

# Interculturality in Patagonian Medicine: An Interpretation from the History of the Americas\*

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## Abstract

Interculturality in health has become an internationally recognized issue. For example World Health Organization (WHO), Pan-American Health Organization (PAHO), and Inter-American Development Bank (IDB) have addressed interest toward it quite recently. This article considers the issue and its history in Patagonia, where the Indigenous medical knowledge is in many way intertwined with the medical knowledge of the colonialists and immigrants. However, the significance of the indigenous knowledge and skills in health and medicine is rarely recognized. This article brings into the light the long needed recognition of the centrality of addressing health and health care from an intercultural perspective and claims that indigenous health and medical knowledges and practices should be recognized in the name of the equal treatment of cultures.

**Keywords:** interculturality, native medicine, Western medicine, transcultural diagnosis

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## Introduction

For more than fifteen years, international health organizations such as the World Health Organization (WHO) and the Pan-American Health Organization (PAHO), as well as other entities like the Inter-American Development Bank (IDB) have been discussing and developing proposals referred to interculturality in health. For example, an internal document of the IDB has suggested a series of questions to be taken into account when implementing programmes of this kind, namely: is the programme at stake designed to respect the constitutional immunities of Indigenous practices while complying with the constitutional guarantees of access to adequate, quality health care services?; was this programme developed with the real participation of Indigenous communities?; does this programme acknowledge the different world views, definitions of illness and health and needs from recipients, and if so, does it address the issues arising there from?; does this programme acknowledge the limitations of Western medicine, and if so, has it assessed and considered adequately the positive role that Indigenous medicine could play to improving health care?; does this programme take into account legal issues concerning intellectual property rights of medicines and treatments derived from Indigenous practices? (Perafán, 2000).

At the international level, a precedent for this approach towards interculturality was a series of consultations that, officially, began in 1993. A document drafted for the Directing Council of PAHO (PAHO/WHO, 1993a) discussed the legal and ethical issues related to intercultural health, stating that: "Among the policy areas requiring special consideration and development there is one referred to traditional practices and the use and preservation of medicinal plants." The same year, within the framework of the United Nations' International Year for the World's Indigenous People, PAHO held a consultation meeting on the health of the

Indigenous people in the city of Winnipeg, Canada. The meeting reached an agreement on the following specific set of recommendations: the need for a holistic approach to health; the right to self-determination of the Indigenous people; the right to systematic participation; the respect for and revitalization of Indigenous cultures; and the reciprocity in the relations. These recommendations were incorporated in a report approved by the Directing Council of PAHO/WHO known as Resolution V, "Health of Indigenous Peoples" (PAHO/WHO, 1993b), that was used as a guideline for the Health of the Indigenous Peoples Initiative. At a political level, this resolution represented a compromise among member governments to prioritize Indigenous people's health while respecting their culture and ancestral knowledge.

Resolution V addressed a number of issues: the participation of leaders and representatives of Indigenous peoples for the formulation of health policies and strategies and, the development of activities in the areas of health and the environment for the benefit of their populations; the strengthening of the technical, administrative, and managerial capacity of both national and local institutions, which are responsible for the health of Indigenous populations; the guarantee of increased access for the Indigenous populations to health services and quality care; the need to carry out inter-sectoral actions (governmental and non-governmental organizations, universities, research centres and Indigenous organizations); and the transformation of health systems and the development of alternative models of care for Indigenous populations, including traditional medicine and research into quality and safety (PAHO/WHO, 1993b). In 1999, the WHO held an International Consultation Meeting on the health of the Indigenous peoples (Rahima Foundation, 1999) that set up a framework for the formulation of health policies for the benefit of the Indigenous populations that contemplated some prerequisites and basic principles. The meeting identified several

prerequisites necessary for the formulation of these policies: the respect for the fundamental human rights; the recognition of the Indigenous peoples; and the political will of governments. The consultation meeting also formulated a series of principles on which the policies should be based on. Among others, the framework emphasized the principles of self-determination, equity, cultural affirmation and access to resources.

In essence, these policy formulations and principles recognize the centrality of addressing health and health care from an intercultural perspective. As Cunningham (2002) indicates, with an intercultural approach "the Indigenous populations and ethnic communities can introduce new elements to plans and programmes according to their own reality." This approach to the development of the health care system allows the creation of a setting that may reduce the contradictions between life in Indigenous communities and what is experienced at health centres (hospitals, health posts, etc.). Cunningham (2002) argues that with intercultural health, Indigenous peoples and ethnic communities become agents who participate in constructing their own healthcare models. Discussing an intercultural model of healthcare affords possibilities for the progressive construction of inter-ethnic networks based on the respect of ethnic and cultural diversity. Additionally, if community and endogenous elements based on the ancestral experience of wisdom and knowledge are included, these aspects are likely to contribute to breaking the old paradigm according to which health professionals and workers are the experts who know it all, while community members are passive recipients of knowledge and care.

In most Latin American countries a significant increase in the number of intercultural health initiatives implemented with varying degrees of success over the last decade has been observed (Mignone et al., 2007). These experiences demonstrate ways of advancing in the articulation between traditional Indigenous medicine and Western medicine. A case study of several

intercultural health initiatives has suggested that the basic premises for a successful intercultural health care are: mutual respect, equal recognition of knowledge, willingness to interact, and flexibility to change as a result of these interactions (O'Neil et al., 2006; Mignone et al., 2007). Intercultural health care takes place at different levels including families, practitioners, health centre, hospital, and health system. The existence of experiences of intercultural health as practices in health care bridging Indigenous medicine and Western medicine wherein both complement each other is a very promising development. However, a main element in achieving a successful, relevant intercultural health care is the understanding of the different traditions involved. Without any knowledge of the developments of each world view and mutual interactions between both across a centuries-long history, the achievement of meaningful intercultural experiences is put at risk. This paper provides a historical analysis of both Western and Indigenous practices of medicine as they have developed in the Americas since the 1500s, centred on South America, with a particular interpretation on the developments in the Patagonia (southwest of Argentina and southeast of Chile).

