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An ethnographic approach to the concepts of health and disease in the Turkana tribe: a project to improve the health of the nomads of the Ilemi Triangle, Kenya

Aproximación etnográfica al concepto de salud y enfermedad en la tribu turkana: proyecto para la mejora de la salud de los nómadas del Triángulo de Ilemi, Kenia

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ABSTRACT This paper aims to provide a broad view of the Turkana tribe of the Ilemi Triangle in northwestern Kenya, especially regarding the way the members of this nomadic ethnic group understand and shape their own construct of health and disease. It is based in an ethnographic study carried out in July and August 2014, including participant observation of 15 villages of the Turkana tribe, formal interviews and in-depth interviews carried out with the collaboration of two translators of the tribe and a nurse. Field notes as well videos and audio records were captured and transcribed for later analysis. Among the primary results of this study, it should be highlighted that the concepts of both health and disease differ greatly from the western approach that external projects bring with them *a priori* and it is likely that the lack of adherence to these projects is related to the scant cultural knowledge regarding such constructs on the part of the health professionals.

KEY WORDS Anthropology, Cultural; Ethnic Groups; Nomad; Health-Disease Process; Kenya.

RESUMEN El objetivo de este artículo es ofrecer una aproximación a la cultura de la tribu turkana del Triángulo de Ilemi, al noroeste de Kenia, en especial al modo en el que los miembros de este grupo étnico nómada entienden y dan forma a su propio constructo de salud y enfermedad. Se basa en un estudio etnográfico llevado a cabo en julio y agosto de 2014, en el que se realizaron observación participante en 15 aldeas de la tribu turkana, entrevistas informales y entrevistas en profundidad, con la colaboración de dos traductoras de la tribu y un enfermero. Se tomaron registros escritos, de video y de audio, los que se transcribieron para su posterior análisis. Entre los principales resultados de este estudio cabe destacar que tanto el concepto de salud como el de enfermedad distan mucho del enfoque occidental que a priori traen los proyectos externos y es probable que la falta de adherencia al seguimiento terapéutico de dichos proyectos esté relacionada con el desconocimiento cultural de ambos constructos por parte del equipo profesional.

PALABRAS CLAVES Antropología Cultural; Grupos Étnicos; Nómada; Proceso Salud-Enfermedad; Kenia.

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INTRODUCTION

Geography and people of the Ilemi Triangle

A frontier area currently under Kenyan control, Ilemi Triangle is located in East Africa bordering on South Sudan, Ethiopia and Kenya. It is considered one of the most disputed African regions, as it remains in continuous controversy with the bordering countries due to frequent cattle raids.[1] With a surface ranging between 10,320 and 14,000 square kilometers, Ilemi Triangle presents a desert geography, where economic marginality, together with ongoing government instability in the region, added to remote physical location from the urbanized zones, prevents these regions from gaining access to benefits of the current medicine provided in the rest of the territory.[2]

In Kenya, Turkana people are semi-nomadic pastoralists living in the high valley of the Nile River, and their settlements extend throughout the Rift Grand Valley. Turkana people have a peculiar lifestyle and culture rooted in their pastoral traditions. Owning cattle is a sign of wealth for a member in the tribe; although, the final purpose of rising cattle is not cattle resale, but rather the development of beneficial relations with other Turkana peers who also own cattle, as well as the arrangement of local events, dances, sacrifices or offerings to their god and/or exchange of one or various women, given that polygamy is a part of their customs.[3,4] Cattle are the main exchange currency and are also used to provide food to their families. Turkana herders depend on heavy rainstorms, which are not frequent in the region. Rainstorms are the main source of water for irrigation, cattle raising and human consumption (Figure 1). This region extends onto desert lands [4] and its permanent droughts are part of its weather pattern. Several studies[5,6,7] show that droughts are perceived by Turkana people as part of the habitat in which they live.

Figure 1. Goat herd. Turkana Tribe, Ilemi Triangle, Kenya, 2014.

Movement is a key adaptation strategy to mitigate the impact of droughts; however, if severe droughts occur, Turkana herders may lose part of their cattle, which is their main food source. For this reason, based on a social relations system, they distribute part of their cattle among those who are in most need, in order to achieve a mutually beneficial outcome once the drought is over. Simultaneously, they are often forced to move with their remaining cattle and household toward the South where they can profit from the rains which are more frequent in that region; however, some tribes are likely to prevent them from passing by to stole their cattle or even kill them.[4] As a last resort, and when the droughts are too severe, cattle owners may be forced to reduce the number of people being fed from the cattle since some women – whose husbands died or became impoverished – live together with many Turkana families, and their children are the ones who will have to be relocated with other families who are in a better economic position or beg for alms or work in towns where there is commercial activity.

