Staving	g Well o	n the	Margins	of the	Formal	Economy:

Exploring occupational health and treatment among Peruvian vendors in the urban marketplace

Amy Blaisdell

Abstract

With a growing percentage of the world's population living in urban areas, many people in cities are increasingly participating in economic activities on the margins of the formal economy. Many such workers generate income by vending goods on a small-scale level in and around traditional open-aired marketplaces. As a setting for health, marketplaces have been studied largely in the interest of consumer safety but less in terms of occupational health. This study explores the health of market vendors with a health promotion lens. It assumes health to be a holistic concept that considers the physical and psychosocial affects that vendors experience as a result of their work. Situated in the Andes, I describe how traditional concepts of health and well-being related to social reciprocity and ritual payments to the natural surroundings inform vendors' everyday health practices in a market located in the city of Arequipa, in the southern Andes of Peru. Data interpreted through socio-economic frameworks describes how one's social status, inside and outside the market, as well as social networks, affect health and rationale of treatment choices, largely in terms of biomedical and traditional methods. It was found that the nature of vendor's work represents a challenge to maintaining health in relation to both biomedical and traditional health practices. Findings suggest that treatment decisions may be motivated by demands of work, but also made as a means to re-enforce social relationships that go on to support one's economic well-being.

Keywords: small-scale trade, marketplaces, occupational health, health promotion, traditional medicine, biomedicine, treatment systems, medical pluralism

Contents

Acknowledgn Abbreviation. A note on pre	i ii iii	
Introduction	1	
1	Background	6
2	Theory & Methods	25
Findings		
Outlin	40	
Part I	41	
3	Health Risks of Vending	42
4	Health Benefits of Vending	54
Part I	61	
5	Everyday Health Practices	62
6	Informing Health Ideas & Behavior	73
Part I	81	
7	Biomedicine	82
8	Traditional Medicine	95
Concluding 2	116	
Appendixes	121	
Sources	123	

Acknowledgements

I'd like to express my sincerest gratitude to the vendors at the Feria Altiplano without whom, this study would not be possible. Your enthusiasm, generosity and the laughs we shared made fieldwork a true joy and I am forever humbled by your stories.

I also wish to thank my incredibly welcoming and hospitable host family in Arequipa for contributing to such a wonderful and memorable experience. The time I spent with you greatly enhanced my understanding of daily life in Peru and informed much of my research. Many additional thanks for ensuring my safety and well-being during my stay.

To my dedicated and encouraging thesis advisor, Cecilie Ødegaard, a wholehearted thank you for agreeing to take on a student outside of your academic discipline. Without your commitment, I would not of had the opportunity to design a project that I feel so passionate about. You have given more of yourself to this thesis than I ever expected and your brilliance inspires me.

Thank you to the faculty at the Department of Health Promotion at the University of Bergen in Norway for equipping me with the skills that instilled in me a sense of professionalism and competence while carrying out this project. To my fellow students, the moral support during the past two years was invaluable to me. The bonds we have created are irreplaceable. A special thank you to Marie for helping to organize my data.

The writing of this thesis was aided a great deal by public libraries, and also by the generous alumni privileges at the University of New Hampshire, Durham. The blueberry coffee on your campus fueled much of this work.

I am appreciative to the organization Partners in Health, who provided a stimulating environment to spend time during the period I wrote this thesis. Also I'd like to recognize to their co-founder, anthropologist and medical doctor Paul Farmer, whose work inspired me to embark on a study of health promotion.

Lastly, thank you to my parents, family and friends who supported me at all stages of this process.

Amy Blaisdell Exeter, New Hampshire 8 May 2012

Abbreviations

CHI Comprehensive Health Insurance
ENAHO National Household Survey
ESSALUD National Social Health Insurance
IMF International Monitary Fund
INEI National Institute of Statistics

MINSA Ministry of Health

PAHO Pan American Health Organization

UN United Nations

WHO World Health Organization

A note on presentation of data:

Since data was collected in a noisy and sometimes hectic research setting where it was difficult to record participants, only statements quoted in Spanish, with English translations, represent participant's exact and electronically recorded words.

Quotes only in English reflect data that was documented by manually writing participants' words in a notebook.



Sun rising over the Feria Altiplano Market - Arequipa, Peru 12 September 2011

Introduction

When Alberto Fujimori assumed presidency of Peru in 1990, the country was in a precarious state. Throughout the 1980's Peru experienced violence from guerilla attacks that resulted in thousands of deaths, violence and destruction in rural areas (Conaghan, 2005). The economic loss associated with these attacks was significant and at the same time, inflation rates were rising. Between November 1989 and February 1990, inflation increased 2500% (Sachs & Paredes, 1991, p. 16) leading to decreased consumer buying power and high rates of unemployment. In an effort to bring Peru out of economic crisis, Fujimori implemented radical neo-liberal policies that aimed to deregulate the economy. The International Monetary Fund (IMF) supported Fujimori by giving him loans for programs that would promote Peru as a place for foreign business and international trade (Carrion, 2006). His reforms were effective in slowing inflation, but as a nation, Peru suffered in other areas. Increasing foreign investment led to privatization of public companies, which reduced government employment opportunities and wages (Klarén, 2000). Unemployment rose even more when the demand for natural resources that Peru's economy now relied on for foreign trade decreased (Ewig, 2010). To further finance his new polices, cuts were made to education, social programs and health care. In 1991, for instance, the public health system received just 15% of the funding it received in 1980 (MINSA, 1996, p. 26 as cited in Ewig, 2010, p. 79). Fujimori also initiated an extreme public health initiative where, in the name of "economic development", hundreds of thousands of poor and indigenous women were sterilized, many without consent (Ewig, 2010). These actions raise interesting questions as to how policy makers perceive health in relation to the pursuit of "economic development". Health is, after all, a prerequisite for a productive work force.

To understand the context of Peru's work force, it is important to highlight the large percentage of the population who live in urban areas—now standing at approximately 75.9% (INEI, 2007). This is a significant increase given the urban population of just 35.4% in 1940 (INEI, 2009, p. 43, table 4.1). Migration to cities can be attributed to several factors, including fleeing from the violence in rural areas, but also by a desire to better one's life—often supported by money making activities. However, a lack of regular employment opportunities due to a combination of the state of the economy, steep competition for jobs in

crowded cities, and lack of job skills valued in urban settings has led to a significant portion of Peru's working population to earn their living by participating in unofficial, or unauthorized, small- scale economic activities on the margins of the formal economy¹.

Un-authorized work is generally regarded as work that is undocumented, meaning workers do not pay taxes or receive regular pay and also do not receive benefits like sick leave or health insurance. This work is characterized by long hours in sometimes dangerous and uncertain conditions. In a 2007 WHO report on the protection of workers' health in "developing" countries, they state: "working conditions appear to be worse for workers employed in small enterprises, the self-employed, and workers in the informal sector. The risks they face are generally of a chronic, long lasting nature, herewith implying negative health consequences" (WHO, Houtman & Jettinghoff, 2007, p. 17). These workers are at higher risk of experiencing high blood pressure, depression, muscular skeletal disorders, type II diabetes and alcohol dependence (p. 22). Wilkinson & Marmot (2003) attempt to partially explain the connection between health and work with the "social gradient"; that is, those with jobs of lower status relative to others in the same setting tend to have lower levels of health. This may be due to factors such as less favorable work conditions and lack of benefits, but is also believed to be related to psychosocial considerations. It is thought for example that those on the higher social gradient, specifically in workplaces, have more opportunities to make meaningful decisions that contribute to a sense of self worth and confidence, leading to better health. The social gradient may offer a useful lens to explore the health of workers on the fringe of the formal economy since within the fringe there too may exist various levels of occupational status within particular classifications of unauthorized workers. Additionally, how those who participant in this work, are perceived by those of higher socio-economic status in society as a whole, may also affect health.

-

¹ While some may characterize such work as "informal" and belonging to the "informal economy" or "informal sector", these terms are problematic in that they assume a separation, and understatement, of the role of these economic activities in the development of a nation's economy (see: Hart, 1973; Bromley, 1978; de Soto, 1989). This study then will refrain from using the term "informal" in regards to work it tends to undermine the complexity, significance and often-times valuable opportunities that can characterize these economic activities. Instead, the terms "unauthorized", "unregulated" or "economic activities on the margins of the formal economy" will be used to describe work in this regard.

In Peru in 2001, it was estimated that 61.5% of the working population in urban areas were making their living in (as described by the INEI) "informal" work (INEI 2003). In urban Lima in 2007, over 30% of all "informal" workers made their living in commerce, meaning street vendors, retailers, stall vendors or micro enterprise managers (Aliaga Linares, 2010, Table 1 p. 8: calculations based on ENAHO Survey 2007). Assuming that the definitions of these categories may overlap, this study will focus on all those who participate in small-scale commercial activities, specifically in and around traditional open-aired marketplaces. These workers from this point forward, will be referred to as market vendors, or simply vendors.

A marketplace was chosen for this study since it represents many unique characteristics to consider relating to health, both positively and negatively. On the one hand, vending can be very demanding physically due to heavy goods and repetitive movements. This kind of work can also be mentally stressful due to economic uncertainty, theft and long hours. On the other hand, marketplaces may foster social networks, provide flexible work for mothers, and through market organizations, give opportunities to organize for better work conditions. These aspects of work can be health promoting. Additionally, marketplaces can be settings for health awareness campaigns and also a place where one can buy health related commodities, all of which may affect ideas of health for those who work in this kind of environment. The perspective of health promotion is useful in this study since it assumes health is a holistic concept that accounts for more than just the lack of disease. Health encompasses all aspects of mental, physical and social well-being and also assumes that health is created in environments where daily life is carried out, such as work places.

Yet despite health promotion's all encompassing understanding of health, defining health is inherently problematic. What constitutes mental, physical or social well-being—and how it is achieved—varies from context to context, culture to culture. A city represents a meeting point of diverse populations that carry with them different ideas and practices related to health. In Peru, a significant percentage of the urban population is made up of indigenous people from the Andes. It may be that former government health policies implemented in the rural Andes years ago, such as those initiated by Fujimori, have influenced people's attitudes

regarding public health care today. However, there is much more to consider than attitudes based on past health care experience. From a cultural perspective, health beliefs in the Andes are embedded in relationships with the animated natural and spiritual surroundings. People in the Andes view acts of social reciprocity and their relationship with mother earth as central to a state of equilibrium that is essential for well-being. If balance of this delicate relationship is disrupted, illness may result. These beliefs have been largely ignored in public health initiatives, which are typically based in scientific, or biomedicine. The majority of market vendors in Peru, however, are first or second generation migrants from the Andes whose concepts of health may be shaped by such traditional beliefs.

At the same time, those who have migrated to cities in Peru often come to achieve "progress", or with the desire to better their lives. As Ødegaard (2010) explains, the process of progressing is generally understood as leaving behind a "backward" way of life of the rural Andes and assuming practices associated with city dwellers. This may suggest moving away from traditional health practices to those that are associated with urban life. In the city, what was once perceived as categories of race have become understood as socio-economic categories that can be constantly negotiated. One who is indigenous can "become" a mestizo (mix of Spanish/indigenous decent) by adopting cultural practices like clothing, dress and language. As Ødegaard continues to explain, bettering one's business, house, or the education of children may be a sign of progress and support one's transition from Indian to mestizo. Consumption of modern goods associated with the city that are often in opposition to rural life, may also signify progress. The achievement of higher socio-economic status may promote health through better access to health care, and becoming *mestizo* may reduce discrimination experienced by many indigenous people in the city. The concepts of progress and modernity in the Peruvian context, and how they relate to status, are therefore important to this study in order to put in context participants' everyday cultural practices. The variety of, and "changeable" nature, of these practices is in many ways also reflected in the range of health related treatment forms and systems in urban Peru.

For thousands of years, Andean medicine has relied on medicinal plants, traditional healers, and homemade herbal remedies. In any Peruvian city, Andean health options can be found

for sale or advertised alongside biomedicinal clinics and pharmacies. Furthermore, these medical, or treatment systems, seem to be increasingly influencing each other. Traditional medicinal herbs are commercially processed and packaged into forms that mimic pharmaceuticals. Urban curanderos set up offices that resemble that of biomedical doctor's clinics. All the while, Peru's public health system is strained or undesired. In such situations, how do people decide on a mode of treatment?

The purpose of this study is to explore issues relating to health in the urban marketplace from the perspective of vendors. It will report on the felt occupational risks and benefits of market work and how vendors manage health issues related to their work. While physical aspects of work are a focus of this study, I also seek to demonstrate how occupational psychosocial status may have implications for health, both inside and outside the market. In terms of exploring health concerns, I will attempt to theorize as to how people in the Andes, and specifically those who work in a market setting, incorporate both traditional and biomedical treatment systems into health practices. How these practices are rationalized will be examined based upon the urban environment and characteristics of vendors' work. This will be both in terms of health ideas, products, and agendas that circulate in and around the marketplace and the occupational characteristics of vending such as work hours, income, and physical work. Overall this study will draw on the daily routines of vendors in the context of socio-economic and cultural factors to understand how health is maintained and managed. More specifically, this study seeks to explore:

- 1) The health risks and benefits of market work as perceived by vendors
- 2) How vendors maintain their health
- 3) How the urban market may influence concepts of health and health practices
- 4) The use and perceived efficacy of treatments from multiple medical systems

Chapter 1. Background

Arequipa

Every August 15th in the city of Arequipa, thousands of dancers in festive clothing parade down the streets accompanied by traditional music. The entire city seems to shut down to accommodate the parade. Spectators sit ten or fifteen rows deep under the hot sun hoping to catch a glimpse. Between groups of dancers are sometimes motorized floats, military bands, or university groups, but the emphasis remains on the dancers who represent different regional identities from around Peru. Their differences are marked by music, hairstyle, clothing, and many other nuances. By nightfall, the dances keep passing and show no sign of stopping. On this day, all seem to be celebrating their unique traditions in the modern city they share.

Arequipa, founded by the Spanish nearly 500 years ago, is located in the southernmost region of Peru and is the country's second most populated city with over 1.2 million citizens (INEI Population Estimate, 2012). Like much of Peru, Arequipa is a place of contrasts. Located at over 7,000 feet above sea level, the days are hot and sunny and the nights are dramatically cool. Before the Spanish arrived, as Chambers (1999) explains, few people inhabited the area perhaps largely due to it's dry climate. After an extensive irrigation system was built, Arequipa flourished. It is located well to trade routes with the highland region of Puno as well as Chile and Bolivia, and is also relatively close to a port in the Pacific where passing cargo ships often dock, making the city a "crossroads of the south" (Chambers, 1999, p. 21). It wasn't long before the Spanish were soon relying on the labor of indigenous people to settle the land. As the city grew over the next few hundred years, many of the indigenous people settled to the northeast of the city in what was referred to as the "Pampa de Mirafores", or nowadays, simply Miraflores (Chambers, 1999, p. 28). Today, rural residents continue to migrate to Arequipa. As testament to this, in 2007, 16.6% (INEI) of the city's population spoke an indigenous language as their mother tongue.

Yet at the same time, Arequipa has also been known for the "whiteness" of its citizens, due to its Spanish founders. Nicknamed "the white city" for the natural volcanic white rock that many of Arequipa's buildings are constructed with, this expression is also used to describe

its light skinned citizens (Ødegaard, 2010). Through a relatively recent influx of migrants in the 1940's, many practices of people from the highlands are felt in the city. Women from the Andes can be seen walking the cobblestone streets in traditional clothing, their hair in long braids, and carrying children on their backs in colorful tapestries. A few blocks away from the city center a market sells homemade bread and cheeses characteristic of different regions of Peru. Medicinal stalls sell fresh and dried herbs and one stall even makes juice from live frogs. All the while, professionally dressed office workers and western tourists go about their business sipping Starbucks and visiting internet cafés.

As I explore Arequipa I notice that private doctors' offices and pharmacies appear to be on every block. During the anniversary parade, I am given several flyers advertising various medical services, including alternative therapies like magnetism and acupuncture to biomedical doctors and dentists' offices. In this context, it is interesting to think about how those in Arequipa not only understand health in a context of traditional values and modern aspirations, but also how they choose among the various treatment options that, at times, personify these same dichotomies.

The case of Camilla: understanding market work, health & treatment

Camilla and her husband Julio own a stall at a market near the parade's starting point in

Miraflores. Both were born in the highlands and migrated to the city many years ago.

Camilla first worked as a domestic servant, then vended in the street and was able to finally acquire a market stall after much hard work. She and Julio seem to eat well and she is always sharing her food with her friends who work in the market when they come by to chat. But she tells me of earlier times when she was very thin and did not have money. By many accounts, the market has appeared to help her progress, but Camilla is always looking for ways to get ahead.

To Camilla, the anniversary celebrations are not a reason for a day off, but a day to work. In the days leading up to the parade, Camilla traveled across the city to a wholesale market. She bought a large supply of Arequipian flags and several large flagpoles that she hoped would be big sellers during the anniversary. When they failed to sell as she had anticipated,

she became quite anxious. She told me she awoke one night worried that she had forgotten to secure the costly flagpoles properly before leaving the market. It is easy to understand how she could of overlooked this; it takes Camilla approximately an hour to complete all her closing tasks, including taking down large amounts of hanging goods with a large metal pole and placing them on hooks high above inside. She then closes heavy metal doors and secures them with multiple locks. Arthritic bones, an eye condition and pain from a recent surgery seem to make these tasks difficult. Still, she ignores the pain and continues to do what she needs to do to run her stall. Sometimes she chews coca leaves, which she says gives her energy to work. When she has a sore throat, she buys pills from a nearby pharmacy. She also consumes coconut water and oranges that she says helps her stomach pains, saying that they do not hurt her stomach like other foods do. They also do not "cause harm" to her body, like pills do. At home at night, she drinks tea, sometimes of muña, an herb good for stomach pain that can be bought from a stall not far hers. It seems, however, muña may not be effective enough as Camilla recently had an operation which she states causes her pain at night. She says, "it hurts me, it hurts me" and points to her abdomen. This pain keeps her awake at night, sometimes until three or four in the morning.

Also on her mind is her husband Julio whom she says is sick. He has been in need of an operation for sometime now which Camilla says they cannot afford and then adds that hospitals are where people "go to die". Her statement may reflect both a lack of confidence in Peru's public health care, which is often said to lack technology and competent professionals, and signify a conflict of cultural health beliefs. People in the Andes perceive balance in both social and spiritual relations (Bredholt Stensrud, 2011; Greenway, 1998; Ødegaard, 2010) as well as humoral bodily balances (Bastien, 1982; Ember, 2004; Juárez & Bolhispana, 2004; Oths, 1992) as central to well-being. Health professionals who have not given consideration to the importance of social reciprocal exchange by those seeking treatment may undermine their understanding of sickness and healing. Additionally, removing blood or parts of the body during operations may be thought to upset balance to the body and lead to more sickness.

Camilla and Julio must also consider what his operation would mean in terms of their business. When Camilla had her surgery, much of the burden of running the stall fell onto her husband and a close friend of hers, a fellow vendor, who also helped. If he were to undergo surgery, Camilla would be responsible for all aspects of their business, like opening the stall, vending all day, and closing at night largely on her own. Also problematic is who would care for Julio while he was recovering. For people like Camilla and her husband, it is easy to see how treatment decisions regarding health are not related simply to costs, but also to—though not limited to— work demands, time, and cultural understandings of health and well-being.

