

# Food and childhood pathologies and social representations among the ewondo of Cameroon

## Abstract

In the Third World, childhood pathologies are associated with malnutrition and, above all, environmental conditions. However, there are pathological foci that are not linked to these two entities. We have a range of morbidities which are the result of the diet of either the mother or the child. These are morbidities considered to be endo-cultural. An approach to pathology that finds meaning and a solution in the perspective of a particular cultural entity, and for which it has its foundation. This is reflected in dietary prohibitions. The relationship between diet and morbidity makes perfect sense here. In fact, we have childhood pathologies that are the result of parents' failure to respect social and dietary prohibitions. In the light of a few examples, we can see how these two particularities of human and child life are linked. Using an ethnographic approach to the issue of food, we relate the childhood morbidities that Ewondo socioculture includes in its childhood nosology to the related perceptions and representations. Childhood illnesses are not caused by the environment or malnutrition, but rather by the culture and its vision of the world and of things.

**Keywords:** food, childhood pathologies, social representations, Ewondo

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## Introduction

In anthropological terms, food is a process that extends from production, distribution and consumption of food within a given space and socio-culture. It is therefore dependent not only on the environment but also on cultures. And as a cultural element, food is organised around rules of diet and conduct, which are themselves categorical or a function of class, rank and social status. This is why we have cultural food legislation. The Ewondo, constituting themselves as a socio-identitarian entity of the Beti ethnic group, organise and regulate their diet according to the cultural norms specific to this group. This is a function of gender, age, class and social category. Consumption of a food that is banned in any of the categories to which one is assigned would inevitably cause pathologies for the individual and even his or her offspring. The same applies to children. A deviant diet would be a cause of morbidity in children, and the cause would lie at a level other than the responsibility of the sick child, but rather that of the parents. Talking about nutrition and related pathologies brings the phenomenon of malnutrition directly into line. As we can see from the *Africa Nutrition Chartbooks* report (2004), malnutrition appears to be one of the major problems affecting the health and well-being of children and adolescents in sub-Saharan Africa as well as in Cameroon. The main causes are food insufficiency and disease. For food and nutrition specialists, the relationship between food and disease in Cameroon and among the Ewondo people can only be understood by focusing on the quality and quantity of food provided to young children. The negation of the cultural dimension and its impact on the development and support of children seems to explain why infant feeding programmes are not successful in certain areas of Africa and Cameroon. From an ethno-anthropological perspective, this article lays the foundations for an understanding of childhood pathologies among the Ewondo, based on cultural rules of social and dietary behaviour. It provides a cross-sectional view of the medical and social anthropology of childhood pathologies through the prism of nutrition. Based on a field methodology specific to anthropology, the socio-cultural representations of nutrition among the Ewondo enable us to understand their conception of certain childhood morbidities and, consequently, of the therapeutics developed.

## Methodological

The methodological orientation of this research work allows us to say that it can be classified in what methodologists call descriptive studies. The primary objective was to provide a description of the phenomenon studied among the Ewondo of Cameroon. In addition, we propose to shed light on the perception of childhood pathologies in this socioculture. Based on an anthropological approach using group and individual interviews, our fieldwork was carried out over a period of one year in the localities of the central region home to this people. The field data were interpreted and symbolized through content analysis based on the theories of reasoned action and socio-cultural representations.

The inclusion of participants in the study and the conduct of interviews took place in the time frame from September 11, 2019 to October 20, 2020. The community is predominantly (if not exclusively) Christian, and the average age of the participants was 45, which suggests an adult category. Among the participants we interviewed were parents who had already had at least one child and lived in rural areas. The topics covered included: knowledge of childhood pathologies and their manifestations. The last section deals with the community's view and perception of these conditions. Participants' comments are quoted in quotation marks, in italics. Participants were coded to ensure confidentiality and anonymity. To this end, a code such as "MBYO-KOU-Mar001" means that the quotation comes from the interview conducted in Mbalmayo (MBYO) in the village of Koumassi (KOU) with the first participant we met.

## Typology of childhood eating disorders

The combined impact of prenatal and postnatal nutrition and a wide range of nutritional ingestions in women, children and babies no longer needs to be demonstrated. With Lambert H. Lumey,<sup>1</sup> we can see that this provides the child with special qualities. Poor management of pregnancy and infancy is also at the root of certain pathologies. To this end, we would say that there are two types of morbidity relating to nutrition in children. There are intra-uterine or foetal pathologies and those known as extra-uterine or relating to the feeding of the child from birth.

## Intra-uterine feeding pathologies

These are pathologies that affect the child as a result of failure to comply with the dietary restrictions imposed on the parents, especially the mother. As L Mallart-Guimera<sup>2</sup> points out, these pathologies:

*are not etiologically so, since they are not considered to be caused by people in possession of anti-social l'èvu (witchcraft). Nor are they therapeutically so, since the doctors in charge of treating them do not necessarily have to be in possession of l'èvu. Like simple illnesses, they fall within the framework of the order established by Zamba (God), albeit in a different way. Indeed, daytime illnesses are not regarded as normal, insignificant phenomena, but as the sign of a direct or mediated sanction from the ancestors for observance of the norms that regulate clan life.* L Mallart-Guimera<sup>2</sup>

*“Nutrition and food deprivation in the first months of life, whether during pregnancy or soon after birth, can affect brain development in ways that leave their mark well into adulthood”* Lise Dubois.<sup>3</sup> From this perspective, the Ewondo place particular emphasis on what the woman in labour consumes in order to avoid future consequences. Thus, for them, pathologies linked to intra-uterine nutrition are the genesis of a pathological category referring to the transgression of a proscription. These childhood illnesses result from the transgression (*dan*) of a prohibition (*èki*) or the violation (*vus*) of a clan law (*mvèndè*) by the parents. All these offences lead to punishment in the form of bodily illnesses in the child.

### //Akòn/fùlú//: fùlú diseases or “diseases linked to resemblance”

Resulting from non-observance, or rather violation, of certain prohibitions: seen from the point of view of *èki*, they are contracted by a child during its intra-uterine or foetal life. They result from the violation of prohibitions that the father and/or mother were obliged to observe before and/or during the gestation period. Thus, the organic structure (*fùlú*) specific to the father and another to the mother is what contributes to the formation of the fetus. L. Mallart-Guimera<sup>2</sup> states that there are two types of *fùlú*: one masculine and the other feminine. *“Fulu ya bivès enè fùlú fám (Bone fùlú is a masculine fùlú). Fulu ya bye enè fùlú fám (Nail fùlú is a masculine fùlú) Fulu ya meki enè fùlú miningâ (Blood fùlú is a feminine fùlú). It therefore appears that bones, nails and solid parts of the body are masculine elements due to the male fùlú while flesh, blood and all soft and liquid elements, are feminine traits due to the action of menstrual blood”*. L. Mallart-Guimera<sup>2</sup>

In the context of this work, we are only interested in the prohibitions relating to women, given their close link to food.

### //Fùlú/ abum//: fùlú of the belly related to pregnancy or mòn a vu dzom

When the Ewondo refer to *fùlú* related to the belly, they are referring to a series of dietary and/or gestural prohibitions concerning the pregnant Ewondo woman or girl and/or the husband, whose non-observance leads to morbid conditions in the newborn. For the Ewondo, and certainly for many other African sociocultures, there is a homological relationship between one of the symptoms and a particular trait of the forbidden object. These are:

#### **Mòn/a/vu/zip//: the child looks like a long-legged antelope**

As the name suggests, it is correlated with the element ingested by the mother during gestation. This morbidity has a double level of action. On the one hand, we have the mother or pregnant woman, and on the other, the child. In order to make it a reality, the woman is forbidden to eat the flesh of the “zip” antelope (*cephalophus*

*leucogaster*), which has the characteristic of being very rare. For some women, this means uterine hemorrhage during gestation, and for others after delivery. The second materialization of this pathology would be in relation to the unborn or newborn child. In fact, it confers morphological characteristics in line with the animal's physiognomy. In other words, at birth and during its morphological development, the child will have long, threadlike legs with no markings, like those of the zip antelope or *cephalophus leucogaster*.

#### **//Mòn/a/vu/odzoe//: the child resembles the elongated-snouted antelope**

This morbidity stems from the consumption or eating of the proscribed flesh of *cephalophes africanus*. This proscription is due to the characteristic weakness of this animal which, in and during its death after shock, behaves like an individual in full convulsion. The Ewondo believe that the flesh of this animal causes convulsive malaria and epileptic seizures (*kanda*) in the child. The mother-to-be who, during gestation, consumes the flesh of this animal exposes her child to convulsive malaria and/or epileptic seizures. By analogy, the sick child will drool, gasp from time to time and convulse like the antelope *odzoe*.

#### **//Mòn/a/vu/ossen//: the child looks like a squirrel**

This morbidity is rooted in the ban on eating the flesh of the squirrel. The first characteristic of the squirrel (*Funisciurus isabelea*), or *ossen*, for the Ewondo, is its cough-like cry “cough” accompanied by a small whistling sound. In view of this, pregnant Ewondo women are forbidden to eat its meat. Failure to do so will result in a cough which, by homology, will be similar to the cries of a squirrel.

#### **//Mòn/a/vu/nsomi//: the child resembles the marrow of bone or “otitis”.**

Pregnant women are governed by a number of dietary prohibitions, compliance with which will not only ensure better development of the fetus, but also, and above all, a healthy birth. Breaking and eating the marrow of the bones of the animals you eat is the rule to follow. It is said that: *“mòn a yi vu nsomi”* or *“the child will resemble the marrow of bone”*. The manifestation of this childhood pathology is suppuration of the ear, better known as *“otitis”*. For the Ewondo, bone marrow is assimilated to this suppuration or discharge of pus observed in one of the child's ears.

A second category related to this morbidity is established in the order of gestural prohibitions. These can also be the cause of *nsomi*. Pregnant women are advised not to cut off the caudal glans of bananas (*abine ekon or banana testicle*) in the first instance, and then to discard the juice that emerges. Failure to do so will result in *“otitis”*. It is related to the sap flowing from the banana plant's caudal glans. The manifestation is the same as the first, i.e. suppuration of the ear.

#### **//Mòn/a/vu/kam//: the child looks like glue**

This *fùlú* is related to gestural prohibitions. Among the Ewondo, there is a set of gestures and actions that are detrimental to the human project gestating in its mother's womb. This is why it is forbidden to touch the latex of a *ficus (trachoma)*. This prohibition is based on the sticky property of conjunctival granulations in a cul-de-sac, which is synonymous with the sticky property of *ficus latex*. Thus, if a pregnant woman steps on it, the child must pay the price.

#### **//Mòn/a/vu/ngom//: the child looks like a porcupine**

Not eating the meat of the porcupine (*ngom*), or of any other animal with only one testicle, is the proscription that conjugates

this *fúlú* with the child. The mother-to-be who chooses to consume such meat imposes a state of suffering and risk of “infertility” on her future child, especially if male. As mentioned above, the child is born with “undescended testicles resembling the undescended testicle of the porcupine or any other animal with one testicle”. It’s worth noting, however, that at some point, this situation is accompanied by excruciating sub-abdominal pain, sometimes leading to the child’s death. This is “*the reason why Ewondo mothers check the purses of their male children to ensure that they are in good condition and correctly positioned*” (NYSO-KOU-Afou 01, 24.10.2020). For some of them, this would mean advocating the rapid and effective use of therapy to resolve this situation, which is considered disastrous for the Ewondo people. For they see it as “*a waste, a loss*”.