In the Kenyan territory, there are approximately 28 different patrilineal clans.[8] A clan consists of a group of people related by their kinship ties and they all descend from a common ancestor. Kinship includes adoption,

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marriage and traditionalist genealogical ties, including the fictitious ones.[9] These groups differ from the peoples that live near the City of Nairobi (City of Kenya), since these are traditionalist groups and are rooted in their noble traditions of cattle herding.

Out of the 28 clans mentioned above, three form the Turkana tribe and are settled in the lands that make up the Ilemi Triangle. The anthropologist Marshall Sahlins[9] defines "*tribe*" as a group of people that belongs to a family or an association of several families who also share with a common ancestor a dwelling in a geographically defined territory and generally share the same ethnic race and the same beliefs and customs. Turkana people are different from their neighboring tribes (Niangatong, Dassanesh, Toposa, Karamojong, Samburu and Pokot), in that they do not have a chief, nor official political representatives, but rather their leaders are the elderly. According to the tradition, whenever required, the elderly gather to arrange raids, preside over any type of ceremony or party and make any important decision in relation to the community. Furthermore, they consider that, as the case of *Ngimurok* or prophets – a term that will be described below in this article – the elderly may influence their god Akuj, through offerings and sacrifices.[10]

Women are in charge of child-rearing, household chores, family travels and building up a new hut, or *manyata,* if they decide to migrate to other lands. *Manyata* is the name the tribe gives to huts made of mud, clay and acacia or Esekon branches, the two most common tree varieties in the

Figure 2. Communal *Manyata* (hut made of mud, clay and acacia or Esekon branches, created for communal use and food distribution by non-governmental organizations). Turkana tribe, Ilemi Triangle, Kenya, 2014.

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region (Figure 2). Gender disparity in task assignment, that is often deeply rooted in these herding societies, is a critical factor in relation to access to health care services.[2] In fact, women are not the ones who are in charge of making decisions, in regard to how and when they should be assisted by health professionals or receive the treatment required, but men will take that role.

As in most livestock cultures, men are in charge of the cattle work,[11,12] and they do the driving of cattle, slaughtering and meat cutting, if they decide to make it a part of their diet. Besides, they protect the cattle and are great warriors if they have to defend their property. However, and though they preserve their own group customs, Turkana tribe has been for years in contact with visitors from all over the Western world that bring projects related to social and health aspects, as described below in this study.

Living in the Ilemi Triangle

Nomads continue the long-established–tradition initiated by their ancestors based on moving their cattle to lands in better grazing condition, for feeding, raising and reproduction of cattle, and to also meet their own community daily dietary needs. Goats, camels, donkeys and zebras are the most common animals used as exchange currency in various transactions, barters and rituals. Though man takes care of the flock, when he is not married, livestock ownership is held by the family unit to which he belongs; therefore, he must share meat or milk with his siblings. Marriage grants livestock ownership, though, to be entitled to it, and based on the principles of the Turkana culture, a kind of payment must be made that consists of offering a previously agreed number of livestock to the girlfriend's family and his future wife, which somehow compensates the years invested in her child-rearing and those others she will not be able to perform labors for her own family, given that she will be a member of her husband's family. As indicated by some publications in relation to the Turkana Tribe and its traditions,[10,13,14] polygamy is considered a sign of wealth, i.e., the more livestock a man owns, the more privileges he is granted. As stated by Good [15] and Gearhart:

> ... the universality of health care traditional frameworks includes a range of social and economic factors and spiritual and political health influences of a person.[16]

It is for that reason that family units constantly move, forced by drought periods,[17] in order to improve their flock herding resources.[18,19] At certain times of the year, in order to meet their daily needs of water, i.e., for the survival of both themselves and their cattle, they have to travel for more than an hour and extract water from huge holes manually excavated on the river bed because no water can be found on the channel surface due to lack of rains.

