New shapes and original medical creations: the dependent nature of the individual in a Nahua community in Mexico

Silvia Iorio¹, Paola Badino², Marta Licata²

¹ Department of Molecular Medicine, Unit of History of Medicine, Sapienza University of Rome, Roma, Italy; ² Department of Biotechnology and Life Sciences, Insubria University, Varese, Italy

Summary. Background and aim of the work: Within of Nahua of Naupan, the impact of acculturation processes by the historical interconnection between different models of medicine has given rise to important revisions and reinterpretations of local medical culture. The main purpose of this article is the observation of dynamics and aspects related to processes of understanding, perception and management of diagnostic categories, as well as the local understanding of the person (the individual) in the rural district of Naupan, located in the North East part of Sierra de Puebla. Methods: The analysis presented in this work is the result of an ethnographic study carried out at the Nahua community (1,614 people) residing in the rural town of Naupan (Huachinango, Puebla, Mexico). Results: The attention will be given to the synthetic analysis of the local conceptions of certain pathologies and how the individual is seen as an unstable and constantly changing aggregate, situated in a context where health-related issues are clearly linked to different levels of perceived reality. Conclusions: In settings where there are no systems of institutionalized medical knowledge, nosological concepts are seen in a subjective and indeterminate manner, due to the fact that in some cases they also vary considerably depending on the person. Faced with the choice of therapeutic options, the Naupeña population moves between integrating and rejecting medical concepts from different cultural horizons, through a continuous creation of knowhow that they see as more or less organized and transmissible knowledge about disease, treatments and methods of prevention and interpretation. (www.actabiomedica.it)

Key words: traditional medicine, diagnostic categories, Nahua

Introduction

Based on data collected during a five-month period of ethnographic research carried out at the Naupan (Figure 1) rural community in the Sierra de Puebla (Huachinango, Puebla, Mexico), this article explores the local conceptions of specific pathologies that refer to the individual as an unstable aggregate of balances connected to the environmental, social, individual and supernatural ecosystem, within which health-related problems are tied to the fluidity of individual boundaries – this is the concept of a body that is perpetually open and subject to the continuous
and constant interaction between the person’s inner and outer forces.

The research focused first and foremost on processes regarding the exchange, merging, inclusion and conflict between medical knowledge from different cultures. During our work, the resulting pluralism of concepts, diagnostic categories, choices, and therapeutic strategies proved to be truly dynamic, based on the continuous adaptive facets that members of society developed in order to deal with a condition that was considered as pathological in the community. In fact, within the same medical system, there is a multitude of knowledge, traditions and practices that can not, aside from rare cases, be easily classified or traced back of solid theories related to disease, cure for diseases, and health. Based on this viewpoint, the author saw the Nahua’s medical system as a dynamic complex, within which members of a particular society move (1, 2).

Methods

The analysis presented in this work is the result of an ethnographic study carried out at the Nahua community (1,614 people) residing in the rural town of Naupan (Huauchinango, Puebla, Mexico). The study, promoted and supported by the Italian Ethnographic Mission in Mexico, was aimed at understanding the conceptualisations and beliefs of the population in relation to the cognitive-values of local medicine, which greatly differs from the medicine that has been imported there in the last thirty years, part to the biomedical model that was adopted by the primary health centres within the territory. The survey in this project included participant observation, 50 structured and semi-structured individual interviews and 10 group meetings. Participant observation was carried out in biomedical healthcare facilities as well as those where local medicine practiced, including private homes and places of worship such as religious sites, markets, etc. Discussions and interviews were in Spanish (80% of the population speaks Spanish in addition to local Nahuatl), and in specific cases we used the help bilinguals. All interviews were recorded and transcribed, and in some cases we required the support of bilingual members of the community.

In order to understand the dynamics that determine the complexity of health and disease in the culture of local medicine, we needed to identify the following focal points for our analysis: (a) local population’s representations on the concept of the body/health/illness/healing; (b) the complexity of the disease as an event that can be broken down into disease, illness and sickness; (c) the identification of therapeutic prototypes that would be useful in creating a systematic analysis on the use and methods of local healthcare resources.

Results

The complexity of the person, which at certain moments of their existence is spread out within the surrounding ecosystem, makes them subject to the influence of external forces that can bring them to experience conditions of discomfort and danger. If different studies have been shown essentially that there are permeable boundaries of the body that allow the “soul-components” of the person to move around and act out beyond that of the individual self, here the authors have often chose to dwell on just how much the external forces, ethereal and intangible, can interact with the alteration of the person’s health, from malicious actions against internal components to external projections of the individual and the community (3).