#### //Mòn/a/vu/kos//: the child looks like a fish

The Ewondo forbid pregnant women to fish for ecope. In addition to this prohibition, pregnant women are advised not to eat fish caught while fishing (*alog*). Multiple justifications are produced in relation to the consequences of non-compliance. “*This proscription is assigned to women who have left or escaped from their lands*” (MBYO-DZE-Mel 02 on 14.12.2020). This escape, accompanied by fishing, takes the form of refusal to breastfeed the child, sometimes leading to the child’s death. Some of the informants equate this pathology with *édip*. However, it should be noted that these are two different pathological entities. The latter is attributed to the mother, and would only cause the death of the child if the latter were to take from her breast.

#### //Mòn/a/vu/ékúkú//: child looks like bird *ékúkú* dyspnea or bronchitis

This pathology can be classified as a natural disease. In Ewondo socioculture, however, it is a supranatural condition. Its appearance is said to be the result of a breach of a ban on eating a bird (*ékúkú* or large sparrow). In the newborn, this is said to cause the *ékúkú* disease, characterized by rapid, marked breathing, which resembles that of the bird itself. This respiratory difficulty appears in children suffering from “fever” and a large “spleen”. It’s common to hear people say “*Mòn a vu ékúkú*” or “*child looks like bird ékúkú*”.

In medical parlance, this is assimilated to dyspnea. It is a dry, acute “cough” with blocked breathing and febrile attack. N. Monteillet,<sup>4</sup> quoting Tsala (1956: 183), says that “*dyspnea occurs in children with fever and a large spleen*”. Following this view, the Ewondo recognized another origin for this pathology. This is the child’s proximity to a cat. For them, this animal’s hair causes the same symptoms in the child. And sometimes, they make the baby purr like the cat. Hence the set of measures designed to protect children from this pathology.

#### //Mòn/ á/ vú/ ósòk//: the child looks like *Cercopithecus cephus*

This morbidity stems from the fact that pregnant women are forbidden to eat the meat of the *ósòk* monkey (red-tailed monkey: *Cercopithecus cephus*). Among the Ewondo, this would prevent the child from being exposed to or falling prey to “whooping cough”. For the Ewondo, whooping cough is characterized by a “cough” that resembles the cries of this monkey.

#### //Metin/: elephantiasis

As its name suggests, *elephantiasis* is marked by the prohibition of eating elephant paws, otherwise the child will have *metin* with increased volume of the leg or legs resembling elephant paws. Just like some people with big legs. It should be noted, however, that this pathology sometimes manifests itself a little late in life.

#### //Mòn/ á/ vú/ ekob/ zok//: child looks like elephant skin

This pathology, like most morbidities of this kind, is part of the ban on eating elephant skin during gestation. If it is not respected, the child will have “*dermatosis*” eczematiform, marked by analogy or by the resemblance between the horny character of this lesion and the skin of the elephant.

#### //Mòn/á/vú/bibolo//: the child resembles decay

“Bibolo” refers to decay. This is what justifies the restriction on eating meat in the early stages of decomposition or rotting: “*bibol bi tsit*”, as “*the child will be pestilent or risk giving off an odor related to the stinking and purulent character due to the decomposition of the meat consumed by its mother during its intra-uterine life*” (MFOU-MBAL-Ngoo 003 le 24.01.2021).

#### //Mòn/ á/ vú/ ebēm//: the child looks like an animal that has swallowed another

A pregnant woman is forbidden to eat the meat of an animal that has swallowed another, or the meat of an animal found in the entrails of another. Non-observance will lead to the child being affected by the large spleen considered by the Ewondo as an animal (*tsit*) which is in the child’s belly.

As presented above, the *fúlú* characteristic of women is “*linked to flesh, and blood*” and therefore related to “*the action of a woman’s menstrual blood*”. This, in our opinion, is closely related to pregnancy. As a result, her level of nutrition belongs to this category of Ewondo perceptibility. But to this is added another, which concerns the result of transgression (*ndan*) of certain laws (*mvende*) that regulate and sometimes even govern clan or lineage society.

#### //Ndāñán/ mòn//: crossing the child

“*Ndāñán*” literally means “*crossing*” or “*transgression*”. In the context of this pathology, the verb “*ndāñán*” is *polysemous*, designating transgression, defilement, illness and/or misfortune, as well as treatment. The breastfed child can be the victim of any childhood illness. For there has been a transgression of the norm that forbids sexual relations with a breastfeeding woman. Let’s note in passing with one of our informants that we say this because during this period, the child forms a barrier between the two parents, as it lies in the middle. Crossing or transgressing is tantamount to stepping over this child to have sex with his wife. And even if she doesn’t conceive, the father’s sperm will make the child sick (AKO-YEL-Meyi 004 le 06.12.2020).

#### All the symptoms are recognized and classified as follows:

- Diarrhea (white or water only) ;
- Child emaciation marked by very excessive weight loss;
- Feverishness due to water loss. This makes the child vulnerable to other illnesses;
- Anemia leading to malaria XE “malaria” in some cases.

This infantile disease stems from the transgression of the prohibition against sexual intercourse by breastfeeding mothers. Our informants say that “*there is a transfer of blood between the father and the mother, and with ejaculation, the sperm rises to the breast and poisons it, thus exposing the child*”. (MEFA-MBA-Mvel 005 12.01.2021). This transgression is the cause of pathologies such as “*anyos*”.



**//Anyos// or //mòn/ akòn/ anyos//**

This pathology refers to “a sick child due to close or, better still, very close maternity”. This is a transgression of the law forbidding sexual relations with a parturient. For the breast-feeding child, we have to some intestinal “colic”, which the Ewondo call “anyos or anyos minneman”.

If the woman manages to conceive, these children are considered to be rival brothers, competing for the same source of physical and social existence, especially in terms of the eldest-born relationship. They’ll be like twins in simultaneous competition. As one of the participants puts it:

*The breastfeeding mother will have sexual relations with a man who may or may not be the father of the child she is breastfeeding. However, she will conceive, i.e. become pregnant while breastfeeding. The child will then have diarrhea, lack appetite, lose weight and run a high fever. (MEFA-MBA-Mvel 005 on 12.01.2021).*

This category of childhood illness is the logical consequence of the empirical link between sperm and mother’s milk, as Mallart-Guimer<sup>2</sup> points out: “in fact, to have sexual intercourse during the lactation period is to make the breast-feeding child drink sperm, thereby endangering its life”.

**//Mòn/à/díp/màbí/abum//: infant constipation**

Constipation refers to a child’s failure to have a bowel movement or fill a diaper for three, four or five days. The child’s intestines contract to evacuate faeces, resulting in persistent, unpleasant spasms. Intestinal obstructions are sometimes rare, but the child won’t be relieved until he or she has evacuated the faeces. According to some of our informants, this is the result of all the prohibitions surrounding pregnant women. This morbidity, considered natural and biological, also occupies a place in the register of Ewondo cultural diseases. It can be summed up in one proscription. Ewondo parturients are forbidden to consume food that has been consumed during the night. Failure to comply with this proscription leads to constipation in the newborn. Better to “keep the stool in the belly”, according to the local expression translated literally: *mòn à dip màbí abum*: “the child keeps the stool in the belly”.

**/Bilòg/ or yeast**

It manifests itself as a bloated belly in children. The child loses appetite and suffers abdominal pain. “This pathology is very dangerous and is not often treated in hospital. The child has a bloated, tight stomach, lacks appetite and, in some cases, even anaemia and fever”. (MFOU-MBAL-Ngoo 003 on 24.01.2021).

This is a pathology that kills even adults in this socioculture, especially if it is not diagnosed and treated quickly.

**/Édip/or /idib/: hydramnios**

In most cases, this disease is hereditary. “It is a blood disease, not very visible in childhood, but more apparent when the child has grown up, and is observed in the child’s physiology” (MFOU-MBAL-Ngoo 003 le 24.01.2021). It’s a female pathology that, in adulthood, manifests itself in difficulties conceiving and breastfeeding, with “heavy water loss”. As one of the participants pointed out, “if the child is born and takes the breast, it becomes very ill and sometimes dies” (MFOU-MBAL-Ngoo 003 24.01.2021). *Edib* literally refers to a large hole in a body of water. “When a woman gives birth, the child is accompanied by a great abundance of water; this water causes itching. *Edib* is the result of syphilis. It’s a serious disease, as it often leads to the death of newborn babies”. L. Mallart Guimera.<sup>2</sup>

For the Ewondo, all pathological manifestations are ethno-pathologies. Their origins lie in the non-respect of a certain number of rules, in the breaking of prohibitions, in human, ancestral or divine action. They sometimes have physiological symptoms that can be confused with natural morbidities, but their treatment is exclusively endogenous, cultural, according to well-defined endogenous ideocodes and endo-therapy, which we’ll discuss below after presenting natural morbidities.

**Exclusively natural diseases**

This sub-section is structured around a pathological frame of reference defined by a typology: *akòn tsíd*, *akòn misse*, *akòn nlo* or *akòn nyo’o* etc.

**//Akòn/ tsíd// or “tsíd” diseases**

Under the name of “*tsíd*”, the Ewondo group together a series of diseases caused by a pathogenic element bearing the same name. In other contexts, the term *tsíd* would mean:

- i. Non-domestic quadruped animals, as opposed to birds, reptiles and fish;
- ii. Meat.

However, we are unable to report precisely how the different meanings of this term are reconciled.

The pathogenic element “*tsíd*” is represented by the Ewondo as a living being which, like, moves from one point of the body to another, stirs, bites certain organs and sucks the blood of its victim. In the Ewondo pansemia, this pathogenic element is represented as a leech-like animal living in the body of the patient. All these diseases are considered to be disorders of the circulatory system. Hierarchically speaking, the “*tsíd*” category is placed, by virtue of its general meaning, at the first level of diseases that L. Mallart-Guimera<sup>2</sup> describes as classificatory. At the next level, it comprises six categories that can be recognized linguistically by the fact that the basic term “*tsíd*” which is modified by a determinant that designates the region of the body where the action of this pathogenic element manifests itself. For example:

Among us Ewondo people, we have a plurality of *tsíd*. These different *tsit* correspond to very specific illnesses. For my part, I think there are something like five categories of *tsíd*: the *tsíd* of the *mbo’o nno* (right side) ; of the *mbo’o nngala* (left side), the *zoñ* (jaundice), *tsíd mändzim* (*tsíd* due to water), *tsíd abúm si* (meat of the lower abdomen), and finally *tsíd meki* (malaria), apart from the *tsíd mesoj* (gum disease). (MBYO-NDZE-Melio 003 on 24.03.2021).

First of all, let’s contrast *tsíd* on the left (or female) side with that on the right (or male) side. The former includes all splenic affections, and the latter all hepatic affections. The third appears as a synthesis of the previous ones, as suggested by its name: *tsíd* of the two side, by which we designate cases of spleno-hepatitis. The fourth is designated *tsíd* of the lower abdomen; this is the name given to certain disorders (hemorrhages, pain due to spasms of the uterus) that occur in women after childbirth. The fifth, *tsíd* of the blood, refers to certain anemic conditions caused by “malaria”. Finally, *tsíd mesoj*: *tsíd* of the teeth identified as inflammations of the gums.

**/Tsíd mèki/: malaria**

Literally, the expression refers to “an animal in the blood, animal of the blood”. Malaria can be recognized by its symptoms, which are commonly shared by the Ewondo. These include: the cold felt by the child, chills, hyperthermia, headache, fatigue, muscle or body aches, sometimes lack of appetite and anemia.

