Medical Pluralism in Peru—Traditional Medicine in Peruvian Society

A Master's Thesis

Presented to the Faculty of the Graduate School of Arts and Sciences
Brandeis University
Department of Global Studies
Sarita Bhalotra MD PhD, Advisor

In Partial Fulfillment for the Degree
Master in Arts in Global Studies

By:

Ashley Borja

May 2010

Acknowledgements

I would like to thank the people who helped me shape my ideas for this paper, Professor Cornelia Kammerer. I thank Noelle Nee for taking the time to read this body of work and edit it to the best of her abilities in order to help me. I would also like to thank those who supported me through this long year of compiling my research, my mother Blanca Borja and my family and friends.

Table of Contents

ABSTRACT
Medical Pluralism in Peru—Traditional Medicine in Peruvian Society

A thesis presented to the Department of Global Studies

Graduate School of Arts and Sciences
Brandeis University
Waltham, Massachusetts

By: Ashley Borja

This work focuses on medical pluralism in Peru. Looking at the use of traditional medicine in Peru both in the rural and in the urban sectors, but looking specifically at the collaboration of the two, as can be seen in the case of the reduction of maternal mortality. The issues that Peru must confront in regards to the use of modern medicine and traditional medicine rely heavily on greater integration and cultural pluralism in order for there to be greater understanding and collaboration between traditional medicine and biomedicine. This work looks at the benefits that have come out of medical collaboration with a focus on maternal health and the impact the international community has had on these benefits. This work also recommends action to be taken in order to completely integrate the indigenous people as part of the greater Peruvian nation, specifically focused on Health.

Introduction:

Under the Spanish Colonial rule, the indigenous population was used as a labor force and little consideration for them as human beings existed. This population had no rights over the lands they inhabited, eventually being stripped of these culturally significant lands and refused integration into the Spanish or Peruvian society. This issue of indigenous integration has been a focal point of Peruvian politics since the late 19th century. After independence in 1821, very little changed in the realm of the status quo. These lands continued to be *hacendados,* which were land holdings of Spanish elite tended by the indigenous people, while the indigenous population remained marginalized politically and socially.

During the late 19th century and early 20th century, there was a movement toward greater integration of the indigenous people as part of the nation of Peru. About two-thirds of the population, if not more, was indigenous, yet their needs were not taken into consideration when legislation was passed, rather, those from Spanish descent were allowed to maintain their lands and continue to use indigenous labor. It was during this time that the *Indigenismo* movement began in Peru. The *Indigenismo* movement's goal was the complete integration of the "Peruvian Indian" politically and socially. The movement began with Manuel González Prada, who was the first to suggest an indigenous movement, but the true father of the movement was José Carlos Mariátegui, a mestizo, whose aim was to change the structure of the Peruvian society from the old oligarchy. Mariátegui was heavily influenced by Marxist thought and believed that not only did the societal structure have to change but also the economic structure.

Indigenous integration socially, politically and economically has been a fluctuating phenomenon since independence. The *Indigenismo* movement allowed for progress to be made, such as passing of legislation and the creation of APRA and Acción Popular, the two longest standing political parties in Peru. The parties that were created from the movement were not seen as part of the oligarchy. They existed to represent the entire Peruvian society, giving indigenous populations a voice in politics and society. The movement was also based on the belief of cultural pluralism: that both the indigenous culture and that of the Spanish could co-exist and work collaboratively.

With the creation of these new parties, it was evident that the indigenous population had gained some rights, but at the same instance, they still remain a largely marginalized population. Residing in the rural areas of Peru in vast territories that are incredibly secluded, makes it difficult for many social policies to reach them at times, they are not even considered citizens. The past instances of conflict between the indigenous and the government have made the indigenous people highly suspicious of authority but recently there has been greater effort by government agencies to integrate and collaborate with them.

Although Peru has begun programs that promote cultural pluralism and medical pluralism, the question becomes, can these systems co-exist? What must be done in order for these systems to co-exist? What are the benefits to be had?

Chapter 1: What is Traditional Medicine/Healthcare?

Traditional medicine is common in many regions of the world, including Latin America. Traditional medicine is the collection of knowledge, skills, and practices based on beliefs and experiences in indigenous cultures.[1] According to the Pan-American Health Organization, about half or more than half of the population in Latin America uses traditional in medicine. In Chile about 71% of the population uses traditional medicine and in Colombia it is about 40% of the population[2]. In Peru, traditional medicine has become a point of interest. With 45% of the Peruvian population being indigenous, traditional medicine has made a large impact on Peruvian health care.

There are a variety of traditional medicine practices that encompass cosmological beliefs, ranging from ritual to herbal remedies. Peru's traditional practices continue to be supported due to its vast and isolated regions. Also, due to its extraordinary biodiversity, many medicinal plants have yet to be explored or have not been explored in depth. Peru has been called the "health axis" by Lupe Camino, meaning that Peru is an area rich in knowledge of traditional medicine, medicinal plants, and also rich in "shamanic lore"[3]. The use of these plants and rituals varies from "folk illness" (usually illnesses not recognized by modern biomedicine) to maternal health and birthing.

Peruvian traditional medicine is based in cosmological beliefs in which they believe that illness stems from lack of harmony between body and soul, and its relation to the environment and community. The task of maintaining this balance when one falls ill is usually placed on the "chamanes" (shamans) or "curanderos." The practices, rituals, and knowledge are passed down from generation to generation and are used in diverse areas in Peru for the purpose of achieving the harmony between the body and soul. The chamanes-curanderos are important in guiding a person to lead a balanced life from the moment they are born. Chamanes-curanderos are seen as individuals that have inherited a rich knowledge which is complemented by the natural elemental energies and the spirits from the mountains[4]. There is also a great deal of importance placed on birthing practices and rituals that are heavily reliant on the cosmos and folklore. Many of the indigenous people of Peru, such as the Quechua, believe there is a tie between human beings and the environment. There is a great emphasis on the relationship between the supernatural spirit world, human beings, and the environment: "the body cannot be separated from the landscape; nor can an individual's health be disassociated from that of the household and the community"[5].

1.1 What does traditional medicine mean to the indigenous population?

Indigenous populations of Peru have historically been isolated populations located in remote regions, particularly in the Andes and the Amazons (*See Figure 1*). Their isolation has meant minimal contact with other populations and minimal exposure to modern biomedical practices, furthering a heavy reliance on traditional beliefs regarding their community and environment. According to Greenway, "illness etiologies and

treatment therapies are derived from and reiterate a conception of cosmology in which bodies and spirits are intertwined with mountains and stars in webs of reciprocal duties[6],” meaning that it is not only the environment in which the Quechua and other indigenous populations place their beliefs but also in the supernatural and cosmological. They view these as possible origins of disease that arises from the hierarchical social webs. The chamanes-curanderos are healers in a community who are responsible for keeping people in a spiritual and physical balance when they fall ill. According the Quechua and other indigenous populations, illness is derived from an imbalance between the spiritual and the physical which can be derived from the moment of birth. A person’s identity is constructed by the community, arising from economic, political, social and medical choices. Each one of these factors must be maintained in balance; there is a social standard and hierarchy that must be obeyed. If one disrupts this balance then, according the lore, one would fall ill. This illness not only affects the person but the community. One may fall ill due to many different factors, such as fright or being out in dangerous terrain. These, of course, cause an imbalance in the spirit and environment and could be dangerous to a person. Therefore, chamanes-curanderos work in order to bring balance back to an individual and at the same instant bring the individual back to the balance of the community[7].

(*Figure 1: Map of Peru, Source: www1.american.edu*)

Illness and uses of Ethnomedicine: Traditional Healers

In order to regain a balance, the chamanes-curanderos must first identify the disease and must then perform cleansing ceremonies accordingly. There are many origins and types of illness, but the most well documented illness has been "susto" (fright sickness) or *mancharisqa* (Quechua word for fright). Other illnesses that occur due to lapses in maintain balance, with ancestors, earth spirits, and stars, are *hap'iqasqa* (being grabbed by the earth*), machu wayra* (an evil wind or ancestor sickness), and *uraña* (illness caused by the wind or walking soul)[8]. In the indigenous community, illness can be caused by many different factors, especially if one disrupts harmony of the cosmological and spiritual this may be caused by "hungry earth spirits", "vengeful stars," winds, devils and other supernatural entities can cause people to lose their *animus* or soul[9].

These illnesses can also be distributed differently among the population. Gender hierarchy and tradition play a significant role in ethnomedicine and in illness vulnerability. Illnesses such as, *machu wayaras* is an illness that is believed to enter a vulnerable body through openings in the body such as the head, orifices, lower back and feet[10]. In Cuyo Cuyo, in the northern department of Puno, in the southern Peruvian Highlands, there is an emphasis on the vulnerability of people in relation to illness. Some, such as women, young children, and the elderly, are seen as more susceptible to this illness[11].Women are seen as the weaker gender due to the fact that they are the child bearers and also because they have an extra orifice, the vagina. Due to the extra orifice that women have, it is easier for *machu wayara* to enter. Although traditionally, men and women were seen as equals in tending to the agriculture work and the work of the household, this has changed. According to Larme, this is due to influence from the Western world. Although seemingly irrelevant, it is very important to keep in mind the gender roles that play a significant role in the indigenous community because they factor into how healthcare professionals administer medical assistance. It is also crucial to understand that each illness occurs differently and that tradition is a main factor in how the illness treated.

Each illness can be caused by different factors - soul loss, such as an encounter with an evil spirit, a fight, or not giving proper respect to ancestors or the environment by not completing a sacrificial offering, and basically the disruption of relationships, either social or cosmological[12].Usually these illness follow a pattern of symptoms, such as loss of appetite, sleeplessness, restlessness and lethargy. It must be also understood that "folk illnesses" such as the ones stated above are not the only maladies that afflict the

indigenous population. They also experience colds, bronchitis, tuberculosis and other illnesses. In order to treat these health problems, those of indigenous descent, such as Mollomarquinos and Cuyo Cuyeños, rely on "home remedies" such as herbal medicine. However, as time has progressed, there has been an influence of Western medicine in the indigenous community. Indigenous communities are now mixing Western medicine with traditional medicine, such as is the cases in Cuyo Cuyo but traditional healers remain in high demand[13].

The healers in the indigenous communities are seen as powerful and knowledgeable, yet they are most often the poorest members of the community. In the eyes of the Quechua this is usually seen as a way to maintain harmony, because the poor chaman-curandero can repel undesired spirits and disorder and at the same time the chaman-curandero can restore order by bringing and individual back into the community socially, physically and spiritually[14]. The chamanes-curanderos often use plants in order to heal their patients, of which they have a vast knowledge. For the most part, the knowledge of the chamanes-curanderos is a knowledge that is "sacred" and passed down to certain people, they are experts on healing with plants and know the dangerous plants and what is the effect of each plant. According to De Feo, the traditional medicine of northern Peru falls into two groups, plants with 'hot virtues' and plants with 'cold virtues.[15]' The "cold" plants are used to cure "hot" illnesses such as inflammations, and "hot" plants are used to cure "cold" illnesses such as malaria or bronchitis[16]. When it comes to traditional illnesses, there are usually different steps taken to cleanse the individual. The use of "cold" remedies is usually used because the illness manifests itself in a psychological way while an illness such as "susto" (fright sickness) would be cured

by “hot” plants. The plant that is used most frequently is the use of the San Pedro cactus, which causes hallucinations. The ritual sessions usually include the use of the San Pedro, the coca leaf, and liana ayahuasca. These plants are used to detoxify and allow the chaman-curandero to enter a trance in which the chaman-curandero can liberate the individual from evil spirits and bring them back to harmony with the spiritual and the physical[17]. The ancestral beliefs and magical rituals accompany the trance and the use of the plants, the indigenous people believe that a beneficent spirit enters the healer in his state of hallucination and therefore purges the evil spirit from the individual. The chamanes-curanderos also have a ritual set according to the day of the week, usually Tuesday and Friday night (in the Northern Peruvian Andes), in which a therapeutic rite, the ‘mesada’, is performed in order to heal. It is during this time that the chamanes-curanderos make use of the San Pedro cactus and its hallucinogenic properties[18]. The plant is used only for ritualistic purposes and ritual rules are what control the preparation and the administration of San Pedro. In addition to the San Pedro, there is the use of the “cimoras” used as a means to purge “bad spirits” from the patient’s body. The rituals that are undertaken by the chamanes-curanderos in the indigenous are centered on beliefs that attempt to maintain harmony between individuals and the spirits and landscape. Some would argue that it is a closed system that is isolated and does not have access with the rest of the world but that does not seem to be the whole truth. Despite the fact that these populations live in isolated regions of Peru and contact with healthcare professionals may be minimal, there is knowledge to be gained from these regions. Also, due to the fact that these populations are not greatly exposed to the modern world allows them to be dependent on their immediate community and maintain a strong hold of traditional

practices and beliefs, such as gender roles and ailments. The gender roles that are well installed in the culture also reveal the attitudes of men and women associated with medicine, illness, and healing, which often leads to communication barriers between the local women and health practitioners.

Although chamanes-curanderos can assist a person in regaining their cosmological balance once ill, their focus strays from women's health, both reproductive and maternal. Women's health is a separate branch of traditional medicine. The role of women in the indigenous community and household are detrimental to the survival of the family. Traditional practices when in relation to women's reproductive and maternal health are constructs of the community and are important in order to maintain balance and order within the community. Rituals and specific practices are performed by women in order to, at times, prevent pregnancy or to have a successful and quick delivery during birth. These practices serve to keep a woman healthy and in order to prevent illness from befalling the baby or the mother.

1.2 Ethnomedicine: Culture, Rituals, and Beliefs

Traditional medicine, or ethnomedicine, is not solely based on the act of healing performed by the chamanes-curanderos, but also in the prevention of illness. In regards to women's health, there is a focus on reproductive health, and maternal health and birthing and illness prevention in the indigenous community. There are many origins of illnesses and many different types such as "susto" (fright sickness) or *mancharisqa* (Quechua word for fright). Other illnesses that occur—due to lapses in maintain balance with ancestors, earth spirits, and stars—are *hap'iqasqa* (being grabbed by the earth*), machu*

wayra (an evil wind or ancestor sickness), and *uraña* (illness caused by the wind or walking soul)[19]. In the indigenous community, illness can be caused by many different factors, especially if one disrupts harmony of the cosmological and spiritual this may be caused by "hungry earth spirits", "vengeful stars," winds, devils and other supernatural entities can cause people to lose their *animus* or soul[20]. It is a belief in the Andes that these illnesses can possibly befall the baby before it is born, especially *uraña wayra*—a malevolent wind that causes illness, disease and death[21].