### **Medicine in the Americas: A history**

The contact between Europeans and Indigenous peoples of the Americas starting in 1492 meant to a large extent an antagonistic encounter of the two worlds in many aspects, the economic systems, social institutions, spiritual beliefs, taboos and mysteries. Medicine was just one more aspect of this antagonism: two extremely different views on health, illness, its origins and ways of healings. Despite the fragmentary information about the complex system of health related knowledge in the pre-Columbian Americas, the comparison between European medical practices and those of the Indigenous peoples of the Americas suggests two distinct worldviews. Initially, such a situation caused many clashes

between Indigenous societies and the newly-arrived Europeans. In time, this confrontation gave way to a process of both syncretism and mutual adaptation in some regions, whereas elsewhere an absolute exclusion of Indigenous medicine occurred. The historical process of centuries since the arrival of Europeans must be analyzed to capture the dynamic process of both Western medicine and Indigenous medicine in the Americas.

### *Western medicine in the Americas*

During three centuries of the colonial period, European medicine in the Americas subsisted in medieval conditions. Meanwhile, Europe underwent successive cultural periods that significantly influenced the development and modernization of Western medicine: i.e., Renaissance (15th and 16th centuries); Baroque (17th century), Illustration (18th century) and Romanticism (beginning of the 19th century). It was the cultural and technological isolation of the colonial society that prevented these European cultural transformations from being introduced and producing significant changes in colonial communities.

In the 1553 edition of the classic account "*Chronicle of Peru*", Pedro Cieza de León (2005) considers Indigenous medicine to be one of the most relevant issues from the historical point of view. A review of this chronicle, written by García (1989) emphasizes how Cieza de León's vision combines a considerable dose of ethnocentric rejection of those kinds of practices with a fascination for the unknown. In 1767, Francisco Xavier Clavijero, a Jesuit priest expelled from the New World, settled in Italy where he condensed a large part of the Aztecs' medicinal knowledge in his "*Historia Antigua de México*." Even to this day his work is considered a significant contribution (Boletín Buena Salud, 2003).

Throughout Europe, until halfway through the High Middle Ages, medicine was mainly practiced in monasteries. It was towards the beginning of the high mediaeval period that cathedral

schools became more important. However, the medical knowledge applied by monks was limited to the exercise of their charity mission. In the 9<sup>th</sup> century, the library of the monastery of San Galeno had six medicine books and one thousand theology books. Moreover, medical texts written in Latin were mostly simplified fragments or summaries of the great Greek works, essentially practical in nature.

At that time, there was a distinct break between medicine and surgery. The fact that Galeno abandoned surgical practice claiming that surgery was just one kind of treatment, contributed to deepen this separation. Thus, a surgeon remained subordinated to a medical doctor. A number of factors played a role in the separation and degradation of surgery. In those times, Christianity saw the human body as the abject prison of the soul. The human organism did not deserve any detailed examination. Similarly, the Islamic doctrine, which became more influential later on, asserted that the body of the dead was foul and impious, so no one should touch it lest getting blood-stained. In addition, mediaeval medicine had put a strong emphasis on speculation. While medical theory constituted the substance of medicine, manual practice was despised. Thus, surgical practice gradually became the realm of barbers. Finally, in 1163 the famous Tours Council's edict: *Ecclesia abhorret a sanguine*, clergymen were officially banned from performing surgical practices. Such prohibition was promulgated by Pope Inocencio III, enforced in 1215. As a result, during that same century, barber surgeons progressively acquired a higher status, a tendency which became much more important during the Renaissance.

In these times, Christianity reintroduced a religious element to this impoverishment of medicine: illness was God's punishment for sinners, a demonic possession or the result of witchcraft. Praying and doing penance became essential to keep evil at bay. In this respect we can appreciate one of the basic contradictions of the dominant culture: while the Spaniards

condemned American shamanic practices for being pervaded with witchcraft and burned gods' images as false idols, they introduced in America their own version of witchcraft: the Inquisition. Over centuries, this institution imposed punishments on people: Christians were threatened with idolatry trials while non-Christians were under threat of forced conversion. Through a Pope order, Indigenous people were excluded from this possibility, for it was thought they belonged to the same category as women and minors. In America, until the times of the revolutions of Independence (a process that began towards 1810 in a majority of Spanish colonies), the Inquisition acted brutally, either burning at the stake, excommunicating, torturing and dispossessing many Spanish and *criollo* people, whose only offence had been to use practices not approved by the Church. Among the latter, practices related to Indigenous medicine were not exempt.

Renaissance belatedly arrived in America. In relation to the field of medicine, those were the times of anatomical thought; of anatomy, surgery and pathological anatomy. It was in the 18<sup>th</sup> century when decisive changes took place at an official level: in France, for example, the foundation of the Académie Royale de Chirurgie in 1731, Louis XV's decree banning barbers' surgical practices, and, after the French Revolution, the creation of the Schools of Health and the doctoral degree, which put an end to the difference between physicians and surgeons. Let us get back to the 16<sup>th</sup> century: towards the end of the Renaissance period, humanists promoted the observation and study of psychological factors involved in diseases. The notion of *imagination* or *suggestion* as mind's healing or disturbing factor was taken up again. During this time the idea that witches were not devil's allies but that they suffered from mental illness appeared. For the first time there was an attempt to classify mental illnesses.