The addictive nature in people is the consequence of a concept of the responsibility that invests human relationships with social norms and values, whereby the individual evil is understood not only as an attack on the social and moral order, but also as a break from the harmony of the relationship between the body, the person and the ecosystem.

The spiritual energy that can abandon or attack the body of a person when this person is not careful or is in a difficult moment constitutes the interpretative aspect of illness that defines the “extra-human” etiology of varying symptoms, the neglecting of which would likely trigger a dangerous aggravation that could lead to death (4, 5).

The person – the individual – is placed in a context where extra-human forces have a strong influence on social and individual destiny. The idea of a fragmented world, criss-crossed by a vast complexity of benevolent or malevolent entities, finds the principle of unity through the Catholic idea of one God. From this idea
of unity - which, as we will explain below, is more quantitative qualitative - everything in the ecosystem is divided into countless beings with many different characteristics, usually anthropomorphic, whose raw material has a “thin”, light density, unlike the “heavier” living beings and earthly creations. The uniqueness of God determines the design of the main figure of the supernatural world, embodied in turn in the rich pantheon of Catholic saints.

The polar opposite of God is the figure of the Devil, in the classic Catholic ideology strictly inferior to God and the saints. To simplify the complex structuring of supernatural forces, which in the Nahuatl cosmology rule the world and influence the fate of all living creatures, we would like to propose a list of some of these entities, all hierarchically submissive to God:

1) the pantheon of Catholic saints (santos);
2) the patrons of places (dueños de lo cerros, de las cuevas, de los ríos, de los pozos, etc.);
3) the winds (aires).

The aires are not actually completely distinct entities compared to the two prior ones. Often, in fact, they represent the means by which they arise and act in the environment, interacting with the individual. In many other cases, however, they are associated with malignant powers, and consequently represented as emanations of forces or entities belonging to the world of the dead, the middle world, and therefore also that of Evil. Santos and dueños, on the hand, can be defined as secondary deities (compared to the singularity of God), because, according to the divine plan, they determine the fate of the individual and the community. Precisely for this reason, santos and dueños are addressed, through divination, by special rituals and are essential for producing diagnosis and identifying a particular cure, and therefore they also determine the healing of any disease. However, both are not mere benevolent entities and indeed they often inflict a certain evil upon those who dare to show disrespect towards them (6).

There are many ways in which the individual may cause irascibility. For example, the dueño del río can scare a child, near water, behaves in such a way that shows lack of respect for authority. At this point the dueño will make sure to scare the child to cause the release of the tonal and capture him, holding him hostage until he has received due compensation for the offense. To accomplish this clearly punitive task, the dueño may make use of aires to capture and hold the tonal, which will remain imprisoned in the place where the crime happened.

During this research on the spiritual world inhabited by these figures, which are generally anthropomorphic, we focused particular attention on what the aires represent to the Naupan, and more specifically, on the pathological aspects in which they are directly involved.

The aires, in nahuatl called yeyekame, can be divided into four different categories:

a) climatic phenomena of air currents;
b) harmful emanations that are absorbed by the body;
c) intentional emanations of extra-human or human entities;
d) personified evil entities with their own will.

Each of these categories of aires turns out to be potentially harmful to the individual and each of them correspond to definite pathological classes.

a) The aires, when associated with climate or weather, are forces that could be categorized as those above, called secondary deities, which are seen as a basic element of the agricultural cycle and associated with seemingly natural aspects of air currents. Consequently, they are separated into yeyekame itstik (literally “cold winds”) and yeyekame totonke (“hot winds”). As seen in literature (4), hot and cold are the two opposing elements that in Nahuatl thinking constitute the cardinal idea of the polarization of elements, bodies and substances, according to one of the fundamental interpretative frameworks of illnesses afflicting the person. Accordingly, the aires, which are also connotations of thermal qualities, can be determinate in how pathogens, penetrating inside the body, cool the person and lead to general symptoms such as headache, cough, fever and colds, attributable to yeyekame totonke as well as yeyekame itstik. The latter, however, are considered to be more harmful than the others and can generate chronic illnesses if not treated promptly. Their accumulation, in any point of the body, is extremely harmful, even if, based ethnographic data we collected, we
found evidence that those interviewed mainly identified yekekmie ististik as a cause of bone pains, of just about any type:

