the age of 2 weeks

In this study, over 80% of the children had undergone the procedure by their 1<sup>st</sup> birthday.

This is unlike the practice among the Hausa community in Niger where all children undergo uvulectomy by the first week [3]. In Ethiopia and Niger where uvulectomy is common, 35% and 19.6% of the children respectively will have undergone uvulectomy by the age of 5 years [12, 3]. Indeed an interview with the uvulectomists suggested that the younger the child the easier the procedure and the less the likelihood to have complications

### **Indications**

Most parents took their children for uvulectomy to prevent vomiting after feeds (43%). Recurrent cough accounted to 36%. It is worth noting that most of these indications can be grouped together as upper respiratory tract infections. In the current study, only 8% sort treatment because of traditional reasons compared to Hausa tribe in Niger where it is done on the 7<sup>th</sup> day as part of the naming ceremony [3]

85.99% of the children were reported to have significant improvement and this improvement was sustained in 86.98%.

### **Social influence**

In most cases the mother made the decision to take the child for the uvulectomy without the influence of other people. However the role of the extended family cannot be downplayed. The mother in law (child's grandmother) had a significant influence on

whether the child will be operated on or not. Only 28.3% sort any information from the health worker before seeking uvulectomy.

### **Complications**

There were 20 (6.1%) children who were reported to have developed complications. Infections accounted for 36% of all the complications, though none was serious to require admission to hospital. Minor haemorrhage was reported in 26% of the cases. In general there were no fatal complications reported. Ijaduola et al [3] had reported bleeding as the most common complication (55%), while Andes Jeppson et al [14] reported infections to be more frequent

Majority of those who had complications were treated at home with analgesics or just observation (45%). 40% sort attention due to the complications in a health facility while 15% went back to the uvulectomist.

None of these children required hospitalization compared to Prual et al [1] who reported complications of uvulectomy to account for 7.8 per1000 admissions in children below 15years

### **Belief in uvulectomy**

Out of the 311 respondents, 217(69.8%) indicated they still believe in uvulectomy. The main reason for this is because there was improvement on the index child. Only 17% would have uvulectomy because of cultural believes.

There were 93 (30.2%) of parents who would not take another child for uvulectomy again. This is either due to lack of improvement (34.4%), or are well informed (15%) or just don't believe in this practice.

### **Uvulectomists.**

Only 5 traditional surgeons were identified in the district. However two declined to participate in the study, hence it was not possible to make any quantitative analytical conclusions. Of importance to note is that all had



been in the modern medical practice either as auxiliary staff or nurses. They used scissors and artery forceps compared with sickle knife in the Ijaduola et al series [3]

Boiling was the method of cleaning and sterilizing among the dresser and the primary school drop out.

#### **Shortcomings of the study**

1. Being an outpatient study, it could not determine the serious complications requiring admission or resulting to mortality
2. The relatively small number of the traditional surgeons made it difficult to make conclusive analytical report
3. It was not possible to determine whether there was any case of HIV resulting from this practice
4. Most of the respondents were of primary school level, thus it was not possible to statistically compare the different levels of education with the various aspects in uvulectomy being studied like believe in uvulectomy

#### **Conclusions**

1. Women (mothers) are the most important in making decisions when it comes to traditional uvulectomy followed by the paternal grandmother
2. The indications (conditions) leading to uvulectomy can otherwise be effectively treated in the most peripheral health facility.
3. Despite the seemingly harmful practice, this study found a very small rate of complications. However this was an outpatient based study and

hence could have missed serious complications requiring admission or resulting to deaths

4. The methods used to clean/decontaminate the instruments are not the recommended only to prevent infection transmission

### **Recommendations**

1. Health education programmes on the dangers of uvulectomy need to be conducted especially in the maternal and child health clinics targeting mothers coming for prenatal and postnatal visits. The community health workers should also educate parents especially mothers and grandmothers in homes on the dangers of the procedure and possible alternatives to the procedure since the indications can be treated at the local health centres.
2. Many people still believe in uvulectomy and may continue seeking services of the uvulectomists. The final solution may be to outlaw the procedure. In the meantime, uvulectomists could be trained on modern methods of decontaminating/sterilizing the surgical instruments to prevent infections as change of culture takes time.
3. Further studies need to be conducted especially an inpatient based study to determine serious complications requiring admissions or resulting to morbidity or determine any cases of blood borne infections resulting from this practice.