The imposition of Spanish medicine in the Chilean territory illustrates the transformations that occurred in the medical field during the conquest period. The essential



characteristics of this process were based on the religious medieval hospital care model. Our frame of reference covers the second half of the 1500s and early 1600s, governed by two captains that started and completed the conquest: Pedro de Valdivia and Alonso de Rivera. These leading figures were governors and, together with the *cabildos* (i.e. township authorities), were directly in charge of medicine and health matters. They laid the basis for colonial medicine with the assistance of *encomenderos* (i.e. Spanish colonists who were granted Aboriginal labourers by a royal decree), priests and representatives of the *cabildos*, organizing the health care centres, which were mainly destined for a growing number of Spanish settlers.

In the times of the conquest, the nucleus of medical practice in Chile were the Hospitales del Socorro (lit. Help Hospitals), founded by Pedro de Valdivia in Concepción (1552) and Santiago (1553) to be ruled by hospitallers, a Catholic order created in 1537. Until 1617 these hospitals were managed by the *cabildos* that appointed the steward and representatives who in turn supervised patient care as well as the work of either physicians or resident surgeons. *Cabildo* was a colonial institution governed by two mayors and six *regidores* (aldermen) elected by the neighbours. It had many administrative and judicial functions, such as public works, granting lots of land, exercising control over crafts and fixing tariffs. *Cabildos* were also responsible for hygiene and public health, hence in charge of dealing with epidemics and regulations related to health care practitioners.

The first physician of the Santiago-located Hospital del Socorro was Hernando de Castro, a Medicine licenciate (1552) and the first surgeon was Licentiate Gonzalo Bazán (1557). Juan Guerra, born in La Serena in 1557 and educated in Lima, was the first Chilean physician serving Governor Alonso de Rivera. The most significant historical heritage of this period is to be found in 16<sup>th</sup>-century documents: i.e., the deeds of gift providing funds for Hospital del Socorro. Among these writs, the most interesting is

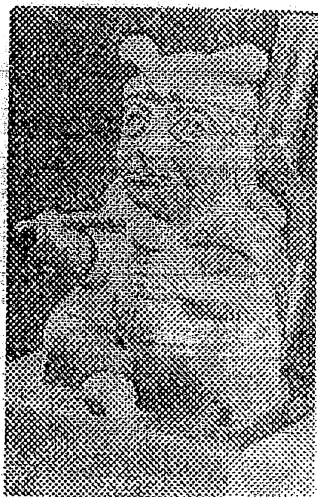
the gift of the Huechuraba rural estate, given by Captain Luis de Toledo (1546) and the land title deeds granted by the *corregidor* (magistrate) Alonso de Miranda (1591) for the Paine-located Hospital. Another important document from that period was the *Cabildo* of Santiago's deed, in which conditions are imposed on Franciscans friars for the gift of twelve plots to the Santiago-located Hospital San Juan de Dios so that hospital estate was extended to the south of Alameda (the principal avenue of the city) (1554). These documents reveal the origin of the financial resources of hospitals during that historical period. Their only fixed income was the ninth and a half (in other words, 12%) of Church's tithe. Such gifts allowed for income from farm production and were the basis of the annual budget allocated to hospital maintenance. Other gifts were a mill, plots of land, charities, and property pertaining to deceased persons given to charity.

In general, with few changes, the Spanish organization of health centres followed this scheme during the first centuries of the colonies. The scarce technical knowledge by European physicians, mixed with popular knowledge and the contribution of Indigenous herbalism, created a cultural mosaic in which practices were not codified. A continuous adaptation of practices to the needs and availabilities of each region took place. However, the management of health-related care continued being under the influence of the Church. Overall, the medical knowledge of this period was quite limited as stated by Maquiña Vargas (2002):  
"*...For many years, physicians trained in the main medicine schools had few elements for diagnosis and therapy...physicians of those times had few medicines, there were no antibiotics, vaccines, insulin, corticoids, and the like. In fact, I would call them illustrated and cultivated quacks.*"

A considerable part of the information about the medical knowledge of pre-Columbian period, the conquest and first years of the colonies in the Andean area come from the *huaco* portraits of the Moche culture (Huacos are ceremonial ceramic vessels

pertaining to Andean cultures). Representations of the most common diseases of that time are depicted on those vessels. There also exist numerous writings from chroniclers, priests, officials, naturalists, physicians, geographers, engineers, militaries and academicians. Out of curiosity, interest or vocation, they tried to understand and control the natural environment that surrounded the inhabitants of the Viceroyalty. The colonial science they practiced proved to be useful in improving public health, drawing the first maps, and keeping the existing social order. It had a great impact upon both the European and local imagination.

Due to the excellence of the native medicinal plants, many Spanish people considered it was not necessary to train more physicians locally. The "discovery" of the healing properties of the quina (*Cinchona* sp), or cascarilla (*Croton* sp), a substance extracted from the bark of North-Andean trees and currently known as quinine, clearly illustrates how the Aboriginal knowledge was incorporated to the European therapeutics, which in those times was more inclined to purgatives and bleeding. The powerful febrifugal effect of the quina against "intermittent fevers", the name given to malaria at that time, was already known by Indigenous healers.