In these isolated villages, the indigenous people depend on the community and the land to grant them a living and provide them with spiritual guidance and support. These isolated communities have maintained their strong ancient ideologies and are seen in everyday life and rituals[22]. In the Andes, women's health is often focused on reproductive and maternal health. According to highland communities, children are a welcomed miracle after a couple is joined in *rimanakuy* (traditional Andean marriage). However, in the same instance, abstinence is not greatly adhered to. On the contrary, it is viewed as a common occurrence and is accepted as long as the sexual encounter does not result in pregnancy[23]. In a modern biomedical view, it is difficult to imagine natural contraceptive methods, yet the women of the Andes perform their own form of contraception based on herbal beliefs.

Herbal remedies are the main form of contraception in isolated communities, the use of condoms are not readily available to these areas. Women rely on the use of traditional knowledge in order to prevent conception. The herbal remedies used are common and varied, such as depositing the plan *oqhe qora* (*Descurainia titcacensis*

Walp) in boiling water and then drinking small amounts three times a day during menstruation, This herbal concoction can also be combined with *alqo kiska* (*Xanthium catharticum*)[24]. There are also other herbal uses, such as juice made from parsley taken for two days at breakfast at the beginning of menstruation. There are also forms of contraception after birth, such as drinking guinea pig soup three times a day after giving birth in order to prevent conception for several years.

Although there are several traditional methods to prevent conception, once there has been *rimanakuy*, faithfulness is expected and so are children. During pregnancy, there is very little change in a woman's routine, but there are specific traditionally-based precautions that a woman must take into consideration. Woman who are pregnant are believed to have a special bond with their child and there is a belief that if a woman has negative thoughts, those thoughts could enter the womb and harm the child. Therefore, the woman must refrain from being upset or having negative thoughts. In addition, simply because the child is within the mother's womb does not mean that it is not vulnerable to illness. It is believed that uraña wayra can affect the child and in order to prevent this from occurring, Andean women twist black and white wool threads toward their left side (*lloq'esqa*) and wear these threads around their wrists and ankles[25]. When the act of birthing comes near, there are many rituals and practices that are adhered to.

When birthing is near, usually the mother, husband or children are present in order to assist the woman. Like the birthing process in modern biomedical settings, there are special packets of necessary tools for the birthing, in Andean communities, these are special carrying cloths. The carrying cloths contain woven cloth, string of wool in order

to tie the umbilical cord, fleece to absorb the blood from the umbilical cord, incense, herbal teas (nettle-Ortiga) to speed the birthing process and cleanse the body and give the woman strength, and a piece of ceramic tile to cut the umbilical cord, which they believe helps the navel become stronger, if the umbilical cord is cut with a knife, then the child will wear out their clothes very fast[26]. There are herbs, such as ma mani alqa (*Ouricia chamaedrifolia Benth*), which is believed to facilitate labor and help expel the placenta. The delivery process occurs at home. Women are allowed to wear their traditional clothing for the sake of modesty, boiling water is prepared in order to create a hot and humid environment, incense is lit in order to prevent *uraña wayra* from entering the house and a white mineral is used to purify and also keep away bad winds by rubbing all over the body. There is also the fashioning of a bouquet of three coca leaves (*coca k'intu*), which is offered to *Pachamama* (Mother Earth) for a fast uncomplicated labor and a healthy baby. After these preparations have been made, women kneel on an alpaca fur for birthing and it is common for women to walk and stand during this time, rarely if ever do they lie down as in modern biomedical practice. When faced with difficult or long labor, there is also a practice of "blanketing" (*suska*) that is used, this entails wrapping a shawl around the hips and back of the woman and gently pull the shawl back and forth in a rotating fashion in order to bring the baby into the right position for entering the birth canal, in addition to praying to *Pachamama* and the *Apus* (where spirits of ancestors live). This act of *suska* is one that midwives or "*parteras*" are considered experts of using due to the passing of knowledge of generation to generation, but they have become rare in these regions because of migration from rural to urban areas. Once the child is born, the fleece is placed on the umbilical cord and the umbilical cord is cut.

The baby is then wiped off and the white mineral is used on the baby in order to keep the *uraña wayra* away[27].

The rituals and practices that are undertaken by women in these isolated regions are very important to their beliefs in maintaining unity with the cosmos and as the woman cares for the child, these practices are continued and taught to the next generation. The ancient rite of baptism, *unuchakuy,* is one of the first steps of the child becoming part of the community, because without this rite, the child will fall ill and bring disease and other problems. The cosmological beliefs of interconnection and spirituality weigh heavily in the actions of the women and the community in order to maintain balance and harmony between the people and the environment on which they rely. The woman is responsible for the care of the child, including nursing, baptism, and the solidarity that is built between the child and the community. These rituals and ceremonies are important because according to Andean beliefs, they are important for the well-being of the people, animals and all nature[28].

Chapter 2: Traditional Medicine and Maternal Health

The majority of Peruvian citizens reside in the urban sector (*see Figure 2*), which allows about two-thirds of the population access to modern health facilities, yet there has also been an impact of traditional medicine on these communities. Looking at urban Peru, there are many different types of traditional healers that are consulted. There are the "hueseros," who specialize in bone ailments, mainly lesions and fractures There is also the "hierbero," a person who is knowledgeable over the basic properties of medicinal plants, a "curandero," a person who has knowledge of medicinal plants, prayers, domestic animals and "folk" illnesses, such as "susto" and "mal de ojo," and also the "chaman", who is knowledgeable about traditional medicine and/or witchcraft, and lastly, there is the "curioso," who has limited knowledge of traditional medicine and only serves to recommend treatments.[29] In urban areas of Peru, the traditional medical specialists consulted the "huesero" the most. In 1997, it was recorded that 50.2 percent of the heads of households that were interviewed in urban areas preferred to be treated by "hueseros" in cases of bone lesions and other bone trauma. In the case of "hierberos,"36.8 percent of heads of households in urban homes preferred to use "hierberos" while 13.4 percent preferred to be treated by "curanderos" and less than 10 percent preferred a "chaman" or

a "curioso.[30]" According to the 1993 Census, there were 8,793, 395 indigenous people in Peru, 97.8 percent of them were Andean and 2.1 percent were Amazonian, which according to the numbers, represented about a third of the total population of Peru[31]. It can be observed that movement from rural to urban requires less emphasis on traditional medicine as primary care, but at the same time, there is not complete abandon of the traditional methods of healthcare. Peru's population is about 45 percent indigenous, the largest indigenous population in Latin America, and as a result, there is a great deal of tradition that is preserved.

2.1 Who uses Traditional Medicine in Urban Peru?

According to the Instituto Nacional de Estadística e Informática *(*INEI*)*, there are many people who are drawn to traditional medicine and who believe in the healing practices. Many factors contribute to people's inclination to see a traditional healer rather than a medical professional ranging from a wide aspects of demographics such as gender, age, number of people per household, and income. In Peru most heads of households (63.2 percent) that were interviewed believed in the effectiveness of the "huesero," but when analyzed by gender, men believed more in the effectiveness of the "huesero," 52.0 percent versus 11.2 percent of women. The "hueseros" and the "hierberos" carry the greatest belief in effectiveness especially when compared to the "curanderos" who have less than 20 percent belief of effectiveness and the "chaman" and "curiosos" have less than 10 percent belief of effectiveness. There is an obvious shift away from the tradition of superstition and supernatural and cosmological beliefs as can be seen by the greater

belief in “hueseros” and “hierberos” as opposed to the “chamanes” and “curiosos” who work more with supernatural aspects and witchcraft.

Heads of Households who Resorted to Traditional Specialists, by Gender, 1997

Gender	Huesero	Hierbero	Curandero	Chaman	Curioso
Peru	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Yes	50.2	36.8	13.4	3.5	7.1
No	47.3	60.9	83.5	92.0	89.3
Male	**81.6**	**81.6**	**81.6**	**81.6**	**81.6**
Yes	41.4	30.2	11.1	3.0	5.9
No	38.3	49.5	68.0	75.0	72.8
Female	**18.4**	**18.4**	**18.4**	**18.4**	**18.4**
Yes	8.8	6.6	2.3	0.6	1.1
No	9.0	11.5	15.5	17.0	16.5

Figure 2 (Source: INEI, Peru: Percepcion Sobre la Medicina Tradicional de Hogares Urbanos, 1997)

There is also a difference in beliefs across generations. According to the INEI, older generations prefer to use “chamanes” and “curiosos” as well as other specialists rather than healthcare professionals. This can be attributed to an older generation that may have grown up in a rural setting with traditional medicine influenced by supernatural beliefs. Out of the 50.2 percent that use “hueseros”, 20 percent of them are 50 years or older, and 15.3 percent of the 36.8 percent that use “hierberos” are also 50 years or older. The use of these traditional medical specialists falls below 13 percent when age falls below fifty.

HEADS OF HOUSEHOLDS THAT RESORT TO TRADITIONAL MEDICINE by AGE, 1997

Age Groups	huesero	hierbero	Curandero	Chaman	Curioso
Total	**50.2**	**36.8**	**13.4**	**3.5**	**7.1**
12-19 yrs	0.2	0.1	-	-	-
20-29 yrs	5.2	3.4	1.4	0.4	0.6
30-39 yrs	12.3	8.8	3.3	0.9	1.9
40-49 yrs	12.4	9.2	3.5	0.8	1.8
50+ yrs	20.0	15.3	5.2	1.5	2.8

Figure 3(Source: INEI, Peru: Percepcion Sobre la Medicina Tradicional de Hogares Urbanos, 1997)

Although traditional medicine has moved away from its supernatural roots, it is surprising that there is a large percentage of heads of households that actually go to see these specialists go for illnesses that are called “folk” illnesses. For example, 85.8 percent declared that they had gone to see a specialist for many different illnesses such as “mal de ojo” and “susto” and about 19.7 percent went in order to undergo particular practices such as “pasada de huevo,” “pasada de cuy,” and “session de sanacion.” Undergoing treatment for “folk” illnesses has maintained a great deal of importance in the Peruvian society, both in the rural and urban areas throughout the country, each region maintain a high percentage of heads of households that use traditional medicine for “folk illnesses.” As can be seen (see Figure 3) that Peru as a whole relies heavily on traditional medicine, more than half of the urban population uses traditional medicine for traditional healing for certain illnesses.

Heads of Households who Resort to Traditional Medicine for "Folk" illness or Traditional Healing, 1997

Age groups (yrs)	Total	Susto	Mal de ojo	Daño	Incurable illness	Diverse "males"	Other
PERU (%)	**100**	**100**	**100**	**100**	**100**	**100**	**100**
12-19	0.3	-	0.8	-	0.2	0.6	-
20-29	14.2	15.2	16.8	5.1	8.8	5.9	7.1
30-39	29.1	31.6	31.1	21.8	16.3	20.6	20.1
40-49	22.4	23.0	19.4	34.9	17.4	23.1	28.3
50 +	34.0	30.1	31.9	38.2	57.2	49.8	44.5

Figure 4 (Source: INEI, Peru: Percepcion Sobre la Medicina Tradicional de Hogares Urbanos, 1997)

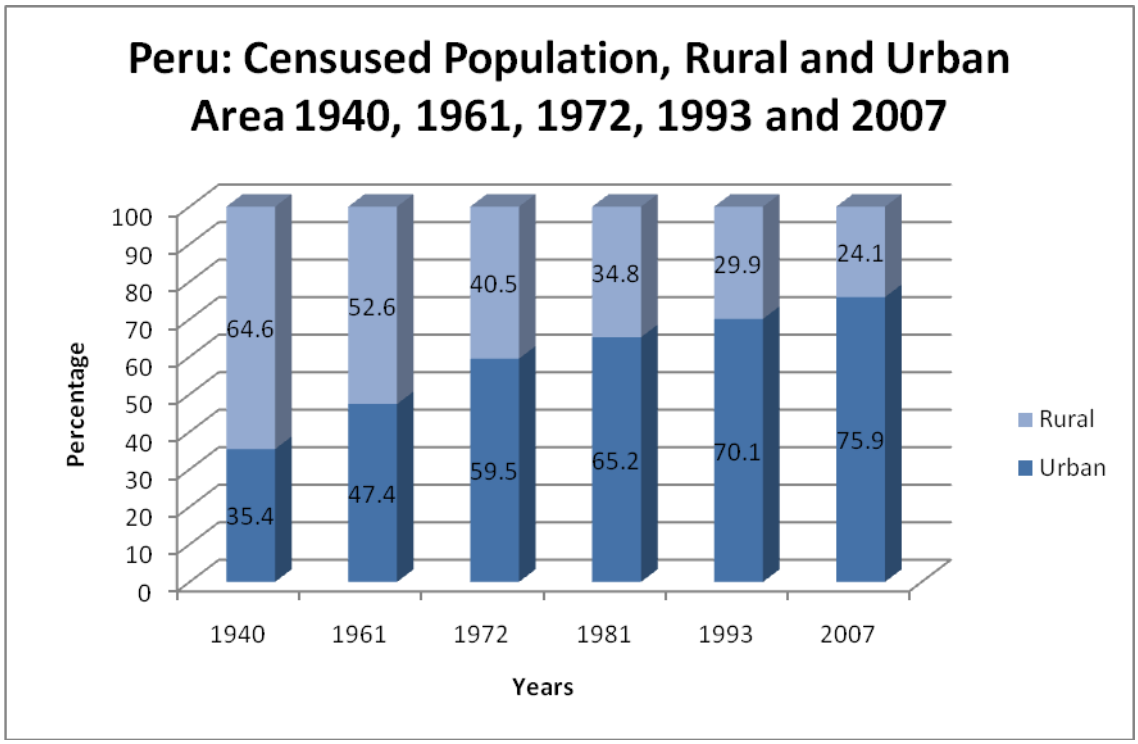
Traditional medicine and healers are being used in a wide variety of ways in Peruvian society, both rurally and in urban settings. Traditional medicine remains a very influential mode of care. Due to high demand and significant use of these healers and their knowledge, the Ministry of Health of Peru has created the Centro Nacional de Salud Intercultural (The National Center of Intercultural Health).