Onechuitek yekekatl ististik (Literally, “The cold air hit me”) [...] It usually reaches them in the bones, anywhere in the body, it goes through the skin, and then: “What else can it touch?” Then the bone, and sometimes it does not stop moving. The bones can become very cold, for example a tomato when you do not put it in the refrigerator it is soft, but when you put it the refrigerator it is very hard – much like bones when enters the air enters. [...] Knees start to hurt mainly [...] then legs, knees sometimes, sometimes shoulders and elbows being to ache [13/01/2010 B.C.].

b) Whether the bones or other parts of the body are affected by this category of aires, the cure includes empirical treatments aimed at halting the pathogenic nature of the entity through the thermal principle of opposition, which in a symbolic-mechanical conception focuses on expelling, through the use of contrast, the element of aire.

c) When defining this category of aires as harmful emanations that are absorbed by the body we are referring to the suble and ethereal substance that is associated with the emanations of mothers or newborn babies. Children, in their first days of life, represent the liminal state of the human beings, and therefore they are still tied to the world from which they came – the world of the dead that carries the harmful forces. In this regard, the ceremony of the lavado de manos (“Hand washing”) is quite meaningful. This lustral ceremony follows the classical Catholic rite of baptism, through which it aims at eliminating the contagious impurities that the child brings with it when coming from another world. Even the woman who kept the child in her womb is considered potentially contaminant for those around her. All garments that have been in contact with the new mother as well as the child are dangerous because they are impregnated with these harmful substances, in the form of aires, which can infect anyone who is nearby, with the exception, however, of the family and the midwife: the therapeutic specialist is the only person authorized to wash, and touch, the clothes of the mother and child. However, this type of aire, in addition to being connected with the harmful forces from the way of the dead, also refers explicitly to another type of impurity: that of sexual relations. The newborn is also the result of the sexual act by which his parents conceived him or her, and it carries the contaminant “dirtiness”. The aspect of the contamination regarding the sexual act (the power of “force”), along with the contamination from a world that is different from that of the living, are closely interconnected. In order to clarify the complex features of these aires, we should consider the role of dogs, which next to that of the mother and newborn, is constantly cited by those interviewed as a cause of contamination. Dogs are also connected to the world of the dead, and are described as nocturnal animals that communicate with the souls of the dead, yet they are also considered highly impure and dirty because they mate frequently in public places, in front of everyone.

These different aspects of aires are described and characterized through a “bad smell” from liquids that the mother loses in the days after birth, as well as the dirtiness of stray dogs that populate the streets of Naupan. Therefore, insofar as aires recall the idea of dirt, impurity and consequently the contaminant, they would appear to belong to the so-called “aires de basura” (7).

Contamination that occurs by means of this category of aires is commonly represented as the entrance, within the body, of a strong and disgusting smell that causes the disease called nitlatlak (lit. “I’m burnt”):

It is a smell is found in the throat, which then goes into the stomach and remains in the body causing the creation of different saliva [...] it happens because we feel disgusted and want to vomit. [...] Nitlatlak means “I’m burnt”, but not burnt by fire, it’s as if the body was burning from the inside [18/2/2010, L. B.]

That notwithstanding, these quotes appear to highlight that the “bad smell,” understood in a generic sense, is the cause of nitlatlak, while the pathogen is always traced back to emanations, more or less odorous, of mothers, babies, and dogs. For this reason, the agent of evil is not the smell, but more likely the nature of some living things (dogs, mothers, and infants), which determines this connection with aires. We would also like to point out that the disease is not caused only by inhaling these impure aires, but that contamination can occur, otherwise, through direct contact with
the bodies and objects that are infested. Thereofre, the aire is introduced into the body through inhalation or through casual contact, attaching itself in the trachea or in the stomach, and leading to weakening in the individual through the symptoms of lack of appetite, body swelling, and yellowing of the skin.

d) As mentioned in the introduction of this part of study, the aires are often the medium used by extra-human entities (santos and dueños) in order to punish the individual or the entire community for some outrage or offense committed. Another case is that in which the entity associated with the natural phenomenon (rainbow) infests any source of water with harmful aires, causing a noteworthy urinary tract inflammation called mal de orín. In this category of aires, we can also include the entity that the ritual specialist emanates from himself in order to pass or cure a disease. In the previous paragraph, we referred to the soul-components present in the practices of ritual specialists. The emanations that he produces can be regarded as aires – breaking away, in a voluntary manner, from the body casing, they roam the surrounding ecosystem with the aim of damaging a possible enemy. Although so far we have only highlighted what concerns the harmfulness of these forces, the fact remains that they can be malicious as well as benevolent. Dueños, santos and ritual specialists can address and pass their emanations with the aim of freeing the individual from a specific disease or, more generally, from a misfortune.