*Huaco (Moche culture)*

### *Indigenous medicine*

In pre-Columbian American societies, humans sought to understand the surrounding world by striking a balance between the empirical and the magic realms; the healer was the master of life and death. Thus, the cause and origin of diseases, the miracle of procreation, sexual initiation, climacteric period, menopause or death were considered magical phenomena operated by spirits. In this world, shamans, healers, magicians and wizards represented those spirits and acted as mediators of the unknown and, consequently, as dominating forces of world's magical nature. Their knowledge about certain aspects of nature, the passing-by of seasons and the healing properties of plants bestowed authority on them. At the same time, it imposed on them the duty of responding to those natural phenomena.

The Indigenous peoples of the Americas had varying degrees of political, economic and social development. However, they shared a magical-religious tradition and similar ideas concerning their healing practices. Despite the geographical and temporal distance among those cultures, a distinctive double phenomenon could be observed in their medicine: on the one hand, the healer, the shaman and the wizard were closely related to one another and, on the other hand, they had a sophisticated knowledge of the use of the medicinal plants in each region. Thus, healers and shamans always had great significance in their societies, for they embodied pre-Columbian medicine. They gathered the magical elements of rituals that the gods vested on them together with the patterns of use of natural medicines and preparation thereof, which only they knew and that were kept in secret. Botanical medicine had a considerable importance so it was converted into a millennial tradition based on the knowledge of an enormous number of medicinal plants, classified and successfully used for various diseases healing process. People linked medicine to three factors: religion, for the origin and cure of certain diseases

that was attributed to the gods; magic, for people believed that some diseases were caused by wizards; and finally to science, because they knew the healing properties of plants and minerals. For these peoples the idea of illness was magical and mysterious, indistinct from their spiritual beliefs and world view. In pre-Columbian America believing that there existed a healthy mind within a healthy body was not enough. *"The medical wizard is not just a healer that takes care of the individual. He is the one who raises the social awareness of the community, for illness is a symptom of group or economical disorder."* (Paz Oterro, 1974) Consequently, the shaman's education included knowing about the ecological environment, the characteristics of the community and of each one of its members (Ruiz, 2000) so his function was eminently preventive.

The similarities among shamanic healing practices in different cultures are striking. This fact explains why shamanic healing is generally considered as the instrument that has kept alive and unchanged the knowledge and efficacy of ancestral practices. Healing does not follow written guidelines. Healers work differently with each person. They use herbs, ceremonies and powers in such a way as they may consider appropriate for each individual. Healing might involve sweat lodges, talking circles, ceremonial smoking of tobacco, shamans, herbalism, animal spirits or "vision quests." Each tribe uses its own techniques. The techniques by themselves are not "the traditional healing." They are just steps towards becoming healthy, balanced and connected (InfoRed, 2002).

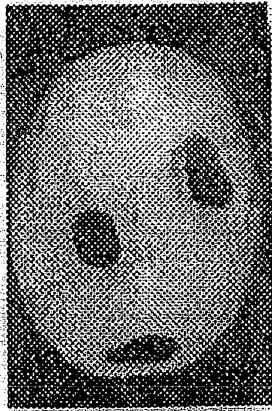
Frazer (1992) suggests that, in societies with non-mechanized technologies the key to a doctor's healing power lies in his ability to free the ill person's psychic strength, stimulating the healing potentials of the collective subconscious by means of his rites and magical influence. Thus, the remedy does not solely operate due to its "what", its nature or essential composition. It also works because of the "whom" (the one who prescribes it, the magician who dominates the hidden powers), because of the

“how” (the administration ritual which is essential for its operation), and because of the “where” (the place where it is applied and the powers which are released therein). Remedies are not used only on account of their nature, they are used because they help the magician-priest to control the hidden powers that cause illness.

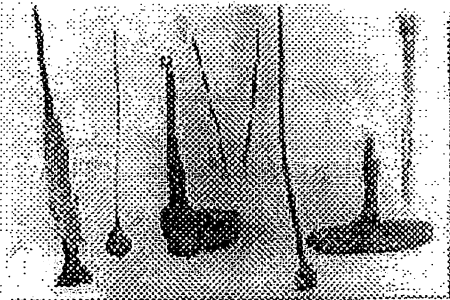
There exists a substantial evidence of specific medical practices performed throughout America, centuries before the Europeans' arrival. A practice that was carried out with an unexpected high percentage of success was trepanation. Instruments and causes may vary, but it is an established fact that, from Mexico to Patagonia, trepanation was one of the significant developments of pre-Hispanic medicine. Thousands of findings throughout the continent --many of them dating back 3,000 years-- confirm it. However, what is even more remarkable is that, according to the analysis of the bones found, patients survived many years after so risky a procedure.

Based on numerous similar cases, research has come to the conclusion that medicine as practiced in pre-Columbian America was - development-wise not too distant from this science practiced in Spain at the time. Ruiz (2000) states that trepanations could have originated in the belief that evil spirits chose that place of the body to settle into. When other liberating practices, like bleedings failed, a cranial perforation was performed. It has also been proved that this procedure was used to remove tumours and that the places selected for trepanation confirmed that pre-Hispanic cultures knew about brain anatomy. It is believed that the techniques employed before the European's arrival guaranteed 70% of efficaciousness. Meanwhile, still in the 18<sup>th</sup>-century Europe, nearly all operations failed. Minimal cases of infection were found in Peruvian trepanations; it is assumed that asepsis was achieved by using baby saliva (that due to their enzymes content reduces the effects of bacteria and viruses). They also used antiseptic herbs. Trepanation holes were sealed off with gold or

copper plates and vegetal barks, like the *totumo* (calabash tree) bark (Ruiz, 2000).