Health promotion

It is important to emphasize that although the phrase "health promotion" includes the word "health", health promotion is concerned with much more than the physical body. Health promotion follows the WHO's definition of health as not just the "absence of disease" but a "state of complete, physical, mental and social well-being" (Constitution of the World Health Organization, 1946, p. 1). Addressing all the factors that contribute to a holistic sense of well-being demands attention be given to understanding how all sectors of society, not just the health sector, are capable of influencing health. A marketplace for example is influenced by public services like electricity and water. The availability of safe running water and electricity can have a positive impact on food safety and sanitation facilities, reducing the spread of disease. Public policies regarding zoning laws may also affect the layout of the market, which can have implications for health. Traffic patterns on streets surrounding the market may for example play a role in pedestrian accidents or contribute to unsafe air quality for vendors who spend many hours in stalls along side roadways. Therefore the perspective of health promotion will be valuable to exploring how the market environment, as a whole, impacts health, and how public policy may be capable of creating or supporting a healthier work environment. Finally, health promotion offers a perspective that will encourage local understandings of health.

In 1978, the Alma-Ata Declaration called for an "acceptable level of health for all people of the world" by the year 2000 (p. 3). The declaration also calls for a more equitable

distribution of resources around the world for social and economic development of primary health care. How to determine what type of primary care is wanted and how it can be effectively delivered in diverse communities however remains a topic that is relatively unaddressed. Implementing health programs that are forced or unwanted is an unsustainable approach. Those who are forced to comply with a health mandate may subsequently reject associated health related professionals, institutions or treatments. The feeling of coercion or intimidation in health care by one group over another may divide populations— contributing further to inequities in health. As a city characterized by various cultural identities, Arequipa, like many growing cities around the world, is a setting where traditional and biomedical health ideas converge. Achieving "health for all" requires more research in regards to how these concepts affect demand for health services in the urban context

Relevance

With more than 80 percent of the population in less developed countries estimated to live in cities by 2030, cities are increasingly an important setting for health promotion (United Nations Population Fund, 2007). Cities generally show higher rates of literacy, education and greater concentration of health care services compared to rural areas. Basic needs like safe water and food are also more readily available. On the other hand, great inequalities exist in terms of accessing these resources. Transportation, schools and hospitals may not be equally accessible in all areas of a city. Insufficient city planning often also leads to unsafe housing, pollution, violence and crime. In Arequipa, 17% of the population lack access to public water supply in their homes, while 23% lack sewage and nearly 10% are lacking electricity (INEI, 2009). While these numbers are lower than those of rural areas, they still have much room for improvement.

A health indicator that is more often a concern in urban areas around the world are pollution levels, often due to industry, as well as excessive or dated transportation systems. In Arequipa, (between 2007 and 2009) the level of air pollution was reported as eight times higher than safe levels set by the WHO (PAHO & EMBARQ, 2011). Air pollution is directly related to higher rates of respiratory sicknesses, heart disease, asthma, lung cancer and skin problems. Vendors like Camilla and her husband, who work near the street, may be

especially vulnerable to such environmental conditions. According to Peru's Ministry of Health, people living in urban areas in Peru also experience higher levels of obesity, hypertension, and diabetes (Encuesta Nacional de Indicadores Nutricionales, Bioquímicos, Socioeconómicos y Culturales Relacionados con las Enfermedades Crónicas Degenerativas, 2006) suggesting a need for health research related to how these risks are perceived by those who live and work in urban areas.

The context of markets has relevance on a global level. While the significance of a market as a place of employment for vulnerable groups has already been demonstrated, healthy marketplaces are also in the interest of the general public. Markets are an important place to purchase goods for many urban citizens. In "Urban Health in the Third World", Akhtar (2002) explains that urban migrants may have reduced reliance on extended families and social networks. Access to natural resources, too, tends to decline so purchasing goods becomes necessary to meet basic needs. At markets, prices are generally cheaper due to low overhead costs, making them an important resource particularly for urban citizens of lower socio-economic status (Moy, 2001). Cheaper costs, however, may be a reflection of quality, as many goods at markets may be counterfeit and even harmful.

Some counterfeit goods that end up at markets are actually pharmaceutical drugs. The UN estimates that in Peru, up to 40% of all pharmaceuticals are counterfeit, and these, as well as expired drugs, have been found for sale by vendors in a central market in Lima (United Nations/Unicef, 2008). These can cause health problems to those who consume them as well as have consequences on a global level. Drug resistance for example, has been attributed to unregulated use of antibiotics. In crowded marketplaces, epidemics and communicable diseases may spread rapidly—especially if symptoms are masked with medicines.

Marketplaces can be the source of diseases, often from uncooked or contaminated meat. In China, the deadly virus commonly referred to as the "bird flu" (avian influenza) was found to be present in live poultry sold at markets ("Bird flu virus kills Chinese man," 2011). Communicable airborne diseases such as tuberculosis that can spread by coughing or sneezing should also be a health concern in crowded markets. This may have particular

significance in Peru, which has one of the highest rates of tuberculosis in Latin America accounting for 21% of al new cases in the region in 2010 (WHO, 2011a). Considering the millions of international tourists that visit Peru each year, often visiting local markets, there may be significant global benefit to research on issues surrounding health in an urban market setting among those who are participants there day in and day out.

Peru's health care system

Because this study will discuss how vendors manage their heath, it is imperative to give a background of the public health care system to give context to the role it may play in health care decisions of participants. The structure of Peru's already strained public health care system may pose a challenge to many, and particularly workers like market vendors, in achieving health. Peru has one of the fastest growing economies in Latin America yet is one of the lowest spenders on public health care, at just 2.8% of their GDP in 2002 (PAHO, 2007: Peru, Ministerio de Salud; Organización Panamericana de la Salud. Cuentas Nacionales de Salud: Peru 1995–2000. Lima; 2003). According to the PAHO Health In the America's Report (2007), the most widely used public insurance scheme in Peru is known as the Comprehensive Health Insurance plan (CHI). This plan aims to provide free basic health care to people under 18, pregnant women, and those living in poverty. This plan is said to cover approximately 32% of the population. The second health insurance scheme is the social security system (ESSALUD), which is available and mandatory to anyone holding a regular wage-paying job. Although public in nature, ESSALUD excludes those who do not have a "formal" job, which would generally exclude vendors. The third public insurance scheme is available to police and armed forces and covers approximately 3% of the population. The PAHO report goes on to explain that in total, the public sector then covers 53% of the population, and when combined with private coverage, leaves 37% of the population unaccounted for. In order to qualify for free or greatly subsidized health care, one must be declared as living either at or below poverty level. To determine this, a social worker is sent to the home and determines if one or more basic need is not met. Market vendors are likely to be in a precarious position. Having access to the capital to rent or own a market stall often means they are able to meet their basic needs, but they may nonetheless

have little to spare for other or unexpected expenses, such as those associated with illness and treatment.

When it comes to accessing biomedicine, costs are not the only barrier. Amnesty International reports that discrimination is a significant factor that discourages marginalized groups from seeking biomedical care (2011). In Peru, they write that women have reported being treated "dismissively" or "abusively" by health professionals because they were poor or indigenous (2007). A number of scholars (see: Bastien, 1982, 2003; Crandon-Malamud, 1993; Glass-Coffin, 1998; Greenway, 1998; Koss-Chioino & Greenway, 2003; Yana Villasante, 2005) discuss that that people from the Andes often express the feeling that biomedical doctors as not have knowledge of, or do not believe in traditional illnesses, and therefore cannot heal them Perhaps as a result of discriminatory treatment and lack of acknowledgement of traditional beliefs, many in Peru view biomedical health facilities as a last resort. Hospitals, for example, may only be visited when all other treatment efforts fail (Personal conversation, Camila Gianella May 2011). A review of the literature will help to better understand the relationship between work, biomedicine and traditional health beliefs in the Andes as they relate to vendors.

Introduction to the literature

Much of the literature that exists relevant to health and market vendors is either from research on undocumented trade workers in general or the risks to health a market poses to consumers, largely in terms of structural hazards and food safety. Little exists on the health specific to marketplace workers, and even less on health promoting aspects of market work. This literature review will present what has been documented in these areas while pointing out areas within these themes that this study will contribute to. Once research on potential health risks and benefits is reviewed, local concepts of health in the Andes will be introduced. Local health in the Andes is important to understand when theorizing about health practices related to maintenance and treatment, which will the focus of empirical chapters four and five. The later part of the literature review will give examples of how medicines have been interpreted in medically pluralistic settings, specifically in those which are urban. Urban environments, as will be demonstrated, seem to have an ever-growing

number of options for treating health concerns. Finally, rationale of treatment choice will be explored in terms of social motivations in the context of one's social network that is fostered in the marketplace.

Marketplace work: physical, psychosocial & economic considerations

According to Moy (2001) markets can be compared to fast growing cities. Fire hazards, poor air quality, lack of sanitation facilities and unsafe food are often the result of unplanned growth. A study by Programa Salud y Trabajo ("SALTRA: project for the health of street vendors in Honduras," n.d.) that focuses on urban street vendors in Honduras, found that air pollution, poor sanitary conditions, exposure to sun, rain and noise were reported as factors negatively affecting vendors' health. In terms of food safety, refrigeration, access to clean water and soap and poor preparation practices have been documented as issues in marketplaces (Moy, 2001; WHO, 2006). Since vendors commonly buy and eat meals in the market (Seligmann, 2004; Ødegaard, 2010), they may be continuously at risk of experiencing food related illnesses. Priorities for structural improvements to markets are stated in several WHO reports, but do not give information on what market workers believe to be important. This study hopes to add to this area.

Work tasks may also pose a number of risks. Sharp tools may result in cuts and perhaps more serious lacerations. Repetitive movements may be related to overuse injuries as a result of weighing or retrieving goods. On the other hand, the sedentary nature of vending can also pose health risks. Vendor's stalls are generally small which can limit movement and discourage physical activity. Seligmann quotes a young vendor in Cuzco talking about her mother's stall "She had a stall, inside, six meters, a big one" (2004, p. 59). This stall is indeed likely to be larger than average. In the city of Huaraz, Babb (1989) says that most market stalls give just two meters "of table space" (p. 104). Little space to move around can cause low levels of physical activity, which can lead to obesity, diabetes and many other related health issues.

Working in a market and having a stall means that vendors have the advantage of storing goods. They can have a large amount of inventory on hand at anytime and take advantage of

goods that become available at low prices. A full inventory may attract customers and repeat business. Being in the same permanent location may also encourage *caseras*, (regular customers). Regular customers are generally highly desired since they can represent consistent income (Seligmann, 2004; Ødegaard, 2010). *Caseras* however may also lead to stress. Vendors may feel pressure to consistently be at the market to maintain relationships, causing vendors to work long hours and take few days off. Seligmann (2004) notes an example where a vendor refuses to sell the bulk of her goods to one customer early in the day that would have allowed her to go home, since this would mean she would then be unable to provide for her regular customers.

It is worth noting that while research on the physical and occupational health aspects of vending is limited, research on how occupational health concerns are prevented and treated is even scarcer. In a study entitled, "The reproductive and occupational health of women street vendors in Johannesburg, South Africa", over 400 women working as street vendors were surveyed about their health (Pick, Ross, & Dada, 2002). The researchers report that 54% of the street vendors suffered from work related illnesses and from this group, 32% sought treatment. However, there was no further explanation of the type of treatment sought. This study hopes to add considerably to this area. Also affecting health of vendors is not only the physical characteristics of their work, but also the psychosocial effects of vending on health.

Many of the positive aspects of market work can be related to the health promotion concept of empowerment, or exerting control of the factors that influence one's life. On an individual level, Ødegaard (2010) reports that many vendors value their work because it is relatively self-managing when compared to regular work, or other forms of often unregulated work, such as a domestic servant. Not having a boss may have several advantages, including the freedom to make meaningful business decisions. Vendors generally decide what stock to buy, how to obtain it, and at what price it will be sold². Successfully managing a market stall may contribute to positive self-esteem that is thought

_

² In some cases, prices however may be set by government guidelines depending on goods and current agendas (see: Babb, 1989, chap. 4).

to correlate with well-being and good health. Self-managing work also gives flexibility with work hours. For female vendors in particular, this offers the advantage of carrying out other responsibilities such as preparing meals or minding children (Seligmann, 2004; Ødegaard, 2010).

In "Between Field and Cooking Pot", Babb (1989) argues that since vending has historically been a female position whereby their income is necessary for their families, this give vendors "a sense of the importance of the work they do" (p. 153). This may promote one's self-esteem and promote autonomy. As a group of women participating in a similar type of work, this suggests the potential for vendors to organize themselves in order to demand improved work conditions. Babb for example references a union of vendors who protested against a proposed rise in the daily market rental fee quoting a vendor saying "All rose up together because we were united. And we won" (1989, p. 167). The juxtaposition of vendor's work as harmful yet empowering, makes for a compelling setting in which to apply health promotion perspectives in this area.

Another aspect of vending that may have advantages and disadvantages to health are the social interactions that occur between market participants. Social relationships between vendors may have many benefits. They often watch each other's goods to prevent theft and loan each other money to meet debts. Relationships established in the market may also play a role in one's relatively longer-term economic livelihood. Ødegaard (2010) for example refers to cases where vendors have entered into relationships known as a *compadrazgo* (p. 102), or co-parenthood. Typically when one is asked to be a co-parent, it is because they are regarded as a relatively high socio-economic status. This is important since it suggests they will be able to meet financially duties that are expected of co-parents. To be asked to be a co-parent is considered an act of respect, though may still represent a financial burden. In turn, a co-parents' support may be reciprocated with the giving of food or alcohol. Ødegaard (2010) discusses that vendors may prefer to buy from wholesalers or other market vendors whom they have entered into a *compadrazgo* with. This serves to show that social relationships may play a strong role in underlying seemingly "economic" decisions in a commodified market setting. On a broader level, understandings of the acquisition of capital

and resources in a market may be influenced by an underlying worldview held by many people from the Andes which may have implications for accessing resources that support health.

In her dissertation among small entrepreneurs in Cuzco Peru, Bredhold Stensrud (2011) quotes two common phrases among her participants which are, "everything in life has to be paid" (todo en la vida se paga) and "the world goes around" (el mundo da vueltas). She explains that these expressions stem from the concept of ayni, or "ideal of universal equilibrium" (p. 175) and signify a condemnation of "individualistic stinginess" (p. 175). Reciprocity is strongly associated with generosity, or the sharing of resources, which may be important in the market. Bredhold Stensrud for example states how those in small business often give each other informal loans where repayment may be delayed or cancelled based "on negotiations that draw on senses of suffering, sympathy and solidarity, as well as respect and dignity" (2011, p. 175). Vendors may be constantly participating in social acts as a way to "build credit" in case they should have to rely on their social networks. If one is particularly successful, they may be expected to "invite" or share something such as food or drink. Eating too well for example may be a sign of success and jealous vendors may perform harmful acts (brujería, or witchery) (Ødegaard, 2010). Removing curses can be a costly endeavor, and if not cured quickly, can be to blame for subsequent health complications. Very much missing from the literature are discussions about brujería or other "magical" sources of illness as they relate to work. Furthermore, an urban environment where there is reliance on commodities may encourage harmful acts as competition to earn money is needed to fulfill basic needs intensifies (Glass-Coffin, 1998). This may result in attributing economic misfortune and illness to "magical" sources rather than to causes that can be attributed to one's business decisions or biomedical science.

Also largely missing from the literature in terms of health issues in markets is research on the traditional illness known as *susto*. *Susto*, or "soul loss" is one of the most widespread traditional illnesses in all of Latin America. Also known as fright sickness, *susto* is generally the result of a frightening experience that scares the soul and causes it to leave the body. According to various researchers (Crandon, 1983; Crandon-Malamud, 1993; Greenway,

1998; Koss-Chioino & Greenway, 2003; Larme, 1998) in the Andes, *susto* can be caused by any number of startling experiences such as thunder, encounters with animas or even "unnatural" experiences like traffic accidents. Symptoms seem to vary greatly across cultures and countries but the most general seem to be insomnia, fever, diarrhea, lethargy, loss of appetite and in children, excessive crying (Baer & Bustillo, 1993; Crandon, 1983; Crandon-Malamud, 1993; Greenway, 1998). A market may have conditions that cause *susto*, such as stray animals, loud noises and insufficient infrastructure.

As Greenway puts it, for adults in the Andean context, evidence that one has *susto* may be based on "any deviation from the norms of proper human behavior" (1998, p. 999). Giving an example of a rural village being connected by a road to a larger town, Greenway states that the act of losing one's soul and then going through the healing process of encouraging it to return reaffirms identity that may be threatened by changes to the community. On an interpersonal level, she argues that diagnosis of *susto* may restore "stability" to family members whose ways of life may be changing, such as by learning Spanish or by seeking paid employment. For market vendors who are recent urban migrants experiencing changes in their socio-economical environments, these arguments may be particularly relevant to consider when analyzing illness. This study will add to the understanding of *susto*, and other traditional notions of health, that may be a result of the market environment both in terms of social and physical causes. Furthermore, this study will explore what factors are considered in terms of treatment.

The Urbanization of Traditional Healing & Medicines

Traditional medicine will be used as a term that encompasses a broad range of treatments, from homemade medicinal beverages, to herbal baths, to all night ceremonial cleansings and ritual offerings, to herbal teas and composites applied to the skin. It is no secret that these can all be found in Peruvian cities. The aspect with which this study is concerned is based on the growing body of literature that demonstrates how these methods are being influenced by treatments from other medical systems. One area that is specifically discussed in research is the commodification of traditional treatments, specifically in urban areas, both in terms of

services and medicines (Koss-Chioino & Greenway, 2003; Macía, García, & Vidaurre, 2005; Ann Miles, 1998, 2003).

Bastien (1982) makes the point that healers in the highlands traditionally have not charged money for their services, but instead are rewarded on a system of reciprocal exchange at some point later in time. He argues that rural biomedical doctors are often not a preferred method of treatment since they are not thought to care much for the well-being of the patient, evidenced by the fact that they charge money, which undermines a sense of mutual interest and compassion. Since most urban traditional healers charge for their services, this may similarly put their intentions and legitimacy in question. Miles (1998) for example discusses an urban *curandera* who is careful not to charge too much for her services since this could risk her credibility, but at the same time cannot charge too little since she would then be unable to make a living. These relatively new ways of negotiating price and services in the urban context may put existing ideas of how best to treat traditional illnesses into question. On the other hand, traditional urban healers may represent an alternative that bridges sometimes dichotomized medical systems.

As Sikkink states, urban healers can be conceived of as an "opportunistic hybrid" between traditional and biomedical treatment systems (2009, p. 137). She cites the growing use of "modern" pills and powders among traditional healers. Miles (1998) too discusses the rise of natural medicine shops in urban Ecuador that sell commercially packaged herbal remedies in biomedicinal forms. She says that natural medicines generally appeal to lower classes. One shopkeeper said the majority of his clients were "from the market" because of their clothing and the way they kept their money hidden in their clothes (1998, p. 214) which suggests a socio-economic association with certain treatment choices. Also interesting in her research is that most of her informants seemed to be purchasing natural products to treat illnesses rather than as a preventative measure. It may be that those who sell these products instill such beliefs. Miles quotes one storeowner as saying "Chemicals may cure you of one thing but they are so strong that they can cause something worse. Natural medicines target the illness and don't harm anything else" (p. 217). This statement is significant since it reflects a discussion of health beliefs between health related actors near marketplaces and the market

participants who frequent natural medicine shops. This study will add the perspective of market vendors who buy medicines rather than relying primarily on those who dispense them as in Mile's study.

Perhaps more "traditional" in nature are treatments in their unprocessed form. There are often stalls in Andean marketplaces that sell fresh and dried medicinal herbs as well as the commercially packaged varieties that contain similar properties. Those who sell traditional medicinal products in markets are known as *naturistas* and they are generally assumed to be knowledgeable of offerings. The vast array of such natural medicines located in and near markets as well as the ability of seller to offer knowledgeable advice, represents perhaps a tempting source of treatment for vendors who work in nearby market stalls. There does not appear to be research on to what extent *naturistas*, as well as the vendors of other health commodities in and around markets, may affect health practices of those who consistently spend their days in these environments.