e) Malignant forces may also have their own will. In this case, we are referring to aires understood as souls of the deceased, the damned, or demonic entities. All the souls of the deceased, including those of who died of natural death, remain for some time near the dead body and their home before embarking on the journey to the afterlife. Those who have died in a sudden or violent death, before their time, are destined to wander the world of the living until the time comes for their ultimate departure. They are tormented souls who, taken from their own bodies, are persistently trying to get inside of the living, damaging the vital force and leading them to death.

Each of these harmful entities has their own will. They often turn aggressive towards those who are still alive, and especially towards more vulnerable people, such as children and the sick. Generally, they are encountered at night outside of the village, where anyone can run into them or suffer the attack. Otherwise, the places where they are concentrated in greater density are cemeteries, crossroads, and caves. The types of diseases that can arise are numerous, and often with horrible symptoms. The diseases are generally caused by the spirit’s intrusion into the body, which may cause a widespread malaise (tremor, insomnia, nausea, cyanosis, convulsions, etc.) as well as pain or dysfunction of various parts of the organism, or even the onset of behavioural or psychological alterations. This type of aires usually intentionally harms its victim, generally driven by envy and resentment against the living. However, there is also the possibility that a morbid state is manifested in those who encounter these entities in a chance meeting. Not infrequently, in fact, people may come across the spirit of a deceased who eventually scares the person, damaging their soul forces. In most cases, however, the aires are invoked and concealed by ritual specialists who, on behalf of third parties and through an action of witchcraft, instruct the evil entities to damage the chosen enemy.

By analyzing these different categories of aires, we can see that the first two include pathogens that are harmful in a completely random way, in a manner devoid of any kind of intentionality and personification. With regard to the last type, it is evident that there is the will to act against someone, either on their own initiative or on commission. In fact, these are aires given the name a’mo kuale yeyekame (literally meaning “bad winds”), indicating their close relationship with demons, precisely a’mo Kuali (“not good”). Evil, this “not good”, is associated with two days in particular, Tuesdays and Fridays, when divine forces, inherently beneficial, are absent or become less vigilant. As a matter of fact, these days are reserved for witchcraft, and all possibly beneficial or curative activities are suspended. The expression a’mo kuale yeyekame is used by the Nahua of Naupan to distinguish demonic spirits, damned souls, dead souls and soul-projections of ritual specialists from atmospheric or climatic phenomena and harmful emanations that do not have the intent to harm people. Therefore, certain pathologies are accepted as events that lack voluntary causes, as in the
A case of yeycame itstik, which enter the body simply because in a given situation the individual is found to be vulnerable to this particular disease-causing agent. As for the amo kuale yeylekame, however, the personification and intentionality of the pathogen are nearly always obvious. They can often manifest themselves in a visible manner, taking on human characteristics, so much so that whoever comes across them is not able to immediately recognize their ethereal nature. Only ritual specialists, through divination, can identify the true essence of the entity that the sick person has encountered. Divination is in fact the only means by which we can determine the nature of the evil at hand. If the cause is recognized as a result of the action of the amo kuale yeylekame, the cure often consists in the ritual of lustral limpia, a process of “cleaning” that is carried out in order to rid the body of the foreign entity:

For example, one day a shadow appeared, and it quickly hid behind the bathroom and I went over to see it, but I found nothing. I got scared because I saw a lady who then disappeared behind the room and then nothing was left of her, so I went into the house and the baby started crying non-stop, and I couldn’t calm him down because he had been seized by “mal aire”. [...] The baby kept crying all day and all night. So even though we did not see anything that was hurting him or making him sick, we went to see curandera because they can see ... Donna Angelita [ritual specialist] immediately realized that the child was not well and said: “He has got the mal aire, I have to urgently cleanse him, otherwise who knows what could happen.” She carried out the limpia [symbolic ritual of cleansing] with turkey egg, wax, herbs and many other things. She watched the child using the copal [divination tool commonly used by ritual specialists] and confirmed that the child had amo kuale yeylekatl, or mal aire. After this operation the child gradually calmed down. He was saved and is now doing great. [29/12/2009, R. G.]

