

**COMMUNITY BASED INTEGRATED MANAGEMENT  
OF CHILDHOOD ILLNESS (CIMCI-PLUS) PROJECT  
AFRICARE - NTUNGAMO**

**OPERATIONS RESEARCH INTO OBURO AND EBIINO FOLK DISEASES**

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July 2006.**

### Acknowledgement

*We would like to extend our gratitude to mothers, Fathers and grandmothers, Health workers and community leaders who spared some time to participate in the focus Group discussions and interviews.*

*Special thanks go to the following Ntungamo District Health workers; Mr Ndyanabo James, Twesigye Francis, Dr Edson Katushabe, Komwezi Agatha and Leocadia Mugisha for conducting the study and participating in report writing.*

*In addition, we cannot go without thanking Ms Tamara Nsubuga (Nutrition Intern) and Jacob Todd (US Peace Corp) for your efforts in putting different sections together and editing the report.*

*To CIMCI technical staff, thanks for all the support you provided in mobilizing communities and administering the questionnaires*

**ABSTRACT**

*This operations research was carried out to learn more about the belief in “ebiino” and “oburo” folk diseases. This report will be used to generate more effective BCC strategies that reduce extraction. Focus group discussions and key informant interviews were carried out in the seven sub-counties of the Africare CIMCI-Plus Project. It was found that the communities still hold deeply rooted belief in the diseases, and that extraction is still carried out. Africare, and its partners, must carry out increased sensitization and health education about the dangers of extraction, in order to change these perceptions.*

### 1.0 INTRODUCTION

#### 1.1 Background

Many communities in Ntungamo believe that “ebiino,” or false tooth disease, is a disease that affects every child at an early age including immediately at birth or a few days after. Symptoms are close to those of diarrhea, but mothers/caretakers believe that the disease cannot be treated by western medicine. Instead, the affected children are brought to local specialists who extract what they call a maggot like insect from the gums of the children. Some children’s teeth are not extracted. Instead, the local specialist rubs herbs on the gum, which are believed to stop the development of the false tooth. This process is called silencing, and is normally done when the false teeth are still very young in development.

The concept of “oburo,” or millet disease, is derived from the belief that there are millet like nodules in the chest of the sick person. It is believed that this disease also affects children in Ntungamo District. The signs and symptoms of “oburo” are similar to Pneumonia and Malaria.

In January 2004, Africare conducted a baseline KPC survey in all seven of the targeted sub-counties. The survey obtained information from mothers with children under two years of age and helped the project set indicators for tracking progress of the five key intervention areas of malaria, CDD, HIV/AIDS, immunization and nutrition, breastfeeding and micro nutrients implemented by CIMCI-Plus project.

According to the KPC survey, 42.5% of the children aged 0-23 months were taken for false tooth extraction and 10.6% were taken for millet extraction. These folk diseases are widely believed in and according to informal discussions with mothers and child caretakers; unless a child is taken for extraction, the disease cannot be cured. Based on this background, CIMCI-Plus project found it necessary to conduct an in depth study in this area.

#### Objectives

The goal of this study is to generate factual information on why diarrhea is linked to “ebiino,” and why malaria/pneumonia is linked to “oburo.” This will help the project design more appropriate BCC interventions. The following are the specific objectives of the study.

1. To explore why caregivers are bringing there children for extraction.
2. To find out people’s perceptions about the causes of “ebiino” and “oburo” diseases, and how they are related to causes of diarrhea and malaria/pneumonia.
3. To use the information gathered from the study to develop effective BCC interventions to demystify the existence of “ebiino” and “oburo” folk diseases.
4. To suggest ways on how Africare can “buy the extractors out” of their practice.

### 2.0 STUDY METHODOLOGY

#### 2.1. Study location

The study was conducted in the 7 sub-counties of Bwongyera, Ihunga, Itojo, Kayonza, Nyakyera, Rugarama and Ruhama where CIMCI-Plus operates.