Health understandings in the Andes

To better understand the rationale behind illness causation and treatment choices, it is important to give a broader explanation of how health is often understood in the Andes. It is believed that *pachamama* (or mother earth), as well as the mountain gods known as *apu*, possess qualities that—much like the needs of humans—must be satisfied (Greenway, 1998; Koss-Chioino & Greenway, 2003; Ødegaard, 2010). Greenway and Ødegaard explain that if the earth is not fed, it can become "angry" and reek havoc on those who have failed to please it. An angry earth may be the cause of serious accidents and illnesses, as well as the cause of general misfortune like poor business. To avoid such risks people reciprocate by making ritual offerings. These may occur with various frequencies and forms. The first sip of soda or alcohol may be poured on the ground to "feed" or share such an indulgence with *pachamama*. Depending on certain times of the year, people may also participate in bigger offerings.

There is a fine line though that vendors must walk when making such payments. Ødegaard says that "although uncommon, people said that some traders also make payments to the

devil to improve their access to money" (p.195). The devil craves substances like blood and fat, particularly human in origin. It is thought that if one is able to satisfy the devil, the devil rewards you with great fortune. At the same time, those who have relations with the devil are greatly feared (Crandon-Malamud, 1993; Yana Villasante, 2005). People in the Andes refer to those who take blood and fat from humans to give to the devil as *kharisiris*³. If one is a victim of a *kharisiri*, one is thought to die if left untreated. To what extent health suffers as a result of the *kharisiri* and *pachamama* is not discussed much in the literature as a health risk of urban workers involved in small scale and unauthorized trade. It may be that since vendors place emphasis on ritual payments for business success, they may also associate these with the state of their health.

Concepts of the natural world and equilibrium are also important in several aspects that are directly related to work in the Andes. As many researchers who study people in the Andes note (see: Bastien, 1982; Crandon-Malamud, 1993; Greenway, 1998; Juárez & Bolhispana, 2004; Oths, 1992) natural elements like wind, cold air and changes in altitude make one vulnerable to illness. Such elements are thought to enter the body through pourus skin or openings like the mouth, nose or eyes. Larme (1998) explains the importance of eating frequently and at regular times. Doing so is thought to reduce risk since a full stomach helps to keep one strong and ward off "wayras", harmful spiritual beings who enter one's body and prey on the weak. Market work may cause missed or irregular meals, expose one to cold, making one susceptible to illnesses. Vendors also frequently travel which can intensify these risks. It is also thought that in unfamiliar land, one has not had the chance to make an offering to the "local" pachamama or apu (Ødegaard, 2010). Keeping a balance of body fluids is also thought to maintain health. Replacing these to restore balance however is usually perceived as either impossible or very difficult. According to Larme, in the community of Cuyo, located in Puno, Peru, residents have attempted to return health by drinking the blood of bats to replace lost blood. Given the difficulty of curing such ailments, this study will seek to investigate use of treatment from other medical systems, specifically that of biomedicine in treating traditional health conditions. While there isn't a great deal of

-

³ Also known as *kharikhari*, *lik'ichiri*, *khariri* & *chupacauri*

literature on this subject, researchers in the Andes have shown how biomedicines have been, in some cases, interpreted by people in the Andes.

Oths (1992) for instance discusses how people in the Andes tend to perceive traditional medicinal remedies that are black in color, non-ingested or liquid in form as being the most effective. These preferences seem to have influenced the way in which "modern" items and biomedicines are used too. Dark colored beer is thought to be curative and dark colored vitamin tonics are preferred over light colors. Toothpaste was seen to be applied externally to help tooth aches and eye drops and cough syrups added to herbal teas. While Oths' research focuses on the curative, Nichter and Vuckovic (1994) discuss cases whereby biomedicines are used among people with traditional health beliefs to maintain everyday health

In Guatemala, intravenous glucose has been seen to be a popular wedding gift among agricultural labors as it is perceived to "promote vitality" and "protect against illness" (Cosminsky & Scrimsaw (1980) as cited in Nichter & Vuckovic, 1994, p. 1512). The authors also state that steroids have been perceived to promote health since they give strength and increase appetite. They quote informants in India leaving pharmacies as saying that medicines are "the cost of urban living" (1996, p. 290) as they are needed to cope with the stress of city life. This suggests that some perceive the urban environment to have negative impact on health, and see biomedicine as a solution. Pollution, stress, poor housing, or any combination of factors may contribute to this felt need to take medicine to cope with adverse conditions. Work may be another. Nichter and Vuckovic (1994) say, "studies clearly need to be conducted on the effect of the increasing availability of short-term medical fixes on perceptions of occupation/environmental health risks" (p. 1512). If not, they argue that medicines (meaning biomedicine) may in effect "numb" one to unfavorable living and working conditions. If this is so, then it raises interesting questions as to the likelihood of identifying needs and demanding healthier environments. This study as Nichter and Vuckovic suggest, will help determine if biomedicines are used as a strategy to maintain health in a bid to work. By understanding the daily lives of participants, it will also strive to produce data gauging perceptions regarding the desire, and felt ability, to influence the

market work conditions. Attitudes regarding the ability to influence change in the market place, may also be representative of attitudes regarding participation as citizens in a broader societal context.

As Miles and Leatherman (2003) state, "Andean history was marked not only by continuity, resilience, and adaptation, but also by centuries of domination by outsiders who became insiders and controlled access to labor and resources and who created and perpetuated patterns of social relations that economically and politically marginalized large segments of the population" (p. 7). Bastien (1982) argues that such marginalization has had a direct impact on access to biomedicine. He says that access to biomedicine mirrors those who have wealth because biomedicine is typically practiced by those with medical training and access to technology, both of which tend to be expensive. Therefore, biomedical systems tend to benefit those who are socio-economically similar to those who practice biomedicine. Still, as Crandon-Malamud (1993), one of the most well known researchers of medical pluralism in the rural Andes, emphasizes that even the most "adequate" supply of biomedicine and facilities would not satisfy health needs since social relationships and reciprocity are of utmost importance to Andean well-being. In "From the Fat of Our Souls" she views the expression of illness and treatment to be based on identity that is steeped in historical and political contexts (1993). Choosing biomedicine, when there are other options from alternative treatment systems, may send the message that one perceives oneself of a higher socio-economic class than others in the community due to biomedicines' association with wealth and privilege. Deciding to use biomedicine, she demonstrates, is capable of putting social alliances at risk that can go on to threaten livelihoods in other capacities. Her research however was in a rural community. Central for this study will be to add to Crandon-Malamud's hypothesis by exploring health treatment options in an urban setting where social relationships are a central characteristic of market life.

In terms of historical, political and social considerations in medical treatment decisions, Crandon-Malamud states: "the patient suddenly emerges from this complex, constantly changing, and politically charged situation as a kind of decision maker that mot scientists want to avoid: he is not a Rational Man looking for medically efficacy; rather he is a social and political animal who at times may be looking for meaning through efficacy which becomes a validation of some sociopolitical or economic proposition, but more often is looking for efficacy through meaning in a sociopolitical and economic context" (p. 33, 1993).

Therefore, it is not expected that this study will contribute "hard" findings to the literature regarding treatment choices. Instead the main objective is to produce insights that may help to better understand situations of how health is managed by a socio-economically marginalized group under daily stressors in a society with multiple medical systems.

Chapter 2. Theory & Methods

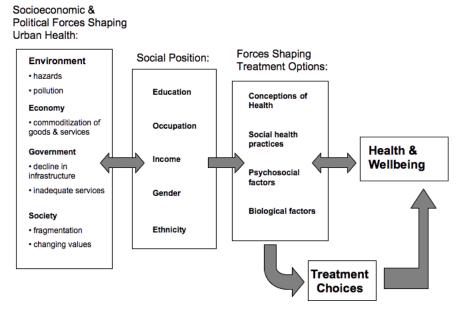
Theoretical Framework

This study assumes that health is a result not only of biological factors alone, but largely influenced by one's everyday practices and environment. The non-biological influences that shape one's health will be investigated using two main theoretical frameworks. The first, referred to as the Social Determinants of Urban Health, will give a basis from which to explore the felt role of the urban environment on the health of participants. While this model accounts for urban "risks" such as pollution, it also recognizes that socio-economic circumstances may influence health. One's socio-economic status will be discussed in terms of participant's occupational status within the market relative to other market workers, as well as participants socio-economic status relative to others in Peru's society as a whole. As will be demonstrated, a vendor may have high socio-economic status when compared to other vendors and this positioning may be health promoting, and vise versa. Yet outside the market, a vendor's socio-economic status may be relatively low on the social hierarchy, and this may have consequences that have a negative affect to health. The other framework this study will rely on is Crandon-Malamud's argument that choices regarding treatments may be made in the interest of social alliances that act as resources to accomplish certain goals. This theory will be elaborated on after presentation of the Social Determinants of Urban Health.

I have created the Social Determinants of Urban Health Framework by merging what is traditionally referred to as the Social Determinants of Health (see Wilkinson & Marmot, 1998) with Obrist's model of "Urban Health Vulnerability" (2006, p. 63). The Social Determinants of Health is "concerned with key aspects of people's living and working circumstances" that influence health (Wilkinson & Marmot, 2003, p. 5). It assumes that these circumstances are shaped by economic and social conditions as well as by political policy. Since the forces that shape living and working environments are created by a society, they are capable of changing to produce conditions that are more favorable to health. In "Struggling for Health in the City", Obrist (2006) refers to major "limitations" of urban health which include pollution, commoditization of goods, inadequate public services and infrastructure, and finally, "fragmentation" of society and changing of values. She argues that these factors "force people

to use their practical, intellectual and emotional capacities to help themselves in their struggle for health" (2006, p. 62). This perspective is relevant to a study on health promotion because it is concerned with how people make health decisions with often limited resources and draws on their strengths to cope under perhaps unfavorable circumstances. Still, Obrist's urban health "vulnerability" focuses only on factors that deter health, rather than create health. Therefore by combining it with the Social Determinants of Health, this study will assume that even in consideration to urban health risks mentioned in Obrist's model, by knowing how to use available resources and skills, positive health is possible to achieve. The following model represents the positive health outcome of the "Social Determinants of Health" and combines it with the urban health risks as recognized by Obrist.

Social Determinants of Urban Health Model:



Adapted from Obrist (2006) Urban Health Vulnerability Framework and the Social Determinants of Health (SDH) Framework (WHO, 2008). See appendixes 1.2 and 1.3 for the original Obrist's Urban Health Vulnerabilities" and the SDH frameworks, respectively.

With the understanding that markets are social settings, typically situated in the public sphere, this study will pay particular attention to how one's social position relative to their work may affect health. Wilkinson and Marmot's (2003) notion of the "social gradient" is a concept that is useful to explore how one's position relative to other workers in the market environment may affect health. They argue that "lower ranking staff suffer much more

disease and earlier death than higher ranking staff" (2003, p. 10). This theory is found to hold true across a spectrum of occupational settings such as professional office settings to those involved in manual labor (2003, figure 1, p. 10). This social gradient theory is interesting to apply to this study since one's occupational class within the same setting found to have a direct correlation with health. In a market, there are multiple levels of "status" that could positively or negatively affect health. In descending order, the levels in descending order is more or less the following: wholesaler, stall owner (possibly also vendor), stall renter (vendor), paid helper and *cargadoras* (Seligmann, 2004). The relative mid or high-level status of vendors in this system may indicate whether vendors enjoy health benefits from their work when compared to others in a market setting with lower levels of status or income. If vendors are found to hold themselves in high regard in the market chain, then this may question assumptions that those in market work are negatively impacted by low status work in general. Regardless, the social gradient assumes that work has a direct affect on health. The term "social gradient" will be used when referring to one's status relative to other market workers.

On a broader scale, the health of vendors may also be affected by their socio-economic status. Researchers have pointed out the unjust treatment vendors experience from market customers, particularly those of higher socio-economic status. Seligmann claims that traders prefer transactions that "do not entail defending their status or character" (Seligmann, 2004, p. 134) even if it means earning less. Feeling discriminated against can lead to social exclusion, preventing participation in activities that all citizens should have access to, such as education, social services and health care (Wilkinson & Marmot, 2003, p. 16). Wilkinson and Marmot believe that the more time one is socially marginalized, the more likely one is to experience ill health and cardiovascular disease in particular (p. 16). The authors explain that those with low socio-economic status experience more disease than those of higher socio-economic status. This study then will analyze how being a vendor in the context of broader society, may impact health largely in terms of access to resources that support health. The terms "social hierarchy" or "social ladder" will be used when making reference to this theory.

It terms of treatment choices, the work of Crandon-Malamud will be used to theorize as to why certain treatments may be used over others, largely from a social perspective. Crandon-Malamud (1993) states that the "choice of a specific type of medicine when several alternatives are available can restructure social relationships between different healers and between everyone involved in the same social space" (p. 206). This is then interesting to apply to a market setting where there are many participants with various agendas, and particularly ones that are health related. Furthermore her main hypothesis is that peoples' health decisions, or use of a "primary resource" are influenced by the resulting social outcome. The social outcome generally is a way to gain access to a "secondary resource" that is desired by the one deciding on a particular treatment when there are multiple to choose from. Crandon-Malamud's work however was based in a rural setting where people seemed to rely more heavily on social networks for meeting their primary needs than in urban areas where goods can be bought. Therefore, her work is not necessarily applicable to all data collected in this study, but will serve as a basis for much discussion.

Research Setting

Data was collected primarily in the market known as the Feria Altiplano in the district of Miraflores, Arequipa. This market was chosen in part because the academic advisor of thesis carried out her own research in this setting. Thus through our conversations I felt the Feria Altiplano would be an appropriate setting to explore my research interests and also felt a degree of familiarity of what to expect and plan for prior to research.

The Feria consists largely of vendors selling fruit, vegetables, meat, packaged and prepared food as well as goods such as house wares, clothes and electronics. Scattered in the surrounding streets are a range of *ambulantes* (walking vendors) who sell an equally vast array of items⁴. Large flat screen televisions playing the latest DVD or soccer match attract small crowds who stop to watch, and some stay for hours. Meanwhile *cargadoras* wheel in

_

⁴ A few weeks into fieldwork the authorities cleared away the street vendors surrounding the Feria causing me to loose contact with two of my initial informants. This campaign was in an effort to decrease "disorder" in the street, which was attributed to more accidents and thefts. This campaign also prevented cars (with the exception of "dropping and loading") from entering a main street located in front of the Feria to decrease congestion. Both the absence of the street vendors and cars would become issues raised for concern by vendors at the Feria in future market association meetings.

large orders of fruit to vendors on small dollies down narrow isles as they yell "watch your feet, watch your feet!" Some vendors call out to potential customers as they stock their shelves. Others knit, read the newspaper or talk with friends and customers. On busy weekend mornings traveling salesmen arrive and push the latest products that they have brought all the way from Lima. Eye doctors set up tents giving eye exams, hoping to sell glasses. While there is a general flow of daily activities, every day is different and unpredictable. Marching bands seem to appear out of nowhere and parade throughout the market. At times, the power goes out and the water supply is cut off. As a research site, it is exciting, energizing and challenging all at the same time.

The physical construction of the Feria varies greatly as materials and quality of construction lack in consistency. There are areas of dirt and tile floors, some places with sheet metal walls and some with no walls. On the outer edge of the market is a less established section where the walls and ceiling are created by plastic tarps and large sacks of produce. Behind the Feria is the site of an even less developed section, which consists of nothing more than a dirt lot. This area is only occupied on Mondays and Tuesdays by vendors who travel weekly from the countryside to Arequipa to vend produce grown in the highlands.

A notable characteristic of the Feria is that it was established about ten years ago by a group of *ambulantes*. After organizing they were able to gain the rights to the land where the Feria now stands. Many bought one, or in some cases even several stalls, which they either use or rent to others. Being fairly new and perhaps also feeling a sense of ownership, there seems to be a collective feeling among vendors that the Feria is still very much being developed. The presumption of an evolving marketplace gives an added dimension to this study in terms of themes related to health promotion that are concerned with the ability to influence and better one's environment.

Methodology

The data was collected from 14 July – 4 October 2011.

Using an ethnographic research design, this study took a qualitative and exploratory approach. Qualitative research is needed in order to help answer questions in a real life context where factors cannot be isolated or controlled for (Creswell, 2009). Markets are such a "real life" setting where people live their daily lives. Markets as research settings are challenging because they are composed of a wide range of actors and activities—that are ever changing. This study seeks to explore issues relating to health from the perspective of the participants themselves. Green and Thorogood believe that "the best qualitative research starts by asking not what people get wrong, or don't know, or why they behave irrationally, but instead seeks to identify what they do know, how they maintain their health, and what the underlying rationality of their behavior is" (2009, p. 22). An ethnographic research design then was appropriate in order to gain a holistic view of the market and the participants who operate within the setting.

Sampling

Recruiting participants for this study relied on both purposeful, by chance and snowball sampling. It should be stated that all participants were independently established from my own efforts and were not influenced by this thesis advisor's previous fieldwork in the research setting. At the start of fieldwork, I was present in the market nearly the entire day. This allowed me to learn the daily schedule of the traders. These initial observations gave clues as to the best time to approach vendors, being mindful to interfere with normal activities as little as possible. This time also allowed me to start building relationships with many who would become participants. I was also introduced to many vendors through my host family⁵. While many participants became part of the study by chance, I did sometimes initiate contact with vendors based on factors such as items sold, location of their stand, age or gender to gain different perspectives.

Snowballing turned out to be an invaluable strategy. Vendors introduced me to vendors with different areas of expertise. Without their help, I may not have been able to identify these "experts". Often these experts shared their knowledge on a particular topic but were

-

⁵ I was invited to stay with a local family whom I introduced to from a university researcher familiar with Arequipa and this study's themes.

not interviewed on all research themes. Therefore, it is important to note that participants contributed to different degrees in this study.

This study is informed largely by notes taken on conversations with 29 vendors. Four participants were males and 25 were female. The majority of participants were women, mainly for the reason that the majority of market traders are female. Participants' ages ranged from 19-74. Most participants were over the age of 40 but younger than 65. Vendors in this age group presence tended to be present more consistently.

Out of all 29 participants, 13 were the owners of stalls. Others either rented their stalls, were paid employees, were children of stall owners. Three worked as *ambulantes* who vended in the street. In-depth data⁶ was collected from 12 out of 29 participants. These 12 were distinguished from other vendors in only their availability, enthusiasm and felt understanding of the project. In depth data was collected from ten female participants and two male participants.

Approximately half the vendors have no previous professions while the other half either worked as domestic helpers or as outdoor workers in agriculture. Two vendors previously worked in offices, and one previously as a security guard (for a breakdown of products sold by vendor, see table 1.1 in appendix).

Other informants in this study include pharmacists from several cities around Peru as well as vendors of natural medicines, alternative healers and a medical doctor. One of the purposes of these interviews was to inform my understanding of health in a cultural context much different from my own. Their words were also useful to learn about who seeks their treatment and why. I found that answers to my questions were given easily in these situations since personal health information was not being asked. I was also curious to know how medical professionals trained in biological science in Peru felt about traditional illnesses since their beliefs may influence how or where these conditions are treated.

31

⁶ In depth interviews are defined as data from conversations that took place at least three times a week over the course of at least one month also touching on all themes researcher sought to discuss.

Talking to these health related actors also helped to inform interview questions with market participants.