Marriage plays a vital role in the social organization of Turkana people since it creates alliances and networks of social support among the clans given that a woman is now part of her husband's clan, and a man cannot be married to a woman of his own clan, this is to say, his father's clan. Marriages are arranged between families, one of which pays a dowry proportional to the family wealth: both because it is a well-off family or because it is a family that raided the livestock from neighboring tribes. Severe droughts may be a key factor to drive the head of the family to make such an important decision as to arrange one of his daughter's marriage, both aiming at compensating possible livestock losses during the droughts or strengthen social ties with other Turkana people. Arranged marriages often involve marriages with girls up to 12 years old with men of 60 years old. Thus, dowries negotiated by Turkana people are the highest known among the pastoral peoples.[4,20]

Though Turkana people know about Western medicine, which was introduced by the white man in the past, as mentioned by Bayardo *et al.*, while referring to Soustelle,

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notions and practices related to disease and medicine are an "inextricable mixture of religion, magic and science."[21] Turkana people believe in a god, referred to as Akuj, and to whom they attribute the power of the Rain: if Akuj is happy, it will rain and if, on the contrary, he is angry with the people, it will not. In order to keep their god from getting angry and stop sending the rains, Turkana people rely on many different characters, i.e., there are the *Ngimurok*, people that retell the messages their god delivered to them while dreaming. They are equivalent to what other groups call seers or prophets, who are capable of predicting or interpreting the messages received from their god in order to share them with their people later. *Ngimurok* people use a great range of knowledge of the surrounding nature, as well as the environment humidity, temperature, and migration of birds and insects, etc. Good weather conditions are necessary to improve the survival of Turkana people and ensure that their arid lands become good grazing lands to feed their livestock.

According to their beliefs, they refer to their god as a sacred entity that may help them in time of need or that can bring them healing. In exchange of these benefits coming for their god, Turkana people often sacrifice part of their cattle as an offering. As indicated by one of the privileged informants, based on his experience and knowledge, they also use this method because they believe that it will help recover from those illnesses commonly known by Western people as long-term illnesses (brucellosis, leishmaniasis, heart diseases, etc.), because in many cases they relate them to a kind of curse that they describe as something similar to the "evil eye" as it exists in other cultures, i.e., a belief that the malevolent glare of some people and certain negative acts and feelings have the capacity to cause damage to others."[22]

Project: *Mobile clinics*

In Kenya, in the early nineties, African Medical and Research Foundation (AMREF) had already had more than thirty years of experience with mobile clinics among Kenyan herders.[23,24] Mobile clinics were created to target the geographical dispersion between the pastoral peoples and the health services, which does not mean that a link with the services providers had been created as a result of the nomads' diverse preferences regarding the traditional medicines that the different traditional healers of their tribes may offer.[2]

Notwithstanding that a previous project of health care led by AMREF had existed in Turkana Northwest for the masáis,[25] a *mobile clinic* is created together with the support of two Spanish nurses that reside in the Lobur's[26] mission, which is situated in Lobur area and covers a territory of 15,000 km^2 in the Ilemi Triangle. Lobur's mission is a public association of faithful Christians of the Catholic Church, formed by priests and lay, men and women, from different parts of the world, and it is the coordinator of all development projects that the Missionary Community of St. Paul the Apostle (MCSPA) carries out in the Turkana region. The project *mobile clinic* covers 12 villages, out of which four correspond to mother-infant care centers established by MCSPA and other eight to nomadic peoples. The project aims at expanding its services to approximately 22,750 direct beneficiaries and 12,000 indirect ones.[13]

The mobile clinic consists of two nurses, two indigenous translators and a clinical officer that is one of the main service providers in the country and holds a license to conduct routine MD clinical assistance, especially for primary aid.[27] For the travel throughout the desert, an all-terrain vehicle, which is daily equipped with two huge trunks full of medicine that will be delivered to the area included in the visitation schedule, and with the few tools available to make diagnoses: phonendoscope, sphygmomanometer, oximeter, malaria and HIV test, diagnostic set of otoscope y ophthalmoscope.

The health care team travels with the *mobile clinic* seeking to provide assistance to peoples living in the most remote areas, to visit the patients' homes and, if the situation requires so, to move the patient to the

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hospital in the city in Lodwar (a journey of seven or eight hours by a double traction vehicle, if the weather conditions are favorable). This project includes prevention and bringing awareness to health promotion and healthy and hygienic habits, education provided by midwives for the group delivery, health controls for pregnant women, as well as training of the local health care staff, with the aim to ensure project continuity and sustainability by the indigenous health care staff itself.

Napeikar is one of the settlements with the largest community arranged in groups (approximately 2,500 people) receiving health care services twice or three times a week. Providing health care services is made possible due to its proximity to Lobur mission, a logistic center and a residence of *mobile health care unit*'s collaborators, as well as the place where many projects were initiated, such as infants school (children receive education up to the age of 10 or 12, because after that age their parents assign them several family duties), workshop for the pregnant women or the *mobile clinic*. The continuous provision of medical services enables a fast access to the field work, participant observation and the possibility of interviewing the largest majority of the community members.