**Complications of malaria among the Ewondo can lead to:**

*Ebēm*, which is a descriptive term. This term refers to the large spleen in children;

And *Emina*, an etiological term. This noun is derived from the verb *min*, meaning “to swallow”. It evokes the prohibition that a pregnant woman must not eat an animal in whose belly another animal has been found and swallowed.

Children with this type of spleen today are almost non-existent.

This type of spleen is nowadays quite rare, as predispositions are taken most of the time in our countries, to prevent girls and pregnant women from consuming such meat. Even in the big cities, some women eat it without talking about it, for fear that their children will be affected by the disease. And then, after childbirth, there’s the husk juice that nursing mothers consume to pass on the preventive

**Table 1** Bivalent category of *tsid* by Mallart-Guimera<sup>2</sup>

	left-sided <i>tsid</i> (splenic disorders)	<i>tsid</i> on the right side (liver disorders)
<b>Children</b>	<i>Ebēm</i> (large spleen) - <i>kúé ebēm</i> (large spleen with convulsions)	- <i>ebēm emina</i>

As we have stated, all these conditions are caused by the same pathogen, the “*tsid*”. Ewondo physicians all agree that this agent first operates in the “spleen”: “*ebēlèk*” and that, in a left-to-right movement, it then reaches the gallbladder: “*zoñ/zòŋ*” and the liver: “*esèk*”. The names of illnesses caused by this pathogen therefore change, depending on the movement and the age of the patient.

In children, the term “*ebēm*” is used as the basic term for the action and effects of the pathogenic element on both the spleen and the liver. This action takes the form of splenomegaly and/or hepatomegaly, manifested during a malaria attack. When this basic term is modified by a determiner, this marks the existence of a new differentiating element corresponding to other forms of malaria. These differentiating elements are designated by the determiners “*kúé*” and/or “*emina*”. The three pathological entities, “*ebēm*”, “*kúé ebēm*” and “*ebēm emina*”, are defined according to the presence or absence of the following symptoms: fever, cold, shivering or shivering, splenomegaly, hepatomegaly, malarial cachexia, abdominal bloating with hyperthermia.

The two determinants, “*kúé*” and “*emina*”, meaning “*convulsive movement*” and “*swallowing*” respectively, are used as etiological referents. The categories “*kúé ebēm*” and “*ebēm emina*” belong both, by their etiological meaning, to “*fíliú*” diseases, and, by their descriptive reference, to “*tsid*” diseases.

**//Tsid/məndzim//: Splenomegaly**

As stated above, in biomedical terms this is a form of malaria. Its symptoms are “*heavy sweating, absence of temperature, fatigue*”, caused, according to the Ewondo, by “*the abundance of water in the body*”. In other words, it’s the expression of *Ebēm*. According to our informants, the cause is the mother’s consumption of snails and offal, particularly animal lungs, during gestation. Physiologically, it is synonymous with an increase in the volume of the spleen, the consequence of which is *plasmodium falciparum*.

**//Zòŋ //ou //zoñ//: Jaundice or icterus**

Bile (*zòŋ*) is the cause of many pathologies. When one of these appears, it’s common to hear people say: “Such and such has jaundice... Look at his eyes! What are they like? Did you get a good look at them? Yes, he’s jaundiced! Where does this disease come

treatment to their children through their breasts. (MFOU-MBAL-Ngoo 003 on 24.01.2021).

**Or the Tsid**

We will have the *tsid* on the left side and on the right side, the whole forming a very marked nosographic ensemble. This set is structured along two different axes. The first is based on the left side/right side opposition, which corresponds to the location of the “spleen” and the liver and, consequently, to splenic and hepatic affections as previously stated. The other axis is based on the child/adult opposition. All this is part of the fundamental duality structuring all social and extra-social relationships. Indeed, in terms of nomenclature, splenic and hepatic disorders are given different names depending on whether they occur in a child or an adult, on the left or the right side. Taking these two axes into account, Mallart-Guimera<sup>2</sup> organizes these disorders as follows in children: (Table 1)

from? From the bile secreted by the liver, say the specialists. The term “*zòŋ*” refers to “*icterus*” that can occur in patients with liver disease.

On the one hand, *zòŋ* is the only linguistic form that is not labelled by the basic term “*esèk*”, which could imply that it designates a common symptom that is none other than the yellow coloration of the skin, eyes and urine, of all liver ailments. On the other hand, the same term is used in statements such as “the child is sick with *zòŋ*”. This would suggest that the yellow coloration is considered a pathological entity in its own right. This is how local pharmacopoeia views it. In children, the symptoms are as follows: “*stomach ache, lack of appetite, general fatigue, joint pain, the yellowish color of the eyes which sometimes tend towards green, the same applies to the nails*” (MEFA-MFI-Meny 006. 19.03.2021). A female informant may also refer to “hereditary”. She puts it this way: “*if, above all, the mother was affected by this disease during pregnancy. At the moment, the child is born with red eyes, sleeps a lot and is very tired*” (NYSO-NGOM-Nang.008 on 25.04.2021). It is considered dangerous because it kills children so easily.

In adults, liver ailments are referred to as “*esèk*”, meaning both the liver substance and the ailments it can cause. The term is used to identify cirrhosis of the liver, characterized above all by moderate inflammation of the liver substance. Etiologically speaking, “*nluman esèk*” is a closed category that applies to a single pathological entity: cirrhosis. As its name suggests, it belongs both to the etiological system (nocturnal diseases) and to the “*tsid*” diseases. Finally, let’s point out that increased liver volume (*esèk*), “*icterus*” (*zòŋ*) and ascites (*məndzim*) are the three main symptoms that, alone or in combination, enable the Ewondo to distinguish and name the various liver ailments.

Following these *tsid* affections, we pause to consider diseases caused by worms.

**//Akòn / minsòñ //: illnesses caused by worms**

The term “*minsòñ*”, plural of “*nsòñ*”: worm, is used to label this class or level of childhood ailment. The other three are designated by a single term, a single entity that acts on the body to produce certain diseases. The Ewondo assert that “*there are several kinds of worms*”: “*minsòñ minè kane kane*”. And the names they give to these worms are as many nosographic categories that are classified on several levels of differentiation.

At the classificatory level, this differentiation is achieved by modifying the basic term “worm” with one or more determiners. First, let’s take a look at the nine categories, five of which are designated by non-linguistically identifiable names, used exclusively to designate medical categories.

**Medical category worms**

These are medically identifiable. Among Ewondo children, we have identified two of the four that make up this category:

*Nsòñ nnak*: “the nnak worm” or, more commonly in the plural: *minsòñ minnak* “the worms” *minnak*” or *minsòñ bidzidzi*: the generic name given to the worms that cause the various types of filariasis;

*Nsòñ asomena* “the asomena worm”: worm that causes pneumonia;

This is how the Ewondo distinguish two types of worm *minnak*: of the eye and of the body.

The location of these worms is the criterion used to distinguish, in terms of nomenclature, between these two pathological entities, which are caused by the same pathogenic element. Today, the Ewondo distinguish between *filariasis* caused by *Filaria Bancrofti sanguinis hominis* and that caused by *Filaria loa*, although it seems that in the past, three phases of *filariasis* development were distinguished, and in each phase the worms were designated by a proper name: *minsòñ zè*, *minsòñ bikudu* and *minsòñ bisye*, as noted by Mallart Guimera.<sup>2</sup>

Two categories of this same level are designated by reference to the action of the worm, and the part of the body reached by that action.

**We have:**

- a) *Minsòñ mya lob a abum*: “worms that devour the belly”;
- b) *Nsòñ wà kùl a mvus*: “the worm that bends the back”: also known as *lumbago*, which is absent in children aged zero to five (Table 2).

**Table 2** Typology of medical worms

<b>Minsòñ minnak: worms.</b>	1. Minnak mi diss: "of eyes" or filaria loa 2. Minnak mi nyol: "of the body" or filaria sanguinis
<b>Minsòñ myalob a abum: “worms that devour the belly”.</b>	1. Zèzè minsòñ: "common worms" or intestinal worms. XE "vers intestinaux" 2. Nsòñ angəkum : "worms" or pinworms
<b>(Akòn) minsòñ</b>	<i>Nsòñ asomena</i> : "worm" or pneumonia XE "pneumonie" <i>Bilək</i>
<b>(Diseases) of worms</b>	<i>Nsòñ wò kul a mvus</i> : "worm that bends the back" or lumbago <i>Nsòñ ngoan</i> : « worm – centipede »

**Other categories of verse**

In this category we have the “*biləg*”, which poses a slight classification problem, since, strictly speaking, they are not considered to be worms, but rather “*little beasts, little things*” (*byem, plural of dzom*), to which, however, the same biting or devouring power as worms is attributed. This expression translated literally refers to “herbs” (*biləg* plural of *éləg*). It is because of this analogy that we include *biləg* in the category of diseases caused by worms, although it can be admitted to constitute an independent and unique pathological entity.

The last of these is designated by a name borrowed from the animal world, “*nguan*”, which designates the centipede. In nosological terms, this name is given to the XE “worms” that cause toothache. This form of worm is more visible in some families, where children and adults have blackened, and rotten teeth in the color of millipedes.

**Infantile intestinal worms**

The Ewondo distinguish two classes of intestinal worms, or “*worms that devour the belly*”:

- i. The *zèzè minsòñ*: “Worms of no importance” and ;
- ii. Worms “*angəkum*”, also known as “*bwan minsòñ*” or “*children of worms*”. This is how we refer to the “*ascarides lombricoïdes*” and “*oxyures vermiculaires*” of Western medicine.

In a proverb, the Ewondo say “*it’s not the day you eat the royal squirrel that you suffer from inflammation of the sexual parts (oyòñ)*”. Better still, death is not only brought on by hernia (*oyòñ*). The same is true of worms, whose manifestations are not immediate in children. The Ewondo recognize the origin of this condition as “*eating dust, eating food with dirty hands or eating a lot of sweets for the child. Consumption of unripe papayas or unripe mangoes is*

*not to be outdone*” (MFOU-NSIM-Ewol.010 le 14.05.2021) in the causes of worms. The Ewondo attribute actions to all these worms, whose analysis can help us to better understand their identity. In the words of certain child health practitioners, we can distinguish three types of action, corresponding to three aspects of the activity of these pathogenic elements.

The localization of these illnesses is represented by attributing to these worms a seat in the body, where they sometimes set themselves in motion, travel to other parts of the body and settle elsewhere. In general, when the names of diseases indicate the part of the body where the worms are supposed to reside and act, the descriptions rarely mention this kind of movement. This is the case with “*minnak* of eyes” worms, urine worms, belly worms... In these cases, the nomenclature takes care of specifying where the ailments caused by these worms are located. In the case of the other disease names (*body minnak, oviedè, nyo, nguan, asomena* and *nnà*), the descriptions refer to actions whose key words are as follows: (Table 3)

**Table 3** Verbs referring to verse movement XE “vers”

Verbs designating the seat of the worms	Verbs designating their setting in motion	Verbs indicating the movement of the worms	Verbs indicating the word of movement
Nè (to be)		Kè (to go)	
Túa (to sit)	Kòdò (to leave)	Wúlú (to walk)	Kui (to leave)
Təbo (to live)		Nyi (to enter)	

The parts of the body affected by the movements of worms are those in which the action attributed to these worms manifests itself. This action translates certain sensations of “*mintyé*” pain and other discomforts suffered by the patient. Analysis of our information shows us how the Ewondo represent these sensations. The verbs they



use to describe them express at least three types of action, according to Mallart Guimera:<sup>2</sup>

- A. The worm performs an incorporative action: *di* (to eat); *lob* (to bite).
- B. The worm exerts a compressive action: *Bi* (to seize); *vulu* or *vuru* (to roll up); *fed* (to close, to strangle).
- C. The worm exerts a penetrating action: *Bëman/digui* (to prick, to penetrate); *nyii* (to enter); *lum* (to prick, to throw).
- D. The incorporative action is the most characteristic. It is attributed to all worms without exception. Worms eat and/or bite the eyes, stomach, female genitalia, sexual organs, heart, head, teeth, chest, back and legs. In this way, certain pain sensations manifesting themselves in a very specific region of the body are translated.