### 2.2. Methods of data collection, sample size and selection

The study was qualitative, employing three data collection methods for triangulation purposes. These methods included:

- **Focus group discussions (FGD's):** Focus group discussions were held with mothers and grandparents of children under two years who had taken their children for “ebiino” and “oburo” extraction. 6 FGD's (3 “ebiino”, 3 “oburo”) were held and FGD's comprised a homogenous group of 8-12 participants. Ntungamo district is homogenous in ethnicity therefore FGD's were evenly distributed through CIMCI-Plus sub-counties.

Purposive sampling was done for all the participants who included people who had taken their children for either “ebiino” or “oburo” extraction. Tape recorders were used to capture FGD's opinions, and notes taken concurrently. Teams included 3 people, a facilitator, an observer and a note taker.

- **Key Informant Interviews (KII):** Key informant interviews were held with 7 extractors/silencers, 7 health workers and 10 mothers of children under two years, and 10 grandmothers for both the “oburo” and “ebiino” cases. KII used the same study teams as those used in FGD's.
- **Records:** Records from the health facilities and extractors/silencers were reviewed when available. We were interested in finding out about care-seeking practices after extraction from a trained health worker, as well as whether any documentation on the patients is kept.

### 2.3 Data Analysis

The study was descriptive. Data collection was qualitative and analyzed manually through categorization and coding of responses by the study team members, each day after fieldwork.

A report including results and recommendations on how to operationalize the study was made. The report will be disseminated at sub-county, district and national levels.

## 3.0 RESULTS AND DISCUSSION

### 3.1 “EBIINO”

#### *Common perceptions about “ebiino”*

Almost all of the respondents in the focus group discussions and key informant interviews said they knew and heard about the existence of “ebiino” disease. The only exceptions were 3 grandmothers in Itojo sub-county, who responded that the disease did not exist. “Ebiino” is the most common term for the condition. Some other terminologies used to describe “ebiino” were:

- “Ebiharahano”
- “Ebicori”
- “Ebyomukanwa”
- “Ebikoko byomukanwa”
- “Ebyakaragwe”
- “Ebinyamaishwa”
- “Ebinyangondokyera” (*snails*)

The respondents from each of the focus groups and interviews gave a variety of perceptions and beliefs about the origin and of the disease. The most frequent answer given from the

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focus group discussions was that “ebiino” originated from Northern Uganda, particularly Acholi land, and that it came to the area in the 1970’s or early 1980’s as remarked by one of the mothers “when Acholi soldiers came to the western region they married the Banyankole girls, and it is through these inter-regional marriages that “ebiino” was spread”. Another belief in relation to “ebiino” having originated from Northern Uganda was that the disease came about during Idi Amin’s regime, when the people from northern Uganda came to the west and started mixing with the locals. Other respondents said “ebiino” originated from Buganda through witchcraft. Another mother remarked thus “Baganda women used to put the extracted “ebiino” in front of people’s houses, and recite a curse such that if a pregnant woman passed these “ebiino”, their child would get “ebiino” after birth.”

The responses to questions about the causes of the disease were equally varied. One common thread was that the child contracts the disease while in the mother’s womb. Some other perceptions about the causes of the disease include:

- When a pregnant mother eats diseased maize
- The disease is not passed from child to child
- It is caused by a decaying tooth, and the “maggot” develops inside the tooth
- It is caused by an allergy
- ”Ebiino” occurs if a pregnant mother “comes across” an extracted false tooth
- Some extractors cause the disease by bewitching pregnant mothers

The focus groups were asked to talk about the signs and symptoms of “ebiino” and a variety of responses were given. The most common responses given were:

- Vomiting
- Diarrhea
- Fever
- Failure to breast feed or lack of appetite
- Licking the lips or scratching the gums
- Swelling of the gum

The respondents were asked to list differences between “ebiino” and diarrhea. Their responses are given in the following table. The most common difference was that “ebiino” does not respond to treatment. Many people believe that “ebiino” can not be treated by western medicine. *One middle aged mother said:*