One of the translators, member of the *mobile clinic's* team, is a native of that village where she happens to live as well. She translated the interviews presented in this study and was also interviewed. The possibility of having this person as a nexus with the Turkana people has been of great help since, on the one hand, she belongs to the tribe itself and to the female gender, which facilitates the accessibility to the majority of the interviewed women candidates for two reasons, being of the same gender and demanding more medical services, since women exercise the role of caregiver in the family, in relation to health and disease-related issues. On the other hand, this translator also knows about some personal aspects of the respondents that will be interviewed, the right place and the right time to conduct the interview, so that statements are not conditioned by influences of any type.

METODOLOGY

This study seeks to learn about the Turkana nomads' concepts of health and disease to further plan a culturally consistent and competent therapeutic interaction than can optimize the external interventions efficacy and can help improve the health care services and disease treatment delivered to the tribe.

Research Design

Within the qualitative methodology, an ethnographic approach was selected that enables a direct study of the people and groups during a certain period of time[28] and a specific moment of the development of this cultural group, from the perspective of the actors themselves, including their worldview. More specifically, the participant observation method was applied through the field diary and ethnographic interviews to know about the social behavior, to register a true and realistic image of the group under study and understand the way in which the group uses its natural environment, how it gets organized and socially structures the different facets of its day to day and its relation with other groups or sectors of the society.[3,4,17,18,19,29,30] Specifically, the aim was to learn about the way the Turkana tribe interprets the concepts of health and disease, in order to have a more assertive vision and therefore, to intervene with more efficacy in health and illness matters, to then apply culturally competent and consistent care models in line with the values and concepts in the tribe.

Techniques determination

For data compilation, participant observation and direct observation methods were applied (in the first days of field access by the main researcher), as well as informal conversations and individualized interview to members of the tribe, in which two translators and

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a nurse, who was part of the *mobile clinic* project, daily collaborate, all of them being privileged informants for this study. Likewise, in-depth interviews with different people, in their character of secondary informants who were Spanish and English speakers living and sharing experiences with nomads at least five years ago. Participant observation was carried out in 15 villages that are members of the Turkana tribe; the resulting notes were recorded in a field diary on written records, video and audio. Informal interviews to 42 nomads, selected by the indigenous translators and the *clinical officer* according to their willingness to participate, were carried out in all of those villages. Of the participants, 78.6% interviewed were women and a minor percentage of 21.4% were men, all participants of both genders were between 18 and 50 years old, as stated by the participant themselves. Among the 42 nomads, those who could offer higher availability and more information were selected, with the help of the translator, and after explaining that their statements would be used for a research study and that their identities would be protected, 14 in-depth interviews were carried out during approximately 90 minutes.

During the interviews, the team noticed that women were much more approachable than men and provided more data, a fact that had been mentioned by the privileged informants in advance, since women regarded themselves as the family's representatives and caregivers, therefore they visit the town more frequently than men who are usually engaged in other duties far away from the points where *the mobile clinics* are providing health care services. Moreover, members of the Lobur mission (like the two priests that lead the mission and the six people that are more experienced in that region) were also interviewed, complementing the information collected, since they have interacted with the tribe for long years and know about the tribe's usual traditions, culture and beliefs, therefore they ended up as secondary informants for the study as well. During both participant and direct observation methods, researchers could access 70% of the population covered in the project since, despite the remote location and long distance involved, the daily program enables the interaction, at least one or twice a month, with all peoples whose locations have not changed. A Spanish nurse participated as a main *privileged informant* and remained in the region for the three summer months, between 2008 and 2012 and, after that, he became a member of the health care team, from July 2012 to December 2014, therefore he directly experienced the daily interaction with mothers and Turkana families and case follow-up on several health-related problems.

Simultaneously, information has been compiled through a bibliographic revision in different databases, bibliographic catalogues, PhD thesis and information taken from grey bibliography which was contrasted in different blogs.

It is worth mentioning that ties with nomads were created prior to starting the fieldwork, which largely facilitated the intervention of researchers in the nomads' everyday life and context, as well as data compilation, by which there was no negative perception regarding the presence of the research team, especially the main researcher, as to causing a feeling of intrusive interference in their daily routines and lives for the research purposes.