The “nyoo” worm exerts a dual compressive action: “it grips the individual with force” and “it wraps itself around the heart”. This worm is said to cause *urticaria*: it causes papules to appear, causing severe itching. The verb “bi”: “to seize” probably expresses the state of paroxysm to which these itches can sometimes reach. We know that hives are sometimes accompanied by nausea and vomiting.

In any case, Ewondo doctors describe it in this way, associating these symptoms with the worm that climbs and coils around the heart. The other compressive action, that of detangling, is attributed to the worms “*asomena*” and “*nna*” supposed to cause pneumonia and sciatic gout. The former strangles the patient’s chest, preventing breathing, while the latter strangles the upper thigh, preventing walking. Pneumonia “*asomena*” is the only case where the worm simultaneously exerts an action of incorporation (*lob*), compression (*fëd*) and penetration (*nyii*). In general, the latter translates into acute, highly localized pain.

Finally, it should be noted that all nocturnal worms from the world of “*mgbël*” witchcraft are worms that penetrate the patient’s body from the outside. This is why they are called “*minsoŋ mya luman*”, i.e. “worms thrown or hurled (by sorcerers)”. This category is less common among children, but is nevertheless observed here and there. Another type of action is attributed to these worms: that which follows the treatment. Two types can be distinguished:

- i. The worm flees (generally in its seat) or disappears in the patient’s body;
- ii. The worm leaves the body, generally through the anal passage, under the effect of the medication.

In the first case, the worm becomes inoperative (*akud*) or quiet, terms used to express the patient’s recovery.

We are not in a position to say whether these different actions are always relevant features that enable us to distinguish one disease from another. In any case, these actions, which can translate distinct sensations of pain at several levels, only take on their meaning with reference to the part of the body where they manifest themselves. Relating pain to its location is an important element in formulating a diagnosis.

In the youngest children, from zero to five years of age, the first two categories of action are the ones that are recognized. It therefore becomes obvious to see them writhing in pain. Belly enlargement and hardening appear to be the most obvious signs of bellyache. In some cases, this is accompanied by vomiting and/or diarrhea, leading to a lack of appetite.

So much for illnesses caused by worms. Let’s continue with the pathologies causing cough.

#### //Akòn /ékòè//: illnesses causing cough

The term “ékòè” means cough. The word is a nominal derivative of “kòè”, meaning “to cough”. It is used to catalog a general category that includes a series of illnesses with a common distinctive trait: cough. The Ewondo distinguish at least eight pathologies characterized by coughing. Of these, five are linguistically recognizable by the fact that the basic term is “ékòè”. The other three are designated by a single term (*mboma*, *nkùk* and *sukbikum*) which, at the level of nomenclature, do not show the determinant of the basic term “ékòè”, even though, in the description of these diseases, cough is always indicated as their main symptom. At first glance, it might seem that these are independent descriptive categories of *ékòè*.

#### //Zëzë /ékòè//: simple cough

The main causality is cold. Exposing the child to the cold without any protection in the rainy season is undoubtedly what opens the floodgates to this pathology among the Ewondo. Another way, apart from the above, is to give children cold-water baths. This is why they prepare the child’s bath hours beforehand, either by exposing the bucket containing the water to the sun in the hours preceding the bath, or by simply heating the water over a fire. Symptoms include constant coughing, particularly in the evening, with high body temperature, and sometimes “small eye injuries”.

#### /Mbóma/: the cold

“*Catarrh*” of the nasal mucosa is referred to by the Ewondo as “*mbóma*”. It is apparent that there is some difficulty in situating this pathological entity in relation to diseases labelled with the term “ékòè”. Although the “*mbóma*” category can be considered as a class of independent diseases, and therefore placed at the same level of classification as “ékòè”. It seems to us that they are inseparable, especially if we consider them as symptoms. In fact, we can see that “cough” and “catarrh” are respiratory tract affections that often occur together. “A cough (*ékòè*) is an affection of the chest that we call catarrh (*mbóma*)”; or the expression *mbóma koàs*: “*Fish catarrh*”, or *ékòè koàs*: “*Fish cough*”, are all designations that gravitate around and with the notion of “*mbóma*” among the Ewondo in general. Be that as it may, the Ewondo seem to distinguish between three forms of catarrh: “*mbóma*, *tsétsé* and *mbóma koàs*”. The first term, which generally covers all forms of catarrh, designates common catarrh. The second refers to the stronger forms of catarrh, accompanied by sneezing (*tsé*). The third, finally, refers to the cold, which can affect newborns and is considered a “*filú*” disease, as indicated by the determinant “*koàs*”: “*fish*”.

The cold is not an illness, it’s just a sign that your child has just encountered a new aggressor (virus) that he’s in the process of fighting. This, they say, enables them to gradually build up their own defenses. Some children need a hundred or so bouts of *rhinopharyngitis* to build up their immunity to the usual germs. Until their immune system reaches maturity, around the age of 7 or 8. The common cold in children is characterized by “the onset of cough in children, usually accompanied by breathing difficulties and, above all, constant sneezing and nasal discharge” (AKO-OVE-Ekan.012. 22.08.2021). The latter occurs at the start of and during the rainy season, as opposed to coughing, which occurs more often in the dry season. Cold or exposure to the cold by the child would therefore be the main cause of this pathology among the Ewondo.

**/Nkúk/ou/ékúkúí/: bronchitis or bronchiolitis**

The term “*nkúk*” primarily refers to the inner and outer chest area. Clinically, it designates a pathological entity that corresponds to bronchitis. This descriptive category thus evokes an affection that is localized in this part of the body. In the descriptions given by the Ewondo, cough is one of the main symptoms, which can be qualified as “bad” (*mbē ékòè*). It is accompanied by respiratory difficulties: “*tēgē vēbē mbēn ou tēgē tone vēbē*”, which provoke a certain sensation asphyxia (*édùdù*) in the patient. In children, we observe a snoring in the chest similar to that of the red-tailed monkey “*ósòk*” mentioned above, caused by cold snaps.

Initially, your child has undoubtedly encountered a virus. One more is the beginning of a good cold. Two days later, a cough is added. This is proof that the infection has spread to the pharynx (rhinopharyngitis). The sooner you intervene, the more you’ll prevent this heavy cold from “*falling on his bronchi*” (MEFA-NGOU-Mink.018 on 16.09.2021). If your baby under three months old has a dry cough and wheezes quickly, this is bronchiolitis. He’s probably suffering from a viral infection that rages every year from late October to March, and can be serious in such a young baby. “*If your child wakes up in the middle of the night with noisy breathing and a bark-like cough, these are typical signs of laryngitis, an inflammation of the larynx that prevents air from passing through properly,*” she tells us.

**/Súkbikúm/: the atypical flu similar to the corona virus**

Finally, “*Súkbikúm*” is the name given to the influenza flu that struck this region of Africa in 1918, claiming many victims. This expression is composed of “*súk*”, meaning “to shake”, and the plural “*ékúm*”, meaning “strain”. In terms of nomenclature, these different names evoke both the severity of the disease and the general distress it causes sufferers. The main symptom of cough is usually accompanied by the following thoracic forms: catarrh (*mod asēmēlē àbui*: the individual sneezes a lot), bronchopulmonary congestion (*Súkbikúm abi mod a nkuk*: *sukbikum* catches the individual in the chest) and itchy neck (*mod awok mintsan a kin, ai engon*: the individual feels itchy in the neck, in the throat). All this is followed by severe anorexia or loss of appetite (*mod awok dzom ese abe ai bidi ai mändzim*). With the appearance of the corona virus, the Ewondo assimilated it with the *Súkbikúm* and deployed the knowledge of their cultural body to prevent and cure this pathology and thus resist it.

**/Ekòè-ósòk/: the whooping cough**

“*Ekòè-ósòk*” is also a compound term: “*Ékòè*”: a descriptive term literally meaning cough. And “*Ósòk*”: a term with etiological reference, the name given to the monkey “*Cercopithecus cephus*” whose meat is forbidden to pregnant women, as it is said to cause “*the cough of the monkey ósòk*” in newborns, this kind of cough corresponds to that which characterizes whooping cough “*which has become a little rare due to the rarity of this species of monkey nowadays*” (AKO-OVE-Ekan.012. 22.08.2021). However, there are isolated cases.

It all starts with an apparently banal rhinopharyngitis: the child has a runny nose, a sore throat and a dry cough, especially at night. This rhinopharyngitis lasts 7 to 10 days, then violent coughing fits appear, sometimes accompanied by vomiting. The sound of this cough is very characteristic and resembles the crowing of a rooster, hence the name whooping cough. It can be caught as early as the maternity ward. All it takes is for the child to come into contact with an adult who is no longer immune, or who has an attenuated form of whooping cough without knowing it. This is why all adults with a cough or cold are advised not to hold or kiss a baby in the Ewondo home.

Whooping cough is contagious, especially during the 7 to 10 days of incubation, when the child seems to be suffering from a simple rhino-pharyngitis. And that’s the problem: “*since we don’t yet know he has whooping cough, no one is suspicious*” (AKO-OVE-Ekan.012. 22.08.2021). And the disease is transmitted all the more easily because the general population’s immunization rate is too low, which explains the resurgence of whooping cough in recent years. For around 3 weeks, the child is shaken by violent spasms, vomits, spits, has difficulty taking a breath between two fits, and turns pale. The disease can be particularly serious in babies under six months of age. However, many cases of whooping cough go undiagnosed and untreated, and the sufferer recovers on his or her own.

**/Ékòè-ossen/: the cough of the squirrel**

Expression composed of “*Ékòè*”: a descriptive term evoking the cough; and “*Ossen*”: an etiological term whose name refers to a species of striped squirrel *Funisciurus isabelea* whose flesh is forbidden to pregnant women, as it is said to cause “*striped squirrel cough*”.

**/Mbóma-kos/: the cold of fish**

First we have “*Kos*”, an etiological term literally meaning “*fish*”. This term also evokes the ban on pregnant women eating certain species of fish. And “*Mbóma*” refers to cold. This name is due to the fact that colds can be identified by the sound of fish in water.

**Illness étòn or étúan**

The Ewondo assert that there are two kinds of “*étòn*”: “*étòn*” of the chest (*a nkúk*) and “*étòn*” of the anus (*a zud*). While the information at our disposal enables us to characterize each “*species*”, it does not allow us to determine how one relates to the other, as the terminological structure of these pathological categories indicates. *Etòn* of anus is a childhood disease that Ewondo doctors characterize by the presence of small sores (chancres) in the posterior region (anus and buttocks) that cause the child to itch severely. It is sometimes accompanied by bloody diarrhea.