Role of researcher

In qualitative research the researcher is the main data collecting instrument, therefore complete objectivity is impossible to achieve (Creswell, 2009; Green & Thorogood, 2009). For instance the researcher decides what questions to ask and who to ask them to. While it is accepted that it is impossible to separate oneself completely from qualitative research (to avoid "tainting" research), it is recommended that the researcher be critical and reflexive at all stages of the research process.

In this study data was collected from a socially, economically and politically marginalized group relative to the researcher's own background. In an effort to downplay such differences, I took on the role of a participant. I participated in daily market activities such as weighing fruit and vegetables, peeling oranges or guarding goods while participants took short breaks. Although at the outset of fieldwork, I planned to remain a "professional outsider", in the field this kind of participation felt both appropriate and beneficial.

By sometimes helping vendors with their work, this may have offset time that the participants may have lost during interviews. Secondly, by performing market work activities, I personally experienced the ins and outs involved in daily tasks. This continuously helped to inform interview questions and also sparked casual conversations about aspects of their work, and even health. Finally, playing the role of participant helped demonstrate my commitment to learning about their experiences—that I was there not just to "study them", but to learn *from* them. Learning from participants is a practice that is at the core of health promotion's "bottom up" approach that seeks to empower participants and inform policy with their perspectives.

Preparing for data collection

During fieldwork I was hosted in a home near the research site where I lived with a family who earned their living as market vendors, including a vendor who owned a stall in the

market where the research took place. Daily interactions provided much context for data collected. Being vendors themselves, I was also able to practice interviewing with them. Through this process I improved my Spanish and learned several "localisms" spoken in the region of Arequipa. Family life also acquainted me to customs of reciprocity and what is expected in social situations.

At the start of my fieldwork, I was informed that some of the vendors remarked that I was there to harm them. A vendor with a relationship with my academic advisor insisted to the others that I was a student there to learn. Although I do feel this is an extreme example, it does illustrate the mistrust that some marginalized, most often indigenous people, in Peru may feel toward outsiders⁷. Being made personally aware of this sentiment reinforced the importance of establishing trusting, and transparent relationships with participants prior to interviews.

Visual material was also gathered prior to fieldwork. I bought with me several photos I took of markets I have visited around the world. This was meant to demonstrate my commitment and long standing interest in markets to participants. Sharing these photos turned out to be a great icebreaker and started many useful conversations. By discussing these photos, I became sensitive to various participant's world views that later provided context for future interviews.

Interviews

Data collection consisted primarily of unstructured and semi-structured interviews⁸, document collection and participant observation.

.

⁷ This mistrust may be the result of a number of misleading government or NGO programs that occurred in Peru in recent history to be discussed in a later section of this thesis.

⁸ Formal interviews were not seen as appropriate for a number of reasons. The participants were very busy vending while sometimes also caring for children. Taking significant timeout to answer questions in one, or even a few sessions, could risk a financial loss for the vendors. It was also important to be aware of how power relations might affect data. I felt that by discussing research questions in their market stall would help to prevent feelings of intimidation since this first require that I be invited into their space. It was also felt that his arrangement would give participants a greater sense of control during their time with me, in that it may have made it easier to ask me to leave or to stop the interview at any time in comparison to a location chosen by the researcher or even a neutral location.

Interviews took place in the natural setting of the market where participants worked. They generally started with posing an open-ended question to spark an informal conversation about a particular research theme. Participants were verbally made aware of the aims of this study and their role as participants. I stated that I would return many times over the course of weeks or months to talk with them. When introducing my project to potential participants, I was advised by a local not to use the word *entrevistas* (interviews) but instead to ask if they would like to *conversar* (converse). I stated that I wanted to learn more about their daily lives and their work. I also emphasized that I was interested in knowing more about their health and how they stay "strong enough" to work. Participant authorization forms were not used because paper work is often viewed as suspicious or intimidating for marginalized groups in Peru. Furthermore, many vendors are illiterate so this could have added to a feeling of a power divide between researcher and participants.

Prior to fieldwork, a lengthy interview guide was created that covered five major themes according to each of the main research questions. Each chapter included approximately twenty-five questions. The chapters progressed from questions on a less personal basis to those that the researcher perceived as more personal or difficult to discuss. Before going to the research site each day, I familiarized myself with a particular set of questions that I would focus on. I also carried the interview guide with me daily to the market. Referencing the interview guide while at the research site was not only useful as a reminder of questions, but also served as a visual reminder. It showed participants that I was there to do work too, and not to just "hang out" as it sometimes may have seemed. Having a physical research guide also contributed to transparency. On many occasions while referencing the interview guide, participants would ask to look at it and offered answers to certain questions.

As relationships progressed over time, notes on each participant were reviewed every morning. This served as a reminder of what data was already collected, what data was lacking and what needed follow up. Towards the end of fieldwork, I increasingly wrote down specific questions in advance for particular participants, which formed semi-structured interviews. These were kept to approximately five to ten minutes. They were

brief to avoid taking away attention to vending responsibilities. During semi-structured interviews, questions were read directly from a notebook. Notes were taken in a notebook and sometimes interviews were recorded. It was felt that I could ask to record interviews without suspicion or attracting a great deal of attention. All the participants who were asked verbally agreed to being recorded. On a few occasions, however, participants who initially agreed to recordings were not recorded since the researcher felt hesitation in their agreement.

Appointments to converse with vendors were generally not made since daily activities and attendance were sometimes unpredictable. By simply walking through the market, those participants who did not appear busy were approached or alternatively I waited for the participants to initiate contact. The collection of data from secondary informants, such as customers, sellers of health commodities, and pharmacists usually happened by chance. Since interactions with these informants were usually one-off and brief, these conversations were not recorded. In these short interactions it was impractical to fully disclose all possible implications of being a research participant. Secondary informants were however always made aware of the researcher's general agenda.

Data was also collected through physical materials such as advertising and health related products found in the market. Three market association meetings were also attended. Official documents that outlined the rights of vendors and the rules and regulations of the market were also collected.

Data management & analysis

During fieldwork notes were taken in a notebook either in the market and/or immediately after leaving. The same night, or the next morning, notes were typed by me into my personal computer that is secured by a password. An electronic spreadsheet was kept on each participant during fieldwork. The spreadsheets contained basic information regarding participants age, the amount of years they have been vending, marital status, children etc. and progressed to data regarding aspects of their work, health and my own impressions. After fieldwork was complete, the spreadsheets were read through at least two times, and

then were simplified and organized. Recorded interviews were listened to both during and after fieldwork. Relevant quotes were inserted verbatim alongside the written notes that were taken during the interview.

Next, the data was thematically coded. This is the process of organizing data into similar categories and is regarded as the most widely used method of analyzing qualitative data (Creswell, 2009; Green & Thorogood, 2009; Richards & Morse, 2007). Both predetermined and emergent codes were used. For example, the use of codes such as "theft", "injuries", "urban health", "social relationships" etc., were anticipated based on prior research on risks of market work. Unanticipated codes also arose. (For more detail on the coding process, see Creswell's six-step guide for Data Analysis in Qualitative Research Figure 9.1, 2009, p. 185). In total there were approximately 30 codes. Pieces of data that were coded similarly were examined as a whole to identify commonalities or outliers. Once these were noted and writing up of the findings began, connections between themes started to arise and theoretical discussions linking the themes together developed.

Reliability, validity & generalisibility

Reliability is concerned with the "accuracy of reporting, consistency of coding and thoroughness of analysis (Green & Thorogood, 2009, p. 187). In qualitative studies, reliability deserves particular attention in terms of interviews. Interviewing requires that the researcher multitask in that they ask questions, listen thoughtfully, transition between topics, take notes and pay attention to the well-being of the person being interviewed (Kvale, 1996). Using a research assistant or multiple interviewers can increase reliability by dividing interview tasks or comparing notes afterwards. As an independent researcher I did not have these options but did use other strategies to increase reliability. In terms of interviews, because the majority of data was collected from unstructured conversations, this informality allowed me to pause or excuse myself from a conversation without worrying about disrupting the flow of an "interview". This may have increased reliability since I could concentrate more fully on for example writing down a quote without worrying about introducing a new topic. In the later stages of fieldwork, when semi-structured interviews

concerning personal health topics were conducted, it was sometimes possible to record responses. The recording of these conversations will also contribute to reliability.

A major advantage to both the research site and study design was that it was possible to visit the market almost daily, and for many hours at a time. This allowed me to follow up on data, which I did many times. By spending significant time in the market, discrepancies between said and practiced behavior could be observed. Additionally, field notes were shared with advisor and "double coded" by a fellow student in the International Health Promotion program at UiB.

While validity in quantitative studies traditionally refers to the "truth" of findings, the validity in qualitative studies is more concerned with "correctness" of interpretation of data based on a given theory (Davies, 1999, p. 85). In presenting findings, validity can be shown by giving an "accurate representation" of the data (Richards & Morse, 2007, p. 194). In presenting findings of a qualitative ethnographic study, validity can be shown by In this study, direct quotes from participants have been provided to contribute to validity. Where cases may seem less plausible or extreme, care was taken to verify data either with participants or by cross checking or gathering more data from other sources. Steps to achieve this have been taken in this study by spending a prolonged time period in the field and also by interviewing a wide range of participants including not just vendors but also health professionals. It is hoped that an understanding of the social, economical and political situations in which this data was created and collected has increased validity of insights.

Generalizability, or transferability, is "the extent to which findings from a study apply to a wider population or to different contexts" (Green & Thorogood, 2009, p. 287). Generalizibility is an important issue to consider in qualitative research because data is situated in political, social and cultural contexts. This can make it difficult for findings to be relevant for other groups. Instead of trying to compare one study population to another, Green and Thorogood state that the researcher can think about "conceptual generalizability" or ways in which participants make sense of the world. Data will not strive to answer questions such as, "to what extent are the practices used by vendors to stay well

enough to work used by other populations?" but instead as, Green and Thorogood seek "to identify what they [people] *do* know, how they maintain their health, and what the underlying rationality of their behavior is" (p. 25). Exploring such questions can bring light on how certain variables may come together to influence health related decisions. Still, to help the reader determine generalizibility for themeslves, a thick description of the research setting as well as background context is provided.

Limitations

I realize that a major limitation to this study was myself. While I do have previous experience with both interviewing and qualitative research, this project was the first of its scale that I have carried out primarily on my own. I could not compare notes with other researchers after observations or interviews where I may have missed, or misinterpreted, data. Data was also collected in Spanish, which is not my native language. Interviews occurred in an often noisy and bustling environment, sometimes making it difficult to communicate. Furthermore, only a limited number of interviews were digitally recorded.

Other limitations are those that concern participants. There were many vendors who did not speak Spanish as their native language. Unable to clearly understand their accents, I was not able to collect much data from this (arguably most marginalized) group. The participants also may not have felt comfortable discussing personal issues regarding their health in a relatively public space of the market, or with the researcher. It is hoped however that obtaining data from multiple sources and being able to clarify and follow up as needed, I have minimized several of this study's potential limitations.

Ethical considerations

Prior to fieldwork, approval was obtained from the Department of Health Promotion at UiB and from the Norwegian Social Science Data Services NSD in May of 2010 (Project Number: 27219). The study was also carried out with affiliation from the Social Science Department at Pontificia Universidad Católica del Perú (PUCP).

By focusing largely on positive aspects of work and health, it was intended that participants also would view participation as a positive experience. Many were enthusiastic about sharing their opinions and experiences, often emphasizing that other "gringos" (white foreigners) have not taken the time to get to know how they live. For compensation I sometimes bought goods that the participants vended, or offered to buy the participants lunch. On other occasions, I contributed small items to social gatherings. I also tried to divide time evenly among participants to avoid displaying favoritism or creating dependency.

Participants were told that I was there to study the market and their work to earn a degree for University. I sometimes felt that not all of the participants understood what a thesis was, in which cases I would refer to it as homework or a book where I would try to tell their stories. Many times I witnessed participants explain to fellow vendors and customers why I was there, reaffirming their understanding of my project and their participation. Participants were given my phone number, email and name of the research institution in case they should have any concerns. After leaving the research site, one participant called me, and another emailed, both to check up on how I was doing. Additionally, most, if not all, participants asked when I would return. These actions signaled acceptance and approval of the researcher and participation in the study. Confidentiality was maintained by changing all names. Names were changed in typed field notes before peer coding and sharing with advisor. Only the researcher listened to audio recordings. Researcher received verbal permission from all people featured in the photos used in this thesis.

Timeline & Dissemination

The thesis proposal was approved in May 2011 by the researchers academic advisor and the Department of Health Promotion at the University of Bergen (UiB). Ethical clearance from the NSD was granted in June 2010. The study's affiliation with PUCP was finalized in August 2010. Write up of thesis took place from October 2011 – May 2012. This thesis will be submitted electronically to the University of Bergen to fulfill partial requirements for a Master's of Philosophy in Health Promotion. It will also be made freely and publicly available online through the Bergen Open Research Archive (BORA-UiB).

Findings

Outline

Findings will be presented in three parts, with each part each consisting of two chapters. The first chapter in part one, chapter three, will discuss the health related concerns vendors have in regards to their work. Chapter four conversely looks at what vendors perceive to be the positive aspects of their work and discusses the ways in which these aspects may be health promoting. Part two of the findings is concerned with how participants conceptualize health. To explore this, chapter five will look at practices of health maintenance and well-being, particularly as they are carried out in relation to the market and in the interest of trade. Given that vendors spend much of their time in the market, the market will also be a particular focus of chapter six. This chapter explores health commodities and health related actors in the Feria and discuss how these may affect participants ideas or practices relating to health and treatment. Chapter seven is concerned with attitudes and beliefs regarding biomedical treatment in terms of facilities, health professionals and medicines. These topics will be discussed in consideration to the demands of vendors' work, past health experiences and will also drawn on understandings of health that participants expressed in previous chapters. Finally, chapter eight will focus on traditional treatments. Crandon-Malamud's work will be relied on to theorize about why participants choose or side with a particular medical system. Discussing why participants may attribute traditional systems when multiple systems are used, will also be explored and attempt to pull together findings from all empirical chapters. The last case will be present findings on the *kharisiri*. In relation to other cases of traditional illnesses discussed, this case appears to be is unique in that forms of biomedical treatment may be sought as a form of treatment for this otherwise traditional illness. My analysis on why this may be so will conclude the empirical findings.

Part 1: Occupational Health

Introduction

This section will discuss findings regarding the occupational risks and benefits of vending and how they relate to health. The first empirical chapter will explore concerns participants have in regards to their work environment and the physical injuries and chronic conditions they experience. Although the degree to which chronic conditions can be attributed to work cannot necessarily be determined, what is more important here is the believed cause of said conditions and how they affect—or are affected—by participants' work. Since those with higher economic status tend to enjoy better health than those with lower economic status as described by the social gradient (Wilkinson & Marmot, 2003), attention will also be given to how the market itself, and characteristics of vending, may affect economic livelihoods. Chapter four will take a stronger health promotion orientation by examining the market as a health promoting work setting. It will present findings that may reveal psychosocial benefits of vending and discuss how these may positively impact well-being. Market politics will also be explored here particularly in relation to participation and attitudes concerning the Feria's market association's meetings. The market association provides opportunities for leadership that may promote empowerment, personal development and be a platform to enable change, but in many ways these opportunities were found to be inaccessible and undesired. The section will conclude with a discussion of health related events that took place in the market during fieldwork.

Chapter 3. Health Risks of Vending

Market infrastructure

Participants' concerns with the physical construction, or infrastructure, of the market can be placed within two distinct categories. The first group of concerns that will be addressed are those that relate directly to health and well-being. The second group of concerns will be those that relate to economic progress.

In relation to the first category, many vendors expressed complaints about the temperature in the market. Since the market was not fully enclosed to the outside, temperatures were susceptible to change according to the weather. Participants regarded the cold to be the source of the flu, sore throats and coughs. To cope, most wore many layers and kept blankets in their stalls to *abrigar*, or keep warm. Many drank hot beverages such as teas or milks in the morning and night as a strategy to combat the cold. At first I was somewhat surprised by how much emphasis participants placed on protecting themselves from the cold. The more time I spent in the market however, the more I too felt the cold. Usually this was when I stopped walking and spent time sitting with participants in their stalls. The sometimes sedentary nature of market work may exaggerate the cold, and thus make one more susceptible to illness.

Vegetable vendors expressed complaints especially about the sun and heat. The ceiling above the vegetable section had a number of small gaps that allowed the sun to shine through. At particular times of the day vendors reported being very uncomfortable. Exposure to the sun was also seen as a concern among *ambulantes* who worked on the periphery of the market. Participants commented that they covered their skin with long sleeves and wore hats to prevent tanning and wrinkles. In a more general sense, they also remarked that the sun "hace daño" (causes harm).

As demonstrated in the literature review, an imbalance in the body's internal equilibrium, caused by exposure to extreme temperatures (including through air temperature, winds and food) have been noted as underlying health beliefs among people from the Andes. In Oth's research among people in the Andean highlands, she found that illnesses are believed to

"enter the body as if by osmosis, as in the cases of *mal aire* (bad air), sun, cold, *viento* (wind) and *mal daño* (sorcery)...[illness] is never believed to enter through the mouth in the form of germs" (Oths, 1992, p. 81). Findings from my study back up Oths' statement suggesting that the market's infrastructure makes vendors vulnerable to the health risks posed by such conditions. Furthermore, this study's findings suggest that the goods vendors sell, are also believed to be the source of illness, supporting Oths' description of illness by "osmosis". One potato vendor in this study emphasized that she avoids leaning against her large bags of potatoes because they are cold. She said that the cold can enter her body from contact with the potatoes and cause "an infection". She too wears several layers of clothes and also sits on a stool that is far enough away from the potatoes to avoid leaning against them. This is perhaps a risk of market work that would not be apparent from a biomedical perspective.

Most participants stressed the importance of improving the market "poco a poco" (little by little). The first concern mentioned was almost always the condition of the roof. One vendor felt that the sun that the roof let in was harmful to her vegetables causing them to spoil faster. Others mentioned that a higher roof would improve air circulation. But more widely, it was believed that a new and improved roof would attract more customers due to its "modern" appearance. Participants were also concerned with the appearance of the floor, which varied in material and condition throughout the market. Improving the roof and floor were often seen as major steps towards "bettering" the market and were the central topics of conversations at market association meetings. Infact at every meeting I attended, the president of the association emphasized how they must become more "modern" to compete with supermarkets, which he characterized as being "clean and orderly". He, and several other vendors admitted to regularly shopping at supermarkets. The president also passed around samples of uniforms reminding that they were not "vendors in the street" and to attract more middle class customers, they needed a professional appearance.

Participants also expressed dissatisfaction with the market's infrastructure in terms of "disorder". Trash removal was random and it was felt that this contributed to an "ugly" appearance. They also felt that even though the market is supposedly organized by section,

this is not always the case. It was observed, for example, that potato vendors would also sell cheese, or fruit may be sold in the dry food goods section. There seemed to be a general consensus among vendors that improving the organizational layout too would attract more customers. I found that while vendors believed in the possibility of attracting more customers, they did not anticipate loosing customers. Only one participant, José, mentioned there being fewer customers in the Feria now than in previous years. Perhaps he said so due to the increase in large modern supermarkets around the city. In consideration of the suggestion for modern uniforms and José's words, this may reflect Obrist's urban health risk referring to as "changing patterns" of life. In this case, a shift if consumer spending at supermarkets and other large scale retails may be experienced as threatening the livelihoods of vendors.