Access to the research environment

As a member of the health team of the *mobile clinic* project, the main researcher could interact directly with the Turkana people, both in situations of care delivery and through interviews conducted on July 2014.

The schedule agreed upon with the project's organizers in relation to the scenario selection to assist the different Turkana villages had to undergo some reasonable changes, in view of unpredictable events, such as technical problems involving the vehicles or the fact that the participants of a village would migrate to another area without prior notice or a river's flow grew during rain periods impeding the access to a region, among other problems. The integration to the scenario was facilitated informally thanks to the fact

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that one of the researchers was a member of the *mobile clinic* and was accompanied by a nurse, a *clinical officer* and a translator who had been in charge of this task since August 2012.

Selection of the interviewed participants

The selection of the primary informants was mainly focused on Turkana women, aged between 18 and 50, since they are in charge of the physical work, taking care of their children, carrying out *manyata tasks*, food preparation, etc. Men are often in charge of the flock and the family's geographical distribution, according to the lands fertility for their livestock, so they are less available and are present with less frequency in the scenario selected. For the interviews, both the translators and the nurse selected people that were more collaborative and had a habitual friendly attitude to talk to them, seeking to avoid possible cultural conflicts that may be detrimental, in the short and the midterm, to the development of the *mobile health care unit's* activities, however this decision could incur in a potential bias as regards the type and quality of information obtained.

Data compilation and processing

Each day field notes were recorded *in situ*. Once arriving at Lobur base, the location where some of the *mobile clinic* members resided at, the notes collected would be codified and recorded while contrasted with the data available from the previous days in order to reflect and improve the analysis on an ongoing basis, so that new hypothesis based on the cultural phenomena or observed behavioral patterns could be considered.

Ethical aspects of the research work

All the participants were previously informed about the purposes of the research work and about the voluntary and anonymous nature of their participation. Due to the high illiteracy in the region, the interviewed participants gave the researchers a verbal informed consent, once the translator had read the document containing the terms and conditions to participate in the study, proceedings that were duly recorded. During this process, there were at least two interviewers, or an interviewer and a facilitator, who apart from acting as witnesses, explained in their own language that their stories would be used for a research study, respecting the privacy and anonymity of the people surveyed.

RESULTS

Beliefs regarding health and disease

Turkana people visit several types of healers, according to the cause which they would attribute to their problem to. They hold a strong and rooted belief regarding the unique abilities *wizards*, *witches*, *Emurons* y *Ekerujan* have since they can predict, do fortune-telling and deal with the events occurring in their lands.

Among the people whose work is to seed evil among the inhabitants and their livestock are the *Ngikasubak* who uses, secretly, several conjures against the community, and the *Ngikapilak* who specialize in strong curse invocation using body parts of people who died recently. We could set a parallelism between the concept provided by other authors which refers to *witch* and the well-known *evil eye*,[22] as it is the case of Shankar and Haverkort[3] who defines the evil eye as the "noxious looking directed from a person to a young animal," which could "get a disease in revenge due to human conflicts," such as jealousy or envy, and that may cause stinging, swelling, wounds and edemas. Based on their beliefs and traditions, the *wizard* plays a vital role in the villages, he is usually the referent the members of the tribe resort to and he is considered as the main healer of certain pathologies (habitually chronic ones), who uses his knowledge on certain medicinal

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plants combined with conjures, rites and ceremonies to cast out evil and demons.

The *Emuron* (singular) and *Ngimurok* (plural),[30 p.168] refers to the local healers, who share with the people the messages received from their god through a dream while sleeping. The missionary anthropologist Barrett[31] says that "true seers," also known as "god's seers," are the most respected among the *Ngimurok* because they receive revelations in a dream directly from Akuj, generally, while sleeping. Likewise, he also says that they use other means, such as reading the sacrificed animals' intestines, tobacco, cords, gourds, stones and the most famous of them is throwing of sandals: the way in which they fall on the floor may be interpreted as a signal.[31] Among the reasons why Turkana people ask for help are: to find out the cause, treatment and cure of diseases, droughts, floods, epidemics and other disasters which are out of their control. In exchange, the *Ngimurok* demand diverse livestock sacrifices in order to placate Akuj's temper or influence on his acts, so that his wrath be appeased and no disasters or other adverse events are released on the tribe.

The *Ekerujan* or dreamer (the prophet) is the most powerful way of *Emuron*, his dreams are clearer and Akuj talks through these dreams (meaning). It is said that this type of *Emuron* is the most powerful and that in its initiation he was snatched and taken to Akuj, and, from that moment onward, he left his human nature and became the most powerful *Emuron*: the *Ekerujan*.