*Etòn* of the chest is a disease that affects young children and is caused by the early development of sexual pleasure, through touching of the sexual organs and masturbation. This disease is manifested by “*the presence of febrile states, retarded growth, impairment of general condition with weakening and weight loss of the child*” (MFOU-YAO-Mene.015. 14.08.2021). As mentioned above, “*étòn*” of the chest is a symmetrical and inverse disease to “*fúlú*” of the chest, if we look at their causes and symptoms. Some believe that *étòn* manifests as emaciation with small lesions (sores) in the buttocks and rectum, and anorexia. It is thought to be the consequence of syphilis or of the mother having sexual relations with a person with “*bad blood*”. We’ll be talking about the mother’s precocious sexual appetites.

Next, we’ll look at diseases of the head.

**//Akòn /miβ//: eye diseases**

These include cataracts, conjunctivitis and blindness.

**/Biból’ɔ/: Apollo or conjunctivitis**

This is a disease that attacks the eyes. The eyes become infected, red and swollen, sometimes with discharge. It’s more common in the dry season, when dust or dirty water gets into the eyes. It’s a contagious disease. There is a permanent presence of “*bileg*” or residue at the ends of the eyes. These residues are whitish or yellowish. In the case of traumatic conjunctivitis, the Ewondo simply clean the eye carefully, removing any foreign bodies. Allergic conjunctivitis is certainly the



most difficult to treat. Conjunctivitis is an inflammatory reaction of the conjunctiva, the thin protective membrane covering the eye and inner eyelids. When attacked by a virus, bacteria, allergen or foreign body such as dust, the conjunctiva turns red. This is quickly followed by a very uncomfortable sensation of sand in the eyes, and watery eyes. Occasionally, the secretions become yellowish and so heavy that the eyelids stick together when you wake up in the morning. There are four types of conjunctivitis:

**Microbial conjunctivitis:** often associated with an episode of rhino-pharyngitis, microbial conjunctivitis is easily recognized, as the infection causes large purulent secretions that stick to baby's eyelids on waking. A small ball of pus may also form on the inside of the eyelid. Several germs (streptococcus, staphylococcus) can cause this infection, which generally affects both eyes, with the child contaminating his second eye by bringing his hands to his face.

**Viral conjunctivitis:** Particularly contagious, it generally affects both eyes, and is characterized by marked tearing and photophobia (light hurts the eyes). It is not uncommon for it to appear in the context of pharyngitis, chickenpox or measles.

**Traumatic conjunctivitis:** Mosquitoes, grains of sand and dust can penetrate the eye and cause severe inflammation.

**Allergic conjunctivitis:** While the symptoms are similar to those of traumatic conjunctivitis, "the child keeps rubbing his eyes as if he wanted to get sand out of them", they recur at regular intervals and affect both eyes. Above all, this conjunctivitis is usually accompanied by other signs such as rhinitis, asthma or eczema.

#### //Mòn/ù/bíáli/á/minkeng/mi/miβ//: faceted eyes

As the name suggests, these are children born with faceted eyes. This disease can be classified as a *fulú* disease. For, as:

*This pathology results from the fact that the pregnant woman during her pregnancy used to look into bottles, either to observe the quantity of liquid still present, or out of curiosity. The consequence is that the child is born with this type of eye, which we also and sometimes consider pathological, because it goes beyond the natural expectation that eyes should be normal, like yours and mine. (AKO-OVE-Ekan.012. 22.08.2021)*

To have the eyes in this position would therefore be, according to the Ewondo, a form of betrayal of the mother's "not exemplary" behavior during the gestation period.

#### //Akòn /nyo //: diseases of the body

Finally, in this section we group together all the other illnesses which, from a hierarchical point of view, are terminal categories at the first classification level of Mallart-Guimera.<sup>2</sup> These categories do not include others. Nor are they subsumed by other, hierarchically superior categories, with the exception, of course, of the general category of "disease", which encompasses them all and which, for us, constitutes level zero of the hierarchical structure. We shall limit ourselves here to offering an inventory of these diseases, the description of which has been given elsewhere or previously.

#### //Ntui/: diarrheal diseases

Three categories of childhood diarrhea are recognized here. Although diarrhea is sometimes considered a symptom that manifests itself as part of several diseases, the most common is that it is considered a pathological entity in its own right. While the French language does not allow the statement "I am sick of diarrheal diseases", but only "I have diarrheal diseases", the Ewondo languages, on the

contrary, allow both, suggesting that the term "ntui" can designate either a symptom or a disease. The Ewondo distinguish three classes of diarrhea, two of which are designated by adding a determinant to the basic term "ntui": "zëzë ntui": "simple diarrhea" and "ntui meki": "bloody diarrhea", while the other is designated by a specific term: "mbarabumu".

#### //Zëzë/ntuil//: simple diarrhea

This is simple diarrhea that a child can contract from contaminated food or from dirt ingested by the child. We also have breast milk and intestinal worms that can cause diarrhea.

#### // Ntui/ meki// or / mbarabumu/: dysentery

As in similar cases, it is debatable whether the disease designated by the latter term should be classified as a "species" of diarrhea, or as a pathological entity independent of this group. The clinical picture of "mbarabumu" is that corresponding to dysentery. However, this disease is sometimes misleadingly referred to as "ntui meki", meaning "bloody diarrhea". It is this confusion that leads us to classify "mbarabumu" as a "species" of "ntui". On the other hand, examination of this term shows that its primary meaning is not very far removed from that of "ntui". Indeed, the latter is a nominal derivative of the verb "tui", meaning "to go very often to the stool". For its part, "mbarabumu" is a noun composed of the auxiliary verb "báda" or "bára", used to indicate the repetition of an action, and the term "abum", meaning "belly", which conveys the same idea as "ntui", but with the emphasis on the repetition of the act of going to the stool.

We can thus conclude that, to label the clinical setting that corresponds to dysentery, we retain "the frequency of evacuations as the main symptom". In terms of terminology, the presence of bloody mucus which, as we know, characterizes dysentery is not explicitly mentioned in the term "mbarabumu", but is implied; whereas in the category "ntui meki": "bloody diarrhea", this presence is explicit, which justifies its use to designate dysentery.

#### //Mòn à/yó/ à/tui//: the child vomits and has diarrhea

As the name suggests, the symptoms are vomiting and diarrhea in children. The causes, according to our informants, are "poor nutrition, with the child in some cases not chewing food very well", but also, and above all, "intestinal worms".

#### //Akòn/ melò//: earache or otitis

To speak of earache in this context is to refer to otitis. It manifests itself in children with itching inside the ear, hyperthermia, pain and, a few days later, a viscous discharge, followed by a discharge of pus from the ear. The cause here is the introduction of bamboo into the ear, or improper cleaning of the ear, leading to one or more wounds on the eardrum.

At the onset of the condition, the child suffers from a cold. Then it's rhinopharyngitis because the nose communicates with the throat and ears. The common cold causes inflammation of the ear, and fluid lodges behind the eardrum: this is serous otitis. In some cases, this fluid will become infected: this is acute (or suppurative) otitis. Otitis can be diagnosed by examining the ears with an otoscope in a hospital, but certain signs are unmistakable. Even in cases of acute otitis, the child may show no particular symptoms, but more often than not, he or she will have a fever, especially at night, vomiting, diarrhea and possibly conjunctivitis. When the eardrum perforates spontaneously, you may even find an aureole of pus in his bed in the morning. Your child tends to scream as soon as you put him to bed, and calms down

when you hold him in your arms, as the pain is intolerable when he lies down. Serous (or seromucous) otitis is far less spectacular, and can even go unnoticed. The main symptom is hearing loss in both ears. If left untreated, this can lead to language delay.

#### **/Bíkót/: body spots**

This is the presence of patches on the skin. It is recognized as a cause of extreme unhealthiness in children who suffer from it. These macules, as in the following photograph, do not always heal quickly, but grow and multiply all over the surface of the head and/or body.

#### **/Bivas/**

This childhood condition is more common in children. The causes are unknown to our informants. However, *bivas* can be recognized by its visible physiological manifestations: the excessive presence of small pimples on the feet, such as blisters or boils; itching, leading to swelling; the discharge of water where some have been punctured, with itching and the appearance of new pimples. Lon observes cracking of the skin on the feet “*nyol ya tolé*” or “*nyul ya saleban*”.

#### **/Dzònò/: panariasis**

This is a common disease. For some, panaris and *Dzònòz* are two different pathologies with two different therapies. For the Ewondo, “*it’s a headless abscess, initially causing itching and stabbing pain*” (NYOS-MFI-Meng.009. 22.02.2021). This pathology attacks the fingers and toes the most. The Ewondo say “*dzod ya l’akui mod a onyu*” or “*abscess coming out on the finger/toe*”.

#### **/Dzòd/: abscess or furuncle**

There are three types of abscess in children: 1) abscess in the armpit or swollen woolly lymph nodes. This is a common disease with unknown causes; 2) simple abscesses or those that may appear on a part of the body; 3) Gum abscess or furuncle of the mouth is the presence of furuncles on the gums. Symptoms include pain, making it impossible for the child to chew any food whatsoever.

#### **Gum abscess**

Most of our informants noted that this disease is fairly rare, but is recognized as such by the Ewondo. It is manifested by the presence of a furuncle or in the armpit abscess. “*The child who is affected by this pathology will be refused to be carried because of the pain, the arm always drawn alongside the body and will occasionally experience hyperthermia from time to time*” (MBYO-BIK-Befo 014. Le 16.07.2021). This is why it is so important for the mother to examine her child thoroughly before and during bathing, to make sure that his body is in good condition and that there are no infections. (Figure 1)



**Figure 1** Abscess or furuncle on a child’s forearm.

**Source:**A. Ndjalla 2020.

#### **//Meki/ma/kui/ú/dzúé//: nasal bleeding**

A benign ailment, nasal bleeding is caused by a violent shock or excess heat in the dry season. It can be classified as a pathology because of the therapeutics developed to treat it.

#### **/Məheng/: /fo’o/: sores, skin ulcers or wounds**

Here we have everything to do with wounds, sores and/or skin ulcers. This group is classified as a common illness (*zèzè akòn*) with a well-developed therapy.

#### **//Akòn / mason//: dental ailments**

The Ewondo have several types of dental ailments.

- Dental ailments with the presence of pus: the mouth (cheeks) is swollen, and there is also the presence of pus around the gums;
- Dental conditions with pus inside the teeth and around the gums;
- Advanced dental condition N° 01: with small maggots inside the teeth;
- Advanced dental condition N° 02 or *ngyéèn*: centipede, with swollen cheeks and severe pain in the inner ear. This is considered a native disease.

**Teething:** creates in children, lack of appetite and diarrhea.

#### **//Mintsañ/mi/yogo//: chickenpox or varicella**

To identify this illness, all you need to do is check your body and stomach temperature, which is generally high, and “the humming in your belly”. Then there’s the common cold, diarrhoea, anaemia, the appearance of pimples on the skin and sores in the mouth. We also have eyes that “become red and runny”. The causes are not well known, but are associated with the dry season. Others, on the other hand, say that “*it’s the drought and the lack of varicella vaccine that exposes the child to this disease*” (AKO-OVE-Ekan.012. 22.08.2021).