*“when my child was six months, she developed diarrhea. I tried to give her herbs at home but she could not get better. I was advised by my neighbor to take the child to the hospital which I did. I spent two full weeks in Itojo hospital but the condition did not change. I escaped from the hospital and took her to the extractor that I knew but never believed in, within two days, she became better and got cured completely”*

<b>“ebiino”</b>	<b>Diarrhea</b>
Still has diarrhea even after treatment of diarrhea	Diarrhea stops after treatment
High body temperature (fever)	Low/ normal body temperature
Cough	No cough
Itching of the gum	No itching of the gums
Frothing in the mouth	Absence of froth

Less dehydration

More dehydration

**Table 1: Differences between “ebiino” and diarrhea**

***The Process of Extraction and Silencing***

Silencers, on examining the child’s gums, rub the gum with herbs. The mothers and silencers believe that the “ekiino” dies within the gum without extraction. Respondent 5 from the mothers’ focus group in Ruhama said that the child is taken to the silencer at a very young age, before they have acquired the disease. The silencer uses herbs, which are rubbed onto the child’s gums to prevent the child from acquiring “ebiino”, ensuring the child never suffers from the disease.

The process of extraction described by all the respondents was similar. The extractor examines the mouth of the child, feeling and prodding the gums for the “ebiino”. Once he/she has established the presence of “ebiino,” usually indicated by swollen gums, the extractor uses a sharp, metallic object to remove white tooth-like, maggot-shaped structures from the gum. In some instances, such as Ihunga, the mothers said these “ebiino” could be black in color and roll about after removal. The most common tool in all sub-counties was a bicycle spoke sharpened at the tip. The tools used are of poor hygiene, and have not been boiled, heated or sterilized. After extraction the tools are either not cleaned or a piece of polythene is used to wipe blood off. Sometimes the same tool is used on two or more children.

A wide variety of responses were given when the respondents were asked about the procedures after the extraction, such as referral to a health facility or administration of drugs or herbs. Some caregivers were advised to rub herbs, honey, or sugar on the gums to quicken the healing process. Some children are given anti-biotic injections, or aspirin or panadol for pain. Usually the caretaker is advised to take the child to a health facility only if the child’s condition doesn’t improve.

The cost of the procedure varies in different areas. The price may also vary depending on the experience of the extractor, or the number of teeth extracted. The following table gives cost in, Ugandan Shillings, of extraction by sub-county.

<b>Sub-County</b>	<b>Cost of Extraction</b>
Bwongyera	7000 – 10000
Ihunga	7000 – 10000
Rugarama	1000 – 2000
Kayonza	2000 – 6000
Itojo	1500 – 3000
Ruhama	3000 – 4000
Nyakyera	5000

**Table 2: Cost of False Teeth Extraction by Sub-County**

***The Practitioners***

Almost all of the respondents said that extractors learn the trade by observing other extractors. In some cases it is a practice handed down through generations from grandparents to children. In Ruhama respondents said the extractors do it by “trial and error methods” and extraction is a means of getting income. All respondents said that the extractors don’t receive

any formal training, nor are they registered with the Traditional Healers and Herbalists Association.

### ***Decision Making***

When a child is sick, the mother usually decides to take the child to an extractor. A less common response was that the mother must get the consent of the father before taking the child to an extractor. The respondents in the men's focus group said that it was mainly fathers who made the decision on where the child should be taken for care seeking as remarked by one father "*Its us men that determine where a child should be taken for care seeking because we are the ones with money*". Most groups reported that if the child's problem was "ebiino" then he/she usually gets better; however, if the condition worsens then both parents decide to seek help from the health units.

### ***The Child's Condition after Extraction***

Respondents said that if the child had "ebiino" then he would be cured after extraction, with instant relief. After extraction, diarrhea stops immediately, child starts feeding again, breathing normalizes, and vomiting stops and body temperature goes back to normal. However, some children do get complications from the procedure. The complications that were reported by caregivers differed from those given by health workers.