*A trepanated skull from Cusco  
(Caeto, 1987)*



*Tumi, knife, stiletto, pin and scalpel  
Champi style; obsidian needles and bone carved stiletto (Valle de Majes)  
(200 AD – 600 DC), Valdez Collection – Arequipa, Peru.*

One other important field of Indigenous medical knowledge was the use of psychoactive substances. In pre-Columbian America, most of such substances came from mushrooms, cactus, seeds, flowers, trees and bushes, and, to a lesser extent, from animals. Substances of many varieties existed, from the *ayahuasca* (*Banisteria mettalicolor*) of Central America, the Andean coca, to the *micaya* or *chamico* (*Jimson weed*) of Chile, among others. The latter is mentioned for the first time in a text “*Historia General del Reino de Chile, Flandes Indiano*” (A General History of the Kingdom of Chile,

an Indian Flanders --verbatim), which was written approximately between 1652 and 1673 by Diego de Rosales, a Jesuit priest (Cueto, 1987). Besides providing a characterization of the geography, fauna, life and customs of Indigenous people, this work describes the therapeutic qualities of a wide range of plants, among which we find the chamico. *"Given to drink with wine or water, it numbs senses to such an extent that, if drunk by criminals before torture, they feel no pain whatsoever, no matter how much the ropes are tightened. If they are given a larger quantity, they fall asleep for a whole day with their eyes open, and to awake them, they put vinegar in their nostrils, or hot ash on their foreheads. If they drink a lot, they fall asleep, and they laugh and die without any further suffering."*(Cueto, 1987)

Within each culture the consumption of the various American psycho-actives was the result of long and careful observation and experimentation. This process allowed the ancient inhabitants to recognize the plants and the effects they caused, as well as to specify the most appropriate procedures for obtaining them and establishing dosages and modes of administration. The Western vision of these substances does not grasp the real significance they had in the Indigenous world. Aboriginal people considered that, when used in a ceremonial context, their consumption gave *"meaning to senses, strength to feelings and wisdom to understanding."* (Cornejo et al., 1994) At the same time, their application to medicine provided analgesics and anaesthetics of a still unknown power for Europeans at the time. Spaniards observed the effects caused, describing them as "drunkenness" and "loss of consciousness" because they had no access to the Indigenous worldview. In their worldview, psychoactive substances played an active ceremonial role by opening the gates of spiritual worlds. In Fericgla's (1997) words: *"...for the populations that inhabited our pre-Columbian America, drug consumption would constitute a key element when understanding subsistence strategies, relations of assistance and healing, collective memory and decision making systems, a role*



*that with some variations would be kept among the Indigenous and half-caste American populations until nowadays."*

The arrival of Spaniards to America brought about a radical transformation among the New World's inhabitants. Their lives were completely disrupted. The imposition of a new religion, changes in their nutrition, economy and organization as well as impacts on their health challenged their customs and beliefs. Diseases that were widely spread throughout Europe, like measles, smallpox, cholera, tuberculosis, mumps and yellow fever, among others, severely affected the Indigenous population. In a short period of time, the imported epidemics devastated the Spanish-occupied territories. The fusion of these two cultures put an end to the barriers that for centuries had separated not only the peoples of Europe and America, but also other forms of life, like vegetables, animals and microbes. This caused irreparable damages to the ecology of the American continent. Considering that the colonized inhabitants already possessed an ancient and rich tradition in herbalism, which was based on the empirical knowledge of the properties and applications of medicinal plants, this encounter became advantageous to the Europeans. In fact, surprised by the botanical riches of the new lands, Spaniards informed the European royal courts about the abundance of plants and their beneficial properties. Based on these references, Friar Bernardino de Sahagún arrived in Mexico in 1529. He learned Mexican language and collected data provided by some doctors of Tlatelolco, which were later included in his *General History of the Things of New Spain* (Lockhart, 2004). Martín de la Cruz --the first medical doctor graduated from Colegio de la Santa Cruz in Santiago Tlatelolco, was also interested in such issues. In 1552 he wrote a treatise in Nāhuatl language compiling all his knowledge about healing plants and other medicines. In 1570, King Felipe II commissioned his personal doctor, Francisco Hernández, to make up a catalogue of medicinal plants, useful animals and venomous pests, minerals and each and every other natural riches of the new

world. Nonetheless, during colonial times, traditional Indigenous medicine was eventually condemned as witchcraft and people involved in those practices were punished by the Inquisition. However, the actual pattern followed by the medicine at the time was mixed, because while the Spanish, *criollos* (*white people born in America*) and *mestizos* enjoyed the services of the few existing European doctors, the Indigenous population turned to what was left of native medicine. Further, there are numerous examples of mutual influence between Spanish and Indigenous medical ideas.

It is a well-known fact that migration of humans and their diseases constitutes the main cause for epidemics. When any migration takes place, individuals that have been isolated for a long time are the ones who suffer most. This happens because their genetic material has not been in contact with those diseases that were not previously present in their geographic environment. The American natives had the fateful privilege of living apart from the Old World until the moment the two civilizations came in contact. In that way, the serious diseases from Europe became far more lethal in the New World, and even disorders that were non-malignant in Europe, became fatal to the Indigenous populations of the Americas (Estrella, 1993). Thus, despair spread among Indigenous people. Defenceless and dying, the populations were an easy prey for the conquerors. Their gods relinquished and their fasts, offerings and abstinences failing. Wherever the white men went to, unknown evils appeared; and as if it were a present from an alien God, the emergence of such diseases that neither their medicines nor their healers and shamans could cure ended up taking root in their lands and peoples.