In these charts, there is an obvious impact and growing trend of the use of traditional medicine. It is also observed that there is coexistence between both the modern biomedical practices and services and the traditional medicine practices in this society. Although traditional practices are available, citizens also take advantage of modern biomedical services. Although women in urban Peru use health care facilities, the issue of maternal mortality is one that can demonstrate the pluralism of the two systems. It highlights the improvements that can be made using both systems in order to reduce

maternal mortality especially in the isolated rural areas of Peru, which allow only minimal contact with healthcare professionals.

2.2 Maternal Mortality in Peru: Rural v. Urban

Peru has one of the highest maternal mortality ratios in the world , with at least 185 women dying per 100,000 live births especially when compared to 20 women dying per 100, 000 live births in higher-income countries such as the United States and Canada[32]. Over the years, there has been a population migration from the rural areas to the urban areas (*see Figure 5*). This movement has concentrated the population, more than 75 percent, in the urban areas, which has also led to concentration of medical facilities in these regions, while rural areas have minimal contact with these services. Lack of assistance and services leaves rural areas vulnerable to high rates of maternal mortality.



(Figure 5, Source: INEI, Censos Nacionales 2007)

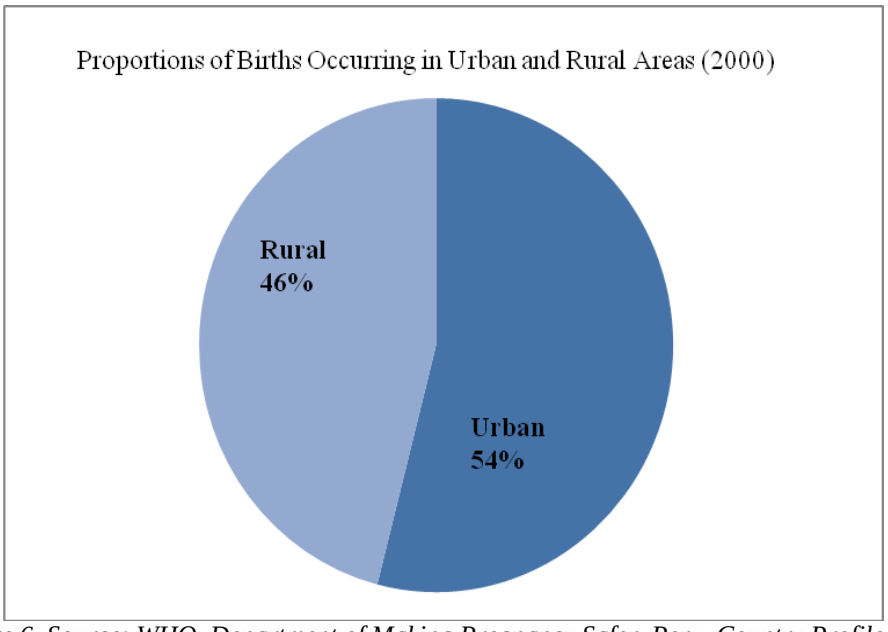
There are many factors that can contribute to high mortality—these factors are related to reproductive health and maternal health. Rural and urban sectors have varying health outcomes due in part to varying degrees of reproductive health access. Migration of large proportions of the population from the rural to the urban tends to concentrate health care facilities and services in urban areas. Although the majority of the population resides in urban settings, most of the health care issues exist in rural areas.

There are many factors that can reduce maternal mortality, and one the most important factors that can lead to more positive health outcomes is knowledge of reproductive health. Reproductive health is an important part of maternal health. Maternal health begins before conception, this relies in proper nutrition, a healthy lifestyle, prenatal care in order to prevent and treat complications, and a healthy postpartum period in which physical and emotional support is present[33]. In urban areas of

Peru, such assistance is more widely available due to great number of facilities, while assistance in rural areas is minimal if existing, which leads to higher mortality. Although reproductive health is vital to maternal survival, there are also many factors that inhibit assistant and services from reaching rural women. Factors that contribute to poor health outcomes are numerous and include environmental, social, economical, and political practices.

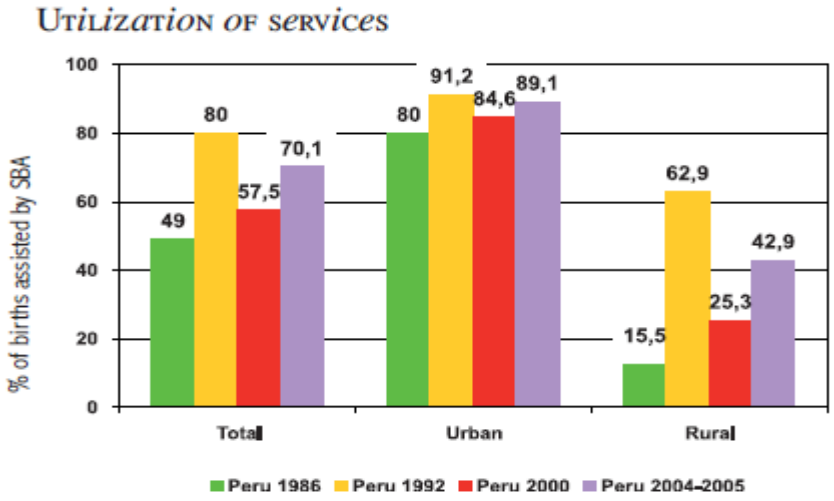
2.3 Reproductive and Maternal Health

According to the World Health Organization (WHO), in 2000, women in rural and urban areas were interviewed and about 46 percent of births occurred in rural areas, while 54 percent of births occurred in urban areas (*see Figure 6*). Despite the fact that more than two-thirds of the population is located in urban areas, almost half of births occurred outside these areas.



(Figure 6, Source: WHO, Department of Making Pregnancy Safer, Peru, Country Profile 2004)

The two regions have a large number of disparities. According to the 2007 National Census of Indigenous People, nearly 60 percent of the communities covered by the census did not have access to a health care facility, which lowers maternal survival[34]. In addition, the scarce resources in the remote regions of Peru, such as the Andes and Amazon, also lowers and minimizes a skilled attendant at delivery, especially when compared to urban areas (*see Figure 7*). There are many factors that leave rural populations on the outskirts of health resources. For the remote and rural indigenous women, it is obvious that, compared to the urban sector, there is a significant difference in the presence of skilled birth attendant. Although there is an obvious increase as time has progressed since 1986 to 2004-2005, but even then, less than half of the women in rural areas have the presence of a skilled attendant, this is shocking especially when compared to the urban sector, in which nearly 90 percent of all births have a skilled birth attendant present at delivery. There is an obvious health gap between the rural and the urban sectors, allowing Peru to maintain a high maternal mortality ratio.



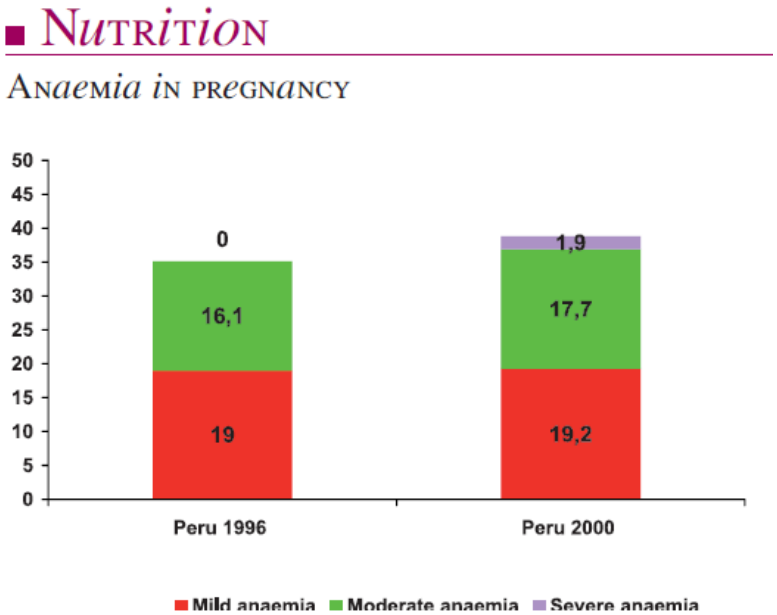
Skilled Birth Attendant at Delivery

(Figure 7, Source: WHO, WHO, Department of Making Pregnancy Safer, Peru, Country Profile 2004)

There are many factors that leave rural indigenous populations on the outskirts of health resources. For the remote and rural poor indigenous women, factors that affect them the most are social, economical, environmental and political.

Causes of Pregnancy Related Deaths

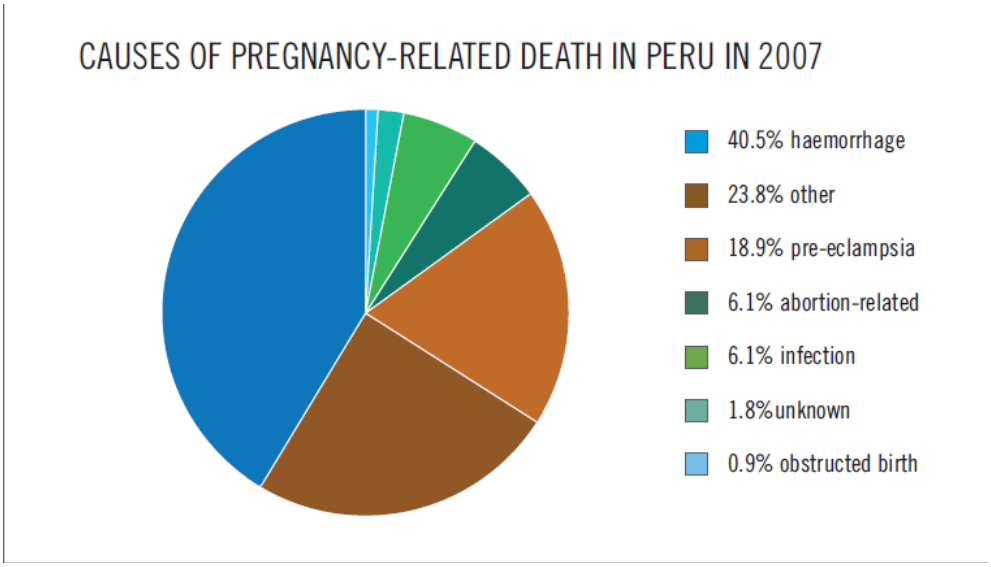
As stated before, reproductive health is very important to assure a healthy pregnancy in addition to a safe delivery. In rural areas, there may not be a large selection and variety of vitamin rich foods, which can cause different forms of malnutrition in women and can result in dangerous conditions such as anemia (*see Figure 8*). As time has progressed from 1992 to 200, there has been an increase in anemia cases in pregnant women. Anemia can cause complications, such as delivering a pre-term baby with low birth weight, and the high possibility of large amounts of blood loss during delivery resulting in possible death without a blood transfusion.



(Figure 8, Source: WHO, WHO, Department of Making Pregnancy Safer, Peru, Country Profile 2004)

According to the Dirección General de Epidemiología (The Ministry of Health's Department of Epidemiology), in 2007, about 27 percent of women that died due to pregnancy related causes died during their pregnancy. 26 percent of deaths occurred during birth, and 46 percent occurred during the first 6 weeks after birth[35]. There are five major causes of maternal death in Peru, according to the Dirección General de Epidemiología. The causes are hemorrhage, pre-eclampsia, infection, complications due to an abortion, and complications due to an obstructed birth (*see Figure 9*). In addition, there have been recent studies that have focused on the issue of abortion in Peru.

According to Delicia Ferrando, there has been an increase in the prevalence of clandestine abortions in Peru, which has raised abortion to probably the third largest cause of maternal deaths in Peru. It has been estimated that about one in every seven women who undergo abortions are hospitalized for complications occurring from abortion. Reasons for hospitalization can vary from self treatment or private treatment and death before reaching the hospital. In addition, there is the issue of inaccurate reporting due to under reporting, therefore, the actual rates of death due to abortions may be larger than originally recorded[36].



(Figure 9, Source: Amnesty International, Dirección General de Epidemiología, July 2008)

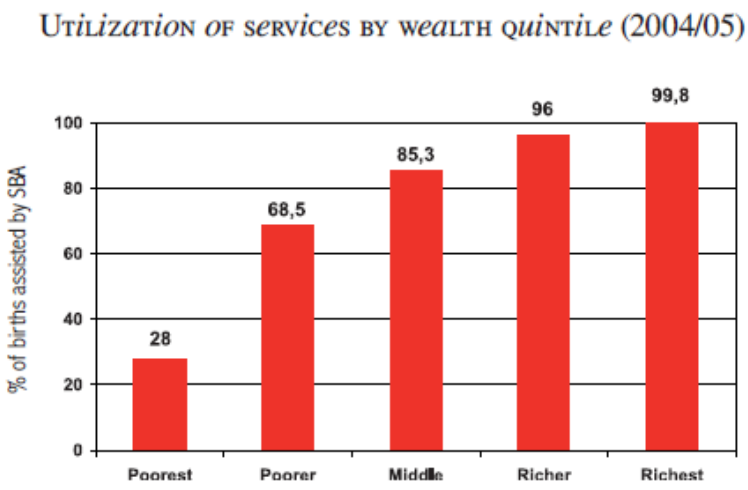
Many causes of maternal mortality in Peru can be prevented, yet there continues to be a large rate of maternal mortality due to a varying degree of factors including discrimination that is gender related, racial, and ethnic, in addition to cost and travel.