Common caregiver responses:

- *Failure to grow teeth*
- *Swollen cheeks and gums*
- *Infection*

Common health worker responses:

- *Anemia*
- *Dehydration*
- *Wound sepsis*

### ***Eradication***

Most respondents said that they did not know how to eradicate "ebiino" and extraction, or that it could not be eradicated. However, the most common suggestions were increased health education by health workers, or preventing the extractors from practicing. Some respondents also said that it could be prevented by silencing all newborn children.

Respondents were also asked to list ways that diarrhoeal diseases could be prevented. The most common responses were as follows.

- *Keep clean/ good hygiene*
- *Have and use latrines, wash hands after going to the latrine*
- *Drink boiled water*
- *Wash the plate before serving food*
- *Wash hands before eating*
- *Cover food properly*

## **3.2 "OBURO"**

### ***Common perceptions about "oburo"***

All the respondents said that they had heard about the "oburo"/millet disease and that it was existent in their communities albeit at varying levels. Some respondents said "oburo" was not very common in their communities, while others said that the practice of extraction was gradually diminishing. Many respondents said that pneumonia is often mistaken for "oburo".

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The majority of respondents said that they did not know any other terms for “oburo,” however, some respondents mentioned “Obujuma” and “Ebyomukifuba.”

Most of the respondents were unsure about the exact origins of the disease. A wide variety of answers was given. Answers included Bunyoro, Buganda, Mbarara, and the Acholi region. Buganda was the most frequent answer, but no clear consensus emerged. However, most of the respondents said that the disease was first heard of from 1975 – 1980.

The responses about the causes of the disease were equally varied. The disease is said to affect people of all ages, however, children are the most commonly affected. Some of the perceptions on the cause of the disease are:

- *The disease is caused by drinking unboiled milk*
- *The disease is less common in the dry season and early rains*
- *Can be passed from one child to another*
- *Children get the disease during harvesting time*
- *Extractors bewitch pregnant mothers*

Respondents were asked to list the signs and symptoms of a child with “oburo.” The most common answers were:

- *Pain below nipples*
- *Child feels pain when lifted*
- *Difficulty in breathing*
- *High temperature*
- *Coughing*

Many of the respondents believe that “oburo” is the same as malaria or pneumonia, or that they sometimes occur together. However, many of these people still believe that extraction is a cure. Some respondents believe that the diseases are different. The most common differences given were that “oburo” can be felt in the chest, and that “oburo” does not respond to treatment as remarked by one mother *“If you don’t cut the chest and remove ‘oburo’ the child cannot get cured even if you give injections and tablets”*.

### ***The Process of Extraction and Silencing***

Most of the respondents described the process of extraction similarly, with a few variations. First, the extractor examines the child. This is done by “feeling” for the disease on the chest, armpit, or behind the shoulders. Some respondents said the examination involves lifting the child. On ascertaining the presence of oburo, the extractor cuts the child with a razor blade, and extracts “fatty small things.” The substance has been described as white or black. A second method is to burn the chest with a hot metal rod. The most common tool for extraction is a razor blade, usually provided by the mother. The tools are not boiled or sterilized, and most of the extractors do not wash their hands before operating. Some respondents said that the disease could be prevented by scratching the chest with a razor blade and then using herbs to silence the disease.

There was less consensus about procedures after the extraction. Some respondents said that the wound is dressed with a clean cloth to prevent infection. Some children are given antibiotic injections, or panadol for pain as remarked by one mother *“after my child was extracted, the extractor gave me panadol and told me to keep the wound clean”*. One respondent said that a hot metal rod is placed in the wound to stop bleeding; however, many responded that the wound does not bleed. Children are usually referred to health facilities only if “oburo” is not diagnosed, or the child’s condition does not improve.

Different amounts for the cost of the procedure were given in different areas. Some respondents said that the price varies with the experience of the extractor. At times, the price

may also be negotiable. The following table lists the reported price of extraction in Ugandan Shillings by sub-county.