With an estimated “attack rate” of almost 90%, the varicella virus (which also causes shingles) spreads very quickly. It is present not only in the characteristic pimples, but also in saliva droplets from the very start of infection, an average of 14 days before the actual outbreak. This incubation period can vary from 10 to 20 days, during which the infection remains “silent”. A fever of varying severity often precedes and accompanies the outbreak. “*The first pimple looks like a mosquito bite. Then, very quickly, it turns into a small blister*”. Others appear in successive waves over 24 to 48 hours. They can cover the whole body, the scalp or the inside of the mouth. The bigger the child, the more itchy the pimples. In a few days, the blisters dry up, the scabs fall off and the child is cured.

#### **/Mintsañ/: Scabies**

This pathology is classified as a skin disease. It manifests itself through the appearance of pimples on the skin, accompanied by constant itching. The Ewondo recognize the following as causes of this disease: excess dirt due to lack of body care:

*a child gets scabies when he’s dirty. He hardly ever bathes. His clothes are always dirty and he can’t see the water. Apart from that, they sleep on the same sheets without washing them, and on a mattress on which they urinate all the time. Sometimes, too, the children play in the sissongo or on the grass, which can also give them scabies.* (MBYO-BIK-Befo 014. 16.07.2021)

#### **/Ndaaba/: herniated fontanel**

This is often found in children whose fontanel is not yet closed. It is manifested by the fontanel, which should beat in time with the heart, “*stopping beating and swelling*”. This creates a “high temperature” or hyperthermia.

**/Nvús/: the back**

This pathology is fairly rare, but can be observed in some children. It manifests itself as back pain, forcing the child to stay in place without being able to play. In this case, however, the condition is hereditary.

**Torticollis**

This is a trauma associated with childbirth. This anomaly is often discovered late, as the child is not in pain. It is the parents who notice that their child is always sucking and sleeping with the head turned to the same side. In biomedicine, this is called plagiocephaly.

**/Ólárà/ou/puall/: measles**

Considered a child-related disease, the expression “*ólara or óllara*” comes from the root “*lad*”, which refers to “*to bind, link or attach*”. This disease is recognized by a symptomatology that the Ewondo state as follows:

*The child's belly heats up.*

*“The belly heats up and buzzes, the body temperature is high, the cold and diarrhea are not to be outdone. We also have lanemia “ndzəmnan maki” with the appearance of small pimples “metolog” and wounds in the mouth causing lack of appetite in the child”.* (MBAN-NOMY-Ngoma.020. 26.07.2021)

Another participant agrees, adding: “*the child has hyperthermia, with red eyes and mouth ulcers (small wounds in the mouth), skin rashes, diarrhea, lack of appetite and fatigue, all of which are symptoms of measles. This pathology is “a disease that kills children because of the wounds it causes in the child's mouth, stomach and buttocks”* (MBAN-NOMY-Ngoma.020. le 26.07.2021). The origin, or cause, is poorly understood, but is associated with the dry season and especially with the approach of the mango production season in the central and southern regions of Cameroon.

It all starts with conjunctivitis, a dry cough and a good cold. The child has a fever, chills and is grumpy. His eyes water, his nose runs, his eyelids are swollen. It's only later that the first red pimples appear. First appearing behind the ears and at the hairline, they gradually spread to the cheeks, arms, torso and legs, covering the whole body two or three days later. Slightly raised, these pimples flush out at the touch of a finger, forming pinkish-red patches with gaps of healthy skin. “Paramyxovirus, the most contagious virus in pediatrics, is the culprit,” according to biomedical specialists. It is easily transmitted via the respiratory tract, notably by coughing and sneezing, but can also be spread by a simple handshake or by touching a soiled handkerchief. Contagion lasts an average of eight to twelve days. The patient is first contagious at least three days before the outbreak, i.e. before anyone even knows he or she has measles. The disease can therefore spread very easily, especially within families and communities.

Aside from measles, we'd like to say a word about German measles and roseola. Rubella begins with two or three days of fever (around 38-39°C), accompanied by a sore throat, cough, aches and pains, and sometimes conjunctivitis. Small pinkish spots (called macules) first appear on the face. Within 24 hours, the rash spreads to the chest, stomach and legs, disappearing two or three days later. Numerous lymph nodes often form behind the neck, in the woolly area and under the armpits, and may persist for several weeks.

Roseola, on the other hand, manifests itself as small pale pink or red spots, sometimes barely visible, which erupt on the stomach or trunk, after three days of fever at 39-40°C. This rash, which “some doctors also call exanthema or 6th disease”, particularly affects children between 6 months and 2 years of age.

Both are viral diseases. Both the rubivirus, responsible for German measles, and the human herpes virus 6, involved in roseola, are probably transmitted by sneezing, coughing, saliva and sputum. Saliva and sputum, which explains why they spread so rapidly. And contagion is all the more rapid because a child with rubella is contagious at least a week before the outbreak, i.e. before anyone even knows he's ill. They remain contagious for as long as the pimples persist, i.e. for another 7 days or so.

**//Óyòh/ nvək/: testicular elephantiasis or hernia**

A condition affecting the testicles in children. It is in some ways similar to “*fúlú*” diseases. It is caused by the pregnant woman's consumption of certain animals, such as squirrels, or “*smothered*” dishes. The child may cry at any time because of the pain; one testicle swells abnormally, while the other remains small; sometimes, one of the testicles may protrude or “*go up into the belly*”. And when touched, there is only one. The pain that characterizes this infantile pathology can lead to the child's death.

This little ball perceptible in the wool is common, even in infants. Parents often notice it when changing their baby, or when he or she cries or coughs. In fact, it's a loop of intestine that slips between two muscles in the abdominal wall”. In addition to the pain, the child may vomit, be constipated and cry intermittently.

Testicular torsion follows on from testicular elephantiasis. The testicle turns on itself, twisting the spermatic cord that holds and nourishes the testicle. This interrupts the blood supply and may lead to testicular loss. Testicular torsion results from a defect in the testicle's natural attachment to its bursa. Testicular torsion can occur at any time, even during sleep. Testicular torsion causes sudden, violent pain. It starts at the testicle and radiates upwards. *Many little boys, out of modesty, show their lower abdomen to indicate and locate the pain. The pain may sometimes be accompanied by vomiting, but not fever, at least on the first day* (MBYO-BIK-Befo 014. 16.07.2021). Please note: not all testicular pain is testicular torsion. It may be torsion of the pedicle hydatid, but this is rare, or *orchiepididymitis*, possibly due to mumps. The testicle has two functions: endocrine for sexual development and *virilization*, and reproductive. During childhood, germ cells gradually develop into sperm cells by adolescence. “*There's nothing to worry about. Testicular torsion does not affect any of the testicle's functions*” (MFOU-YAO-Mene.015. 14.08.2021). If the child has only one testicle, it is perfectly capable of fulfilling its reproductive function if healthy.

**/Makoé/ou/akòò/: ringworm**

Ringworm is a benign morbidity that is now rare among Ewondo children. It manifests itself as whitish spots on the scalp, preventing the hair from growing and developing in the various places where they appear. When the whole head is affected, it gives a white appearance. (Figure 2)



**Figure 2** Ringworm on a child's head.

**Source:**A. Ndjalla 2020.



**/Túan/: tartar**

It is characterized by a cluster, patchy or whitish discoloration of the skin. For both, the causes are multiple. For some, it's the excessive consumption of sugar cane, for others it's an allergy to the consumption of pineapple, and so on.

**Zëzëgël/: Hiccup**

Hiccup is a pathology manifested by a consecutive frequency of hiccups in children. The child will become tired, with chest pains.

**/Messo/: ticks**

This pathology attacks only the feet, and more specifically the toes. It is caused by animal parasites such as pigs. For the Ewondo:

*The child affected by ticks is a child who plays in abandoned houses where pigs take refuge, burrowing in the dust and leaving fleas or ticks (messo) which seep into the toes and develop into large ticks when not detected early. They will then manifest themselves by itching, particularly when the foot has been kept warm in the shoe for a long time.* (AKO-OVE-Ndzou.012. 22.08.2021) (Figure 3)



**Figure 3** Ticks on a child's leg.

**Source:**A. Ndjalla 2020.

**//Abum /mintié//: stomach ache**

This is a “purely infantile” pathology. It manifests as abdominal pain. There are many causes: the consumption of dirt, soiled food, a poorly prepared dish, excessively spicy food, worms or the quality of the mother's milk, as this participant points out: “*a child who is still suckling can have a stomach ache if the mother's breast is not good or is spoiled*” (MEFA-NGOU-Mink.018 on 16.09.2021). The manifestation of this situation is diarrhea in the child.

**//Abum/ mvid//: the dirty belly**

It's also a pathology linked to the belly. The Ewondo believe that having a dirty belly is a pathology that often disturbs children. It manifests itself in bloating of the stomach, buzzing of the stomach, wriggling pain in the child, and sometimes moaning and restlessness in sleep.

*You'll notice that the child has a tight, bloated tummy, lacks appetite, and moans in his sleep with a buzzing tummy. Sometimes he rarely even has a bowel movement, and when he wakes up in the morning, he has drool stuck to his cheeks. Without a doubt, your child has a dirty tummy and needs to be taken care of.* (MEFA-NGOU-Mink.018 on 16.09.2021)

**/Bubumu/: indigestion**

Indigestion is a morbidity linked to the stomach, and more specifically to digestion. It occurs when a child has eaten more than enough the previous day, or very late at night. It is also caused by the

consumption of food that has already decomposed, or as the Ewondo say, “spoiled food”. The child's stomach feels bloated, with a lack of appetite and sometimes abdominal pain. The child feels unwell, can't burp or fart, and feels like he's choking. “Even if he manages to burp or fart, the odor is pestilential.

**//Mòn/a/dzíg//: burning in children**

From the verb “*dzik*” meaning “to burn” or “to be burned”, this state of malaise in children can have a plurality of origins. We shall see:

*For example, a child may spill a pot of hot water on his mother. For others, it may be the pot of hot oil, or the child may end up in the fire. Sometimes a mother's clumsiness or an accident in the kitchen has led her to spill either the pot of water or the oil on the child.* (MEFA-NGOU-Mveli.022 16.09.2021)

Burns are more accidents than pathologies, but they are considered as such because of the discomfort they cause the child, the family and even society as a whole, but above all because of the therapeutic strategy developed.

**//Mongo/a/dib / mənɔɔɔk / abum //: urinary tract infection**

The child is feverish, has pain in the lower abdomen, often feels the need to urinate and complains of burning when urinating. Because of their anatomy, urinary tract infections are especially common in girls, and in all children who don't take the time to empty their bladders completely and regularly. Once a urine test has identified the causative germ, your child should be treated, preferably by biomedical means.

**// Engon/ mintyé//: scarlet fever or type angina**

This is a variant of angina caused by streptococcus A. A bacterium that spreads toxins throughout the body, causing a reddish rash all over. Scarlet fever mainly affects children over the age of 3. Within a few hours, the child's temperature rises to 39-40°C, and he or she is unable to swallow anything. He or she has swollen glands at the base of the lower jaw, complains of a sore throat and stomach, and sometimes vomits. It looks a lot like strep throat, with one difference: 24 hours later, a more or less severe rash appears. We see an eruption of red pimples. These pimples look like a multitude of red dots. The first small red pimples appear in sheets, first on the chest, armpits, upper thighs, elbows, knees, behind the ears, then the rash spreads to the face. It sets in with a single attack. The next day, the child's skin is flushed and slightly granular to the touch. The tongue, white at first, turns raspberry-red by the 6th day. This is a highly contagious disease. Your child can transmit this streptococcus two to five days before the first signs of illness even appear, and for another two or three weeks if left untreated. Children can easily infect each other by sneezing or coughing.