*"...Aboriginal people were persuaded that the presence of these new diseases was due to divine punishment. For many the new god brought by the Europeans, angry with their profane idolatries and mundane sins, sent them the calamity of illness so that they might expiate their wrongs and convert to the new religion. This circumstance was even*

*more pronounced because the Spanish were immune against diseases, something that was surely used like an extra weapon to achieve conversion. Lethal weapons, horses, diseases and a foreign and punishing god crushed the Indigenous resistance..." (McNeill, 1984)*

## **Indigenous and Western medicine in Patagonia: The historical process**

One of the theories related to the interactions among cultures is Berry's (1990) who describes different variables related to cross-cultural situations, and conceptualizes four cross-cultural attitudes. He defines four concepts, namely: integration, assimilation, separation, and marginalization, according to whether keeping cultural identity is considered a value for a certain ethnic group, and whether relating to other groups is considered a value. Berry's theoretical framework assists in understanding that there is one major factor that influences cross-cultural attitudes, namely: the relationship between a dominant group and a dominated group. When a dominant group's position indicates a multicultural disposition, there are more chances for integration and intercultural encounters. The hegemonic position of the dominant group will bring about either assimilation, separation or marginalization, and the resistance to this process also depends on the non-dominant group's characteristics and situation. This model can assist in analyzing the historical processes that culminated in the current situation of Western and Indigenous medicine in Patagonia, and that can be summarized in four key historical periods: "araucanization", Jesuit, conquest of the desert, and European settlement.

The "Araucanization" period refers to the migration of the Mapuche people from what is Chile today to the southwestern regions of nowadays Argentina, that is areas inhabited by the Tehuelches at that time (the word "Araucano" was used by

Spaniards to refer to the Mapuche, a name rejected by the Mapuche people). This movement gave rise to a long process of cultural syncretism, known as the "process of Araucanization." The Mapuche culture had begun its geographic and temporal spread in the central area of Chile, wherefrom its members considered themselves to be native inhabitants; however large groups gradually entered in the present territory of Argentina, at first for exchange purposes and later as a consequence of the long-time conflict with the Spaniards that was called "the Arauco's war." They crossed the Andes in small groups through different passes until the 17<sup>th</sup> century and continued in the 18<sup>th</sup> century when their presence became more established. Since that time, the influence of the language and customs of the Mapuche tinges the pre-existent cultures of North Argentine Patagonia, originating a long and complex syncretism process. This area had been populated by the Tehuelches, who had their own cultural conceptions, economy, organization and environmental adaptation. Several syncretism concretions emerged out of this "Araucanization" process. Thus, important transformations in the Patagonian Aboriginal world occurred when white settlers arrived.

The Jesuit period is characterized by the arrival, towards the 17<sup>th</sup> century of members of the Jesuit Order, mostly of Spanish and Italian origin. Aside from their main role as evangelists, many Jesuits left as a legacy a certain number of written works that still today constitute a precious source of knowledge for researchers. They displayed a remarkable talent for observing their environment. Besides, their intellectual level contributed to the particular acuteness of their observations. Nonetheless, their perceptions were unavoidably ethnocentric. The distinctive feature of the Order was the close relationships that Jesuits established with Indigenous communities. They lived and travelled together with these communities during long lapses of time, learning the native languages of the different regions and, on several occasions,

acting contrary to the Spanish Crown's express wishes. Jesuits were eventually expelled from the Americas by the Pope, in 1767.

The intervention of the national army against the Indigenous populations towards the end of the 19<sup>th</sup> century, known as "The Conquest of the Desert" was one of the events that would become crucial for the later development of the region. Such intervention meant the occupation, extermination and marginalization of those populations. This campaign resulted not only in the fragmentation and loss of Aboriginal culture, but also in a series of traumatic and cross-cultural effects suffered by those populations. There were important economic and political reasons for this campaign. In the 19<sup>th</sup> century, North Patagonia fully-araucanized groups were settling seasonally in semi-permanent *tolderías* (camps), from which they carried out cattle hunting and trafficking raids. Wild cattle, which were abundant during the 17<sup>th</sup> century, began to diminish in number in the following centuries, when they were exploited by the white men that commercialized hides and meat as well as by the Indigenous people who organized huge cattle drives through the Patagonian territory to sell them in Chile. 18<sup>th</sup>-century cattle dealers and landowners living in the outskirts of the Province of Buenos Aires progressively began pushing the Aboriginal frontier further south, so that they could take more territories, thus expanding cattle exploitation.

In the early 19<sup>th</sup> century, the frontier became an unstable area subject to contradictory policies. Eventually, those policies would be more clearly defined in terms of actions aimed at the subjection of the Indigenous people. This process reached its highest point in 1880 with the military campaign that definitively disrupted Indigenous life patterns; the ideology that supported such actions was framed by the prevailing positivist thought of that period. "Order and progress" and the superiority of some human beings over others: those were the principles brandished by Argentina's dominant economic groups, who also controlled

political power. The violent imposition of "civilization" over "uncultured barbarism" was thus justified.

In those times of armed conflict, the healing techniques used by campaign physicians were simple, notwithstanding the large number of ailments suffered by soldiers. In addition to battle wounds, physicians had to deal with fevers, dysentery, epidemic diseases, smallpox, cholera and tumors. According to Dr. Guerrino, "...presumably, there was no asepsis and the place used as surgical rooms did not have the minimum conditions to guarantee the surgeon's work..." (Guerrino, n/d). Usually, there were some women, called "quacks", working together with the physicians. They practiced an alternative form of medicine, which included the use of plants, potions and amulets. Armaignac (1974) reports that, when facing a lack of physicians, these women "...were the ones that healed fevers and other diseases...they used herbs, animal grease, to what they added touchings, cabalistic passes, black chickens, chewed herbs, as well as simple drugs..."