It may be interesting that "bettering" the market was discussed by participants in terms of appearance, but not safety, which is also written about as a way to attract and retain customers. The World Health Organization recommends that markets should be organized by zones to reduce risk of illness caused by contaminated food (WHO, 2006). For instance, they state that raw meat should be separated from ready-to-eat foods. Although many examples in the market were observed that contradict this recommendation, these risks were not mentioned by participants, most of which regularly consumed food prepared in the market. When participants were asked specifically about food, participants did sometimes refer to prepared market food as "dirty". While what constitutes "dirty" is highly subjunctive, a perhaps interesting finding is that participants judged the cleanliness of food based on who prepares it, rather than where or how it is prepared. For instance, many vendors had their meals delivered to them by the same person day after day, without ever seeing it being prepared. This could suggest that personal relationships with who prepares food is believed to correlate with safer food. The responsibility then of "dirty" food seems to be of an individual nature and not a result of the structural characteristics of the market such as lack of refrigeration and water supply or exposure to pollution. This may be significant in terms of health market programs that emphasize collaboration across market sectors to promote health through hygiene. Moy describes a multi-sectoral approach to improve health conditions in a market in Dar es Salaam:

"The BHMTF [Buguruni Healthy Market Strategy Task Force] Plan of Action includes a full range of activities from infrastructure improvements to training and education of food handlers and consumers....construction of a solid waste storage bay, and construction of toilet and hand washing facilities....As evidenced by improved handling of solid waste, activities within and outside the market have produced a synergism which have contributed significantly to the hygienic conditions in the market. Local resources have been mobilized for an education programme for market participants, consumers and other stakeholders to promote awareness that safe and nutritionally adequate food is the foundation of good health" (2001, p. 503).

The relative lack of interest or perceived importance among vendors in food safety and sanitation may reflect a different understanding of causality related to illness. In a more general sense, this may reveal that vendors do not regard the market's organization or facilities as being responsible for preventing illness or shaping well-being on a daily basis. In the particular case of the Feria, vendors expressed that the market association rarely accomplished anything, and even that market representatives were corrupt. This mistrust may contribute to a feeling of self-responsibility for managing one's well-being in the market. It may be that this thinking also extends to other urban settings where vendors spend time such as housing, schools or transportation systems that like the market, may also pose risks to health that could be reduced in collaboration with other sectors.

Injuries

Infrastructure relating directly to vendors' working space was however blamed as being a cause of injuries. Several vegetable vendors complained about hitting their heads on a metal bar when entering or exiting the small entrance to the storage area under their stalls. Respondents also reported being harmed by stray animals and pests. One vegetable vendor showed scratches on her arm from a stray cat that "lived" on the roof. A fruit vendor even reported that a big rat startled her in the market while she was pregnant. About a year later, when her newborn daughter became ill with *susto*, she attributed this incident as the cause (a more detailed telling of this account will appear later). Overall however, injuries appear to be more frequent and dependent on one's stall and particular types of vending tasks rather than infrastructure.

Nearly all the vendors whose work involved using knives had on several occasions cut their hands or arms. Meat vendors showed many injuries evidenced by their scars. Most cuts however were described as "not serious". Vendors reported wrapping their injuries with cloth or plastic, and securing it with tape or string. This was observed twice during fieldwork with two different vendors. On both occasions, they reported continuing to vend until they could stop to bandage the injury, usually within a few minutes. With more serious cuts, some said they went to a nearby pharmacy for bandages or in one case, to a private clinic across the street for stitches. The close proximity of pharmacies and clinics may be an urban health advantage. In rural areas, these facilities typically are fewer in number, far between and open less hours. As we will see later though, private clinics may not be an accessible option for all participants. No participants reported making use of the first aid boxes hung in the aisles throughout the market. Nearly all vendors stated that these injuries still happen, but less now than when they first started because they are now "accustomed" to their work. These examples show that while vendors acknowledge certain risks involved in their work, they may feel a sense of personal responsibility over both preventing and treating them. This again suggests that safety is accepted as an individual responsibility rather than a collaborative responsibility or liability of the market.

Chronic conditions

Participants also reported suffering chronic conditions from the daily aspects of their work, some of which were visible. The two *ambulantes* in this study both experienced dry cracked hands that sometimes bled due to the citrus fruit they handled daily. This also caused a painful separation of nails and the skin underneath. Potato vendors experienced chronically brown hands as a result of years of handling potatoes covered in dirt. They referred to this condition as "*manos de la tierra*", or hands of the land. One potato vendor repeatedly drew my attention to her "ugly" *manos de la tierra* only to then praise my "soft, white" hands. She lamented that her hands would only be like mine if she took several months off from vending, which was not perceived as a possibility. Applying the concept of the social gradient, this is an example whereby vendors' work may negatively influence health in a way that those with professional regular employment are not. As will be explained in part three, participants often believed that without money, biomedical

professionals would "let you die". This may mean that those with *manos de la tierra*, or other physical indicators of low status work and therefore associated with poverty, may not be given treatment at clinics or hospitals in a timely manner. Furthermore, while dry hands from fruit, or *manos de la tierra* may be relatively harmless from a biomedical health perspective, they may signal the existence of more serious chronic health conditions that are a result of work.

Participants also experienced chronic conditions that weren't so visible, such as back pain, arthritis, swelling of the legs and pain in legs and feet. Arthritis, sometimes referred to as "pain in the bones" and specifically in the fingers, was a topic of conversation among many older participants. This condition was not discussed as being connected to work among vendors, nor was it mentioned in interviews. The cause of back pain was however attributed to work. The lower back region (referred to as *riñones*, or kidneys) was specifically noted by several vendors. Several female migrants from the Andes, wrapped a large cloth many times around their lower back and abdomen area for support. In another case, one male vendor born in Arequipa who previously worked in an office, reported sometimes taking aspirin if his back pain was particularly painful. These examples show the existence of both traditional and biomedical health practices related to the maintenance of occupational health, and how they may be based on differing social factors like gender, ethnicity and occupation.

Regardless, nearly all vendors with chronic concerns, like those who experienced injuries, said that now they have less pain, and in some cases no pain, compared to when they first started to vend. They typically stated that this is because they are now *acostumbrado* (accustomed) to their work. While it is possible that vendors have indeed developed physiological adaptations to their work movements, it could also be argued that their pain has become normalized—or like *manos de la tierra*— accepted and internalized as an unavoidable characteristic of their work.

Becoming "accustomed" to chronic pain, that is likely to be caused and further aggravated by daily tasks, should not be understated since it was found to compromise vendor's ability

to work long term. I observed Lupe, a fruit vendor, express physical pain several times when she stood up from her stool to reach for or weigh fruit. She said that the pain is caused by ongoing inflammation in her ankle. A doctor told her she must rest and prescribed her medication that she cannot afford so instead she takes cheaper non prescribed pills, "tomo pastillas de inflamanetes pero necesito mas pastillas que son mas caras a ayudarme con este mal o si no, no puedo trabajar. Sin salud, no se puede hacer nada." (I take pills for inflammation, but I need pills that are more expensive to help me with this pain, if not, I cannot work. Without health, one cannot do anything). Without family members or hired help, Lupe must work despite the pain and risk worsening her condition. But despite Lupe's work, she is still unable to afford the medicine she needs.

Rocío, a fruit vendor, suffered back pain after years of "hard work" which got so bad she claimed that she could not work for one year. Now, her daughter runs her former stall full time and even though Rocío still works at the stall one day a week, she says she cannot "vend well". I met another vendor on a bus ride from Arequipa to Cuzco who claimed she had to stop vending completely because the disks in her back were so badly damaged from carrying and weighing potatoes. Years later she still cannot sleep or sit in certain positions. She has avoided surgery, not because of the costs, but because a friend and fellow vendor with a similar condition was left in worse condition after her back surgery. To cope, she ices her back daily with ice from the freezer that her children bought her as a result of her condition. She also takes daily dosages of a magnesium supplement in the form of a drink, but laments that she can only take half her desired dosage since without a job, she and her husband cannot afford the full dosage. This example shows how those with jobs on the lower end of the socio-economic hierarchy struggle to achieve health. First, work causes their health to suffer, and then without benefits typical of regular employment, like health insurance or social security, people may be unable to afford treatment. In this case, the result is the inability to be economic productive. Such instances may come to pose a great burden on Peru's economic and social development.

Market work also seemed to aggravate previous medical conditions. Physical tasks like pushing a cart and closing heavy stall doors as well as being exposed to the cold, were all

reported to cause pain to areas that had been previously treated or operated on. Without allowing enough healing time after operations before returning to work, the operated area may not heal quickly or correctly. This may cause one to believe that surgery results in ongoing pain and discourage future procedures due to the limitations they may pose to physical work. Health implications of market work however were also of a non-physical nature.

Stress

Many aspects of vending were found to be sources of mental stress, though this too varied depending on the vendor's situation. Paying off debt however was reported most often as a cause of stress and cause of long work hours. Debts appeared to take on three forms: bank loans, independent moneylenders, and *mayoristas* (wholesalers). Bank loans generally had to be paid once a month, while independent moneylenders and wholesalers collected on a sometimes daily basis. Debts were observed among both stall renters and owners. Some debts were from personal loans not directly related to their business. One vendor worked to pay off her husband's carpentry equipment. Others worked to pay off loans taken out for their houses. Meeting these debts was observed as being difficult. I witnessed many vendors borrowing money from friends or negotiating with collectors to come back the next day. Sometimes vendors reported that they believed they paid a collector twice for the same payment since there was often no official paperwork. In one instance I witnessed an ambulante, Rita, return almost in tears after a trip to the bank to make her monthly payment. One of her 100/s (\$33 USD) bills turned out to be counterfeit. Many vendors similarly had experiences with fake currency, as almost all were eager to show me how to identify false money. In this case, Rita blamed herself for not checking the bill more closely since this happened to her before a few years previously she thought she should have known better. While many took care while vending to examine money to avoid accepting fake currency, I observed this could be difficult when there were many customers. Rita's bill was accepted while vending during the day of the city's anniversary parade when she said she was too busy to take notice.

Several vendors reported the most stressful aspect of their work was managing multiple tasks. Vendors often had to attend to customers, collect money, make change and keep goods stocked. If a vendor appeared preoccupied, they feared customers might purchase from another stall, and they often did. Because of the possibility to make a sale at any time, there seemed to be importance placed on always being at the stall. Lupe for example, could only spend a few minutes at the anniversary celebrations because she had just received a large order of strawberries from a wholesaler. If she didn't sell them that day, before they spoiled, she wouldn't be able to pay her debts. This illustrates Babb's point that market workers in this sense function as "commission sellers" to wholesalers because vendors may be dependent on wholesaler debts and contracts, putting what appears to be "selfemployment" in question (1989, p. 164). The pressure to pay debts may contribute to the long hours most vendors reported to work. In rural settings in contrast, as I observed during field work, most vendors stopped working around five or six in the evening when it began to get dark. City infrastructure such as electricity and transportation perhaps makes longer market hours possible. On the one hand this may promote greater cash earnings, but on the other hand, adversely affect health.

In Arequipa, most stalls opened around 7-8am and closed around 9-10pm. While it is not possible to measure the effect a lack of sleep or rest had on participants, most reported being tired. I observed several participants napping, or resting their heads while in the market. One even had a small bed set up under the counter of her stall. When I asked one vegetable vendor when she was not tired, she responded, "cuando era una niña" (when I was a little girl), signifying the chronic exhaustion vendors may experience. There is however a cultural perception that a person who rests too much is seen as lazy, or floja, which carries a negative connotation. When I told one vendor how much I prefer to sleep every night (8-9 hours), she quickly warned me that if I continued with this pattern, I'll become floja. The act of doing work—not necessarily the act of earning money—may be a defining characteristic of being morally good (see: Ødegaard, 2010). Notions of good health may also be embedded in the ability to work. When asked to describe a healthy person, Lupe remarked that "una persona sana puede trabajar" (a healthy person can work). This statement may demonstrate that a measure of health is how well one works.

Not working then may be seen as a sign of being unwell and carry a social stigma such as being *floja*. People in the Andes participate in communal labor in order to better houses, community buildings, and roads. Partaking in such communal work activities is a reflection of being a good person. Therefore it may be that in urban communities where communal laborious work may be less common, spending many hours in a work setting like a market may signify the commitment to work—reflecting good health and good morals.

The type of work one does in the market may also affect how vendors conceptualize their moral identities. According to Lupe, wholesalers earn significant amounts of money because of rituals they practice to "pay" the devil, who in turn gives them good fortune. Lupe stressed that this model was risky, since if they fail to make a ritual payment, their business and their health would suffer almost instantly. The pressure to keep up with these practices she thought to be stressful. Instead, she prays to God who she says cannot give her money, but can give her the good health to work well to make money. In terms of health promotion, this statement is indicative of a source of resilience that those with relatively low socio-economic status, and with less access to resources, may rely on in order to overcome challenges. In the market, many vendors had religious figures displayed above their stalls, sometimes as a part of ornate shrines. Modernizing the market to look more like large retail centers may threaten this source of strength. Although most participants did not directly refer to saints or God when asked about their health, it seemed that faith played a role in participant's well-being. In several instances, praying to God was mentioned as a protective factor against harmful acts associated with witchery. This is a topic that will be explored further in the final empirical chapter. The importance of religion was also reflected when participants expressed consequences of working such long hours.

Being in the market for so many hours a day may have adverse affects on health and well-being. Besides the physical and stressful nature of the job and lack of rest, participants reported missing out on activities they enjoy. Several reported decreased participation in their church, specifically being unable to attend church on Sunday mornings, which is a particularly busy time for business in the market. Lupe reported participating less in her volleyball league and also that she had no time to "find a man". Others expressed not being

able to travel, learn another language or continue their education. This shows how vendors often have fewer opportunities to develop skills or broaden social networks through activities than those with regular employment, pay and time off are apt to enjoy. Only one vendor reported being able to take a regular vacation every year while others stressed they "had to pay" for their days off.

In some cases, hours or days were shared among family members, but in other cases vendors did not have family support nor an *ayudante* (paid helper). When I first started fieldwork, I was surprised to see so many signs at stalls advertising open positions for *ayudantes*, especially after reading so much about the lack of employment opportunities in Peru. Respondents reported that a good *ayudante* was hard to find since they were often unreliable or thought to steal money. There appeared to be no formal hiring procedures or contracts for "employees" of market stalls. This informality may contribute to their unpredictability and on the other hand, offer little protection if employers (stall owners/renters) do not pay as agreed.

Theft or fights were found not to be a significant source of stress in the market. Most reported only verbal conflicts with customers or fellow vendors, which quickly resolved themselves. Vendors sometimes reported only small items being stolen, and even then only on a few occasions. They said that other vendors look out for each other, and that they know how to hide their personal belongings. Outside the market though, vendors experienced their money being pick-pocketed while traveling home to and from work. I got the sense that it was perceived as something that just happens. Crime then, like pollution (and as we will see with food), may be another aspect of urban settings that vendors seem to have come to accept as a part of life.

Summary

In summary, market work was found to produce short-term injuries and long-term health conditions. The health risks of vending may be exemplified by the market's physical infrastructure and specific vending tasks. There also seems to be a degree of self-responsibility in terms of managing occupational related health that could have implications

for efforts to improve the market's condition beyond just physical appearance. While some vendors have found ways to cope with the nature of market work, for example by dressing warmly or becoming adept at handling dangerous tools, others continue to work without the help they desire which may further compromise their health and well-being. But if it is true that "people who have more control over their work have better health" (Wilkinson & Marmot, 2003, p. 18), then there may be evidence to suggest that vendors' health may actually benefit as a result of their work. Therefore the next chapter will explore this possibility with special attention to the ways vendors may feel in control of their work, and in shaping their work environment.

Chapter 4. Health Benefits of Vending

Autonomy

It was repeatedly said by vendors that what they enjoyed most about their job was not having a *jefe*, or boss. Participants liked the freedom to choose their own hours, which let them take breaks and eat lunch when they please. They were also able to care for their children, or grandchildren in the market. Some even on occasion left during lunch hours to run errands or return home to cook and eat. It must be stated that many voiced these advantages in comparison to previously held positions such as a domestic servant or field worker. These two positions are generally less desired and almost always seen as low status work, perhaps because both have a relative lower degree of autonomy than vending. In contrast, one participant, José, turned to vending after he lost his job as an office worker. This case is interesting to examine because while nearly all participants aspired for their children to work as "professionals", José actually prefers vending to his office job.

José was laid off about six years ago and struggled to find regular employment so he and his wife decided to buy a space to vend potatoes. While he says that he works many more hours now—and also experiences back pain from lifting potatoes— he still prefers vending to office work. Part of his reasoning may be that he can make up to three times more money vending every month than he did in his office role. His emphasis however did not seem to be placed on the amount of money he made, but rather on the personal autonomy associated with earning money. He repeatedly emphasized that "I make money for me, if I arrive early, I make more, if I work less, I make less". He also likes that the money he earns goes directly towards "bettering the life of his family" and not to a company. Vending also allows José to express his entrepreneurial spirit. He has a plan to buy a vehicle in the next few years to transport potatoes directly from the *chakra* (farm land/fields in the highlands) where he says he can get them for a fraction of the price that he buys from the wholesalers in Arequipa. Furthermore, José many times stated how happy and content he was with his life, that he didn't need to be a millionaire, stating he has everything he needs—including his health. In terms of the social gradient, switching to a "lower status" career seems to have actually benefited him in many ways. It may be that he has more "decision making authority" (Wilkinson & Marmot, 2003, p. 18) in market work than he did in an office, thus

showing the relativity of the social gradient in terms of positive or negative health. As Wilkinson and Marmot describe, even within the same work setting, those with higher status positions have better health than those in lower status positions. Part of the reasoning being that higher status positions tend to offer more opportunities to make meaningful decisions. José's wife is also president of the potato section, suggesting that perhaps this offers José a higher status than many others in the market have. Furthermore, with his wife in an influential position, he may feel that he has the ability to influence aspects of the market work environment that others may not feel as possible.

Market politics

A key area for decision-making in this research setting lies in the Feria's market association. Since it has been shown that a sense of control over shaping ones work environment has been seen to positively impact health (Wilkinson & Marmot, 2003), these meetings will be discussed in terms of vendor participation and perceived likelihood of affecting change. It is also interesting to consider that many health risks in a market are the same as those of a city. Markets can be characterized by "urban health risks" such as environmental hazards and inadequate services. Attitudes relating to these issues in the market may reflect participant's attitudes of similar conditions in broader society. Before going into more detail on vendor's participation in the association, a brief overview of how meetings were run may be useful.

The Feria is self-governed by a board of elected officials, all vendors, who are voted in by fellow vendors. Each chair is held for two years and every position has a list of expected duties that are listed in official market documents. Furthermore, each section of the market has their own elected president. Meetings are held for individual sections as well as market wide. There are also meetings for stall owners only. During fieldwork I was able to attend three sectional meetings that lasted from two to three hours. A meeting generally started with words from the sectional leader and then was followed by a talk from the market's president, who was also a vendor. They concluded with administrative tasks, such as collecting various fees or reviewing plans for social events. An open forum for questions and comments generally came at the end of the meeting.

It was clear that participants did not feel enthusiastic towards meetings, in fact many were surprised that I was so eager to attend. Some joked about going to the meetings to sleep, but from my observations, this was in many cases not a joke. Others ate their lunches or tended to children while in the meetings. In one meeting, the room was too small, causing several to stand in the hallway outside of the room. In another instance the meeting was held in a large semi-enclosed parking lot. Here some vendors sat far away from the speakers so they could stay warm in the sun. When personal issues regarding payment of dues was discussed, vendors then became engaged and moved in closer so they could participate. Participation generally was limited to a few vendors who were particularly well spoken. In one meeting, a former female office worker raised the issue that several vendors were afraid to speak. With papers and calculations in hand, the same woman also accused the president of charging owners too much in fees according to some calculation per square footage of their stalls. No traction seemed to be gained by her efforts, possibly setting an incorrigible example for many vendors who were relatively less well-spoken, or illiterate, limiting their access to documents to formulate such arguments. In such an open venue, one's social position may discourage participation, especially in an urban context, which values formal education and discourages native languages. When I asked vendors why they didn't participate, they usually responded with "I don't like to". One older vendor said she has no interest in meetings, all she wants to do is "vend, eat and sleep, vend, eat and sleep", over and over again. These examples show that although there is potential for vendors to articulate their concerns to possibly influence their work environment, participation is low. According to several related health promotion models and theories (locality development, social planning, social action), active participation is central to share and identify common problems and to find solutions (Green & Tones, 2010). By not participating, vendors risk having their work environment shaped by opinions or needs that may not be widely shared.