**Diseases in both registers**

Here we have all the pathologies that fit into both natural and supranatural morbidities.

**/Ndzibal/: genital herpes or chlamydia**

Among the Ewondo, “*ndziba*” is a disease with two dimensions. The first category refers to a natural pathology in children caused by sexual relations between their parents or between their mother and other individuals. The second refers to the fact that “*ndziba*” resides in the blood, and when the mother's level increases, it is transmitted to the child. The child's symptoms are “a reddish color of the buttocks”. Women commonly refer to this as “red buttocks”. Another symptom is

“the appearance of small, itchy pimples on the joints in hot weather”, known as “diaper rash”.

The disease also has a cultural origin. It is recognized and perceived that one of its origins is nocturnal sexual relations, better known as “night-time diapers”. It is therefore the result of the action of “sorcerers” or supranatural entities, who, to harm or expose certain attitudes deemed to be wrong. It is therefore transmitted to the child from the fetal state.

In addition, incest between parents can also be at the origin of this morbidity. The Ewondo believe that the fact that two individuals are related proscribes all sexual relations between them. When this is not respected, *ndziba* is the result. As mentioned above, the mother will pass this on to her child.

However, for some informants, “*this pathology exists in everyone’s blood and only manifests itself when the rate is rising or increasing*” (MEFA-NGOU-Mink.018 le 16.09.2021).

#### //Mòn/a/bíàlì / anyu / nsàlàn//: harelip

As we shall see, this disease is the result of a congenital malformation. It could be classified as a *fulú* disease. It’s quite rare these days, but for some of our informants:

*we don’t see it much anymore. But if your child is born with a split lip, it’s the result of witchcraft. Because you know, there are people who, during pregnancy, act as if they love you very much and sometimes give you food. This food is sometimes to spoil the child or give it malformations like this. This is why pregnant women are often forbidden to eat food made outside the family plot or the home* (MEFA-NGOU-Missi.018 19.09.2021).

This discourse makes us realize that for some, this morbidity is the fruit of human action, of witchcraft, for it is known among the Ewondo that there are individuals capable of reading the future of a child even in the womb. Furthermore, others acknowledge that “*if a woman consumes the forked feet of animals such as pigs’ feet, goats’ feet, hens’ feet or others, this can happen*” (MEFA-NGOU-Mink.018 16.09.2021). In view of the above, this pathology is one of the diseases associated with proscriptions. (Figure 4)



**Figure 4** Harelip on a child.

**Source:**A. Ndjalla 2020.

This disease or congenital malformation can be registered as a *fulú* disease. It is the result of non-compliance with a prohibition “*due to the fact that the woman or girl has seen eki or has not complied with the prohibition that she must not consume animal legs during the period of gestation*” (MEFA-NGOU-Mink.018 16.09.2021). For, by analogy or homology, the fork at the end of the legs is what the Ewondo believe to be the origin of the hare’s beak. This pathology is quite rare today, but there are some cases.

#### //Nsú /: poisoning

It’s impressive to realize that the Ewondo classify poisoning as a pathology. This is a state of temporary discomfort caused by the ingestion of a substance that is highly harmful to the human organism, leading to the death of vital organs. It is the result of human action, or of children’s consumption of common substances such as batteries, petrol and others. Many other elements consumed in large quantities can be poisonous to children.

*People are mean. Out of sheer jealousy, someone can poison your child. But there’s also the fact that when a child is already crawling or playing with others, if there’s no one to look after him, he can pick up things that can poison him. You’ll see with the child who vomits, has diarrhea, cries in pain saying that it’s as if his intestines are being cut, the cold* (MEFA-NGOU-Missi.018 on 19.09.2021).

Poisoning is classified as an ethnopathology among the Ewondo. It appears as a state of temporary malaise due to the consumption of a substance rich in harmfulness for the human organism and leading to the arrest of vital organs and therefore to death. It is generally accepted that this is the result of human action. This action would be carried out to harm the child’s parents or to disrupt the child’s life out of jealousy too.

*Jealousy is not a good thing. Nowadays, people are capable of giving poison to your child for nothing or just because they are jealous of your child’s evolution and highly advanced abilities. You know, some people may see your child playing, detect advanced intelligence for his age and choose to eliminate him. That’s why people have become very cautious.* (AKO-OVE-Ndzou.012. 22.08.2021)

To this end, strategies will be set up to prevent or manage the consumption of any poison whatsoever.

#### //Mòn/á/bêt / ndúgudù //: hyperthermia

For some of our informants, hyperthermia is considered a pathology. This is all the more important as the slightest fever is immediately a warning sign. The latter can be associated with the symptoms of several pathologies, but is also a particular pathological entity that can generate other illnesses and even the death of the child. The main symptom is hyperthermia, which leads to crying, lack of appetite and perspiration. For some, this hyperthermia may have its origins in an individual. To this end:

*It’s possible for your child to run a temperature just because there’s someone disturbing him where you are. In some places where there are large gatherings, it’s best to be prepared before taking your child out, because some people have things on them that may threaten or disturb the child. If you don’t realize this in time, your child could die from crying.* (AKO-OVE-Ndzou.012. 22.08.2021)

She goes further, noting that *it’s even possible that when people come to see the child, an old mother will carry the child and give him the witchcraft. The child will start to heat up, cry and disturb, so you have to be vigilant when you have a child.* (AKO-OVE-Ndzou.012. 22.08.2021)

#### //Ndžëman/ mēkil//: anemia

It is present in some children and manifests itself as “*fatigue, pale skin and white eyes*”. In addition to all the causes of anemia, the Ewondo recognize another which is due to the action of an individual. In other words, through the action of vampirism, someone could feed on the child’s blood all the time, making the child anemic, weak, toneless, and pale, etc. Some people believe that this is the cause of the child’s anemia.

For some,

*Son, are you kidding? I'm telling you, some people are terrible. He spends all night sucking your child's blood. You see your child there, all white, and you do everything to get him back into shape, but a few weeks later, he's already anemic, even though he's not sick. You'll say what's that? Isn't that witchcraft?* (NYSO-ENO-Nkome.026. 24.08.2021)

According to the diagnosis made by our informants, the signs accompanying this pathology are paleness and fatigue. One of the participants can then say that:

*to recognize that the child is anemic, you press on the nails, you even see it's all white, open his he you see it's all white, look the child is weak, he's losing weight, doesn't play, the more time passes, the more tired he gets. Sometimes he even refuses to eat, sometimes he even eats, but he just finishes, losing weight like that, there's also, if the child was black he becomes all white (pale), sometimes he doesn't even sweat and the skin is all wrinkled and it's worrying.* (AKO-OVE-Ndzou.012. 22.08.2021)

This definitional sketch of anemia allows us to look for the causes of this pathology. These are either due to “an illness that disturbs the child from time to time”. The Ewondo also say that one of the causes is the fact that “in the morning, the child is not dressed warmly, so the cold attacks him. There's also the problem of poor nutrition. Thus, “the anemia comes from malaria, even if the child doesn't show the signs, as soon as he has malaria, even for two days, he will be anemic. Malaria is also one of the causes of anaemia, as is poor nutrition, malnutrition” (MFOU-YAO-Mene.015. le 14.08.2021). While for others “it is splenomegaly (*ebēm*) that's the cause and also hyperthermia that make the child turn pale, all white. There are also diseases such as malaria” (AKO-OVE-Ndzou.012. 22.08.2021).

It is therefore necessary to take measures depending on whether it is a question, as our informants recognize, of this or that type of disease. And to do this, she can say that:

*if you have such a case, the best thing would be, after taking all the measures to eradicate the anemia, to go to a health traditherapist specialized in witchcraft to stop the bleeding in time so that the child doesn't die* (NYOS-KOUM-Aben.0045. 24.09.2020).

#### **/Vëbë/: gingivitis**

Gingivitis is an inflammation of the gums. See *You'll notice that the child can't eat normally and complains of mouth ache. Or when he tries to chew, he spits out in pain, and on top you'll see blood on the food. If you check, you'll see swollen gums in some places, wounds in others and sometimes even pus* (AKO-OVE-Ndzou.012. 22.08.2021).

However, in the Ewondo socioculture, it is sometimes admitted that this pathology has its origins in witchcraft. For some of our informants, when you have a child with this morbidity, which generally appears between the ages of three and four, you have to “immediately take the measure of the evil”. They believe that it's the result of an individual who comes every night to give the child human flesh in preparation for nocturnal anthropophagy. They admit that “it's the reaction of the child to this eating of human flesh that causes swelling of the gums and wounds. If you don't stop this early on, you'll have a man-eating sorcerer in your house”.

It is very rare and only manifests itself in isolated cases.

#### **/Məngbəm/: mumps**

As we shall see later, mumps is a pathology specific to children. Its main symptoms are swelling of the mandibular spaces and between

the cheeks. It is an infection of the tonsils. The causes are unknown to the latter. On the other hand, it is recognized as being of human origin. The Ewondo say that once all the necessary measures have been devised and implemented, if the balance is not restored, the *ngəngañ* must be asked to find a solution to remedy the situation and put an end to this pathology, which will result in “impotence” for the young boy. And, as such, can be considered a male morbidity, as it attacks more male children, with the corollary of polarity repulsion if left untreated.

In biomedicine, we speak of an infection of the tonsils. The causes are unknown to the Ewondo people, and it is highly contagious. The Ourlian virus, responsible for this pathology, is easily transmitted by droplets of saliva or sneezes. The disease often occurs in epidemics, especially from the age of 3. A sick child is contagious from one week before the first symptoms to one week afterwards. The virus rapidly infects the body, preferentially lodging in the parotid glands (salivary glands). But it can also reach the pancreas, testicles or ovaries, and more rarely, the nervous system. The first symptoms appear after an incubation period of 21 days. The child has a fever, often high (over 40°C), complains of headaches, aches and pains, and has difficulty chewing food, swallowing and even speaking. Above all, mumps is characterized by a deformed face 24 hours after the first symptoms appear, as the parotid glands under each ear become excessively swollen and painful.

The main complication is meningitis. Of course, this occurs in very few cases. The virus attacks not only the salivary glands, but also the meninges of the brain, causing meningitis. This disease heals on its own in 3 to 10 days. Other complications are rare. The mumps virus can also affect the testicles (orchitic), leading to testicular atrophy (and therefore a risk of sterility) in young boys, the pancreas (pancreatitis) or the auditory nerve. In this very rare case, the child risks permanent deafness.

#### **/Mbúgi/: the fracture**

The term “*mbúgi*” derives from “*búg*”: to break. It refers to the breaking, the fracture of bone. We would say that fracture is an abrupt division of bone as a result of trauma. There are conditions that can predispose humans to fractures. These include: incomplete calcification of bones in children; osteoporosis in the elderly; pathological conditions (endocrine, deficiency, infectious) that affect the skeleton and weaken bones. Among the Ewondo, we generally have two sets of fractures: */Nfóññð/* which encompasses dislocations, dislocations and sprains, and */mbúgi/* or bone breakage. It is therefore common to hear *ivès ine mbúgán, ntsáán* to refer to broken or crumbled bone.

The *mbúgi* is the breaking of the bone, and is also the dislocation, dislocation or sprain. This expression refers to bone trauma. The term *Nfóññð* derives from the verb *fóñn*: to move, to displace. It refers to bone mobility or, better still, displacement, a movement of the bone away from its normal position. It clearly translates the various notions of dislocation, sprain or luxation used in biomedicine. The natural causes of bone trauma are accidents of all kinds, direct impacts on the bone which can result in a fracture. There are also torsions and rotations, tumors or osteoporosis, certain genetic diseases such as glass bone disease, or even very prolonged efforts associated with repetitive micro trauma. Other causes include overtraining, falls, punches and assaults.