Social Factors and Poverty

The rural population of Peru makes up over 57.7 percent of those living in poverty in Peru and 8 out of 10 people living in extreme poverty live in rural areas[37]. In terms of use of modern biomedical services, it is obvious that those closer to healthcare facilities would use them, in addition, those who have the means to pay for the reproductive prenatal care would do so, while those located in rural areas are left to their own devices in terms of disease treatment and maternal care. According to the WHO, there is a large disparity between the richest and poorest sectors of Peruvian society, a disparity of 71.8 percent between the two extremes (*see Figure 10*). According to the INEI, the 2007 National Census of Indigenous People, only 36.1 percent of women in the poorest sectors who gave birth between 2002 and 2007 had their most recent birth in a

health care facility, which is shocking when compared to the richest sector, in which 98.4 percent delivered in a health facility. In addition, only 35.9 percent of the poorest had been attended by a skilled birth assistant (SBA) and the richest sector maintained a high attendance, at 99.2 percent[38].

The numbers presented by the INEI are staggering; the large disparities are due to many social and economic factors that mainly influence the indigenous population of Peru. Historically, the indigenous people of Peru have experienced and have fallen victim to discrimination relating to gender, race and ethnicity. During the conflict between the government and Sendero Luminoso (Shining Path) many indigenous groups were the target and were targets of violence including forced sterilization by authority figures, creating an overwhelming distrust for authority. In addition, many indigenous people do not have legal identity documentations because they do not have access to administrative services and since they do not receive the same benefits of other citizens who have identity papers[39]. These occurrences have created distrust of the government and outsiders, which allows for greater affirmation of traditional practices, which results in great barriers to effective health assistance and services.

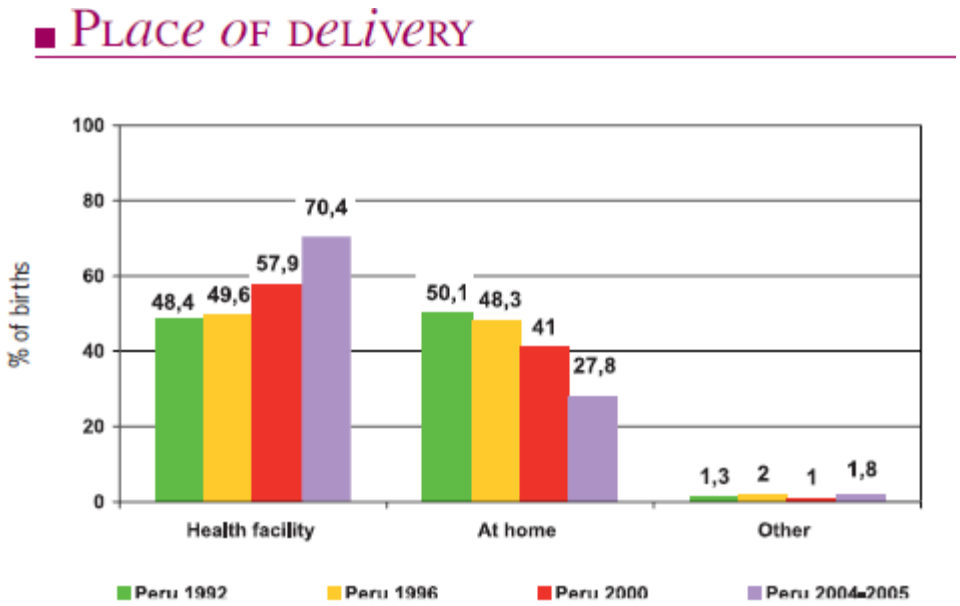


(Figure 10, Source: WHO, WHO, Department of Making Pregnancy Safer, Peru, Country Profile 2004)

According to the 2007 Census of Indigenous People, 59.1 percent of rural communities did not have an health facilities, 45.4 percent had only a first aid post, 42.3 had only a basic healthcare facility and a mere 10.9 percent had a health center (can handle more than a basic health facility). Looking at this data, it is obvious that the government, despite its call for universal health coverage, has not had a large impact on the rural communities. Women in these rural communities must overcome discrimination, poverty, and isolation, obstructing their voice of influence in the political. Women in these areas often lack proper knowledge about their sexual reproduction and maternal health options. Socially, women in isolated areas follow specific practices as part of their community, which may be in conflict with their beliefs. The politics also control access and services, and policy tends to not address the core issues of access to health care in these communities.

Environmental Factors

The environment in which these women find themselves also plays a large role in the effectiveness of healthcare facilities. The problem in these areas is that villages are hours and at times, days away from the nearest health care facility, meaning that women who experience a complication during labor have little or no chance of survival[40]. The issue of cost and transportation plays a major role as well in the health care access in rural communities. According to Peruvian health policy laid down by the Ministry of Health (MINSA), those who live in poverty are given free healthcare, yet the problem is not truly the cost of health care, but the access due to travel. There is little spending on infrastructure in Peru, which means there are no roads to reach these communities, and although transportation costs are covered by the Seguro Integral de Salud (SIS—Public Health Insurance Scheme), there are no buses, ambulances or roads to access health care facilities or isolated communities[41]. In a survey taken by the INEI between March 2007 and March 2008, there has been a drop in people citing "cost" as a reason for not attending a health facility from 24.5 percent in 2007 to 19.9 percent in 2008. Yet, there has been an increase in the issue of distance, which increased from 11.8 percent in 2007 to 12.7 percent in 2008[42]. Despite these hardships Peru has attempted to integrate maternal waiting houses, known as *Mamawasis*, into the health care system in rural areas in order to insure healthy deliveries and decrease the mortality rate in rural Peru. As can be seen in *Figure 11*, there has been some success in bringing women into health care facilities, there has been a decrease in "at home" deliveries, which has been seen in the 2004-2005 period, now about 70 percent of women in Peru deliver in a health facility.



(Figure 11, Source: WHO, WHO, Department of Making Pregnancy Safer, Peru, Country Profile 2004)

There are many factors that affect maternal mortality that includes reproductive health and access to health care, Peru has begun to implement strategies in order to reach out to these isolated communities in order to decrease their maternal mortality ratio. Modern Biomedical practices have become an important role in reducing mortality and morbidity among pregnant women and as a result, there has been the establishment of programs that have allowed Peru to see success in this area as well as other areas that include disease, prevalence, and incidence reduction.

Chapter 3: Biomedicine in Peru

Although about 45 percent of the Peruvian populations still use traditional medicine, in the recent decades, there has been an increasing presence of modern medicine in the country. In the mid twentieth century, the Ministry of Health in Peru (MINSA) was established. MINSA's mission statement claims to protect personal dignity, promote health, prevent illness and guarantee the health of the inhabitants of the country. In 1997 the General Health Law was enacted, which assigned the state responsibility of providing public health services and promoting adequate health services for the population. The state has also become responsible for monitoring health, preventing illness, treating malnutrition, mental health, environmental health, maternal health, child health, and elderly health.

The state has a great deal of responsibility in providing services, but the modern medicine health structure in Peru consists of different institutions – the public health sector institutions, private insurance and providers as well as non-profit institutions that also provide health services. The public health sector is comprised of the Ministry of Health, IPPSS (EsSalud—Seguro Social de Salud de Peru, Social Security of Health), the armed forces and police health services, and social welfare agencies.

3.1 The Structure of Modern Medicine in Peru

In 1994, the Basic Health-for-all Program was launched with the purpose to increase the response capacity of primary care health facilities, which were focused in the areas with the highest rates of poverty. Health services in Peru are numerous and diverse, the different health services that are provided have been increasing in the past decade, in 1996, the Basic Health-for-all Program comprised 21 percent of the MINSA budget. The goal of the program was to create universal access to public and individual health care services and ensuring that the poorest regions of the population have access to a basic package of health services[43]. The program also seeks to modernize through technology, restructuring of finances, develop competitiveness for improved accessibility and control of urgent health problems and the promotion of healthy living[44]. According to the Census of Physical Infrastructure and Resources of the Health Sector taken in 1995, Peru had 7,304 health facilities: 5,931 (81 percent) administrations by the Ministry of Health, 134 hospitals, 1,028 health centers, and 4,762 health posts. The health services that are offered by the Ministry of Health and private institutions also work as modes of surveillance. There are epidemiological surveillance sites: 2,690 health facilities (208 hospitals, 924 health centers, 1,504 health posts and 54 other health facilities) there have also been established 33 epidemiological departments that create reports on 15 specific diseases every week[45]. The availability of physicians has also increased from 1992 to 1996 from 7.6 to 10.3 per 10, 000 and dentists have also increased from 0.7 to 1.1 per 10,000 population, nurses rose from 5.2 to 6.7, and the rate of obstetricians rose from 1.1 to 2.1 and in 199, the physicians employed by MINSA increased from 7,557 in 1992 to 11,157 in 1999 and physicians employed by EsSalud also increased from 3,476 in 1992

to 5, 237 in 1999[46]. The amount of educational resources for health care professionals has also increased, in 1999 there were 27 medical schools, which increased from 14 schools in 1992. In 2000, there were also 43 nursing schools, 21 master-level Public Health programs with 11 major areas[47].

The modern biomedical system in Peru has expanded enormously in the past few years and as a result, there have been medical benefits. MINSA has established programs in order to reduce maternal mortality as well as to reduce disease prevalence and incidence, which have in turn increased life expectancy.

3.2 Benefits of Modern Health

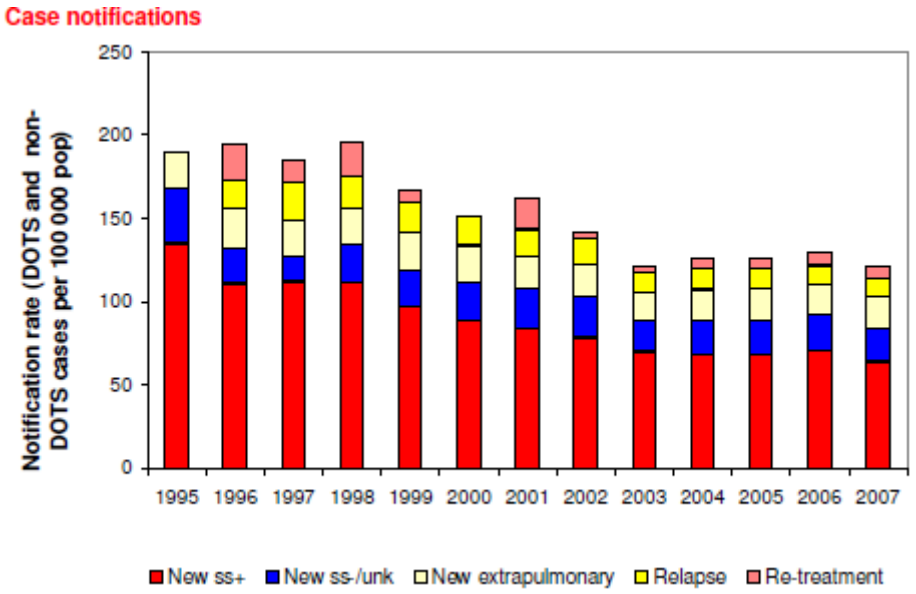
The modern health care system has developed many different ways to improve the health of its citizens, through both the public and the private sector that have been brought in through non-profit organizations. The improvements seen in the healthcare system can be observed not only in maternal mortality ratios but also in the reduction of child mortality rates, infant mortality rates, overall mortality rates, reduction in common illnesses, and the increase in life expectancy.

Disease Reduction

Specific illnesses especially tuberculosis has become major priorities for MINSA. The incidence rate each year is about 35,000 new cases of TB reported, while the prevalence rate is about 38,000 cases a year in addition, the mortality rate of the disease is about 4.4 thousand deaths a year[48]. In addition, in 2007, there were about 32, 000 relapses of tuberculosis there are also extra pulmonary cases, about 5.3 thousand that also

arise every year. Peru has had a long history of combating tuberculosis and beginning in 1990, TB became a national health priority.The National TB Control Programme received large amounts of funding in order to reduce the number of cases and in order to provide adequate assistance for those suffering from TB. The populations that suffer the most from TB are the indigenous populations, who have limited access to healthcare and treatment, in addition, they may or may not understand how the disease is spread and therefore take no measures to limit their contact with their community, thereby spreading the disease. Yet, according to the World Health Organization and the Peruvian Ministry of Health, there have been great improvements and successful cures of about 60-78%[49]of those who have contracted the disease, which is an achievement for a lesser developed nation such as Peru. According to the Pan-American Health Organization, between 2000 and 2001, Peru was able to drop its number of total cases by 1,000, a reduction of about 3.8%[50]. According to health indicators, there has been some reduction in the rate of deaths per 100, 000. In 1990, the rate was 36.0 per 100,000, then in 2000 the rate dropped to 26.0 and in 2006, the rate was 16 per 100,000. The success that Peru has experienced is due in part to the implementation of the DOTS system. With the help of USAID (United States Agency for International Development), there have been many achievements that have strengthened the Ministerio de Salud, such as the training of over 1100 health workers in 2007 and the updating of TB treatment and protocols in addition to training health workers in monitoring and evaluating TB[51]. In supplement to the USAID strategies, the World Health Organization has also developed DOTS (directly observed treatment, short-course) is a method to move towards a tuberculosis free environment. The DOTS method has five main components that are fundamental to its

implementation and success: 1. Political commitment with increased and sustained financing, 2. Case detection through quality-assured bacteriology, 3. Standardized treatment with supervision and patient support, 4. An effective supply and management system, and 5. Monitoring and evaluation system and impact measurement[52]. Under this strategy, the Ministerio de Salud (MINSA) has been well funded and has produced information and fact sheets of its own in order to inform the public of how TB is spread and what its symptoms are and how it is spread. In addition, MINSA has invested in laboratories in order to research TB and develop anti-TB drug therapy, to run diagnostic exams and overall care for TB patients[53]. As a result of these efforts and DOTS implementation, there has been a positive success rate for detection and treatment, they have been able to successfully test for and treat TB, which can be seen in Figure 12, there has been a constant decline in the of the "incidence of smear positive TB" (ss+ TB). Although there have been some years in which TB cases have increased, overall, there has been a constant decline in the incidence rate. In 2007, there was less than 100, 000 new cases of TB and an overall prevalence of nearly 200,000 cases. In addition, with the DOTS system, there has been a decrease in the incidence rate as well as an increase in treatment (*see Figure 12*).