European settlement started around the end of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century. The first European settlers arrived from the West and North of the territory. Following the principles of "civilization and progress" that originated the above-mentioned campaign, those colonists came to occupy the lands with a new way of life. At that time another process of cultural syncretism began.

In 1878 the "Gobernación de la Patagonia" (Patagonia Governing Corps) was legally created. The authorities established their office in the village of Mercedes de Patagones, which some time later on changed its name to Viedma. Considering this area as indicative of a phenomenon that progressively became universal in Patagonia, around the end of the 19<sup>th</sup> century, in the lower valley of Rio Negro we can distinguish a population that, to the pre-existent composition of *criollos* and Indigenous people adds immigrants of diverse origins, such as British, Scottish, Welsh, Italians, Germans, Austrians, Swiss, French, Greeks and Danish nationals. George Humble, an Anglican missionary who had

arrived before General Roca's campaign (1884) worked among this heterogeneous community. For that reason he is considered as the first physician of Patagonia. Besides his religious duties, this missionary also practiced medicine for he had an accredited degree granted by the School of Medicine and Surgery of the University of St. Andrews in Glasgow. In his diary, Humble (Canclini, 1980) points out that, notwithstanding some "hostile Indians" who resisted the change implied by everyday contact with Europeans, there were many others that sent their children to the village's school, went to the settlement for bartering and to visit the doctor. For him, these visits sometimes meant long rides on horseback to get to the *talderias* where most Aboriginal people lived (Musters, 1964).

Towards 1902, the city of Bariloche had only one obstetrician and one midwife. All patients had to be sent to Chile or Los Repollos. Another possibility was to use household-grown medicinal herbs, quite often mixing elements of Mapuche and European medicine knowledge. The first European physician in the region, José Emanuel Vereerthbrugghen, arrived in 1907. Of Belgian origin, he had studied at the Leuven University and had taken his degree in Bonn, Germany. In Bariloche he worked alone because there was no organized health care system. For his medical visits, sometimes as far as 200 km. away, he had a small herd of horses. Around 1915, with the joint support of some neighbours and Salesian priests, a First Aid Centre began to operate in Bariloche. By 1920, the second physician, Ernesto Serigós, arrived in the area. He also practiced surgery and examined and treated patients in the first Regional Hospital established in 1932. For many people the place was known as "Serigós' Hospital." In 1938, under the direction of Juan Javier Neumeyer the hospital was moved to the building it currently occupies. When professional nurses were incorporated, nuns that worked in the first hospital progressively left their nursing role and devoted themselves to provide only spiritual care to patients (Vallmitjana, 1995).

During the 1940's the Argentine government fully developed the health care system. Until then the provision of health care services strictly depended on local arrangements. Both the structure and professional training in the government-run health care system was shaped by the Universities of Buenos Aires and Córdoba, which, in turn, had followed European models. Initially, this procedure did not affect too much ancestral healing practices still in use. Overtime the "European-like procedure" imposed itself more widely as the ideal model of intervention, diagnosis and cure. This notion was carried out and constructed in terms of national programmes or health provincial arrangements. These were designed by the central government, which first reproduced European models and, more recently, models coming from the United States. The fundamental principle of these programmes was, and still is, the "standardization" of interventions, with a one-way approach irrespective of populations. The implementation of those programmes has caused a great deal of confusion, as well as resistance among the regional cultures. The current health care systems are not open to the creation of intercultural spaces. A debate is needed to foster the transformation of current health care systems and models and the implementation intercultural health initiatives.

When analyzing the above-described four historical moments we can understand the following facts. The Araucanization period involved a syncretism process between two native cultures, in which the dominant group was the immigrant group (Mapuche). Integration was achieved in a 300-year long gradual process and included some assimilation of the Tehuelche culture. During the Jesuit period there were some attempts at assimilation which was determined by the Jesuits' world position as a dominant ethnic group, which considered "uncivilized" those who were different. During this process there was some integration because the Jesuits missionaries used it as a means to "appeal" to the people they wanted to conquer. In turn, the



Indigenous people adopted some of the concepts brought by the conquerors. During the "Conquest of the Desert" a disintegration process took place among the Aboriginal ethnic groups. Due to the position certain groups began to occupy in society, the subsequent effect was either one of marginalization and separation, or a long-term assimilation process. With respect to European settlement, there was integration, to a greater or a lesser extent, between immigrants and native inhabitants. The above-described processes and their long-term effects resulted in a "current space" in which these four attitudes, as characterized by Berry (1990) converge. Consequently, it can be regarded as a "mixed space."

Considering it as a possible "intercultural space", upon which we can operate, an important task lies in identifying those signifiers that hinder communication and interaction. In Patagonia, Western culture continues to be dominant and the medical system follows western-type models. The current medical system, which is far from being effective, is now in a position wherein it is not questioned enough about the type of medicine that should be implemented, reason for which we must consider the intercultural space as a space yet to be constructed. Ethno-medicine is a discipline that may act as a connecting link between Western medicine and the Indigenous-popular world views.