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**DETERMINANTS OF UVULECTOMY QUESTIONNAIRE**

1. Respondent    Mother-----                      Father-----                      Others (specify)-----

2. NAME OF CHILD \_\_\_\_\_ Serial No-----

3. Date of birth\_\_\_\_\_

4. Sex-----

5. Age at uvulectomy-----

6. Education background of guardian/parent at time of uvulectomy

No formal education     Primary     Secondary     Post secondary

7. Why did you seek for uvulectomy (indications)?

Long uvula  recurrent cough  vomiting after feeds  as a traditional ritual

Inflammation of the uvula  pharyngitis/tonsillitis  others (specify)-----

8. Who suggested uvulectomy?

- a. Mother insisted
- b. Father insisted
- c. Advice from in-laws
- d. Advice from friends .....
- e. Advice from traditional healer/medicine man
- f. Advice at the health center
- g. Failure of medical treatment

9. Did you seek any health information from your general practitioner/health provider on uvulectomy? Yes  No

10. Did the child improve upon uvulectomy? Yes  No

11. Was the improvement sustained? Yes  No

12. Were there any complications? Yes  No

13. If yes which ones?

- a. Bleeding
- b. Infections
- c. Weight loss
- d. Tetanus
- e. Food regurgitation through the nose
- f. Speech problems
- g. Others (specify)

14. If any, what was done?

- a. Referred to hospital
- b. Treated by the uvulectomist
- c. Others (specify)

15. Do you still believe in uvulectomy?

- a. Yes
- b. No

16. If yes give reasons

17. If No give reasons

## APPENDIX II

### QUESTIONARE FOR UVULECTOMISTS

Name

Serial No.

1. What are the indications of uvulectomy in your practice?

2. Enumerate the instruments you use in your practice

3. How do you clean your instruments?

Water alone

Soapy water

Water and jik

Others (specify)

4. When do you clean your instruments?

At the end of the day

After every case

Never clean.

5. Do you encounter any complications? Yes      No

6. If Yes, which ones

7. How do you deal with the complications encountered?

Treat myself

Refer to hospital

## Appendix 3

### GENERAL PATIENT INFORMATION AND CONSENT FORM

#### **General patient information**

We would like to seek your consent to participate in a study aimed at understanding the reasons why people seek to have their uvula cut. There are a lot of things we would like to know about the procedure so that we can manage it better.

#### **How do you participate?**

This will involve a question answer session, whereby the interviewer will ask you questions and record your responses.

#### **How does your participation affect you?**

This study does not affect you in any way because you will not be denied medical attention and other than answering questions there is nothing physical that will be done to your child.

#### **Are there any hidden dangers in your participation or non-participation?**

Non whatsoever.

Objecting to any part or the whole of this study will not affect the quality of care you receive.

#### **What do we do with the information we get?**

The information we get may not be of very immediate benefit to you but it will help us in the long run in managing the condition better.

Like all scientific information we will seek to share our findings with other people undertaking similar studies. Therefore we may publish our findings in scientific journals or present them at meetings.



If you require discussing this matter further with family, friend, or associates you are free to do so and we will be ready to answer any question. If you are satisfied with our explanation and are willing to participate then please sign the consent form below.

**Informed consent**

I, ----- parent / guardian to -----  
do hereby consent to my son / daughter to be included in a survey on uvulectomy.  
The study will enable health providers understand this practice better and hence be  
able to advice the community appropriately. I also understand that I don't have to be  
included in the study because I might change my mind at any time of the study. This  
does not mean that I will not receive the routine health services as I have been  
receiving before. The nature of the study has been explained to me by Dr.  
..... and I have not been promised any material gain to be included  
in this study.

Signed ..... Date .....

## **Kibali kwa ajili ya utafiti**

Mimi kama Mzazi / msimamishi wa -----natoa kibali ili mtoto wangu ahusishwe kwenye utafiti. Nimefahamishwa jinsi utafiti utakavyoendeshwa. Nimetoa kibali bila ushawishi wowote. Najua niko na haki ya kupata matibabu na ushauri hata nisipojumuishwa kwa huu utafiti.

Sahihi----- Tarehe

## BUDGET

| <u>ITEM</u>          | <u>COST</u> |
|----------------------|-------------|
| Literature review    | 10,000      |
| Stationary           | 10,000      |
| Secretarial services | 15,000      |
| Data processing      | 20,000      |
| Traveling            | 10,000      |
| Ethical committees   | 1,500       |
| Contingency (15%)    | 9,975       |
| Total                | 76.475      |

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