(Figure 12, Source: WHO, TB Country Profile, Peru: Surveillance and Epidemiology)

Benefits to Maternal Health

Improvements in many of the medical facilities have also led to an increase in life expectancy and despite the fact that there are private facilities, only about 12 percent of the population uses private services, but 40 percent of the population depends on services provided by MINSA[54]. MINSA has led campaigns, such as Semana de la Maternidad Saludable y Segura (Week of Safe and Healthy Pregnancy) in order to educate many women in rural regions about maternal health and child heath, according to MINSA, women in rural settings are two times more likely to die when compared to the urban areas. Peru has recognized that there are many reasons that woman do not attend health care facilities, such as fear, cost, embarrassment, distance and waiting time. MINSA has focused on health care access to rural and remote regions of Peru and have created strategic programs such as Maternidad Saludable in order to reduce maternal mortality ratios. Maternidad Saludable's strategy is to 1.) increase community participation in order

to notify people of personal health, 2.) In order to provide quality of care, they work to gain the community's confidence and 3.) Secure health for these populations. The objectives of this program were specifically set between 2001 and 2006 and focused on maternal mortality in the poorest sectors. Maternal mortality was less than 100 per 100,000 live births and their goal was to bring down the ration from 100 down to 50 per 100, 000 live births in 2012[55]. In order to keep these promises, in 1998, MINSA launched the program of "waiting houses" (*Mamawasis*) in order to reduce the maternal mortality ratios. The term *Mamawasis* is Quechua, meaning "mother house" and it was established in rural areas in order to reach out and bridge the physical distance between the rural communities and the health facilities. These waiting houses also allow for family and community support to be present, they allow for health insurance to cover the costs and services for impoverished families and are also an example of cultural adaptation in the realm of maternal health—building a bridge between tradition and modern biomedicine[56]. The establishment of the *Mamwasis* has shown reductions in the reported cases of maternal deaths especially in indigenous woman, who are in regions with greater health risks[57]. In addition, MINSA has stated that vertical birthing can be healthier because it reduces pressure on the blood vessels and the uterus, which would affect the amount of oxygen that reaches the baby[58]. MINSA has also launched campaigns that are maternally related, such as the breast feeding campaign that has support from other agencies as well.

MINSA has launched a campaign that promotes breast feeding. Peru has the highest rate of breast feeding in Latin America and has also managed to lower the infant mortality rate to the world rate. Breast feeding has been the most cost effective way to

reduce infant mortality and malnutrition and has greatly benefited Peru with the assistance of UNICEF and la Sociedad Civil[59]. The campaigns and programs that have been the most effective have ones focused in the outreach of the community, such as the DOTS, Salud Materna, and breastfeeding. Campaigns and programs have allowed for the expansion of health services and benefits to remote regions and have also influenced the health indicators and life expectancy of Peru.

Life Expectancy

Although there may not be consistent data on the health indicators of Peru, there have still been improvements in the health of the population. In 2003, the life expectancy of Peruvians at birth was 62 for females and about 60 for men, according to the UNDP; this number has risen to about 73 for both genders. In addition to this, there has been a drop in the adult mortality rate, from 204/1000 in 1990 and 2000 to 153/1000 in 2006. This could be attributed to higher health standards and the creation of a health ministry that has been given power to create initiatives within the country, such as the building of new laboratories for the purpose of scientific progress in the study of diseases such as TB and HIV/AIDS[60]. The under 5 mortality rates have also dropped from 78/1000 in 1990, 41/1000 in 2000 and 25/1000 in 2006, which shows progress, although it does not compare to high-income nations, such as Sweden whose rate is 6/1000, but Peru has done better than its neighbors, such as Bolivia, whose under 5 mortality rate was about 61/1000 in 2006[61]. Overall infant mortality rates have also fallen; in 1990 the rate was 58/1000 then dropped to 33 in 2000 and in 2006 was at a low of 21/1000. An interesting trend that appears to be occurring in Peru is the number of overweight children for their

age appears to be increasing. In 1996, the percentage of overweight children for their weight was about 9.9, and then in 2000 it rose to 11.8%. The trend is very interesting because in more industrialized countries, such as the United States and the United Kingdom appear to have the highest levels of obesity—the trend appears to state that the more industrialized a county becomes, the more they indulge in food and the trend from communicable diseases such as TB change into diseases such as obesity and cardiovascular disease. Peru has not yet reached that level of industrialization and must still battle malnutrition and stunting that occurs from lack of vitamin rich foods, despite their investment in agriculture, their rate of prevalence appears to be unchanged from 31.6 percent in 1996 and 31.3 percent in 2000[62]. Despite these improvements, Peru remains a country where a large portion of the population resides in poverty and many cannot afford the cost of health care nor can they access these facilities, leading to problems such as high maternal mortality ratios. In order to continue improving health outcomes, there are problems within the Peruvian health structure that must be addressed.

3.3 Problems with Health Structure

Although Peru has had much success with its campaigns, MINSA has had to finance much of this with very little budget. The sector that receives the greatest amount of budget expenditures is agriculture due to the fact that agriculture is one of Peru's primary exports. Peru's economy is quickly expanding, and is one of the fastest growing economies in Latin America, with a GDP of $127.8 billion with an annual growth rate of 9.8% in 2008[63], and yet only about 4.3% of GDP expenditures were funneled towards healthcare as of 2006, which have not changed since 1998[64]. Peru does

place healthcare above its interest in its own military. Most Latin American countries, coming from a heritage of military rulers place a large amount of GDP expenditures into the military, but Peru's expenditure does not appear to place it with other countries in Latin America. Peru spends about 1.5% of its GDP expenditure in the military, placing it 107th in comparison to the rest of the world, when in Brazil and Chile, the expenditures account for about 2.3%[65]. In comparison to other social expenditures, healthcare in Peru does receive a significant amount especially when compared to education which received 2.7% in 2005[66]; food security expenditures are much higher because of investment in agriculture and the biodiversity of the region. In addition the country launched an "anti-crisis" package in 2008 and increased public expenditures, due to concern about food security[67]. Although there has been much focus in the agricultural sector, the healthcare system in Peru has not been completely cast aside, although food security is gravely important to Peru, healthcare consists of Private and Public sector healthcare. Although health care may receive greater funding than education, holistically, these issues are interrelated and many issues in the health care system remain. Even in this type of healthcare system, the indigenous population remains isolated from the rest of society due to different practices and isolating locations, the greatest issues that the indigenous populations face are, as stated previously, access, cost, travel and discrimination. The indigenous rights movement in Peru worked to improve the access to health for the indigenous Peruvian population, but they have also hit a number of obstacles due to a large disease burden in the country. With regards to specific issues such as maternal mortality, Peru has found it difficult to keep up with the demand of medical services outside of the urban areas and has not been able to achieve integration of these rural

communities into the Peruvian society. In addition, there must be greater cultural understanding between the biomedical system and indigenous customs.

In rural areas, health care professionals at times undermine or disregard the indigenous practices and beliefs, creating tension and increasing distrust between the women in the community and the health care professionals. According to Espinosa, there have been a number of incidences in which health professionals, due to misunderstandings of culture, in which the health care professionals have treated these women in a condescending fashion due to their lack of biomedical knowledge. According to Espinosa, in one specific incident, an indigenous woman had been given medicine in order to administer it to her ill child, but once the woman realized she was pregnant, she stopped treatment because in her culture they believed that a pregnant woman is impure and she should not administer medicine. In response to the indigenous woman's action, the health professionals mocked her and scolded her and called her an idiot, simply because they did not understand her beliefs and she did not have modern biomedical knowledge. Incidents such as these are a problem and isolate the rural and indigenous populations even more and more focus should be placed on education and increasing services, yet MINSA has the issue of financing to overcome as well.

The financing for the health sector comprises about 4.3 percent of the annual GDP, despite the fact that Peru's economy has grown, this percentage has been maintained, in addition, the health sector is also financed by household spending, employers in addition to the national budget. There have also been contributions from the private and international sectors that have financed independent health projects,

according to PAHO, there have been 102 health projects financed through these channels within Peru in 1998-1999[68]. The Peruvian public health sector has a great deal of problems to address and has attempted to reach out to the community through many different campaigns, but at the same instance, the increase in the budget towards agriculture also causes there to be a focus away from the health sector and could potentially lead to a decrease in funds. Despite Peru's success in such campaigns as the HIV/AIDS awareness and tuberculosis (TB) reduction campaigns, much of the efforts were done in collaboration with the international community, which demonstrates that Peru's Ministry of Health cannot handle the demand or supply of healthcare professionals that many isolated indigenous people require.

In many low-income countries, such as Peru, the international community, in addition to the nonprofit-independent organizations supplies a great deal of aid and assistance to the health sector, but at times this causes conflict. The international community may install its own expectations of a country's health sector, or the nonprofits may not be able to work in collaboration with the government agencies. Although these agencies donate assistance, services and money to MINSA and its projects and programs, Peru must also construct a means to support these campaigns independently.

Chapter 4: Integration of Traditional and Modern Medicine—The Role of NGOs

The World Health Organization (WHO) has placed a great deal of emphasis on the integration of the traditional practices and modern biomedicine. The WHO is not the only international organization that has been involved in the health care programs in Peru, there has been the presence and assistance of programs and groups such as USAID, Doctors without Borders (MSF), Partners in Health (PIH), UNICEF, CARE, and even local Non-Governmental Organizations (NGOs), such as AIDESEP. Organizations such as these have created programs that have led to great health improvements in the category of communicable and non-communicable diseases in addition to working collaboratively with the indigenous populations in order to improve health outcomes through comprehension of culture and beliefs. The assistance of global institutions has allowed Peru to gain a great deal of financial support in order to properly assist the Peruvian citizens, especially rural and indigenous groups.

USAID is a program that has very broad strokes; it combines many different factors in order to help Peru achieve a more efficient and effective health plan that covers education, access, and regulation. USAID works with MINSA in order to strengthen MINSA's ability to regulate and oversee the health system from regional and local

governments. USAID seeks to improve the budget planning, collecting and analyzing of data, surveillance and response to outbreaks of infectious diseases. In addition, they provide assistance to health care professionals and local and regional governments. Although it appears that USAID works solely on infrastructural problems, it has also worked down to the local level of health care. USAID/Peru has also sought improvements in the realm of malnutrition by promoting health and educational programs within the state; in addition, they have also pushed for health insurance coverage and the reduction of malaria cases.

USAID programs have focused on promoting healthy behavior and nutrition, but one of the most impactful has been USAID/Peru's reproductive health activities. USAID has donated contraceptives to Peru, although this appears to be a misguided donation due to the fact that most maternal complications occur in rural Peru, USAID/Peru has invested in grassroots projects in order to improve health in indigenous and secluded communities by promoting safe sex and working with the community (who are trusted above outsiders) in order to promote safe sex and provide voluntary family planning[69]. Yet, USAID's program of Integrated Network of Health Services has attempted to reach out to communities in rural areas, such as in Trujillo, their focus has been to provide assistance to clinics and hospitals in locations that have enough funds to have a hospital, but a large amount of indigenous and poor communities are still on the periphery of the health care system. Other organizations seek to also improve the prevalence and incidence rates of communicable diseases that tend to spread quickly through low-income countries due to lack of education and medical access.

The WHO has been a promoter of disease reduction, improved health outcomes and mortality reduction in various areas around the world. The WHO has created a vast array of policies designed for the improvement of the health care systems in countries such as Peru. As stated previously, Peru has found success in the reduction of TB cases through the DOTS system. The creation of this system has allowed there to be a significant decrease in the cases of TB in Peru. As a result of these efforts and DOTS implementation, there has been a positive success rate for detection and treatment, they have been able to successfully test for and treat TB. The partnerships from the PAHO (Pan-American Health Organization), Partners in Health (PIH) and USAID have been collaborating with the National Sanitary Strategy for the Prevention and Control of Tuberculosis (ESNTBC) under MINSA in order to support the success of anti-TB efforts. In addition, Peru has received grants from the Global Fund to Fight AIDS Tuberculosis and Malaria—receiving 14.7 million dollars in Round 8—in order to continuously fund its efforts[70]. The efforts from the WHO obviously are more far reaching than writing policy, PAHO has allowed there to be a regional health organization body that would support efforts to reduce disease and increase life expectancy in the Americas.

Other organizations such as, UNICEF (United Nations International Children's Fund) has also created programs in order to promote the health of children in different regions throughout the world. There are programs that have been implemented in Peru, such as basic education with emphasis on children, children's rights and child HIV/AIDS. UNICEF has been present in Peru since 1948 in order to provide assistance to the poorer communities in relation to factors that affect Peruvian children. Peru and UNICEF have implemented the National Plan of Action for Infants and Adolescents beginning in 2002

to the present in order to reduce child mortality. UNICEF also works at a local level as well as a national level[71]. Global efforts such as these have resulted in many positive health outcomes, there are still obstacles and not adequate efforts not only to treat rural and indigenous communities, but also integrate them into the greater Peruvian health care system, which allows for independent NGOs to provide services that these programs do not reach.

There are various types of NGOs that have become very active in the Peruvian community especially in rural and indigenous communities, such as PIH and MSF. MSF's work is based on humanitarian action based in medical principles and impartiality[72]. MSF is independent of any state or government, which allows them to act independently, they also act as a neutral body that seeks only to provide health care in armed conflicts and provides services in epidemics, malnutrition, exclusion from health care (such as indigenous communities), and natural disasters[73]. Within Peru, MSF has provided health treatment in under-privileged areas, such as in Villa El Salvador, a poor suburb of Lima, in which they launched an HIV/AIDS treatment project. These efforts also coincide with MINSA's national AIDS treatment program. AIDS is most likely going to be an increasing problem in Peru over the next 10 years and in order to create better access and treatment for the disease; MSF is providing medical, social and psychological support to these people. The goal of these programs is to get rapid and efficient treatment within the urban centers, which are greater hit and then to decentralize the clinics to provide greater outreach. MSF has continued to provide health care to many under-privileged people in Peru, and has provided limited health care to indigenous and rural populations, but there is not a large impact on these communities due to MSF's

limited funding and resources[74]. MSF is not the only NGO that has given special attention to Peru, but also, Partners In Health.