The *Ngimurok* are usually brothers, since such quality or gift is transmitted from parents to children. It is important to note that the *Ngimurok* are merely Akuj's messengers of the events. Akuj shares with them through their dreams and their god may anyway decide to send droughts, plagues or diseases, etc., no matter the rituals or sacrifices they may do to placate his decision and will. The *Ngimurok* only interpret what Akuj tells them in their dreams and ask for sacrifices to reduce their god's wrath and avoid his punishment.

Health as social interaction

Among the results obtained in the diverse interviews made to study participants, we find consistent agreement with respect to the perception of the concept of health, which would be directly related with the family, tribe, environment and faith in their god, i.e., that it is the result of the interaction with the elements in their scenario, health is never perceived as a particular asset or an issue that is independent from that social interaction. During the interviews, health was referred to as the power to develop their daily activities, also the participant concern over being deprived from health in terms of an obstacle that hinders the fulfilling their pastoral duties, and the sense of belonging to their families, in addition to the need to please their god to avoid adversity and evil. This conception does not include personal physical well-being, so pain, chronic disease or other problem that will not largely hinder them from complying with their daily activities, is not deemed as lack of health, as it would not be hindering them from carrying out their most important activity, which is cattle herding, family life and their beliefs.

Case study

We found a group of young people who were playing with a medium-caliber gun which on the stumbling of one of the boys fired accidentally on one of them. In general, the fact that most herders carry firearms, such as AK-47 or Kalashnikov,[1] both for the defense of their livestock and thefts or assaults they face (Figure 3) is not unusual. But this time the unfortunate incident had hurt a young man. As in all societies, abnormal incidents spread quickly among its people. The medical assistance team learned about this sad incident five days later, while also learning the good news that the young man was alive. Once we contacted the translator, while asking various nomads about the victim's whereabouts, we found the victim walking with a cane, limping and with a dirty bandage made of cloth on the injured leg. As we approached,

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we noticed the young man sitting under the shade of a *manyatta*; he looked like anyone in the village, but when he tried to move the face gestures transmitted his pain. With the help of the translator, we asked him what had happened, how he was feeling, why he was there, etc. and he replied:

> *... This happened to me five days ago: I was playing with my friends and apparently some witch had thrown me the evil eye. I visited the wizard and he put me this. It still hurts but I can walk with the help of this cane and soon I have to gather my goats herd assigned to me by my father...*

After uncovering the dirty bandage, we noted he had a wound with a minimal input opening through the front part of the tibia and an exit through the external side, at the same level. Fortunately, there was no evidence that it had touched the bone, but the hole had a tear of about 5 or 6 centimeters in diameter, with signs of infection and flies landing on the wound without bleeding. We quickly healed the wound and administered antibiotics. During the next four days, the team went to the place to administer medication and heal the wound. On the fifth day, the young boy had already migrated without giving prior explanations to the health assistance team who was delivering care to him. As we learned later, the family had decided to pack up and move to more fertile lands for cattle grazing. This act could be interpreted from different points of view, on the basis of what it was referred to us by the informants: a) their child could walk better and did not need help anymore; b) the curse of evil eye ceased; c) the prioritization of the common family interest over the benefit of one of its member; d) the natural path would determine that the strongest survive and the weak die.

Figure 3. Young in charge of goats herd. Turkana tribe, Ilemi Triangle, Kenya, 2014.

Disease as a curse or spell

Unlike the concept of health, the concept of disease is understood as an impediment or obstacle to perform their daily duties. Some of them closely relate the cause of the disease with the abandonment of their ancestors' traditions, offense to their god or witchcraft, so they resort to prayers and sacrifices to heal the relationship with the ancestors. However, when they find a problem or change in their children's health, they do not relate it to a curse, because a child may not have offended his/her god, though he may have been the victim of witchcraft. This is the way in which the privileged informant described the case of any child who had a physical or mental disorder, for example, epilepsy. Most families believe that epilepsy is not a curse and, in order to find a solution, usually ask for help to health care professionals after trying to eliminate them through their prayers and sacrifices. Likewise, there are also non-habitual cases of children diagnosed with autism, obviously with the typical behavior of the disease, which is perceived as abnormal or different by the rest of society. According to the verifications made by the informants, these cases are usually

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interpreted by the tribe as a consequence of abnormal events, derived from the partnership between their parents, such as cannibalism and necrophilia, leading the tribe to think they are cursed children, as part of the punishment or curse because of their parents' behavior.