One participant, Camilla, expressed concerns that reflect how an inability to create change may involve a sense of ambivalence towards participation. For example, she felt it very unfair that a group of vendors who traveled back and forth from the highlands and were only at the Feria on Mondays and Tuesdays, could not attend the market wide meetings

(since they were not scheduled on these days). Not owning market stalls, these may be perceived as lower status, or belonging to the lower end of the market's occupational gradient which seemed to devalue their rights as market participants. Camilla said she didn't raise issue with the scheduling issue in the meetings because in the past whatever she said did not matter since nothing changed. Another concern of hers was the wall that was to be constructed around the market. The wall would eliminate her view of the street, which she quite enjoyed while passing long hours at her stall. She said that since a majority vote was taken in favor of the wall, there was no point in bothering to contest the issue.

Change & realizing dreams

To get more perceptions of experiences dealing with change in the market, I asked participants, "what has changed in the Feria since you started vending?" The responses depended largely on how long they had been in the market. When the Feria first started, there was only a dirt floor and ceilings constructed of tarps. In recent years there has come a tiled floor, a metal roof, and lights. No other changes were mentioned. One participant brought up the point to me that all changes in the Feria are paid for by the vendors, but not all are in the same economic situation. Therefore, he believes that improvements cannot be made quickly and furthermore, that nothing has changed in the six years he has been vending. This may be significant in the sense that individual vendors' aspirations may be bounded by the economic position of fellow vendors. José for example emphasized that he knows how to manage and save money, but that others do not. Regardless, vendors seemed to be united towards a common vision for positive changes in the market.

As discussed previously, participants did seem to share in the belief that the market would be "modernized". One fruit vendor worried that someday when I return, I might have trouble finding her in the market because it will be so different. She also added that she would hopefully be selling children's clothes by then because clothes do not spoil like fruit which offered several advantages. Notably when discussing the future, no participants mentioned changing their line of work. In fact a few said that their "dream" was to own their own stall, or to vend prepared lunch food. Regardless of participation in market politics, the desire of upward mobility within the same line of work implies that

participants are reasonably satisfied with their work setting. It also implies that vendors do believe that they have the ability to change their circumstances, or "identify and to realize their aspirations" which according to the Ottawa Charter for Health Promotion, is necessary to achieve a state of complete well-being (WHO, 1986, p. 1).

Social lives

In health promotion research, social capital is often used as a framework to understand how social circles may contribute to well-being, including how people use their social networks as a resource in times of hardship. Social capital in a market context is highly relevant due to the social relationships that have been seen to permeate these environments (Babb, 1989; Seligmann, 2004; Ødegaard, 2010) Findings from this research also confirm the existence of social ties, some of which may be advantageous to health. The social context of the market is a theme that will be drawn on throughout this study's findings. Therefore, the following is a brief account of how the sociality of the market may play a role in vendor's well-being.

One participant had a good friend who traveled back and forth from the highlands every week and brought back with her food goods that she would give as a gift. Vendors also highly valued eating together. Vendors were often very curious about not only what I ate for lunch, but whom I ate lunch with. As Bredholt Stensrud (2011) explains, there seems to be an association between the ability to eat and social togetherness. She gives an example of a woman in Cusco Peru who stayed at home alone while her husband worked, "she became thin and pale; not because Wilfredo [her husband] did not give her money to buy food, but because she missed her family to share the meals with. She did not like to have to eat alone" (p. 86). Therefore the social aspects of vending can encourage healthy eating habits as well as the exchange of resources that may help reduce economic burdens.

Social relations may also reduce the hurt from physical pain. For instance, the most social area of the market from my experience was the fruit and vegetable sections where there were no walls separating vendors. Most spent time in front of their stalls, which seemed to result in a high degree of conversation and general social interaction. One vegetable vendor

experienced bad headaches as a result of menopause. She stated that talking and joking with her friends in the market helped her to forget the pain. In other areas of the market where stalls were separated by dividers, vendors seemed to do more individual activities such as reading of knitting. In one such section, a clothes vendor reported that when she has to go on short breaks, she prays to God to protect her goods from being stolen stating that her neighbors do not watch her goods well. Since a characteristic of modern markets generally include clear divisions of storefronts and well established walls, plans to modernize the Feria may threaten existing social relations and discourage the building of greater social capital that can help one to cope under vulnerable circumstances.

Health activities

Perhaps more directly related to health, at least in the physical sense, are the number of health related activities that took place in the market. Markets around the world have been used as venues for public health campaigns such as child immunizations and to relay educational health messages. In the Feria, several initiatives relating to health were observed.

For two days there was a tent set up just outside the market for a private health clinic offering biomedical diagnostic testing of 42 parts of the body⁹ using *alta tecnologia* (high technology). I found it interesting that the first day the tent appeared, was also the first day of a campaign to clear *ambulantes* from the streets surrounding the market, which resulted in a high police presence near the medical tent. Given the negative association with government and health care among many people, I got the impression that the authoritative presence of police near the tent discouraged visitors. Furthermore, the clinic's tent had a big printed picture of a person on an operating table surrounded by surgeons. Much literature on Andean medical beliefs attests to the perceived dangers of surgeries, since removal of body parts or fluids can disrupt a balance of body fluids that is necessary for health. This printed picture may underline the impression that biomedical treatment is inherently invasive. One the other hand, the market also arranged for a "massage doctor" that was advertised over the Feria's loudspeaker as "natural treatment". This option seemed to be

-

⁹ Listed as: "heart, stomach, back, liver, colon, kidneys, pancreas, mental state, ovaries, gallbladder, prostate, and others".

more in demand by vendors. During the time of my visit, there were 10-15 people (both vendors and members of the public) waiting to be seen. While barriers like paperwork and cost did appear to discourage participants in this study from visiting the "massage doctor", they did seem to be receptive of this treatment option. These health activities begin to demonstrate that the market is a place for occupational health as well as treatments that may be utilized to support their health or likewise, inform ideas of health. Part two will explore these themes in more detail.

Summary

In summary, the second chapter of this section hoped to shed light on the positive aspects of vending which generally receive less attention than the negative aspects. This may be due in part to the finding that the benefits of vending seem to be less conclusive, and also less visible. Injuries can be seen and the existence of stress in this workplace is virtually undeniable. Measuring participation and it's benefits to health are harder to quantify. To realize the benefits of market work, one perhaps has to look beyond a biomedical view of health, and into a holistic sense of well-being that is measured by vendor's perceived progress, future aspirations and social relationships. Chapter four demonstrated that there are advantages to market work that may supercede benefits of regular employment, which acts as a reminder that assumptions about "low status" work must be questioned. But while much evidence has been found to suggest vendors value their work, there remain many opportunities to enhance well-being. To further understand health through the perspective of a market vendor, the next chapter will discuss vendors' practices related to maintaining health, and furthermore how these practices and health beliefs may be socially constructed in a market setting.

Part 2: Health in the Market

Introduction

In part two the study moves beyond work characteristics and into practices of health maintenance, how these practices may be observed in the market and the social interactions that may work to create, reproduce, or change health beliefs. The first chapter, chapter five, focuses specifically on practices of health maintenance and illness prevention including the flu, food and exercise. In discussing these practices, many traditional health practices will be introduced, particularly as to how they may relate to a work and a market setting. Highlighting traditional health practices will also serve to give the reader an orientation and background for later sections concerning treatment decisions. With a social constructivist perspective, the second half of part two will describe different health related actors and products that are found in and around the market, and the different health related products that are sold, purchased and used among vendors. The chapter will attempt to theorize about how vendors come to conceptualize health issues, based on the social exchanges involving health related actors and commodities. It is hoped that these examples will highlight the fluidity of health ideas as an evolving creation among those involved in an urban market setting.

Chapter 5. Everyday Health Practices

La gripe

In vendors' daily conversations they often mentioned *la gripe*, or the flu. Symptoms included the chills, weakness, sore throat, headache or fever, much the same as symptoms associated with the flu in biomedicine. It was found that treatment typically also followed biomedical practices. Participants believed the flu could be treated by doctors, pharmaceutical drugs, rest, teas and a variety of other home remedies. Viewpoints on how *la gripe* was contracted however did depart from a biomedical understanding.

During fieldwork, I happened to experience many symptoms characteristic of *la gripe*, leading many vendors to give advice regarding *la gripe* which in turn gave insights into perceived causation. Participants continuously voiced the importance of dressing warmly to avoid *la gripe*. Furthermore, several stressed the importance of covering one's neck with a scarf in order to prevent sore throats. It should be mentioned that when asked what causes *la gripe*, two participants did mention "contamination", specifically by coughing or sneezing. Nearly the only reported, and observed, preventative practice though was dressing warmly. One vendor however did report getting a flu shot yearly, which shows a concern for prevention, but her understanding of how the flu is contracted too seems to be connected to ideas outside of biomedicine. Upon learning I was traveling to Cuszco, she recommended that I get a flu shot. She said that the change in the air in regards to the altitude and the cold could cause *la gripe*. According to the U.S. National Institute of Allergy and Infectious Diseases (NIAID), there is no "experimental evidence" that shows being exposed to cold weather increases the risk of the flu. Likewise, the NIAID also confirms that the flu is caused by the influenza virus, not cold air.

In addition to avoiding the cold, drinking orange juice was another practice participants observed to prevent, as well as treat, *la gripe*. On several occasions I observed customers buy orange juice commenting that they had *la gripe* and needed the juice to treat their illness. One customer even bought orange juice in order to take pills he had to treat *la gripe*, which he showed to me and the vendor before swallowing them. Despite openly sharing that he was sick, there appeared to be no concern for preventing the transmission of his sickness

during after this exchange as drinking glasses were rinsed with only cold water. Scientific research has well documented that disinfecting shared items like drinking glasses and utensils, is perhaps the most effective measure to prevent contracting viral illnesses such as the flu (NIAID). In a market where food is prepared and eaten by vendors, as well as hundreds of members of the public daily, this finding suggests room to prevent illness by promoting healthy food preparation practices. For such skills to be practiced, it would be recommended from this example, that a causality of contracting sickness via viruses through shared items first be established among market participants.

Many participants reported vending while they had *la gripe*. A vegetable vendor said "cuando tengo la gripe, se si trabajo tengo que sin fuerza...si, tengo que trabajar [como] normal" (when I have the flu, if I work, I work without strength...yes I have to work as normal). Rita had to rely on another ambulante one day to help her push her cart because she was too weak. She also had a headache, and the chills and diagnosed herself with *la gripe*. Upon suggesting she should rest, she said "no puedo, porque necisito pagar los 20 soles en diario" (I can't, because I have to pay 20 soles everyday). This loan is actually to pay off her husband's carpentry equipment, which she says he does not even use because he is an alcoholic. Rita tells me many times how he spends his days getting drunk and does nothing to contribute money to the family. Her parents she says are also drunks. For fear that she may become a drunk too if she stayed in her native rural town, she migrated to the city when she was nineteen. She says that there are no opportunities in the highlands and she wanted to give her future children a good education. Rita now has three school-aged children to support. Since her husband does not contribute to the household financially, and without the support of nearby family to rely on, she has little choice but to work when she is sick.

On this particular day when she had *la gripe*, Rita went to a nearby pharmacy and bought three pills. She claimed to feel better almost immediately after taking them, saying "*no se puede trabajar enferma*" (one cannot work sick). From Rita's perspective this statement is likely to be a reference to her own physical inability to work as she was unable to push her cart that morning when she was sick. In contrast, those in regular paid employment are often encouraged to stay home when they are sick to prevent infecting others, especially those

who work with food. This viewpoint however was not reflected among participants. This finding could be a useful insight to consider for public health campaigns that seek to control communicable illnesses that could spread quickly in urban marketplaces.

Like Rita, others reported buying pills from pharmacies, but sometimes only if the illness was "*muy grave*" (very bad). This may be because participants reported that pills "cause harm" to one's stomach and many preferred to minimize their use. Before suggesting why participants may have unfavorable attitudes towards pills (more in part 3), it may be useful to first explore how participants conceptualize health, and practice health on an everyday basis.

Intake: food, nutrition & pollution

In terms of maintaining health, food was perceived to have significant influence. In fact, most claimed that "eating well" was the only measure they took to maintain their health. The type of food, as well as the time of day the food was eaten, both had importance. Large portions of food were seen as necessary for strength in order to work and failure to eat at the same time everyday was attributed as the cause of illness.

Rita experienced an ache in her stomach last year that was so painful, she decided to go to the hospital. She first described her condition as gastritis ¹⁰ and then continued to explain how the doctors found a tumor on her ovaries. She subsequently had surgery and has since made a nearly full recovery. She attributed this bout of illness to not eating enough, nor at regular times. Before her surgery, she said she was only concerned with working to make as much money as possible, which got in the way of eating well. It was commonly said among vendors, "si no vendes, no comes", (if you don't vend, you don't eat). This statement is significant in that it symbolizes a hand-to-mouth existence that, without regular income, many vendors may identify with. Regardless, this statement, along with Rita's experience, may be interpreted that working is prioritized over eating and thus over health. It was only after Rita's surgery that she was willing to take the time to "eat well" everyday even if it

_

¹⁰ Gastritis is known as an inflammation or swelling of the stomach. It can be caused by a number of factors including overuse of anti-inflammatory drugs, excessive alcohol intake, infection caused by a bacteria, extreme stress and a number of other causes (NIH National Institutes of Health, 2011).

meant earning less. In another instance, after explaining to a vendor that a young family member of mine died after a year of feeling ill with symptoms of tiredness and seizures, she immediately asserted that one must eat breakfast, lunch and dinner everyday to be well. No mention of food occurred before this statement and no other causation was suggested. These two examples demonstrate the great significance that food and eating patterns are perceived to have on health to participants.

Among labor workers in rural Andean communities, Larme too found that eating at regular intervals provided *fuerza*, or strength (Larme, 1993). Additionally she writes that, being hungry is believed to make one vulnerable to *wayras*, or "supernatural elements" that enter human bodies of those who have let themselves become *debil*, (weak and/or vulnerable) through for example being hungry. Although no participants in this study mentioned *wayras*, there was an association between eating, strength and preventing *debilidad* (sometimes also referred to as anemia). After expressing to participants that I experienced pain in my neck and back after helping to vend fruit, I was routinely told that I should eat more because gaining weight would give me more strength to work. This evidence supports Larme's observation that in the Andes, "a fat woman is considered healthy, fertile, strong, and capable of hard work. A thin person of either gender is considered to be weak and sickly" (Larme, 1993, p. 98). So while traditional concepts people in the Andes hold, such as *wayras*, may not be made explicit, vendors do associate food practices with the maintenance of health as well as necessary for work. Andean health beliefs may in this regard contribute to a perception that one's health is at greater risk in cities.

Since many participants, or their parents, were rural migrants, I was interested to know their views of how their health may be affected by an urban environment. Their responses centered again, largely on food. There was a general feeling that food in Arequipa was not as healthy as food from the countryside. This referred to processed food as well as produce that may have been grown near the city or imported from other countries. More specifically, food in the city was intrinsically thought to contain harmful "chemicals". Meat from animals raised near the city was thought to be particularly harmful. The healthiest food seemed to be that transported directly from a family or friend's land where it was grown. According to

Skar (1994), foods from one's native land are associated with identity, kinship and community. Travelers are requested to bring food from rural areas back to the city to family members which functions to maintain familial and social ties. But as she explains, this practice may also work to support health, "On coming to a new place, your body ingests produce from foreign lands, the unaccustomed food being potentially harmful to your health. The vital link between the generalized earth and the individual body is broken when foodstuffs of other places are eaten, the bonds only to be occasionally restored on receiving an *apachikui*¹¹ from Matapuquio" (p. 92). For those in the city, they may have to sustain a diet not only with food not brought from the highlands but also with food that is foreign produced or manufactured. One participant, Juan, voiced this concern.

Juan lamented over the lack of vitamins in his diet because "cereals" (meaning grains like quinoa) are less abundant in the city than in his rural native land. Even though he was concerned about not obtaining sufficient vitamins, he said he would not take supplemental vitamins such as those sold at pharmacies. He expressed that vitamins contained harmful chemicals—just like in "city" food¹². In this sense, rurally produced food may be viewed as having health promoting qualities, whereas food grown, produced or packaged in relatively urban environments, may be potentially harmful to health. Juan also mentioned street food, as well as produce sold where it is exposed to the sun, as being harmful. Still, he says he eats prepared street food regularly perhaps due to its convenience since he works in a stall bordering the street and spends little time at home. Prepared food may also be increasingly accessible in cities in the many "modern" food outlets in Arequipa. Some younger participants remarked how much they like fried chicken and pizza while also stating that it was bad for them. This perhaps represents a change of values taking place in the younger generations of indigenous migrants. As consumption of food bought and prepared outside of the home increases, health may be perceived to suffer or be placed as risk.

¹¹ In Spanish an *economienda*, or a "commission delivered" brought when between traveling between kin or social groups to fulfill reciprocal obligations. May contain cheese, eggs, corn and locally brewed or homemade alcohol (Skar, 1994, p. 56)

¹² Un pure "city" food, was also blamed for causing stomach cancer.

Contaminated city air was also regarded as a cause of illness. Cancer and asthma, as afflictions of the lungs, were believed to be from chemicals that entered the body from pollution. While participants often took measures to eat properly to maintain their health, practices to prevent illness from air pollution were less or nonexistent. In fact the only prevention measure against pollution involved food. A participant located near a busy road took care to cover her lunch with plastic to protect it from the pollution. When asked if she does anything to prevent pollution she believed could enter the body through breathing through the nose and mouth, she responded, "what are you going to do, what are you going to do?" Another complained that the water and air were "dirty" in the city and "hay nada para prevenir" (there is nothing to prevent). It seemed an accepted fact that by living in the city one was intrinsically putting their health at risk, and at the same time participants' responses reflect being powerless against these conditions. Much like the sentiments in the previous chapter that showed a lack of the ability to change their immediate work environment, this sense of helplessness may signify a felt lack of control over participant's broader physical and political conditions in society.

Exercise

Because of the sometimes sedentary nature of market work, perceptions regarding exercise may be important to consider in regards to health. While exercise activities varied greatly between participants, there was an understanding that exercise is generally beneficial to health. More specifically, exercise was sometimes talked about as an effective means to lose weight, which some participants desired but usually only by younger participants. This is of course in contrast to the perceived importance of fat for strength to work, but also shows the diversity of viewpoints in the market. Regardless, a clear pattern that did emerge however is that participants often referred to their work when discussing exercise.

Several mentioned purposely going for walks around the market for exercise while others conceived of actions like lifting goods to be a form of exercise. One vendor specifically mentioned going for walks around the market to prevent swelling in her legs that occurred after long periods of sitting. On the other hand, though still in reference to work, some participants mentioned that vending limited their physical activity. Several reported not

being able to participate in community team sports like soccer or volleyball because they did not have time. These activities are often held on Sundays, which is when most vendors almost always work as one of the busiest days in the market. Also, one participant voiced concern that there are no recreational fields close to the market, which made it difficult to exercise. This last response reflects the WHO's suggestion that increased urbanization may reduce physical activity due to "lack of parks, sidewalks and recreation facilities" (2011b, para. 4). The WHO also regards violence, pollution and traffic as deterrents to physical activity, which are certainly factors to consider in terms of the social determinants of urban health. Participants however did not express concern of these factors as determinants of their own activity levels.