Fractures also have supernatural causes. They are therefore part of the personalistic perspective, which is characterized not so much by the characterization of the cause of the trauma, but by deliberate or premeditated malicious action. The idea that fracture is persecution



is closely linked to the interpretation that the traumatized person is a victim, depending on whether or not he or she is responsible for the trauma. We would even go so far as to say, with Augé M. (1975), that despite the diversity of interpretative systems for morbidity, a general characteristic of etiological models in “so-called traditional societies” is the frequency of persecutory interpretations, of which witchcraft is the archetype. As a result, the corresponding therapies will be active. They involve expelling evil (exorcism) or fighting it (witchcraft). Aggressors uses non-empirical means or is himself a supra natural being. Yet the same means and the same figures are at the root of the same kinds of misfortune. In this type of interpretation, the fracture is not distinct from the notion of misfortune. *“The so-called supernatural causes will initially be the violation of a prohibition. These include food taboos, sexual taboos, protocol taboos, ritual taboos and property taboos. Then we have witchcraft, which is the main cause”*.

These include the disruption of social equilibrium through fracturing, the violation of a ban, or the appropriation of another’s property. Certain individuals possessing a certain initiatory knowledge and extra-normative power, who have the ability to harm those with whom they have disagreements, are said to be the originators of such fractures.

#### //Fê/ kanda//: convulsion or epilepsy

This is a very rare pathology among children in the Ewondo socioculture. However, it is recognized that if you are in the presence of this condition, you must recognize that it is the result of the action of an individual. Like many other pathologies, it’s out of jealousy for the child’s future that the latter (sorcerers) would cast this disease on the child. The Ewondo are quick to point out that:

*Sometimes when a woman sees your daughter’s future and the kind of marriage she’s going to make, she’ll throw this disease at the child so that she falls from time to time, which means that suitors and spouses won’t be able to stand it and will leave. Or if it’s a boy, he won’t be able to do certain activities and his future will be compromised.* (MFOU-NKOL-Mvon046. 12.11.2020)

Even if it did exist, it would be a hereditary type of epilepsy. In this case, it is a common disease. This disease could be assimilated to “fulu” diseases, as it is the mother’s diet that could be at the origin of this pathology. This justifies the ban on contact with things or animals that produce moss.

Between the ages of one and six, the main trigger is fever, hence the name febrile convulsions. This sudden rise in body temperature may occur after a vaccination or, more often, during a bout of angina, otitis, or a fever and otitis. It causes the brain to overheat, leading to convulsions. Your child may have ingested or swallowed a cleaning product or medication, and soon after intoxication, have a convulsion. A lack of sugar, sodium or calcium, better known as hypoglycemia (a significant and abnormal drop in blood sugar levels) in a diabetic child, a significant drop in sodium levels caused by dehydration following severe gastroenteritis or, more rarely, hypocalcemia (low calcium levels) due to vitamin D deficiency rickets can also cause convulsions, as can epilepsy. Occasionally, seizures can also indicate the onset of epilepsy. The child’s progress in the light of further examinations, and the existence of a history of epilepsy in the family, will guide the diagnosis.

These convulsions may leave after-effects. This is especially true when they are the sign of an underlying disease (meningitis, encephalitis or severe epilepsy). In such cases, they can cause

psychomotor, intellectual or sensory disorders. Other convulsions are the result of malaria, spleen or hyperthermia.

#### /Èyál/: impotence or infertility

Our informants are unanimous that the cause of a child’s future impotence is rooted in witchcraft, as we shall see below. At a very early age, individuals are said to have nocturnal sexual relations with the child. The Ewondo believe that from the moment of birth, every individual is born in good health, as long as the parturient has respected all prescriptions and proscriptions. However, pathologies such as mumps can also cause impotence if not properly treated.

The warning signs of future infertility of a male child are simple: *“on waking, the child’s sex is not erect. And when you touch the phallic muscle, there’s no reaction”* (MEYO-NDZE-Beye060. Le 20.11.2020). In the case of female children, it’s more or less the same thing, i.e. when you touch their genitals, especially the clitoris, or pat them on the head, there’s no reaction. Others, on the other hand, see the future impotence of the boy child as a result of eating food from the pot in which it was cooked, or eating it while it was still cooking (still on the stove).

#### //Akòn/ abùm//: stomach aches

Bellyaches are generally linked to two pathological categories among the Ewondo. However, among the Ewondo there are also stomach aches that are thought to originate from an individual’s hidden hand. To find out a little more, our informants say that a persistent stomach ache leading to unrestrained and continuous swelling of the abdomen in a child is not something normal. In view of these symptoms, we have to take the measure of things by choosing a therapeutic itinerary that is sometimes joint between two systems of care that should lead to the resolution of the pathology so as not to lose the child.

We also have *minsoŋ* or worms, and water-borne diseases such as diarrhea and others. Gastroenteritis manifests itself in children as curling up and hands on the stomach. The stools are liquid and foul-smelling, and the child vomits, is feverish and has no appetite.

#### /Ndzím/: blindness

Blindness in children aged zero to five is a supra natural reality. It is the result of metasocial action. This pathology is all the rarer for the lack of any treatment or therapeutic follow-up. Children suffering from or born with such a pathology are referred to hospitals, or even better, to biomedicine.

*Years ago, there was a father here who had medicines for people who were going blind or had sight problems. People said he went to the ancestors to get them with the help of a “dougou” or “cuckoo” bird. But during his agony, nobody wanted this remedy and he died with it.* (AKO-OVE-Ndzou.012. 22.08.2021)

It should be noted, however, that this pathology in the category we’re interested in: children from zero to five, is almost non-existent. Even if there were, the cause would be the transgression of a prohibition or the malicious action of an individual.

*X’s child was born with diseased eyes and after two months was blind. It was said that Z was the cause, because he saw the child’s future and out of jealousy gouged out his eyes so that he would not be what God had wanted.* (AKO-OVE-Ndzou.012. 22.08.2021)

#### /Onyañ/: cataract

A pathology that attacks the iris. One of the causes of cataract in children is the action of a “gris-gris” or the action of an individual

to protect some of his fruit trees. It would therefore be the result of the malicious action of an individual. But this cause is much less observable among the Ewondo. They say *“the eye has been spoiled”*. This, in the same vein, justifies the action of an individual on the child.

In Ewondo children, it is also caused by an accident or shock to the eye. It manifests itself as blurred vision and the inability to see daylight because of the pain it causes. The whole eye is also red. Another cause is *filarios loas*.

#### //Akòn/nlò: headache or migraine

The Ewondo can state headache as follows: *Ma wòk mintye á nlò*: I have a headache; or *Ma kon á nlò*: I have a headache. Although headache is considered a symptom common to several morbidities, when it occurs alone or as the main symptom, the latter consider it a pathological entity in its own right. When faced with a person suffering from a headache, two types of diagnosis can be made:

- a) *Wa kòn zèzè nlò*: You're ill with a common headache. Or:
- b) *Wa kòn nlò alu*: You are ill with a nocturnal headache.

The first diagnosis applies to a benign headache whose cause lies in the very nature of the human body. The second, on the contrary, considers that the headache is due to the action of a sorcerer.

Childhood migraines affect boys more often than girls, and cause pain on both sides of the head or all over the skull. *“It bangs in the head”*. The pain is even more intense if the child lowers his head, sneezes or jumps, for example. But in some cases, headaches are simply digestive disorders or abdominal pain. The little migraine sufferer's heart and stomach ache, may vomit, and can't stand light or noise. More rarely, their vision may be distorted, or spots may appear in front of their eyes. Triggering factors include sudden exertion, infection (rhinopharyngitis, otitis), and stress. Lack of sleep or a major upset can also trigger a migraine attack.

As with stomachaches, the Ewondo recognize that some headaches are caused by an individual. A headache that persists despite multiple elaborate therapies would have its origin in:

- i. Ancestors who call the child to a future mission, such as divination or the like;
- ii. The fruit of a sorcerer who causes the headache, which is generally partial and affects one area of the head;

The fruit of a degree of spiritual elevation of the child, who would enter higher spheres and whose return would cause his memory to be overloaded beyond the capacities of his still less-developed brain.

As some of our informants recognize, the child would be used as *“a seat in the great spaces of witchcraft”* and it would be *“the bad wind and the practices of these places that would be at the origin of the evil*.

The disease affects boys more often than girls, and causes pain on both sides of the head or all over the skull. *“It bangs in the head”*. The child has the impression that it's pounding in his or her head, and the pain is even more intense if the head is lowered, sneezed on or jumped on, for example. In some cases, however, migraines are simply digestive disorders or abdominal pain. The little migraine sufferer has a sore heart and stomach, may vomit, and can't stand light or noise. More rarely, their vision may be distorted, or spots may appear in front of their eyes. Attacks generally last less than two (02) hours, but the same symptoms reappear, depending on the case, every week or two weeks. Each time, the attack is identical: the child suddenly looks tired, turns pale, buries his head in his arms and becomes irritable.

#### /Bàkog-ló/, /Òkákádà/or “little crab”: intestinal colic

This is a cultural pathology whose manifestations vary from one person to another. The main feature is the child's exaggerated mobility, with occasional bouts of abdominal pain. One participant was quick to point out that *“you'll know the child has this disease if you see him rolling on the floor in pain from time to time, crying with his hands holding his stomach”*.

*It should be noted that this morbidity is not well known in the hospital environment, and as they point out, “in the hospital we don't really diagnose this disease, and management there is not obvious, as it affects the child's navel”* (NKOL-NSIM-Etoub.66. 10.11.2020). You could call it an umbilical hernia.

Intestinal colic is a disease that mostly affects infants. In addition to the above symptoms, we also have that the child has either whitish stools like cucumber or *“pistachio”*, or greenish ones, with long fibers in these stools. Almost inevitable in infants, these unpleasant spasms are due to an immature digestive tract. Between feeds, your baby cries a lot, especially at the end of the day, fidgets, folds his legs over his chest, screams and only calms down when he emits gas. Then the pain seems to start again.<sup>5-26</sup>

### Conclusion

Most of the time, feeding is studied by means of observation studies or parents' reports on their children's behavior. We can see that growth and behavior are often linked to nutrition. There is therefore a need for coherent and comprehensive research into the relationship between diet and pathology in Cameroon, across socio-cultures. With the Ewondo, we were able to see how the dietary behavior of parents, particularly pregnant women, affects the child's health problems later on. This type of research or study could help us to review and organize child nutrition programs, as well as the keys to change in this area. The integral role of mothers needs to be taken into account when improving nutrition and health models for mother-child health. At a time when cultures and endogenous knowledge are being promoted, it is imperative to realize that for the Ewondo people, it is important to respect the various prohibitions and prescriptions relating to gestation. Respecting these would make it possible to avoid becoming a victim and paying the price of being singled out in reference to this or that prohibition, thereby encouraging the probable and future stigmatization of the child. In addition, the monitoring and maintenance of this human project is significant and justifies all the therapeutic elements put in place. All the more so as the latter is the future society, the future edifice on which the survival of the name, the clan, the family and the lineage rests. This is where all the therapies developed for this purpose come into their own, justifying the choice of this or that element in the therapy.

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### Conflicts of interests

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