The amo kuale yeylekame are extracted [removed] from the body of the sick through the use of elements (e.g. eggs and wax) that absorb them, hold them or attract the harmful ethereal substance, only to be then abandoned in remote areas, or returned to the place where evil comes from, including crossroads, cemeteries, and caves.

Discussion

Based on this approach, it is quite clear that in the description of aires as pathogenic agents, the author has given greater importance to a viewpoint that focuses, with regard to the presentation assigned to them, on the dichotomous distinction through which two dominant directions can be identified in the causal explanation of the onset of the disease: “naturalistic” and “personalistic” (8, 9) In the first case, we are dealing with aetiologies that explain the illness in an impersonal manner – using systemic terms – such as loss of strength and balance, or as the breakdown of normal living conditions. In the latter, the aetiologies refer to the active and intentional actions of a real or non-human agent acting on the patient. This binary opposition can be addressed through various analytic tools that arise from the debate on aetiology, which began at the dawn of research in medical anthropology. Moreover, in capturing the instrumental character of this dichotomy, the author has attempted to highlight the different attributes given to the aires, making a net distinction – as far as general pathological agents are concerned – between a random dimension, in which certain nosological phenomena are accepted as “natural” events, with no specific motives, and a causal principle of to which other nosological phenomena are attributed to the responsibility of malicious, human and/or non-human powers. The benefit of this perspective is to allow us to understand the multiple factors of pathogenic forces, even at a purely descriptive level. On the other hand, if we apply it as an analytical tool to reconstruct causes that are attributed to specific phenomena of illness, we would be faced with a dichotomy where naturalistic viewpoints would concentrate on empirical causality of “how”, while the personalistic view would call into question solely the psychosocial and moral dimension of “why”, regarding the responsibility and fault that led to the harmful entity’s aggression. The reality – with regard to the causality of the disease – is too complex to be linked to one of these two etiological spheres. Therefore, we can see that the event of an illness does not reach completion solely in this “casu-alty”, as it may seem as far as diseases connected to “natural” pathogens; and much less when, as in the case of the disease called nitlatlak, harmful emanations are
in a clear relationship with the world of dead, and specific “causes” directly or indirectly affect the individual in each alteration to the normal state of health.

Therefore, if there is still some margin for this case, it should in any case be placed within the complex intertwining of the causes related to the axiological principle of the responsible causality. Gilles Bibeau (10) proposed the “theory of responsibility” as complementary term to the “theory of persecution”, more closely linked to imprudence and mistakes committed by the individual, or to powerful attacks directed by enemies against him or her. The first theory emphasizes the implication of the subject in the onset of his or her problem, while the second refers to the cultural language used to translate this implication. The responsibility of the sick person in the explanation of evil does not play a fundamental role, only in cases where behavioural and moral irregularities can be easily traced back to the individual, and therefore the illicit action committed to a person in the community or to a non-human entity. The latter, cited several times before, refers to the irritability of dueños or santos as the result of an offense committed against them. On the other hand, through the theory of responsibility, it is possible to emphasize the importance of the “root [initial] cause” in every pathological state. Attention to the underlying cause of illness, which is often overlooked in anthropological studies, is an integral part of this distinction – once again proposed by Bibeau with regard to the Classification of Diseases (11) – between a historical “root cause”, Linked to social and spiritual aspects, and a functional “agent cause”, which may simultaneously involve empirical and spiritual elements. The majority of etiological systems described in anthropological literature refer to “agent causes” and therefore mirrors an excessive importance of causation that is seen on a social level, at the expense of aetiologival perspectives activated individually and expressed by “root causes”. The individual or community that is responsible for the “root cause” is always expressed in the biography of the patient, who even if they believe they are ill - because they were accidentally exposed to cold air currents (yeyekat istik) – they can find the reasons for the disease based on personal responsibilities that can even be traced back to their distant past.