It was also found that exercise was not perceived to be a protective health measure. While participants were concerned with health conditions such as high cholesterol, osteoporosis, cancers and diabetes that can be prevented and treated with exercise, participants did not show an awareness of the benefits exercise can have on these conditions. Instead, only diet and medicinal products were mentioned as being used to control or treat them. In terms of health promotion, insights into perceptions of exercise may be especially useful for battling the high rates of non-communicable, or "lifestyle" related diseases. Preventing such conditions is not only more cost efficient than treating these conditions with biomedicine, but also could extend the economically productive life of vendors.

In terms of urban areas, exercise and health, it is worth mentioning a recent study by Masterson Creber, Smeeth, & Miranda (2010). The researchers found that those who lived in urban areas of Peru (including those who migrated earlier from rural regions) had physical activity rates 18 times lower than those who lived in rural areas. Additionally, those with higher economic capital and earnings also had the highest rates of inactivity. This seems to imply that those in the city who can afford private or public transportation, walk less. Those with a better financial situation were also found to spend more hours watching television. Economic progress among vendors then should not be assumed to correlate with better health outcomes. In the Feria for example, one participant, who showed signs of

economic success¹³ regularly watched television shows on her mobile phone while at her stall and did not report going for walks like other participants. Another economically successful participant, a *naturista* Lydia, hired a helper whose job consisted of walking between several stalls to retrieve goods and make change. For the owner, staying stationary at her stall may have been necessary to ensure that proper advice was given to her clients. *Naturistas* generally develop their knowledge of natural medicines over many years and Lydia is no different. She claims her clients have followed her from various vending posts around the city over the years, which may contribute to her relative high status among vendors. If she was seen moving about the market doing errands that a helper would normally do, her credibility as a successful *naturista*, and thus her status, may have been questioned. The ability to remain stationary then may be perceived as a "luxury" that is something to aspire to. Having an assistant is generally seen as a symbol of status and success, and thus while Lydia may not gain health benefits from moving around at work, she is likely to benefit psychosocially from being on the higher end of the market's social hierarchy.

The natural & spirit world

Food and exercise may be easily understood in terms of their influence on health maintenance, but what may not be so easily understood to those outside of the Andes are practices related to the natural, or spirit world. Failure to pay the earth, it was believed, can put one's health at risk.

Rita fell sick soon after moving to Arequipa from a rural area near Cuzco. In describing her symptoms, she said she did not have a fever or any pain in her body, only that "no tenía ganas para nada" (I had no desire for anything). While from a biomedical perspective she may have been experiencing anemia or depression, Rita's perspective was different. After reading coca leaves, her father concluded that while living in Arequipa, Rita "falta a pagar"

-

¹³ The participant traveled to Bolivia weekly where leather goods were substantially cheaper than in Peru. Her profits allowed her to vend in the market only a few days a week and for relatively fewer hours each day. Unlike Lupe who had to return to her stall to sell strawberries, this vendor was able to close her stall and participate in the anniversary celebration for several hours.

la tierra" (failed to pay the land). To make amends with the earth, the family held a *mesa*¹⁴ and Rita soon recovered. After this story she then went into a lengthy explanation about how the earth can become angry and how important it is to maintain reciprocal relations. Now she says that she makes ritual payments "sometimes, when she remembers" and has not suffered such a sickness since ¹⁵.

The causality of an "angry earth" and it's role in illness has been well documented among people in the Andes. Bastien (2003) for example writes about the challenges of treating Chagas disease in the highlands of Bolivia. Biomedically speaking, Chagas is a deadly disease transmitted by a parasite that bites humans, and other mammals, during the night. It is "a debilitating disease at all stages, and creates a downward spiral of productivity" and according to disability-adjusted life years (DALY's), is responsible for 2.7 million years of lost work in Latin America (World Bank Development Report 1993 as cited in Bastien, 2003, p. 168). Bastien describes a woman infected with Chagas who believed her illness to be caused by "mal viento" (bad wind) brought on by a "wind deity" that is responsible for rains, drought and also good and evil. To rid herself of the evil, by the advice of a curandero, she placed ritual items and money outside her house with the hopes that someone would take the items and carry the evil away with them. The woman felt better for a short time but then fell ill again. She went to a hospital where the doctor reprimanded her for waiting until the last minute to seek treatment. His "elitist" attitude Bastien claims, caused her to leave the hospital and visit a private clinic where she was to pay \$200 before they would treat her. This case is relevant to this study because Chagas is being seen increasingly in urban areas (Bastien, 2003). While Chagas can affect the ability to work, this example shows how belief in natural forces as a source of the illness, delayed treatment from biomedicine. Furthermore, the "elitist" doctor caused her to leave the hospital and delayed treatment even more. While this woman was able to ultimately have an operation with the help of relatives, others may not have the same resources. By keeping balance with the

Literally translating to "table", a *mesa* (also sometimes referred to or spelled as *misa*) is a ceremony held in houses that center around items seen as suitable to feed the earth such as llama fat, animal fetuses, herbs, and alcohol. Usually taking place twice a year during February and August.

15 When I first met Rita she emphasized her belief in God and even told me that she does not pay the land. I got the sense

¹⁵ When I first met Rita she emphasized her belief in God and even told me that she does not pay the land. I got the sense that many participants felt that I would judge them negatively if I knew they practiced and believed in such rituals. Therefore it is difficult to say with any degree of certainty the extent of these rituals were practiced by participants or the degree to which they are believed to be the causality of illness.

natural world through various rituals, one may be less likely to attribute the cause of illness to its forces.

It was quite common in the Feria to see vendors and customers paying the earth with their first sip of soda, or if there was a festival, with beer or wine. On a daily basis however, many vendors bought a small bunch of fresh flowers and herbs, known as *ruda* that were usually sold on foot by traditionally dressed indigenous women throughout the market. Ruda is thought to "attract luck, customers and money" and in this sense, vendors brushed the flowers along their goods to bless them with economic success (Bredholt Stensrud, 2011, p. 247). But I argue that this practice may also function to maintain a connection with pachamama (mother earth) in an otherwise distancing urban environment. Orlove (1998) discusses the significance of "earth touching objects" such as wearing open toed footwear, touching food directly from the land, and physical work in the field that, in a rural setting, contribute on a daily basis to maintaining a strong connection with *pachamama*. In an urban setting, he argues that these practices are limited by modern infrastructure and furthermore discouraged by dominant mestizo and western beliefs. Maintaining balance with pachamama through contact with flowers then may work to promote health via a connection with the natural world, as well as promoting economic well-being through channeling pachamama's powers through to vendor's goods.

Participants also viewed *mesas* and pilgrimages as a means to uphold reciprocal relations with the earth. Several participants reported going on a pilgrimage at one point but almost none on a yearly basis since they can be quite costly and time consuming. The most revered pilgrimage was to Copacabana, Bolivia during the month of August when the earth was "extra hungry" because of various agricultural related beliefs and anniversaries of saints. I was able to travel to Copacabana myself during this time to observe the earth paying rituals that took place. Before traveling I was warned to carry garlic with me since those who travel to this area, especially at night, are susceptible to an attack by a *kharisiri*, who extracts the fat and blood of humans to "pay the devil". Garlic makes one's fat and blood undesirable. Both pilgrimages and *kharisiris* have interesting implications in terms of economic wellbeing as well. Pilgrimages were seen as powerfully influencing business success. In fact, the

majority of pilgrims in Copacabana, I was told, were vendors who believed participating in the rituals at Copacabana would encourage business. Conversely, those with a great deal of economic success risked being accused of being a *kharisiri*, since it was believed that the devil rewarded those who fed him *arta plata* (a lot of money)¹⁶.

Summary

This chapter hoped to convey practices that participants perceive to be important to the maintenance of health and well-being. These practices are largely related to body temperature, food and spiritual rituals. As demonstrated with *la gripe*, sickness may be conceived of as being biomedical in origin, but at the same time understood as being prevented and transmitted in ways that are not congruent with findings from biomedical science. It was also found that vendors routinely work when sick since if they do not vend, they do not earn money. Without the benefit of sick leave, they may not only be endangering the health of themselves, but the many other visitors to markets. In this sense the disadvantages of low status work, may directly affect the health of anyone of any given social status. One's position on the social gradient relevant to other market workers was also found to affect behaviors relating to health. Vendors who earn more and/or have helpers may be more likely to eat consistently, have time to partake in recreational activities or make ritual pilgrimages. Yet at the same time, and regardless of one's socio-economic position, all participants agreed that the city poses risks to health through contaminated food and air. The capability or desire to reduce these health risks, however, was not felt. This may suggest an area where health promotion interventions can be used to raise awareness of how to reduce intake of chemicals through foods, or even advocating on behalf of vendors for stronger traffic controls, such as idling vehicles, surrounding open-aired markets. This chapter was also intended to introduce readers to examples that show perspectives of how people in the Andes understand health. The following chapter will elaborate on how the market setting may influence such perspectives and treatment choices.

¹⁶ My host family heard rumors that some of their neighbors believed they were drug dealers because there was no way they could afford such a nice house by being vendors, regardless of the fact they worked sometimes 14 hours a day and rarely took days off.

Chapter 6. Informing Health Ideas & Behavior

Health as a commodity

Lydia has been a *naturista* for over 30 years. She sells loose fresh and dried medicinal plants as well as small bags of herbs that are commercially packaged. There are also colorful plastic bottles containing "natural supplement" pills that resemble products that can be found in pharmacies. Some items may even be immediately recognizable to those from outside of Peru, such as flax seeds and Stevia¹⁷. In the market, Stevia is advertised not only as a natural herbal sweetener, but also effective as fighting against colds, absorbing fat, aiding in digestion, regulating the heart, healing skin wounds and nourishing the liver, pancreas and spleen¹⁸. It is sold in a "modern" pill form and Lydia says it is one of her most popular items. Some of her other items' uses however are less clear. Many are labeled as being from India or China and have no Spanish on their labels, and some have no label at all. Lydia also has a collection of homemade elixirs that for the most part she tells me, are made from tree saps collected from the highlands. She has many regular customers, many of whom have followed her to the Feria from other vending locations around the city. In addition to these "medicinal" items, about a quarter of her stall is lined with items used for ritual offerings, such as incense and llama fetuses. Lydia helps her customers navigate her products. Sometimes they tell her their health problem and she "prescribes" a product¹⁹.

While I observed many transactions during fieldwork between customers and *naturistas*, I never observed participants buying from them. When I asked participants if they ever bought from *naturistas*, a common response was "sometimes herbs for teas". I must recognized however that since research focused primarily in the market, I had a limited view of participant's home lives, therefore it is impossible to make any conclusions based on the extent to which market health commodities are used. A clear finding however is that health products sold in the Feria, were often regarded by participants as *bamba* (counterfeit). It was even said that the *naturistas* were *falso* (fake) and that if I wanted to learn their trade, I should go to the market in the city center, or travel to the highlands where they were

¹⁷ Stevia is a "natural" sweetener made from the plant *Stevia rebaudiana* that is native to Paraguay and Brazil (Thomas E. & Glade J., 2010).

¹⁸ Several scientific studies support these claims; see (Thomas E. & Glade J., 2010).

¹⁹ A study in Lima found that 19% of respondents infected with Tuberculosis sought the advice of a market herbal vendor prior to seeking treatment from a western style health facility (Oeser et al., 2005)

"better". Mistrust may be associated with the reported amount of *bamba* in the Feria, ranging from clothing to DVDs and perhaps health items themselves. Less government regulation of trade during the time of Fujimori may have led to an increase of goods manufactured for global consumption flowing through Peru. High rates of unemployment may also have encouraged "cottage industries" or the small-scale production of counterfeit goods. Low quality goods of any manufactured origin that cannot be sold by large retailers may be found and sold at markets. Such risks seem to influence opinions and decisions regarding health related items found in the Feria.

One participant drank a small amount of liquid *noni*²⁰ daily to help the pain in her stomach after a recent operation. Even though bottles of this drink are sold in the market, she preferred to pay more to buy it from a more expensive *tienda* (store) since she believes many products in the market are not authentic²¹. The same participant also declared that bottles of olive oil in the Feria only actually contained a little amount of pure olive oil.

In another instance, a vendor had just bought a little jar of loose bee pollen from a *naturista* and showed it to a group of three other vendors over lunch. Upon inspection, they concluded that it was counterfeit since it did not look like a more expensive pollen another vendor had bought from a *tienda*. Even though pollen may be just as "natural" as the herbs vendors reported buying, pollen did not seem to be a familiar or commonly used item. In this case, it was prescribed by a *curandero* for pain in the upper back and shoulder area, which the vendor believed was caused by breathing in cat hair. Unsure of exactly what constituted legitimate bee pollen, the vendors only had the *tienda* pollen, as a point of reference, which became the standard of what "real" pollen should be. The appearance of pollen however can vary greatly depending on the type of flower, bee, or where and when it was collected (Broadhurst, 2011). Regardless, whether or not the pollen was actually *bamba* is rather insignificant to this study. Instead, this example demonstrates the process by which vendors,

-

²⁰ Noni is a type of fruit that is believed to have medicinal and health promoting properties and commonly sold by *naturistas* in the Feria (and around Peru).

²¹ This vendor's concerns may be warranted. In 2008 a man in Spain died after reporting strange symptoms starting after he drank the same brand *noni* drink as the participant in this study (Dana, 2008). An investigation found a small amount of cocaine in the drink and furthermore, according to the label the drink was bottled in Mexico. Since the company does not distribute Mexican made *noni* in Spain, they believe the victim purchased the drink from an unregulated source.

and perhaps others in medically pluralistic settings, may legitimize unfamiliar health products. If this process also translates into other forms of medicine, it could represent a number of challenges. In terms of global health, for example, there has been a recent push to increase access to prescription drugs, generally by use of generics. Generic drugs however that are cheaper and look different than their more expensive predecessors, may also be met with suspicion, especially among populations who pass their days surrounded by—and sometimes selling—bamba. Additionally, bee pollen can be viewed as a natural resource that has become commodified. Like city food, pollen that has been packaged or bought from retailers, verses attained directly from a known source in the highlands, may be particularly scrutinized.

As a health commodity, bee pollen in Peruvian markets may also represent an evolution of health beliefs across time and cultures. Although in ancient times people in the Andes were believed to spread bee pollen on wounds as a form of treatment, in the modern commercial world, bee pollen did not gain popularity until the 1970's when it was marketed as a an athletic performance enhancing health food (Fetrow & Avila, 2000, p. 607). The shift from bee pollen as a topical medicinal application, to oral consumption may demonstrate how traditional and natural health practices can be continuously created through cultural and social changes. Additionally, bee pollen is an ingredient commonly used in traditional Chinese medicine (Elkins, 1996). This may be significant given the amount of commercially packaged Chinese health items found among the *naturista* stalls at the Feria, and beyond. In the remainder of this chatper, I will attempt to elaborate on how ideas of health may be socially created, and come to be accepted, among those in and surrounding the market.

Health on the periphery

Outside the market's "official" boundaries are a variety of private health clinics, dentist offices and biomedical pharmacies. Others stand on sidewalks handing out advertisements for "alternative therapies" like magnetism treatment, and "wellness clubs" that focus on weight control and nutritional supplements. Because this study is interested in the exchange of health ideas, the focus here will be on verbal exchanges that are carried out in the spaces vendors occupy.

On a particular busy Saturday morning on a street in front of the Feria, there were several men in white coats standing behind small tables surrounded by crowds of people. The men held up large and very graphic pictures of parts of the body that showed people with worm infestations and other parasites. These parasites, they said, enter the body through openings like the nose. They also enter your body through eating meat, which if you eat, you too get parasites. The salesmen suggested that a powered drink mixture they were selling cleanses the body of toxic substances that can enter the body by eating foods high in salt, such as condiments. Drinking the mixture twice a day the said, would cleanse the body of parasites and toxins and by doing so, prevent conditions like epilepsy and leukemia and other cancers. A woman seemed to nod in agreement as she took notes in her notebook. The salesmen said the product was from China, and until recently, only available in the Chinese neighborhoods of Lima. After the sales pitch, a significant number of the onlookers purchased the product, which came with no written instructions except a few words in Chinese and English²². Like the loose bee pollen, this Chinese product had little objective evidence from which to legitimize it. The crowd of onlookers then could only rely on the man attempting to sell it as their only source of information regarding he product. A woman in the crowd later approached me and asked if I bought the mixture, and also if I thought it was "good". My "white" and foreign appearance may have given the impression that I am knowledgeable about medicines as "advanced" scientific medicine (to be discussed in chapter seven), was found to be associated with countries other than Peru.

This instance serves to show how ideas of health may be created between market participants and those in the business of selling health commodities. Since many market customers were observed to discuss health with vendors, it is not unreasonable to suggest that ideas imparted by health sellers, would be passed on and discussed among vendors themselves. Vendors often said for example that eating too much meat was harmful to health. While they sometimes remarked that meat contained a lot of fat, their associations with meat and harmfulness could also be informed by the health actors such as the man selling the Chinese drink mix who claimed parasites enter the body through consumption of

-

²² The package read "Ge Xian Weng: Purgative Herbal Tea"

meat. The debate regarding the legitimacy of the pollen and the crowd's willingness to accept the Chinese tea seller's words exposes a certain vulnerability. That is, those without sound knowledge of biomedicine may be susceptible to health messages designed by those looking to make a profit. Therefore, vendors should regard spoken health information relayed by health related actors with the same degree of skepticism that they do so with products.

Going even further beyond the market's walls, vendor's health beliefs may also be shaped during times of travel. As already noted, vendors often make trips, particularly to buy goods for their business. On a bus ride to Cusco I was on, a man stood in the aisle and started giving a speech. A vendor sitting next to me quickly mumbled that the man was going to talk about health, as if she had heard this talk many times before. As he began discussing the importance of nutrition, my first impression was that he was affiliated with a public health agenda. That is until he too, like the men outside the Feria, started talking about parasites entering ones body through the nose and mouth while sleeping or by food. He was selling packages of a nutritional powder consisting of several native Peruvian plants. The product claimed to improve the digestive tract, purify the blood, combat asthma, coughs and a number of other conditions. After about a ten-minute presentation, he sold several packages and got off the bus (presumably to deliver his sale pitch on more buses). It seems that on a daily basis, the health related information that vendors are exposed to is from sellers of health commodities. During fieldwork, there was no observed presence of government or NGO health campaigns in the market. For vendors who work long hours and only go to the doctor when they are "very ill", their ideas concerning health may be particularly influenced by health commodities and those who sell them. Vendors of course also interact with each other and their customers. These interactions I observed also frequently concerned health and sometimes influenced seeking of treatment. The possible implications of this of course may be well intentioned but do not carry professional merit.

Health, vendors, customers & cops

The social interactions among vendors and others in the market in many instances centered on health. A fruit vending *ambulante* sold pineapple skin telling customers that pineapple

water made from the skin is good for the kidneys. A vegetable vendor says she is "como una doctora" (like a doctor) as she rattles off which of her vegetables are beneficial to which body parts. Another vendor tells her neighbor to eat chicken feet instead of other meat, because it is low in fat and contains calcium. Such social health exchanges were seen to introduce new health ideas, reinforce existing beliefs and also lead to treatment decisions. The remainder of the chapter will draw on specific instances linking the (non-commodified) social aspects of the market to ideas about health.