As mentioned above, children's care is a family matter and the family takes care of them, irrespectively of their problem, hoping that one day the problem will be resolved, by itself or through external factors. But the survival factor in the desert lands where they live must be taken into account. Therefore, as previously mentioned, when conditions are unfavorable and resources are scarce, starvation periods are suffered and the survival instinct affects the weakest, i.e., those who had been added to the household, and like the case of women whose husbands died or have become impoverished together with their children. Thus, if identical twins are born in a family in a bad time, they will not feed one of them anymore, and that will be the one that is deemed the weakest. This rule will also be applied to the elderly that are unable to earn a living by themselves. The elderly women and children will be deprived of food on an age scale basis, from the youngest to the oldest. The weakest ones are always the first in the list to be deprived of food, based on the principle that they have less chances of survival.

Case study

We found a Turkana woman of about 50 years of age far away from Lobur, but within the area where health care services are provided. This woman had terminal cervical neck cancer. She had moved to one of the most remote villages, far away from the dispensaries available (where sick inhabitants of the region receive health and pharmaceutical assistance, as well as first aid care to injured patients, without being hospitalized). The fact that she was living in a remote location made it difficult to provide pain care, which was inherent to the disease phase through which she was undergoing and the level of care required due to the suprapubic catheter she carried. The actions taken by the healthcare team aimed to agree with the patient on the benefit of moving to a nearby town, such as Napeikar, where she would get daily health care, as there is a schedule to be complied with to fully meet the health care demand in the area. Nevertheless, the woman answered the following:

> Woman: *I do not want to leave this place, I don't have family here and I can hear the witches at night near the village.*
> Nurse: *What can witches do to you? Do they have the power to do anything to you? You know very well that it is very difficult to come here and we cannot take care of you as much as we could in Napeikar?*
> Woman: *Yes, especially once I die, and I will die soon, they will dig up my corpse and eat me, and I do not want that to happen to me, so I cannot go back to Napeikar, because witches are still there.*
> Nurse: *But do you believe in God? Do you think that God will leave you alone with the witches?*
> Woman: *Yes, of course I believe in God, in your country may be witches cannot do anything to you, but here they can, and I do not want my corpse be eaten, that is the reason why I will not go back to Napeikar, because witches are there.*
> Nurse: *Let's think of a solution, here we cannot treat pain or clean the wound properly, we cannot alleviate your pain, what do you think about moving to Meyen? It is also near, so we can come to see you more often.*
> Woman: *Meyen? Only on the condition that you assure me no witches will eat my body when I have died.*
> Nurse: *I assure you that there are no witches. Perfect! We will pick you up in one day and travel to Meyen, is that OK?*
> *Women: Why do you care so much, if you know I will die anyway? But OK, I'll go to Meyen.*

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Fear of witches and what they might do to her once she had passed away frightened the patient so much that she was not able to notice that, without receiving proper care and treatment to control her pain, her lifetime would be reduced, consequently accelerating the event that the witches could come and eat her body. It also confirms the theory of the meaning they give to the concept of disease, since she concluded that she was ill, because her pain and the probe did not allow her to perform her daily routine. She also interpreted that witchcraft was related to her disease, and that witches would continue to stalk her even after her death.

CONCLUSIONS

Turkana tribe has spent many years sharing about their life, culture and traditions with many visitors arriving with different agenda, such as non-governmental organizations (NGOs) seeking to fight malnutrition, projects such as mobile clinics or projects conducted in the past by the Catholic church to improve the resources of these peoples.[23,24,25] This permanent contact has been the eventual factor of trust gained by white-skinned people, and their intention of improving nomads' resources, since, though the country government is responsible for the provision of such resources and drugs, usually foreigners end up being the ones who finally develop different projects with the aim to assist the most remote villages in the civilization. Therefore, the "white people" are part of their habitat and, until now, they have usually proved to have an agenda with "good intentions," as it was noted during the interviews.

Having access to Western medicine is not always a benefit for all Turkana people, because the distance, as well as its social and economic system, does not often provide easy availability of health-related benefit. For years now, mobile clinics (derived from both Western projects and others owned by the country) have allowed to make health care resources available to several territories of difficult geographical access, giving nomads the possibility of being assisted, without having to depend exclusively on the traditional health practices of their culture.[25] As in the studies conducted by Sandford[32] and Swift[33] regarding the organization of social services for herders and the services provision for nomads, we note that the nomads' unpredictable movements, the poor communication and the low density of some populations hinder the provision of health care services while increasing costs, compared to fix health services that may assist non-nomads more easily. In addition, they cannot be properly monitored, and they often do not understand the importance of follow-up efforts required to complete the treatment, i.e., they do not understand that the treatment includes a comprehensive plan, rather than a single action.