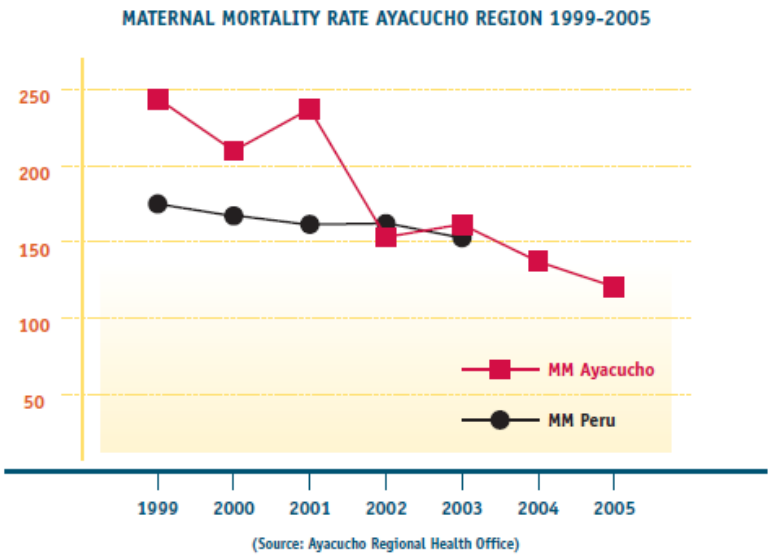
Partners in Health (PIH) is an NGO that has created a sister organization in Peru, called Socios en Salud (SES) and they have been treating diseases and treating members of the community to provide care and prevention for areas around Lima. This has resulted in the creation of one of the largest health care organizations in Peru, and has led to impact on a national level for the prevention of treating MDR-TB (Multi-drug resistant Tuberculosis) and HIV treatment. SES has focused a great deal in the shantytowns of Lima, and has created a system of primary care and social, their team operates 16 small rural health posts known as *botiquines* to serve isolated communities with no other access to health care. In addition, these clinics also provide maternal and obstetrical care for woman, the program "Salud Infantil" (Childe Health) brings health care professionals to these communities to provide treatment and checkups for children in the poorest areas[75]. In addition, SES provides financial support, food, transportation and social support to the community. This long established organization has allowed there to be progress within the community they service, which is a first step in solidifying proper health care and access. These types of communities are on the outskirts of larger urban areas and at times, access does not reach the rural areas that need the assistance most.

These international organizations and non-governmental organizations have made progress in many different areas of health care in Peru, which are detrimental to improving Peruvians standard of living and increasing life expectancy. There have been programs established by these organizations in order to address communicable diseases in addition to the rising concern of AIDS, UNICEF has also focused on AIDS in children,

as have Doctors without Borders. These are very important aspects of reducing mortality and improving standard of living, but it seems that a great deal of these efforts do not focus on isolated rural communities, but "rural" communities that reside on the immediate outskirts of urban centers. MINSA and organizations such as CARE have focused more on the isolated Peruvian regions of indigenous people, a good example of how they have worked to reach out to these communities has been through not only the DOTS system, but also focusing on one important health issue, maternal health.

CARE has implemented strategies that specifically target the indigenous communities in Peru. The establishment of *Mamawasis* was originally established by CARE in collaboration with MINSA. CARE has also established the FEMME (Foundation to Enhance Management of Maternal Emergencies) project, which addresses a need for acute emergency obstetric services for poor indigenous women and their families in rural highlands. This project is rights-based and therefore includes the women, families, community, and health worker and policymakers. As a result, as can be seen from statistical data gathered by MINSA, the number of women who used these services more than doubled and survival rates dramatically improved in addition, MINSA has established protocols and regulations that were based in CARE's field experience[76]. FEMME was a project that was first implemented in Ayacucho and was part of Averting Maternal Death and Disability (a program developed by Columbia University funded by the Bill and Melinda Gates Foundation) that focused on emergency obstetric care[77]. What is unique about CARE is that the organization understood that there would be many barriers to reaching their goal of providing emergency obstetric services. Challenges that were faced included transportation, many times there were no roads or buses in order to

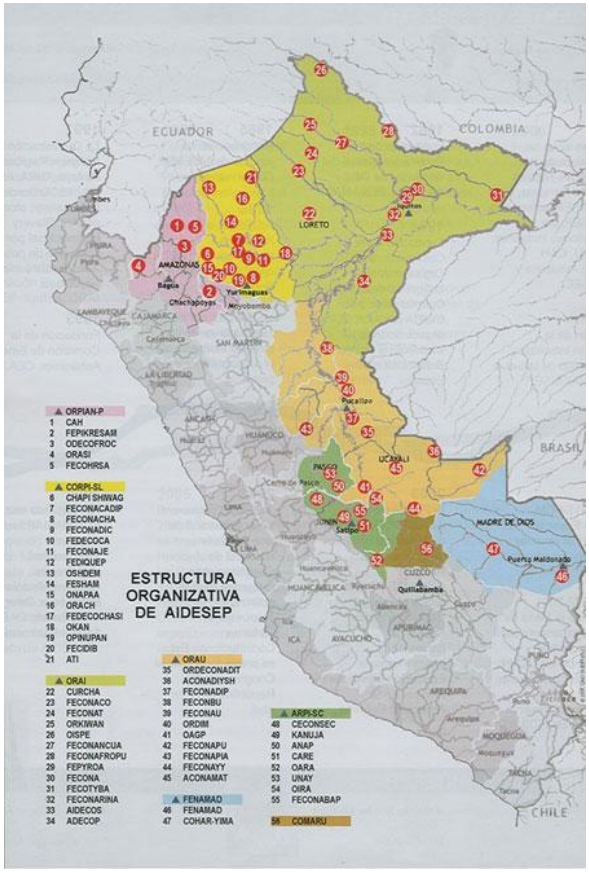
reach the nearest health care facility and when these facilities were reached, at times they were inadequate and not culturally appropriate. Almost 90 percent of the indigenous women who were seeking treatment spoke strictly Quechua, while the workers knew none, this caused women in Ayacucho to feel "culturally and emotionally mistreated by health center staff" which was one of the central reasons why many did not seek health care outside of their communities[78]. The staff was intimidating and un-understanding of the culture and tradition of these people. Understanding these issues allowed the FEMME project to be one of the most successful in reducing female mortality. There has been a great deal of working with the community and gaining their trust and decentralizing the health system. MINSA has also contributed to the success of this project, but providing training for health professionals. The Maternal Perinatal Institute in Lima developed a regional training system for Obstetric Emergencies for rural health personnel[79]. As a result, there has been a dramatic increase in the number of women who use the services in addition to a decline in maternal mortality (*see Figure 13*).



(*Figure 13, Source: CARE*)

The services offered by FEMME and MINSA are very important projects, because it demonstrates a collaboration between the indigenous population and the modern biomedical system, which when understood and allowed to work as a cohesive unit can improve health outcomes by a great deal. As programs such as CARE expand, there will be greater integration and trust between the indigenous communities in the rural areas and outskirts of Peruvian society to be better understood and cared for. The indigenous community, being highly neglected, has even created organizations within Peru in order to gain respect as citizens and force there to be a greater understanding of their culture and needs.

In 1992, Asociasión Interétnica de Desarollo de la Selva Peruana (AIDESEP) worked in conjunction with a NORDECO, a Danish company in order to establish funding for an indigenous health system and as a result, there have been established programs that promote indigenous health[80]. AIDESEP is not located in one region of Peru, but throughout the vast rural communities in which indigenous populations are found (*see Figure 14*).



(Figure 14, Source: www.aidesep.org)

AIDESEP covers a great deal of rural communities in the most isolated regions of Peru. AIDESEP not only supports and helps indigenous women in the realm of maternal health, but also functions as a voice for indigenous people. They are part of the Conferencia Permanente de los Pueblos Indígenas de Perú (COPPIP), which also brings together rural unions and aims to represent indigenous organization from the coast, jungle and mountains in the political arena. They see themselves as a modern organization that defends their property, strengthens their community and fights against their weakness and always seek a democratic means to resolve issues. As result of such movements and dedication, AIDESEP has established programs such as Programa Mujer Indígena, which

educate indigenous women not only in the aspects of politics, but also in health. The specific objectives of this program is to educate women in their rights, and also focused on incorporating women in the organization on a national, regional and local level. This is important due to the fact that there are usually very strong gender roles in these isolated communities and women do not usually participate, this gives women greater power and a voice that will allow them to impact policy that will relate to their needs, such as transportation and health care. In addition, it is important to keep in mind that AIDESEP represents indigenous communities, which do not want to renounce their traditional medicine, but rather reinforce the system.

The establishment of the Programa Salud Indígena works to improve indigenous systems of help. The programs also facilitate knowledge exchange and communication between the shamans and the health care professionals[81]. The program seeks to better understand the ancient shamanic system and understand what their experiences are as well as their knowledge through shamanic meetings and thought exchanges with other shamans. The program also seeks greater integration between indigenous professionals in the realm of sanitation and health and the objectives of the program. In addition, the program seeks to create better communication between MINSA and these isolated regions and make indigenous issues a greater part in policy and legislation when concerning health. As a result of their efforts, there have been establishments that have focused on the indigenous practices and understanding their indigenous system through regional governments, such as that of Ucayali[82]. Although there is not a specific focus on maternal health by this NGO, it demonstrates the importance of integration between the two systems. One cannot be overrun and be expected to be submissive, because this is

thousands of years' worth of tradition that cannot be changed overnight. Collaborations such as these demonstrate that when both are integrated, there are positive outcomes in the realm of health and politics. Recently, AIDESEP and the Peruvian government have come into conflict. During the past year, the government of Peru, led by Alan Garcia, has been disregarding AIDESEP's urges to protect indigenous environments and to respect indigenous land. This in turn has led to violent conflict. In a World Report on maternal health; Peru has demonstrated its vast improvements on maternal health and prenatal care. In the Cusco region of Peru, there are established health clinics in the rural areas. These clinics have been most helpful to the pregnant women of the area, it has been recorded that most women visit the clinic for check-ups and for delivery; as a result, no maternal deaths have been reported in the region as of 2005[83].

International support and action within Peru has proven to "fill in the gaps" that MINSA has not been able to reach, but they are also important not simply for providing health services that are varied, from HIV/AIDS to nutrition, and to the issue of maternal health, but also in creating a working system that MINSA has integrated and adopted as their health care system. NGOs such as PIH and CARE attempt to understand the culture and attempt to change behavior through education and not force, creating a stable community and stable behavioral change that is not antagonized by the change in infrastructure and health care provided. It is important that organizations such as these continue to provide healthcare and work with governments to create permanent programs such as the TB program, HIV/AIDS, and *Mamawasis* in order expand the reach of the healthcare system, especially in countries like Peru, where the geographic regions and the isolation of the indigenous people inhibit proper health care to be administrated.

Chapter 5: Policy Recommendations

In order for Peru to achieve effective health care, there are many policies that must be reinforced and different approaches that must be taken in order for Peru to achieve effective and efficient health care. One of the most important actions that MINSA and Peru must undertake is the integration of the indigenous population into the Peruvian society. In order to achieve integration and efficiency, Peru must set short term and long term goals in order to integrate current programs that have shown an increase in the health of the regions and cities they attend and their understanding of tradition and culture within the indigenous communities.

Short Term

In order for Peru to efficiently undertake a large task such as integrating an entire population in addition to expanding comprehension of indigenous medicine and culture, Peru must first support established programs, they must slowly expand their scope of health care, they must educate the people working at health care facilities, and they must begin to show the indigenous community respect. Although Peru has made many declarations to improve the health of the indigenous people, they remain a marginalized group who are not paid attention to unless there is attention brought to them by outside

organizations. The indigenous populations are impacted the most by climate change, disease, and multinational projects that impact the environment around them. In order for Peru to be truly effective at reaching these communities, indigenous rights must be firmly established and upheld by the government.

Indigenous Rights

The current conflict between indigenous groups such as AIDESEP and the Peruvian government must be reconciled. Although this conflict is focused politically, it is an important step to gaining the trust of the indigenous community, by recognizing that they too have rights as Peruvian citizens. As stated previously, many indigenous people are not even registered as citizens because they do not have access to administrative services in order to complete such a process, this must be the first issue to be dealt with. Peru is divided into 25 different districts, and each district contains different population and access to services.

The Peruvian government has written legislation in order to expand indigenous rights, yet, the laws have a narrow scope. Law No. 28736 gives rights to indigenous villages in the Amazon. This law gives these villages protection in addition it also gives them rights, in article 8, these communities are given all rights under the Constitution. In addition, article 4 gives these groups protection under the government including a.) protection of life and health development in addition to b.) protecting their culture and traditional methods and recognizing their beliefs as part of their identity, c.) recognize their right to posses the land they occupy, d.) guarantee their free access and use of extensive lands and the natural resources that are part of their tradition, and e.) establish

indigenous reserves over the areas that they occupy[84]. Under article 8, they are required to work with and respond to the Institute of Development of the Andean Village, the Amazons and Afro-Peruvians (INDEPA) in order to coordinate with the health sector, agriculture and the interior[85]. The Peruvian government has established law in order to protect the indigenous communities native to Peru, but must first reinforce and actively support this legislation. Peru has also passed legislation that encompasses all Peruvian citizens under article 2 of Law No. 27657, which establishes that the Ministry of Health must regulate and promote health interventions under the National System of Health through the development of people through promotion, protection, recuperation, and rehabilitation[86]. In order for indigenous peoples of Peru to gain benefits from MINSA and the government, they must be citizens. First, Peru must recognize its indigenous groups as citizens and in order to secure citizenship among the indigenous populations, the Peruvian government must make administrative services widely available either by A.) establishing administrative services in rural locations by establishing them slowly from one district to the next or they must B.) use grassroots workers to reach out to rural communities through triage and establishing citizenship in these communities and also expanding this process from district to district. Ideally, both processes would be used in order to universally cover indigenous populations so that they may have access to the same rights as all Peruvians. Peru's government must also work closely with indigenous groups such as AIDESEP and COPPIP in order to truly create collaborative and effective legislation that heavily affects indigenous populations. In addition to such a program, it is important to educate workers on culture and traditional practices that occur in these

regions in order to create comprehension, tolerance, and trust between the workers and the communities.