## Conclusion

This paper has suggested a rich history in the development of both Western and Indigenous medicine in the Americas. The last several decades have seen significant developments, at an international level, of a re-assessment of the relevance of traditional Indigenous health care practices and the implementation of intercultural health initiatives. Particular to Patagonia, despite the predominance of Western medicine, Indigenous health practices operate within, however, a marginalized context. The existing divide does not serve well the

cross-cultural reality of the population of the region. Pushing towards intercultural health initiatives is a necessary action to be performed. This development requires a number of conditions: first of all, an understanding that these different world views have a dynamic history within their own development as well as an interaction with each other across the centuries, as we have been analyzing. From a policy and programmatic perspective, there are a series of recommendations that should be considered for the development and implementation of intercultural health initiatives. As stated by a recent study (O'Neil et al, 2006) these initiatives require: culturally appropriate regulatory environments; contractual models for promoting Indigenous autonomy in health system development; the support of Indigenous organizations and communities in the development of health programmes; technical and financial assistance to develop information systems for the purposes of monitoring and evaluation, as well as research; and an increase in the exchange of ideas and intercultural health care models across the Americas.

## References

- Armaignac, H. (1974): *Viajes por las pampas argentinas*. Buenos Aires: Eudeba.
- Berry, J.W. (1990): "Psychology of Acculturation". In: J. Berman (Ed.) *Cross-cultural perspectives: Nebraska Symposium on Motivation*. Lincoln: University of Nebraska Press, pp. 201-234.
- Boletín Buena Salud (2003): *La visión de la medicina indígena*. July 24. Bibliomed Holdings LLC.
- Canclini, A. (1980): *Jorge A. Humble, médico y misionero patagónico*. Buenos Aires: Ediciones Martymar.
- Cieza de León, P. (2005): *The second part of the chronicle of Perú*. Elibron Classic Series. London: Adamant Media Corporation.

- Cornejo, L., Gallardo, F., Mege, P. (1994): "San Pedro de Atacama, DMT". In: *Mundo Precolombino, Revista del Museo Chileno de Arte Precolombino* N° 1, Santiago de Chile.
- Cueto, M. (1987): "Historia de la medicina peruana. Universidad Peruana Cayetano Heredia". In: *Revista Quipu* 4, pp. 199-147.
- Cunningham, M. (2002): *Etnia, cultura y salud: La experiencia de la salud intercultural como una herramienta para la equidad en las regiones autónomas de Nicaragua*. Washington DC: PAHO.
- Estrella, E. (1993): "Consecuencias epidemiológicas de la conquista de América". In: *Revista Médica*, 8. Facultad de Medicina, Universidad Central de Quito, Ecuador.
- Fericglá, J. (1997): *El peso central de los enteógenos en la dinámica cultural*. Ponencia presentada en las II Jornadas sobre Enteógenos, Barcelona.
- Frazer, J. (1992): *La rama dorada*. Fondo de Cultura Económica: México.
- García Español, A.M. (1989): *Estudio léxico de un cronista de Indias: Francisco Cervantes de Salazar*. Tesis Doctoral. Barcelona: Universidad de Barcelona.
- Guerrino, A.A. (n/d): La medicina en la Conquista del Desierto. *Revista de Gendarmería Nacional*. Buenos Aires.
- InfoRed SIDA de Nuevo México (2002): *Curación tradicional de los indios americanos*. Proyecto del Centro para la Educación y Entrenamiento sobre el SIDA de Nuevo México. Parcialmente consolidado por la Biblioteca Nacional de Medicina y el Departamento de Salud de Nuevo México. Hoja N° 708E. Mayo.
- García Díaz, F. (2002): "El consumo de drogas en los pueblos precolombinos". In: *Revista Electrónica de Ciencia Penal y Criminología*, "Reflexiones", RECPC 04-R3.
- Lockhart, J. (2004): "Bernardino de Sahagun: First anthropologist". In: *Hispanic American Historical Review*, Vol. 84, No. 1, pp. 137-139.

- Maquiña Vargas, C. (2002): "La medicina científica occidental, otras alternativas y las plantas medicinales: una nueva vision". In: *Revista Diagnóstico*, Vol. 41, No. 1.
- McNeill, W. (1984): *Plagas y pueblos*. Siglo XXI: Madrid.
- Mignone, J., Bartlett, J., O'Neil, J. and Orchard, T. (2007): "Best practices in intercultural health: five case studies in Latin America". In: *Journal of Ethnobiology and Ethnomedicine*, Vol. 3, No. 31.
- Musters, G. (1964): *Vida entre los Patagones*. Buenos Aires: Editorial Solar/Hachette.
- O'Neil, J., Bartlett, J. and Mignone, J. (2006): *Best practices in intercultural health*. Washington DC: Inter-American Development Bank.
- PAHO/WHO (1993a) *La salud de los pueblos indigenas*. Washington DC.
- PAHO/WHO (1993b) *Resolución V. La salud de los pueblos indigenas*. Washington DC.
- Perafán, C. (2000): *Indigenous peoples and health: Issues for discussion and debate*. Washington DC: Documento Interno. BID.
- Paz Otero, G. (1974): *La Medicina en la Conquista y la Colonia*. Bogotá: Editorial GAB.
- Rahima Foundation (1999): *Memorias de la consulta de pueblos indigenas en Ginebra*. San Francisco.
- Ruiz, E. (2000): "Asociación de Historia de la Medicina", Perú. In: *Revista Cambio*, Septiembre.
- Vallmitjana, R. (1995): "Sanidad y Medicina en la Vieja Aldea". In: *Historias de Bariloche*, Revista TODO.
- Villatoro, E. (2001): *Promoción de la medicina y terapias indigenas en la atención primaria de la salud: el caso de los Maya de Guatemala*. Washington DC: División de Desarrollo de Sistemas y Servicios de Salud. Organización Panamericana de la Salud.

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