Therefore, Sindzingre and Zempléni (12) are quite right when they remind us that in defining a certain affliction, we must consider at the same time three causative elements, in this way proposing an effective perspective through which we can bring together the various approaches to which we have made reference in the analysis of the etiological categories. The two authors propose a distinction among: an occasional “cause” that may correspond to the pathogen (the “how”); an “agent”, which is a non-human entity, a witch doctor, or a person in general (the “who”); and finally an “origin”, whether it is an offense committed or an injustice they have suffered (the “why”). In the same year, in 1981, Janzen emphasized the importance of considering “multiple causality” in the analysis of etiological concepts, recovering in a critical manner what Evans Pritchard had already said in 1937 regarding the analysis of Azande medicine: e.g. that witchcraft would act together with other natural or supernatural secondary causes. Returning to Marc Augé’s discourse, the disease must be analyzed as a “a disorder that is biological and at the same time social”, highlighting the interconnection of that which is natural, non-human and social, all coexisting within the same etiological dimension (13).

The multiplicity of etiological criteria is also evident in the therapeutic itself, where there may be no correspondence between the type of aetiology and the type of care, so that a type of “natural” aetiology may also correspond to a cure that is based on mystics and rituals, or vice-versa.

In light of these dense complications, in addition to the pathogenic agents, the two large etiologic categories through which the Naupan population carries out an initial classification of pathological states, distinguishing them in the Maldad (literally “Disease of Evil”) and kokolistle Dios (literally “Disease of God”). In this type of classification, the native population explains the disease based on its origin, using an aspect of “interdigitation” (14) which brings together the two conceptual universes in a perpetual dialectical overlapping. The illness is experienced in a completely subjective manner, as a regret and rethinking of the person’s existential condition, through which he or she gives meaning to their life’s story – stories where there are illicit actions committed or suffered, in relation to the visible ecosystem (relationships between oneself and
the community) and that which is invisible (the relationship between the person and the outside world) through which both categories are interpreted. In nosological categories of the Naupéños, the illness is interpreted on a case-by-case basis, depending on facts, feelings and actions in which the patient is involved and that as a whole have contributed to creating the causative chain – and the onset of disease is the its ultimate expression. The terms used to explain the disease are related to the person who is ill, not the pathological condition. Furthermore, it goes without saying that the very definition of a disease is based on the culturally and socially determined subjective manner of dealing with and conceiving the alteration of the normal state of health (15).

Therefore, with regard to the classification structure, as shown by the same denominations in the case of kokolistle Maldad, the reference to that which is malicious or evil is made to correspond to particularly serious pathological conditions produced by either non-human or human agents that are voluntary and involuntary. On the other hand, “diseases of God”, also referred to as the natural kokolistle (literally “natural diseases”), include, in particular, those kinds of pathologies whose understanding has been transmitted from biomedical nosology, and more generally correspond to all those illnesses that are considered initially mild, although they may still reach conditions that are severe or chronic, even becoming fatal.

1. Kokolistle Maldad:
   a) Non-human pathogenic agent: it includes all the diseases in which the amo kuale yeyekame are involved, either through a voluntary attack or by a random encounter, involving the loss of vital components or the intrusion of harmful entities;
   b) Human pathogenic agent: all diseases caused by voluntary human action, such as witchcraft, or involuntary actions, caused by uncontrollable harmful emanations.

2. Kokolistle Dios:
   a) Pathologies caused by the breakdown of the body’s physiological balance;
   b) Pathologies that can attributed to the body’s mechanical and physical dysfunction;
   c) Pathologies caused by contagion through physical contact or by inhalation of harmful ethereal substances, or by the bite of some insects;
   d) Illnesses caused by different types of emotional states.

There are other factors, apart from the causes, that determine the affiliation of each disease to one of the two macro-categories we have presented in this paper. The first factor that we would like to examine – due to its relevance to the fundamental position in our research – concerns the inclusion, within the category of the kokolistle Dios, of all the pathologies whose understanding is derived from biomedical nosology. In fact, biomedicine can only treat “Diseases of God” successfully, while local specialists claim their ability to intervene for both classes of diseases. The family group (in the field of self-care) and the local therapist are the people, when making the diagnosis, who will initially decide whether the patient is facing a disease of divine or evil origin. Therefore, classification will not depend on the type of disease, but above all on factors such as the severity and violence of the pathological attack, its duration and its resistance to biomedical drugs. The parameter of seriousness and gravity, in relation to the first manifestation of illness or malaise, is indicative of the nature of the disease. The sudden onset of serious illnesses generally represents causes related to human or non-human malefic implications. Just as the persistence and resistance of the disease also leads to the search for the meaning behind the various levels of causation in which, in addition to the responsibility of the individual, may also lead to attributing the cause of illness to persecutory attacks (16).