<b>Sub-County</b>	<b>Cost of Extraction</b>
Bwongyera	3000 – 10000
Ihunga	4000 – 5000
Rugarama	1000 – 2000
Kayonza	2000 – 3000
Itojo	2000 – 3000
Ruhama	4000
Nyakyera	3000 – 4000

*Table 2: Cost of “Oburo” Extraction by Sub-County*

### ***The Practitioners***

Almost all of the extractors said that they learn the trade by observing other extractors. One extractor said, “*I had a Mwaamba sister-in-law who used to extract millet when I was still young. I used to watch what she used to do and at times my sister-in-law would explain the process of extraction to me*”. All respondents said that the extractors do not receive any formal training, nor are they registered with the Traditional Healers and Herbalist association.

According to the extractors that were interviewed, on average an extractor operates on 12 children per month. The highest number of extractions per month was 30, reported in Ruhaama Sub-County, and the lowest was two.

### ***Decision Making***

As with “ebiino,” when a child is sick with “oburo”, the mother usually makes the decision to go to an extractor. Some respondents said that the mother must get the consent of the father before taking the child to an extractor. In men’s focus groups, the respondents usually said that it was mainly fathers who made the decision on where the child should be taken for care. Most respondents said that if the condition worsens, both parents decide to seek help from the health centers.

### ***The Child’s Condition after Extraction***

Most respondents said that, after extraction, a child with “oburo” is cured immediately. The child’s temperature returns to normal, pneumonia, diarrhea, coughing, and vomiting stop, breathing normalizes, and the child starts gaining weight. Respondents said that if the child’s condition does not improve, the treatment was delayed too long. Many respondents reported complications from the procedure, however, the responses from caregivers and health workers differed.

Common caregiver responses:

- *Wounds on the chest*
- *Scars*
- *Death*
- *Bleeding*
- *Some girls may not develop breasts, or their breasts may be deformed.*

Common health worker responses:

- *Scars of fresh cuts on chest*

- *Infection*
- *Wound sepsis*

### ***Eradication***

Respondents were asked what could be done to eradicate “oburo” from their communities. Most people said that they did not know, or that nothing could be done. However, many people suggested increased health education, such as encouraging mothers to seek care early, to reduce the presence of “oburo.”

Respondents were also asked to list ways that malaria and pneumonia could be reduced in their communities. The responses to this question were:

- *Mothers can drink boiled water to avoid spreading cough to their children*
- *Immunization*
- *Use of insecticide treated mosquito nets*
- *Throwing away broken containers*
- *Draining stagnant water*
- *Seeking early treatment*

### **4.0 Conclusion and Recommendations**

From the above results and discussion, it can be concluded that the belief in the diseases of “ebiino” and “oburo,” is still widespread. However, the belief in “ebiino” existence is more, while fewer people believe in the existence of “oburo.” Similarly, the belief in extraction as a cure for both diseases is deeply rooted in all seven sub-counties of Ntungamo, and extraction for both diseases is still carried out. Most respondents said that diseases do not respond to “western medicine,” leading us to believe that many people resort to extraction out of desperation. However, it was also concluded that the belief in “ebiino” and “oburo” is a deeply rooted cultural phenomenon, such that when a child exhibits the signs and symptoms of these diseases, care from health units is rarely sought and the child is taken to the extractor straight away.

These beliefs may not be easily changed within a period of time, but with constant sensitization, health education by Africare, health partners and the leadership some people’s beliefs may be changed and the practice of extraction may reduce. There was no relation between the perceived causes of “ebiino” and “oburo” and the causes of diarrhea, pneumonia/malaria. Actually most respondents believed ‘oburo’ was actually pneumonia or malaria.

From the operations research carried out and the results obtained, it is recommended that Africare and its partners carry out increased sensitization and health education about the dangers of extraction. This process should take into consideration that many people hold deeply rooted beliefs in the existence of these diseases, and it will take a considerable amount of time to change these perceptions.