Indigenous Health

Second, MINSA/Peru has collaborated a great deal with its member states in regards to the issues faced by the indigenous communities regarding health and treatment. Peru has sought assistance from its neighbor states in PAHO and from other agencies such as USAID and has signed on to resolutions set by PAHO. MINSA must honor legislation that it has passed, especially under their goals to offer health care and their adoption of the CARMEN initiative developed by PAHO, which was developed as a tool in order to assist member countries to meet the challenge of achieving "Health for All," and is now used as a forum for countries to collaborate and learn from each other in order to reduce the burden of non-communicable diseases[87]. In addition, the WHO/PAHO and MINSA have declared efforts and support for the of integration between indigenous medicine and modern biomedical medicine, and these efforts should be honored. Under Resolution CD40.R6 of PAHO, Peru has agreed to eliminate inequities and strive for great health coverage[88]. MINSA should strive for these principles, such as incorporating indigenous medicine into the health system, and allowing for greater transparency between citizens and the Ministry of Health in order to provide information and assistance of services.

Third, under these policies, MINSA should also continue to administer programs that have been established by NGOs and other international organizations. Implementation of programs established by international organizations has resulted in

many positive health outcomes. Peru should continue with these programs in order to minimize disease, raise awareness and reduce mortality. The most significant and well known of the programs and strategies are:

- DOTS
- VIGIA
- MAMAWASIS

Programs such as these have provided a wide array of services and health promotion in Peru, including both the indigenous populations (who are most hit by disease and maternal mortality). As stated previously, the efforts of DOTS have provided medicine and awareness about tuberculosis. Efforts made by programs such as VIGIA should be followed and be made models of how to effectively reach out to indigenous and poor communities. VIGIA is also an outstanding model of effective health care.

Peru has gathered scientific evidence to implement multi-drug therapy in order to combat drug resistant malaria in great part due to the creation of the VIGIA project (confronting the threat of infectious, emergent, and re-emerging diseases) which has managed to monitor and distribute drugs due to financial assistance from both USAID and MINSA. VIGIA has managed to gain success due to malarial intervention methods such as health promotion and drug distribution in highly susceptible areas such as Loreto in addition to education programs that also educate not only in malaria prevention but also in the prevention of dengue, HIV/AIDS, and infectious diseases[89]. Peru has set up labs, such as the National Reference Laboratory of Malaria of the National Health

Institute, to identify the microorganism and to develop drugs that combat malaria. With Project Vigía, MINSA has also set up evaluation and monitoring at the local level in order to collect data and allow smaller groups to work more effectively not only in data collection, but the distribution of drugs and education. VIGIA's campaign also distributes audiovisual material, including pamphlets and recordings in order to communicate the prevention of malaria and other diseases[90]. With collaboration from the private sector and the government, the decline of malaria has been a successful policy. Peru has managed to lower the incidence and prevalence of malaria cases throughout the years with the assistance of local governments and education centers and general health improvements. Continuing with projects such as these allows for greater outreach to communities and access that can cause the reduction of disease and mortality. For examples, the policy that MINSA has developed for maternal mortality has was originally a program led by CARE, and has now become a comprehensive policy for combining traditional medicine and modern biomedical practice.

Fourth, there must be greater investment into infrastructure. This means the building of roads and expanding the transportation system. There are at times no roads that reach indigenous and rural areas, therefore there is no transportation, but this must change in order to properly expand and incorporate indigenous populations into the health care system. The building of roads would cause greater access to the rural areas and the expansion of the transportation system would minimize valuable time during emergencies, such as emergency obstetric care.

Fifth, the current programs that are developed are spread out in different regions of Peru, MINSA must continue to support these programs and fund them, but they must also spread these benefits to other departments. In order for MINSA to fully cover the indigenous people in the vast regions of Peru, there must be slow integration of the rural sector into the health care system. It must be understood that these communities have their own health care system and this must in turn be respected and incorporated into the system. If specific practices can harm health due to hygiene or other factors, education must also be incorporated into the system, which allows trust to be built between health care workers and the community. Successes of such cooperation can be clearly seen through the use of the *Mamawasis*.

Sixth, MINSA has already established labs and facilities in order to study and understand diseases, as this progresses and expands, there should also be research into indigenous practices concerning herbal remedies. Many of these plants have a medical base and can be used for modern medical purposes. In addition to these facilities, MINSA has established data collection facilities in order to monitor the programs taking part in the health care system. MINSA should gradually collect data on knowledge and practices that compose traditional medicine. What are considered true attributes of traditional healers? Data should be collected by healers (chamanes-curanderos) in both the urban and rural setting. Although MINSA has called for transparency, with greater integration of indigenous practices and herbal remedies, it is important to also expand efforts to the rural communities.

Peru must also find a balance between the use of NGOs and MINSA. NGOs have played an important part of increased health care and increased life expectancy, especially in impoverished areas, these cannot be negated. Pressure from the international community has allowed great progress to be made in these sectors. Through strong establishments of health care facilities that work with indigenous communities and the progressive growth and spread of these facilities to other departments, Peru can achieve great health care in the short term and the long term.

Long Term

Peru's progress can be noted through data collection and monitoring through the INEI and the WHO and UNICEF. In the long term, the evolution of short term policies will establish a stronger and well integrated indigenous and modern biomedical system.

First, with the expansion of administrative services, this would give a greater voice to the indigenous community and through the evolution of the short term policies. The eventual result would be universal administrative services in rural communities in addition to educational facilities in order to incorporate both indigenous practices and modern biomedical practices.

Second, legislation would allow greater transparency, and through the administrative services, there would be greater opportunities for indigenous voices to be heard and more policies that are concerns of the indigenous people. In addition, groups such as AIDESEP should be incorporated as a voice of the indigenous communities and

not enemies, this way giving a political voice that supports indigenous rights, especially rights related to health care.

Third, the role of NGOs on the ground involvement would decrease because MINSA would train and use Peruvians as workers in these communities. The presence of NGOs and the international community would not disappear, but Peru would rely more on its resources after programs and legislation has established strong and long standing services.

Fourth, the building on infrastructure would increase access and services to these regions. Although the indigenous communities would most likely become fully integrated into the urban sector, roads and transportation would give them better access and increase chances of survival in medical emergencies. Women would not have to travel for days to the nearest health facility while in labor and there would be an increase in maternal survival and the survival of many people do to greater medical access.

Fifth, health care facilities would continue to remain in the regions and departments in which they were originally established, but with the spread of the facilities, there would be universal access to facilities. Over a period of years, Peru would spread their facilities and services from the most urban sectors to the rural sectors in Peru, improving health outcomes.

Sixth, labs and monitoring are very important in order to properly calibrate the success of the policies and programs that have been established by a state. Peru's labs are very important in combating disease, but the long term goal of these labs would be to

research herbal remedies and learn from the knowledge of the indigenous people in order to manufacture and use these herbs on a greater scale. In order to verify the success of such policies and actions, monitoring systems must be installed. Peru has managed to carry out censuses conducted by the INEI, but it must also share this data in order to truly calculate success. If there are no significant improvements, then this data would allow for proper action to be taken. In addition to collecting data and generating statistical information, from information gathered, a database such as the National Center of Complementary and Alternative Medicine (in the United States) can be created and its information can be vastly accessed by those who do not completely understand traditional medicine. This can also provide alternative and complementary types of assistance in health.

The integration of not only indigenous practices is important when considering the short term and long term policies of health, but indigenous rights also play a role. The understanding of culture and practices allows for greater comprehension between the traditional health care system and the modern biomedical system. MINSA has developed the National Center of Intercultural Health (CENSI), which is a solid foundation that MINSA can expand upon, focusing on integration and use of traditional medicine and modern biomedicine. Without indigenous rights and the fulfillment of these rights, indigenous people are allowed to be poor and rural citizens outside of society, or at times they are not even considered citizens and are therefore denied access to the benefits of health care that other Peruvians are obliged. The Peruvian government has declared many promises to the Peruvian people especially in the rural and indigenous regions, and must honor legislation in order to truly achieve effective health care. There are many steps

required before MINSA can perform these tasks, such as integration of the indigenous people and comprehension of these communities. The question that remains is whether or not these two systems can coexist and what their futures may be.

Chapter 6: Conclusion—The Future of Medical Pluralism in Peru

Peru is not the only country that makes use of traditional or alternative medicine. It is possible for there to be comprehensive information on practices and wide availability of service listings, as United States has done under the National Center for Complimentary and Alternative Medicine (CAM). The services that are available within the country are categorized and described, as are the reasons for use. According to CAM, complimentary medicines are taken in conjunction with modern medicines while alternative medicine is taken in place of conventional medicine. Peru does not have classifications such as these, because traditional medicine seems to be most heavily concentrated in the rural areas. But in order to truly gain a wide coverage and understanding of "alternative" and "complimentary" medicine, efforts must be made in order to educate the surveyors gathering the data in culture and language of the indigenous people. Without this training, rural communities will not be able to trust or communicate with the surveyors. In order to truly integrate the two systems there must be understanding on both parts of culture, and programs for the promotion of sanitation and health.

Peru has proven that there are great attempts at reconciling traditional and modern biomedical practices and medicine, especially in the realm of reducing maternal

mortality. Although traditional medicine is prominent in rural areas, it has been seen as a growing trend in Peru, such as the use of the curanderos in the urban sectors. Despite the growing use of traditional medicine in urban areas, there has not been significant outreach to collaborate with indigenous groups and understand their culture and tradition. There has been collaboration in the realm of maternal health, in order to reconcile both traditional medicine and modern biomedicine, yet, efforts to integrate indigenous groups as true Peruvians appears to have raised a great deal of conflict. Peru has recently fallen to conflict that has arisen from indigenous groups such as AIDESEP, who feel that their right have been violated, and the government, who has blatantly disregarded indigenous rights.

Conflict has recently developed due to the fact that Alan Garcia, President of Peru, has given the Franco-British company, PERENCO, exploration and production rights of Lot 67 for oil. This land actually runs through a large portion of the Peruvian Amazon, home to many indigenous Amazonian people. This in turn has attracted much resistance from AIDESEP. According to the Peruvian law, lands that have been occupied by indigenous groups are protected lands and are considered property of the indigenous groups that inhabit the land, this new policy taken by the Garcia government is a clear violation of indigenous rights. These types of high conflict situations make indigenous groups feel vulnerable and give them confirmation that they should not trust the government, giving them credence to rely heavily on their immediate communities rather than the government. Situations such as this halt the progress of outreach programs instituted by the government, especially in the realm of health care. According to PAHO, there has been much effort to integrate and collaborate with the indigenous practices and

traditions in relation to healthcare, but there appears to be a very obvious struggle between the indigenous people and the government of Peru. In order for MINSA to be an effective tool of well-being and health, the Peruvian government must reconcile differences with the indigenous population.

Peru has potential to reach universal healthcare under the integration of traditional and modern biomedicine and in addition to integrating and collaborating with traditional healers and health practices, such as can be seen in the creation of *mamawasis*, which are able to use traditional medicine and methods in a safer location in case of complications. The problems that must be overcome are numerous, which begin with indigenous human rights, which must be fulfilled in order for greater participation and collaboration of the community to occur in remote regions. The indigenous population has been marginalized in the past and this continues to be an issue presently, as a result, indigenous populations have shied away from government and authority with much mistrust. It is important to recognize that traditional medicine in rural communities is the rule. Alternatives to their health care system are not widely available in these areas. On the other hand, in the urban sector, there are many different types of "alternatives" to modern conventional medicine, such as the chamanes and curanderos. It is important for future policy to embrace the use of traditional medicine as a compliment to conventional medicine, from this collaboration. Many successes can arise, such as the reduction of maternal mortality in rural areas with the assistance of the *mamawasis* program. The *mamawasis* demonstrate how the two systems can work, one does not necessarily be better than the other, but they can both co-exist for those who have strong traditional beliefs and for those seeking alternatives health care in urban areas. There has been a

great deal of discrimination and stigma against indigenous groups and traditional medicine from the side of modern biomedical practitioners, which has been most detrimental to progress in the health care sector, such as inefficient and insufficient services at health out posts in rural areas, but using programs, such the one CARE has established and been supported by MINSA, there can be a significant health care reform and positive change that will impact not only the poor on the outskirts of urban centers, but also indigenous populations that are the most isolated from health facilities and government services in Peru.