Conclusions

In order to avoid unwanted stretching or embellishment of medical interpretation and classifying requirements, Robert Pool (1993) offers a solution. He underlines the belief that traditional and biomedical nosological systems are more indeterminate than scholars are willing to admit. In fact, there is not always a correlation between the type of aetiology and the type of care and therefore, for example, we must
recognize fact that a “natural” aetiology can safely follow a cure with strong symbolic foundations. In settings where there are no systems of institutionalized medical knowledge, nosological concepts are seen in a subjective and indeterminate manner, due to the fact that in some cases they also vary considerably depending on the person with whom we are speaking (17). Moreover, we must not forget that the same institutionalized knowledge and understanding of biomedicine, based on the experimental method, can not in the slightest way be regarded as immutable and unchanging, since it is itself subject to continuous variations. Therefore, only by accepting the principle of indeterminacy can we observe the semantic wealth of local aetiologies and nosological categories (18). In fact, the most important aspect regarding the complexity of how an individual is represented in Naupan is the “fluidity” of individual boundaries, with regard to the constant interaction between the external and internal forces connected to the person (19).

**Conflict of interest:** Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article

**References**

1. Aguirre BG. Regiones de rifugio. El desarrollo de la comunidad y el proceso dominical en Mestizoamerica. Instituto Indigenista Interamericano 1967, Ediciones Especiales 46.
2. Cabieses F. La articulación de las medicinas tradicionales con la medicina oficial. Anales de la Facultad de Medicina de la Universidad de San Marcos 1966; 57: 12-8.
3. Lupo A. Apostillas sobre las transformaciones de la medicina tradicional en México. In: Lupo A, López Austin A (eds.), La cultura plural. Reflexiones sobre diálogo y silencios en Mesoamérica. (Homenaje a Italo Signorini). México: Universidad Nacional Autónoma de México 1998; 221-55.
4. Ortiz de Montellano B. Aztec medicine, health, and nutrition New Brunswick, London: Rutgers University Press 1990.
5. Signorini I. Sobre algunos aspectos sincreticos de la medicina popular mexicana. L’uomo. Società, tradizione, sviluppo 1991; 4(2): 125-47.
6. Baez Cubero L. Nahua de la Sierra Norte de Puebla. México: CDI – PNUD 2004.
7. Montoya Briones J. Significado de los aires en la vultura indígena. Cuadernos del Museo Nacional de Antropología, Instituto Nacional de Antropología y Historia, México 1981; 5-23.
8. Foster GM. Anderson BG. Medical anthropology. New York: John Winley and Sons; 1978.
9. Foster GM. On the Origin of Humoral Medicine in Latin America. Medical Anthropology Quarterly 1987; 1 (4): 355-93.
10. Bibeau G. A system approach to Ngbandi medicine. In: Yoder PS (ed). African health and healing systems: proceedings of a symposium. Los Angeles: Crossroad Press Ed 1982; 43-84.
11. Janzen JM. The need for a taxonomy of health in the study of African therapeutics. Social Science & Medicine 1981; 15(B): 185-94.
12. Sindzingre N, Zempléni A. Modèles et pragmatique, activation et répétition. Réflexion sur la causalité de la maladie chez les Sénoufo de Côte d’Ivoire. Social Science & Medicine 1981; 15(B): 279-93.
13. Augè M, Herzlich C. Il senso del male. Antropologia, storia e sociologia della malattia. Milano: Il Saggiatore; 1986.
14. Messing SD. Interdigitation of Mystical and Physical Healing. In: Ethiopia: Toward a Theory of Medical Anthropology. Behaviour science note 1968; 3(2): 87-104.
15. Viveros M. La nocion de Representación social y su utilización en los estudios sobre salud-enfermedad. Revista Colombiana de Antropología 1993; 30: 239-60.
16. Young A. Internalizing and externalizing medical beliefs systems: an Ethiopian exemple. Social Science and Medicine 1976; 10: 147-56.
17. Gazzaniga V, Marimon E.S. La malattia delle figlie del sole. Mania, malinconia e mal d’amore dal mito alle fonti scientifiche. Med Sec 2014; 26(3): 679-704.
18. Iorio S. An Ethnographic Study of Medical Practices and Knowledge in the Nahua Contest (Naupan, Puebla, Mexico). Medicina nei Secoli 2014; 26 (3): 793-820
19. Iorio S. Plural Therapeutic Itineraries. Medicina nei Secoli 2015; 27 (1): 51-76.