On the other hand, when the patient decides to receive health care and needs a treatment, according to his/her diagnosis, not all drugs are delivered to the patient in need. Pregnant women, children and the elderly receive the drugs they need, indicated by the health professional, without any exchange of assets; however, both women and young men are subject to a kind of symbolic payment for the medication, which may be the exchange of some cattle, handcrafted items (bowls, vases, stools called ekicholong, etc.), or beads that they use both to show their family's wealth and decorate their bodies[15] for the medicines provided. It should be noted the importance of this kind of bartering, as well as the barter negotiation, since its purpose is not to obtain the payment of the drug provided, but to avoid the misuse of resources or their eventual future resale. These barters allow for the regulation of the scarce resources available for the territory of the Triangle Ilemi, and reduce the consumption by the tribe's members which, over time, have begun to lead a life that depends a little more on the facilities provided through projects created to that end.

Harragin[25] states that in his study carried out during three years on the provision

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of healthcare in northeastern Kenya, mobile clinics received not only ill nomads, but also nomads that said that they had the same symptoms as a member of his/her family actually had, others referred to past diseases to anticipate a possible relapse, or even for storage, resale and/or treat their animals.

Adherence to the agreed treatment is closely linked to the Turkana tribe's beliefs towards Akuj and the various representatives of the tribe, as well as with the education received and previous experiences (positive or negative) with health care professionals. Thus, as regards chronic diseases with poor prognosis, different situations may arise:

1. That nomads directly seek health assistance and that, due to the lack of resources or the advance progression of their disease, the health team cannot offer a possible solution, therefore, a posteriori, they will visit the wizard again.
2. That, if it is a long-term problem they have been suffering, they would relate their disease with the evil eye coming from witches, so, first, they will seek wizard's help and if the wizard failed, they will resort to health care team. Others decide to visit the health professional first, but while noticing that they are not having results in short term through the treatment, they may abandon or seek help from the Turkana healers.
3. Likewise, there are cases of nomads who visit directly the wizard because health professionals are not an available resource for them due to the remote location reasons.
4. There are other nomads who decide to follow both the health care treatment and the wizard's treatment, which can be highly detrimental due to eventual interaction or overdosage of any treatment component. When all available resources fail, Turkana people often resort to the Emuron, with the hope that it can help them by using their supernatural powers. It is important to note that, due to the different forms in which the patient interacts with the disease, multiple aspects to direct the best treatment adherence need to be considered, because the continuation or interruption of the treatment by the patient is conditioned by different beliefs. This network or decision-making network regarding the matter of health and disease has been woven over the years, based on the events experienced by the tribe and the increasingly incorporation of therapeutic options, which has leaded to arrange a more increasingly complex range of services, in which cultural characteristics and traditions of the group are intermingled with external elements brought from the Western world, which have provided the tribe with certain unprecedented capacity to choose which had never existed before. The successful healing result obtained, and the time invested in order to find the resolution for the recovery have been leading the decisions made by members of the tribe. However, it seems that the perception of traditional health and disease constructs of the tribe have been preserved, as shown in ethnographic studies conducted in urban societies, whose conclusions do not differ too much from those expressed here. Thus, the study of Lillo[34] shows that, though people can add options, services or interventions different from those traditionally established, the perception of health and disease culturally learned prevails. In fact, it is the professional group who must know the culture and the constructs regarding health and disease matter of the population to be treated, to carry out a culturally consistent treatment[35] and an improvement approach on the group's situation.[36]

It is important to note the findings contributed by this study to the definition of health for the Turkana tribe, as follow: it is the power to move forward with their daily activities, to meet their obligations regarding the tribe, to belong to his family, as well as to ensure that their god remains happy enough not to bring evil upon them. While disease is construed as: an obstacle that impede them or hinder them from complying with their

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daily duties; some of them closely relate the cause of the disease with the abandonment of their ancestors' traditions, offence to their god or witchcraft, therefore, they resort to prayers and sacrifices to repair said acts. Both concepts are very far from the Western health and disease approach, which, a priori, proposes the external projects, such as the mobile clinic, and the lack of adherence to therapeutic treatment of these projects is likely to be associated to the cultural ignorance of both constructs by the professional team.

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