Endnote References:

[1] World Health Organization—"Traditional Medicine," Programmes and Projects, Media Centre, Fact Sheets, Fact Sheet No. 134
[2] Bussman, Rainer and Sharon, Douglas, "Traditional Medicinal plant use in Northern Peru: Tracking two thousand years of healing," *Journal of Ethnobiology and Ethnomedicine*, Nov. 2006 2:47
[3] Ibid
[4] "Chamanes-curanderos Medicina Tradicional en Peru" www.wanamey.org/articulos/medicina-tradicional-curaciones-peru.htm Mar.13, 2010
[5] Greenway, Christine, "Hungry Earth and Vengeful Stars: Soul Loss and identity in the Peruvian Andes," Soc. Sci. Med. Vol. 47, No. 8, Great Britain, 1998
[6] Ibid
[7] Greenway 1998
[8] Greenway 1998
[9] Ibid
[10] Larme, Anne C., "Environment, Vulnerability, and Gender In Andean Ethnomedicine," Soc. Sci. Med. Vol. 47, No.8, Great Britain 1998
[11] Larme 1998
[12] Greenway 1998
[13] Larme 1998
[14] Larme 1998
[15] De Feo, Vincenzo, "Ethnomedical field study in northern Peruvian Andes with particular reference to divination practices," *Journal of Ethno-Pharmacology*, 85 (2003)
[16] De Feo 2003
[17] "Chamanes-curanderos" 2010
[18] De Feo 2003
[19] Greenway 1998
[20] Ibid
[21] Bolin, Inge, "Growing up in a Culture of Respect: Child Rearing in Highland Peru," University of Texas Press: Austin 2006

[22] Bolin 2006
[23] Ibid
[24] Bolin 2006
[25] Ibid
[26] Bolin 2006
[27] Ibid
[28] Bolin 2006
[29] INEI 1998
[30] INEI 1998
[31] Wessendorf, Kathrin, "The Indigenous World", Copenhagen 2008
[32] Palomino, Maria Luisa, "Peru Embraces Vertical Births to save lives," Reuters, July 11, 2008
[33] CDC Reproductive Health
[34] Amnesty International, "Fatal Flaws: Barriers to Maternal Health in Peru", 2009
[35] Ibid
[36] Amnesty International 2009
[37] Ibid
[38] Amnesty 2009
[39] Ibid
[40] Suarez, Ray, "In Peru, Life for the Life-Givers," The Rundown, PBS News Hour March 29, 2010

[41] Amnesty 2009
[42] Ibid
[43] Pan American Health Organization, Health Situation Analysis and Trends, Peru
[44] Ibid
[45] Pan American Health Organization, Regional Core Health Data System, Country Profile, Peru
[46] Ibid
[47] PAHO Health Data
[48] World Health Organization, TB Country Profile: Peru, Surveillance and Epidemiology

[49] Ibid
[50] PAHO, Technical Documents, Country profiles, Tuberculosis
[51] USAID, Infectious Diseases, Peru (www.usaid.gov)
[52] World Health Organization, Tuberculosis (TB): Pursuing high-quality DOTS expansion and enhancement (www.who.org)
[53] Ministerio de Salud, Peru, Instituto Nacional de Salud, INS Impulsa Constucción de laboratorio referencial para diagnostic de tuberculosis en Lima este (16/01/2006) (www.ins.gob.pe)
[54] MINISTERIO DE SALUD - Semana de la Maternidad Saludable y Segura 2002-
[55] Ibid
[56] UNICEF, Devpro Resource Centre, Programme, Peru, Mamawasis
[57] Jennifer Goy and David Waltner-Toews, "Improving Health in Ucayali, Peru: A Multisector and Multilevel Analysis," EcoHealth Journal Consortium 2005
[58] Palomino 2008
[59] Minesterio de Salud, Campañas & Especiales, Lactancia Materna 2009
[60] Minesterio de Salud, Peru
[61] WHO Core Health Indicators, Country Profile, Peru
[62] Ibid
[63] US Department of State, Country Profile: Peru
[64] PAHO, Peru
[65] CIA Fact book- Peru 2006
[66] UNICEF, www.childinfo.org, Peru

[67] UNDG, RCAR 2008
[68] Pan American Health Organization, Health Situation and Analysis Trends, Peru
[69] USAID-Peru, Health Report November 2009
[70] USAID, Infectious Diseases, Peru (www.usaid.gov)
[71] UNICEF, Peru, UNICEF en el Peru (www.unicef.org/peru)
[72] Medecins Sans Frontieres, About Us, History and Principles, (www.doctorswithoutborders.org)
[73] Ibid
[74] Doctors Without Borders, "Trading Away Health" August 2003
[75] Partners in Health, Peru/Socios en Salud (www.pih.org)
[76] CARE, Maternal Health, (www.care.org)
[77] CARE, Voices from the Village: Improving Lives through CARE's Sexual and Reproductive Health Programs, The FEMME Project in Peru: Partnerships for Improved Health, May 2007
[78] Ibid
[79] CARE 2007
[80] Søren Hvalkof, *Dreams Coming True: An Indigenous Healthcare Programme in the Peruvian Amazon*, IWGIA, 2005
[81] AIDSEP, Programas, Programa Salud Indígena (www.aidesep.org)
[82] Ibid
[83] World Report—Peru Makes progress on maternal health
[84] Ley No. 28736, El Congreso de la Republica, Ley Para La Proteccion de Pueblos Indigenas u originarios en situacion de aislamiento y en situacion de contacto inicial
[85] Ibid
[86] Ministerio de Salud, Rexolucion Ministerial, Expediente No. 07-068112-001, que contiene el Oficio 5970-2007-DGSP/MINSA, de la Direccion General de Ssalud de las Personas
[87] Technical Consulation on a Multi-Stakeholder Forum for Prevention and Control of Chronic Disease in the Americas: March 23-24, 2009, Washington DC, www.paho.org
[88] PAHO, Division de Desarrollo de Sistemas y Servicios de Salud Marco Estrategio y Plan de Trabajo 199-2002, Salud de los Pueblos Indigenas, Washington, D.C., Marzo 2000
[89] Ministerio de Salud, Peru, Peru: Primer País en América que cuenta con política de medicamentos contra la malaria, 25/07/2008, (www.ins.gob.pe)
[90] Proyecto Vigía MINSA/USAID, Lineas de acción: Malaria y otras enfermedades transmitidas por vectores (www.minsa.gob.pe/pvigia)

Bibliography

AIDSEP, Programas, Programa Salud Indígena (www.aidesep.org)

Aiello, Kristina, "Peru's Cold War against Indigenous People," Worldpress.org, July 19th, 2009

Amnesty International, "Fatal Flaws: Barriers to Maternal Health in Peru", 2009

Amnesty International,
-Reports, Peru, July 9th, 2009,
-Peru: Maternal Mortality-Facts and Figures & Case Studies, July 9th, 2009
(http://www.amnesty.org/en/news-and-updates/report/hundreds-peru-poor-rural-indigenous-pregnant-women-die-health-service-lottery-20090709)

Anniether, "National Statistics Institute: Peru is home to 1,876 indigenous communities," Peruvian Times, February 18th, 2009

Anniether, "UNICEF: Peru has made "enormous progress" in reducing child deaths and adapting maternity services to rural cultures," Peruvian Times, February 28th, 2009

Arboleyda C., Ruth E., *Mariátegui y el Indeginismo Revolucionario Peruano*, Mexico : SEP, Instituto Nacional de Antropologia e Historia, 1979

Baines, John M., *Revolution in Peru: Mariátegui and the Myth*, University of Alabama Press, 1972

"Bid to Protect Indigenous Traditional Knowledge in Peru Successful,"
(http://indigenouspeoplesissues.com/index.php?option=com_content&view=article&id=1426:bid-to-protect-indigenous-traditional-knowledge-in-peru-successful&catid=53:south-america-indigenous-peoples&Itemid=75)

Bolin, Inge, "Growing up in a Culture of Respect: Child Rearing in Highland Peru," University of Texas Press: Austin 2006

Bravo, Miguel, "Proyecto sobre medicina tradicional seria evaluado por el MINSA,"
(http://tvo-peru.com/2009/05/18/proyecto-sobre-medicina-tradicional-seria-evaluado-por-el-minsa/) May 18th, 2009

Brown A. et al., "On the Front Line of Primary Health Care: The Profile of Community Health Workers in Rural Quechua Communities in Peru," *Human Resources for Health*, 4:11, 2006

Broad, William J., "Applying Science to Alternative Medicine," New York Times: Science, September 30th 2009

Bureau of Western Hemisphere Affairs, Peru, U.S. Department of State, January 25th, 2010

Bussman, Rainer and Sharon, Douglas, "Traditional Medicinal plant use in Northern Peru: Tracking two thousand years of healing," *Journal of Ethnobiology and Ethnomedicine*, Nov. 2006 2:47

CARE, Voices from the Village: Improving Lives through CARE's Sexual and Reproductive Health Programs, The FEMME Project in Peru: Partnerships for Improved Health, May 2007

CDC Reproductive Health (www.cdc.gov)

Centro Nacional de Salud Intercultural, Misterio de Salud, (http://www.ins.gob.pe/gxpsites/hgxpp001.aspx?2,8,14,O,S,0,MNU;E;1;21;MNU;,)

"Chamanes-curanderos Medicina Tradicional en Peru" www.wanamey.org/articulos/medicina-tradicional-curaciones-peru.htm Mar.13, 2010

Chavarría, Jesús, *José Carlos Mariátegui and the Rise of Modern Peru, 1890-1930*, University of New Mexico Press, Albequrque 1979

Chelala, Cesar, "Health in the Andes: The Modern Role of Traditional Medicine (Part II)," The Globalist, May 11th, 2009

CHIRAPAQ (http://www.chirapaq.org.pe/es/)

CIA Fact book- Peru 2006 (https://www.cia.gov/library/publications/the-world-factbook/)

Country Studies: Peru (http://countrystudies.us/peru/34.htm)

Davies, Jr., Thomas M., *Indian Integration in Peru: A Half Century of Experience, 1900-1948*, University of Nebraska Press, Lincoln 1970

De Feo, Vincenzo, "Ethnomedical field study in northern Peruvian Andes with particular reference to divination practices," *Journal of Ethno-Pharmacology*, 85 (2003)

Dudenhoefer, David, "Peruvian Government, Amazonian Indigenous Groups Remain Deadlocked," Environment News Service, June 15th, 2009

El Comercio, "El censo del 2007 registró 93 mil nativos amazónicos más que en 1993," February 10th, 2009, (http://elcomercio.pe/noticia/244004/censo-2007-registro-93-mil-nativos-amazonicos-mas-que-1993)

EsSalud, (http://www.essalud.gob.pe/)

Greenway, Christine, "Hungry Earth and Vengeful Stars: Soul Loss and identity in the Peruvian Andes," Soc. Sci. Med. Vol. 47, No. 8, Great Britain, 1998

Jennifer Goy and David Waltner-Toews, "Improving Health in Ucayali, Peru: A Multisector and Multilevel Analysis," EcoHealth Journal Consortium 2005

Grady, Denise, "Pregnancy: Clinic in Rural Peru Draws More Women by Following Local Childbirth Traditions," New York Times, Health, September 7th, 2009

Guerra, Isabel, "Indigenous organizations in Peru demand more participation in governance," Living in Peru, April 15th, 2010

IEP Instituto de Estudios Peruanos (http://www.iep.org.pe/)

International Women's Health Coalition, Overview and History of IWHC's work in Peru, (http://www.iwhc.org/index.php?option=com_content&task=view&id=2290&Itemid=486)

Instituto Nacional de Estadística e Informática (*INEI*),

-Percepción de la Medicina Tradicional en Hogares Urbanos – ENAHO 1997 (http://www1.inei.gob.pe/biblioineipub/bancopub/Est/Lib0030/INDICE.HTM)
-Perfil Sociodemografico del Peru
-Peru:Estimaciones y proyecciones de pblacion, 1950-2050

Lama, Abraham, "Peru: Traditional Knowledge Enhances Modern Medicine," World Network, Third (http://www.twnside.org.sg/title/enhance.htm)

Lama, Abraham, "Peru-Health: Traditional Healers Takes on Congress," Inter Press Service English News Wire, March 30th 1996

Larme, Anne C., "Environment, Vulnerability, and Gender In Andean Ethnomedicine," Soc. Sci. Med. Vol. 47, No.8, Great Britain 1998

LEY DE ORGANIZACIÓN Y FUNCIONES DEL MINISTERIO DE SALUD, (http://www.minsa.gob.pe/ministerio/legal/dl584_lofminsa/index.htm)

Ley No. 28736, El Congreso de la Republica, Ley Para La Proteccion de Pueblos Indigenas u originarios en situacion de aislamiento y en situacion de contacto inicial
Mariátegui, José Carlos, *Siete Ensayos de Interpretación de la Realidad Peruana*, Caracas, Venezuela 1928

McDevitt, Thomas, "Population Trends: Peru," International Brief, (http://www.census.gov/ipc/prod/ib99-1.pdf)

Medecins Sans Frontieres, About Us, History and Principles, (www.doctorswithoutborders.org)

Ministerio de Salud, Peru, Instituto Nacional de Salud, INS Impulsa Constucción de laboratorio referencial para diagnostic de tuberculosis en Lima este (16/01/2006) (www.ins.gob.pe)

Ministerio de Salud, Peru, Peru: Primer País en América que cuenta con política de medicamentos contra la malaria, 25/07/2008, (www.ins.gob.pe)

Ministerio de Salud, Rexolucion Ministerial, Expediente No. 07-068112-001, que contiene el Oficio 5970-2007-DGSP/MINSA, de la Direccion General de Ssalud de las Personas

National Center for Complementary and Alternative Medicine, (http://nccam.nih.gov/)

PAHO, Division de Desarrollo de Sistemas y Servicios de Salud Marco Estrategio y Plan de Trabajo 199-2002, Salud de los Pueblos Indigenas, Washington, D.C., Marzo 2000

Pan American Health Organization, Health Situation and Analysis Trends, Peru (www.paho.org)

Partners in Health, Peru/Socios en Salud (www.pih.org)

Palomino, Maria Luisa, "Peru Embraces Vertical Births to save lives," Reuters, July 11, 2008

Portillo, Zoraida, "Medicinas tradicional y occidental se unen en Perú", SciDev, June 29th, 2005

Proyecto Vigía MINSA/USAID, Lineas de acción: Malaria y otras enfermedades transmitidas por vectores (www.minsa.gob.pe/pvigia)

Rousseau, Stéphanie**, "**The Politics of Reproductive Health in Peru: Gender and Social Policy in the Global South," Social Politics: International Studies in Gender, State & Society 2007 14(1):93-125

Salazar, Milagros, "Birthing Houses Combine Native Traditions, Modern Medicine," IPS, September 15th, 2008, (http://ipsnews.net/news.asp?idnews=43877)

Salazar, Milagros, "Peru: Oil Pipeline and Uncontacted Tribes," Inter Press Service, April 8th 2010

Søren Hvalkof, *Dreams Coming True: An Indigenous Healthcare Programme in the Peruvian Amazon*, IWGIA, 2005

Suarez, Ray, "In Peru, Life for the Life-Givers," The Rundown, PBS News Hour March 29, 2010

Technical Consulation on a Multi-Stakeholder Forum for Prevention and Control of Chronic Disease in the Americas: March 23-24, 2009, Washington DC, www.paho.org

UNDG, RCAR 2008

UNFPA, State of World Population 1996, (http://www.unfpa.org/swp/1996/ch2.htm)

UNICEF, Peru, UNICEF en el Peru (www.unicef.org/peru)
-Programme précis--Mamawasis (waiting houses) for safe motherhood in rural Peru

United Nations, Economic and Social Affairs, "World Population Prospects," The 2006 Revision

USAID, Peru (www.usaid.gov)
-Infectious Disease
-Health

USAID-Peru, Health Report November 2009

Wessendorf, Kathrin, "The Indigenous World", Copenhagen 2008

World Health Organization, (www.who.int)
-Tuberculosis (TB): Pursuing high-quality DOTS expansion and enhancement
-Surveillance and Epidemiology
-Country Profile
-Cultural adaptation of birthing services in rural Ayacucho, Peru
- Maternal Mortality in 2005