María is a 30 year-old vegetable vendor who works at the stall that her mother owns along with her sister. She is a single mother with an eight-year-old son. While she pays more to take her young son to a "specialist" doctor, she was willing to seek treatment for herself at a public clinic. Last year she was prescribed a pill by a public clinic, which she said was very affordable, infact "almost free". One day in the market, after several months of taking this pill every day, a regular customer of María's exclaimed to her, "what is wrong with you! You don't look well!" Over several months, María said, the pill she was taking made her become big and bloated "all over". She said it happened so gradually that she was relatively unaware of the side effects until the customer brought it to her attention. The customer urged her to go seek treatment from a "specialist" doctor, which she did. The new doctor expressed surprise that the public clinic had given this pill to María and prescribed her a different, more expensive pill. María says that immediately after switching pills she "deflated like a balloon" and returned to normal. After this experience she only sees specialist doctors, and refuses to go to public clinics. As María told her story, her neighbors nodded with affirmation, recalling her "bloated" state and joking with her about how awful she looked. While many participants also expressed their own dissatisfaction with the public clinics, María's example also demonstrates how health ideas, not just health commodities, can flow through a variety of market participants and furthermore influence treatment choices. From a health promotion perspective, the manner in which María's customer was concerned for her well-being also suggests the existence of social cohesion. Social cohesion, or the strength, and sometimes amount, of bonds between people, has been seen to positively correlate with positive health (Green & Tones, 2010). These relationships can increase access to resources in times of health or economic hardship to help cope with adversity. Or in María's case, her

social network based and created in the market helped to identify health concerns and led to more effective treatment.

It is also interesting to consider that fellow vendors witnessed her experience. Such a case, may reinforce existing attitudes many share regarding public clinics and pills. As will be demonstrated in the next chapter, most participants had negative feelings towards both public clinics and pills. Her subsequent good health after more expensive health care, may serve as an example to all those involved that specialists are superior to more affordable options. This experience also points out how an urban environment can promote health. In a rural setting for example, it is likely María would not have easy access to a private clinic or specialist.

Social interactions in the market also show that participants seem receptive to "new" health practices. A middle-aged *ambulante* who vended directly in front of the Feria, recommended I should drink hot water with lemon and Stevia²³ to treat my headache. In comparison to the use of unprocessed herbs for teas that goes back for thousands of years in the Andes, Stevia (and particularly commercially packaged Stevia) is relatively new. As a "natural" herbal product, Stevia does perhaps mimic in this case more traditional herbal remedies. This is not to suggest that Stevia is replacing other treatment forms, but instead that it may be becoming accepted and incorporated into existing treatment systems. Additionally, this example shows that the market environment may have affected the *ambulante's* beliefs regarding Stevia.

In another example, a policeman that Rita was friendly with, tipped her off to a medicinal product that gives energy and reduces the urge to sleep (a powered product containing magnesium sulfate). He insisted that he uses it when he is tired or sick gave her a piece of paper containing the name of the product and told her she could buy it at a nearby pharmacy for 7/s (\$3.50 USD). He also emphasized several times that it was made in the United States. She was very receptive to his recommendation and also asked me what I thought. Unsure of its intended purpose, I was unable to offer advice. Still, Rita was very interested in trying his

²³ Suspecting that I may have misheard this recommendation, I was able to follow up with the *ambulante* again and verified he did indeed suggest Stevia to treat headaches.

recommendation. This example, as well as the use of Stevia, may be significant in that it shows that vendors incorporate, and are open to new health practices. Though before new health treatments are introduced, consideration to how they may be interpreted within existing health beliefs, should be considered to promote healthy use of such items.

Summary

This chapter strived to show the variety of health related products and actors involved in the marketplace and other spaces that vendors occupy. What I would like to emphasize from this chapter is the role of social interactions in regards to the use of, and attitudes relating to, health products in the market. Crandon-Malamud's hypothesis of the use of primary resources to achieve social aims, or secondary resources, may help to explain the cases explored in this chapter. In accepting that the bee pollen (primary resource) was counterfeit, the vendor who bought the pollen was perhaps validating the opinions of her fellow friends and vendors and therefore maintaining a camaraderie (secondary resource) that may provide her social and economic support on a daily basis. This framework could also apply to Rita's case with the policeman. By accepting his recommendation for the medicinal powered drink (primary resource), Rita in effect communicated trust in his advice. This show of respect (secondary resource) may benefit Rita on a daily basis since police are commonly reported to bully or fine street vendors. Maintaining a positive relationship with him, like the purchaser of the bee pollen, is likely to be in her best interest. Additionally, for Maria, attributing her restoration to health as beginning with the advice of a regular customer, she as a result likely strengthened their bond and benefits from their loyalty. Therefore, while participants appear to be open to new health products, practices and ideas, their implementation may be motivated by social interactions that support their businesses and work environment. While the market may be a particularly accessible setting for seeking health treatment and advice, vendors do of course seek health care outside of the market. Part three will focus on health treatments outside of the market but will continue to explore these choices in terms of work.

Part 3: Attitudes & Beliefs of Treatment Systems

Introduction

Part three will focus on how participants feel towards biomedical and traditional treatment systems and the relationship between them. Chapter seven will explore attitudes regarding settings of biomedical treatments such as hospitals, clinics and pharmacies. While discussing these settings, participant's opinions regarding relevant actors such as doctors, nurses and pharmacists will be presented. Based on participants' experiences, the advantages and disadvantages of biomedical settings, and medicines, will be theorized in relation to the characteristics of vendor's work. It is important to state that the focus here is not on health conditions but on attitudes surrounding places and characteristics of biomedical care. This is partially because determining participants illnesses is not possible on the basis of my interviews, and also because health promotion does not aim to focus on sickness. Therefore, by exploring reasons why certain treatment settings are chosen over others, this will help to eliminate barriers to accessing preferred health care and work towards fulfilling health needs, and ultimately promoting health. Addressing these barriers may require collaboration across health and non-health sectors which will also highlight how ideas of health, and biomedicine, may be informed by participant's societal environment. Chapter eight then turns to treatment options that fall outside of biomedical science. It will explore traditional illness and treatment mainly as they relate to vendor's work. Aspects of their work that put them at risk of these illnesses will be examined and also why traditional treatment may be advantageous in comparison to biomedicine. Participant experiences where both traditional and biomedicine treatments were used alongside each other will be presented to theorize about the perceived efficacy of the chosen treatment methods and even discuss a possible "cross over" of treatment systems. While there is a general organizational structure in discussing these chapter's themes, there are topics, such as doctors, that are discussed under more than one heading as they relate to the subject at hand.

Chapter 7. Biomedicine

Hospitals: a place of health?

On a global level, the state of a country's health services is often measured by the number of biomedical facilities, hospital beds, or doctors per person. Judging by these numbers alone, Arequipa has a relatively large number of settings for biomedical health care. In the department of Arequipa for example, there are 66,962 people per hospital (INEI, 2007). To put this figure into perspective, the more rural district of Huancavelica has over 235,000 people per hospital (INEI, 2007). The numbers dissipate even further in Arequipa when considering *centros de salud* (health centers) and smaller *puestos de salud* (health posts) which are found at the rate of 1 per 9,961 and 6,278 people, respectively (INEI, 2007). Pharmacies moreover, can be on almost every city block, making them perhaps the most accessible biomedical "treatment" setting of all. Participants had much to say regarding these various places for treatment. Their attitudes give insights into the degree of accessibility that these numbers alone cannot account for.

When I introduced the topic of biomedical care to participants, they were often quick to mention hospitals. It has been well documented by many researchers in the Andes that hospitals are perceived as places "where you go to die" (Juárez & Bolhispana, 2004; Ann Miles, 1998). Several participants from this study made the same remark, which may be made on the pretense that hospitals are treated as a last resort and therefore are associated with unfavorable outcomes. Why participants view hospitals "as a place to die" is likely to be due to both practical reasons, such as a lack of resources or discriminatory practices, and differing cultural perceptions of health.

In terms of practical reasons, evidence from this study shows discontent largely in terms of waiting time and costs. Nearly all participants complained about the long wait times at hospitals. It was said that half a day was required to have a consultation. One participant, who described hospitals as *feo* (ugly), mentioned that there are often so many people waiting for treatment, that the hospital will tell you to come back the next day. This may be why participants frequently mentioned the morning as the time to visit hospitals. Arriving early meant they would be ahead of others who arrived later in an effort to decrease their wait

time and increase chances of being seen that day. The morning though is the busiest time for business in the market. Lupe expressed this predicament, "Si voy a un hospital, necisito tiempo. Tengo que esperar para una consulta y perdería toda el dia de trabajo...toda la mañana en especial y en la mañana hay más negocio aqui" (If I go to a hospital, I need time. I have to wait for a consultation and I would lose a day of work...throughout the morning in particular and in the morning there is more business here). For vendors then, a trip to a hospital represents both an expense and missed income. A financial loss is even more likely to be the result for vendors, like Lupe, whose goods spoil quickly, and who is therefore under pressure to sell them quickly. Failing to sell even a morning's worth of fruit or vegetables can mean a significant lost investment.

Payment required for care at hospitals was also a complaint by nearly all participants. One participant said "primer plata, si no, se curan nada" (First money, if not, they cure nothing). Most participants echoed this statement but in more extreme cases they said, "if you don't have money, they let you die" which reflects that biomedical care may be perceived largely as a type of an economic transaction. This can be interpreted from two perspectives. The first, and perhaps more literal perspective, is that participants regard treatment fees as a significant expense. This was seen to delay or discourage hospital visits. One day, Lupe's elderly father sat at her fruit stall waiting for her son to accompany him to the hospital. I noticed that one of his ears and half of his face appeared to be disfigured. As it turns out, some years ago he had developed a tumor and delayed seeking treatment because the family did not have enough money. Lupe's father and son left for the hospital but returned a short time later because they were unable to be seen that day. Feeling that her son did not advocate strongly enough for his grandfather's care, Lupe left her son in charge of her stand and returned to the hospital with her father to demand a consultation. When I followed up with her a few days later about his status, she commented they learned that the tumor is now inoperable. Increasing the ease of receiving attention at hospitals as well as eliminating payment challenges may have resulted in a different outcome.

Determining how much participants believed a hospital visit cost proved unsuccessful. For participants who had surgeries in the past, some said they cost "arta!" (a lot) while others

said they cost almost nothing. Cost may very likely depend on many factors including what hospital²⁴ is visited, if the vendor utilizes public subsidy programs, or has health insurance. Only two participants reported having health insurance. One was covered by her exhusband's insurance policy and the other, Rita, purchased insurance after her son broke his arm. She had great difficulty paying his expensive hospital bill and the thought of having to pay another one caused her so much stress she decided to buy health insurance. This may be significant since Rita, as an *ambulante*, reported not having enough capital to buy, or even rent, a market stall. Buying insurance may signify that she does not perceive her relatively poor economic status as qualifying her for government funded medical treatment. She might infact not qualify since she seems to meet her family's basic needs. Her economic situation then works against her in two ways. On the one hand health insurance reduces her stress but on the other this spending may make it more difficult to invest back in her business as a means to progress.

It should be stated that gathering data on any sort of government funded health care assistance was difficult since I did not want to risk embarrassing participants by exposing their financial situation to myself or others. Regardless, evidence to back up participants' concerns with paying for hospital expenses may be very well justified considering other studies. According to the WHO's 2000 World Health Report, Peru has one of the most inequitable health systems in the world in terms of financial contribution²⁵. This signifies insufficient government spending on health or subsidy programs and that these programs are inefficient. Even if participants were to qualify for subsidized medical care, their concern for hospital costs shows that they are not aware of, or do not consider such programs an option. This may make more affordable health treatment options that surround urban markets, such as pharmacies and *naturistas*, tempting and also important options.

Participants' perceptions regarding access to government subsidized health care schemes may be informed by their participation in the market itself. The Feria collects a number of

²⁴ Participants did not differentiate between public and private hospitals in our conversations.

²⁵ "The measurement is based on the fraction of a household's capacity to spend (income minus food expenditure) that goes on health care (including tax payments, social insurance, private insurance and out of pocket payments)" (WHO, 2000, para. 21).

fees that are divided into various departmental funds, one being the "social welfare fund". In a document outlining the bylaws of the vendor association, which is distributed²⁶ at market meetings, chapter six discusses a type of welfare scheme. It states that stall owners with "lethal diseases" can apply for reimbursement of up to 2,000/s (\$740 USD) for medical care and prescriptions. Upon death, their next of kin would receive up to 3,000/s (\$1,150 USD). Participants confirmed to me that this policy was only for those who are very ill and that only stall owners were eligible, not those who rent vending spaces. Some also believed that only the market association's president, and those who associated with him, were the only ones with any likelihood of receiving such a payment. Believing this payout is unlikely or inaccessible may also be indicative of perceptions of subsidized government medical policies. As the only market "social welfare" policy that was concerned with medical treatment—and being linked very closely to "lethal diseases"—this could also reinforce vendor's perceptions that hospitals (as well as other biomedical facilities) are places that one goes to "die", rather than heal.

The second interpretation as to why participants emphasized cost as a deterrent to visiting hospitals is the manner in which money is exchanged. Specifically, in that it was perceived as having to be presented upfront before a doctor would consider treatment. Participants' remarks concerning payment may be better understood in relation to common perceptions of traditional healers. According to Miles, traditional healers "earn very little from their work and they are popularly thought to enter into health because of altruism and a desire to "help people" and not personal enrichment or greed" (1998, p. 114). Participants from this study did not report doctors as being greedy but their statements about payment do imply a lack of faith in their willingness to heal based on moral or ethical obligations.

Doctors, clinics & foreignness

It has been previously demonstrated that vendors may sometimes associate money with evilness. In part one for example, it was explained that Lupe believes that wholesalers become prosperous by "paying the devil". Many participants also believe in the *kharisiri* who profits from selling the fat and blood of humans. Findings show that there is also an

²⁶ Sold at the cost of 1/s (\$0.33 USD)

association with biomedicinal practices and "evilness" in regards to ritual payments. A biomedical doctor interviewed for this study said that people sometimes think when doctors draw blood or operate, they sell the removed bodily substances for a significant amount of money. One participant believed fat was bought and sold for cosmetic purposes (also see Crandon-Malamud, 1993). Another informant said that those who work in places where abortions are performed sell fetuses to miners who place them in mines, which helps them produce gold. In this sense, doctors, and certainly others who work in biomedical settings, may be perceived to be profiting in immoral ways at their patients expense (Bastien, 1982, 2003; Crandon-Malamud, 1993). Furthermore, removing substances like blood from the body, is perceived to disrupt the humoral balance of bodily fluids and be the cause of illness by people in the Andes (Bastien, 1982; Juárez & Bolhispana, 2004; Oths, 1992). Although not explicitly mentioned by participants, doctors who perform biomedical practices such as drawing blood, may contribute to participant's perceptions of hospitals as causing illness by disrupting bodily balances and perhaps also being exploitive. Such feelings may encourage treatment choices that are open to more negotiation and autonomous choices such as pharmacies and *curanderos*, which will be discussed later.

In terms of work, it is interesting that when talking about doctors, Lupe commented that the "best customers are doctors", but then added "but not the medical kind" from which she further clarified she meant psychologists and others who have PhD's. While I was unable to find out more regarding this specific statement, it does imply a certain degree of disassociation from biomedical doctors. Lupe, like most participants was quick to express the "unjust" ways in which one receives—or doesn't receive—attention at hospitals. Many participants mentioned discrimination as a problem in waiting rooms and that those who "have a presence" or look like they "have money" would be tended to first. Participants did not associate themselves with these groups. The image of looking as if one does not have money may be exemplified by characteristics typical of vendor's work, like clothing. When Lupe for instance brought her father back to the hospital, she went straight from the market, presumably without changing her clothes. Vendors may have other, more permanent, markers of their work such as *manos de la tierra*, as discussed in part one, which cannot be so easily changed. Therefore vendors' work as being regarded as low status on the social

ladder may make receiving attention in hospitals more difficult. Feeling discriminated against in a setting that is supposed to promote health is worrisome since it does not put one in an empowering position to make or contribute to decisions regarding one's health.

Participants' concepts of health and well-being often reside outside of principals of scientific biomedicine. Traditional concepts are generally associated with indigenous groups, who in Peru, are often viewed as "ignorant" or "backwards". To avoid being perceived as such, those with different concepts of health may not express their understanding of their illness to health professionals in a hospital setting. In other words, the doctor may "tell" the patient their biomedical diagnosis and treatment, but this runs the risk of not being understood or fitting within the patient's own belief systems (Naidoo & Wills, 2000, p. 16). Prescribing pills for example, may treat symptoms of an illness but if the illness is traditional in nature, pills cannot *cure* the illness. Curing traditional illnesses, as will be demonstrated later, generally entails rituals involving one's soul and the spirit world, which cannot generally be cured with biomedicine. For sicknesses that *are* perceived to be healed with biomedicine, feeling comfortable to communicate with health professionals regarding attitudes towards medicines can lead to better health outcomes. Oths' (1992) for example found that people in the Andes tend to prefer biomedicines in liquid form, rather than in "solid" form because they are associated more closely with traditional forms of medicines like teas, juices and herbal baths. She refers to one case where vitamins distributed at health posts were reported to have no curative results by people living in the rural Andes, but liquid vitamin drinks on the other hand were reported to have an "immediate, highly salubrious" effect (Oths, 1992, p. 82).

Looking beyond hospitals, there are of course many more settings for biomedical care in Peru, including public and private health clinics. At least one public clinic can be found in or close to most neighborhoods in Arequipa. Private clinics are found at times with much greater frequency especially around the Feria and other densely populated parts of the city. Private clinics were perceived as preferable. They were thought to be less crowded and also to provide better services. The cost though, like hospitals, was found to be a deterrent. One participant reported needing 800/s (\$300 USD) for a consultation and treatment at private

clinics located near the Feria. Public clinics on the other hand were considered affordable. The daughter of a participant who worked at her neighborhood public clinic (as well as the market) said a visit to a public clinic cost just 6/s (\$2.30 USD). Despite the low cost, participants still had negative attitudes towards public clinics that discouraged use due to long wait time and perceived low quality care.

As we saw in the previous chapter, María, the vendor who "blew up" after she was prescribed a medicine from a public clinic, now refuses to visit a public clinic ever again based on her experience. When I asked her to speak a bit more about public clinics, she said "Hay muchas incompetencias...los médicos baratos son malos...los más caros, se curan bien" (There are a lot of incompetencies [in public clinics] cheap doctors are bad...the expensive ones, they cure well). María's negative experience with cheap pills very likely informed her opinion that cheap doctors, and facilities, are also bad. She now pays more to see an *especialista* (specialist) when she is ill. Several other participants also mentioned they preferred to see *especialistas*, but could not always afford to do so. Public clinics, one participant reported, only offer general medicine and not specialists which she prefers, "centro de salud, si voy, no hay especialistas...solo medicina general, yo quiero mi especialista ... en la clinica hay [especialistas] pero son mas caras. (health centers, if I go, there are not specialists...only general medicine, I want my specialist...in the clinic there are [specialists] but they are more expensive). These two cases demonstrate that public clinics are not fulfilling the health needs of participants and perhaps also not fulfilling health needs for similar groups outside of this study. María's example in particular shows distrust in the public health service. Her feelings regarding public and private clinics may also be influenced by factors other than competencies. For example, so long as one can pay, discrimination was not reported as an issue for private clinics. Also, the ability to pay for a private clinic, or furthermore a specialist, may carry a certain degree of prestige that symbolizes economic progress. Whatever the reasons may be for María's preferences, participants' perceptions of specialists, as well as foreignness in biomedicine, seem to be relatively highly regarded.

Surrounding the market, private clinics, dentists and other health related business often emphasized foreign credentials. In the market a vitamin drink business regularly distributed glossy booklets that advertised their products as being from the U.S. Especialistas, it was said, often had to study abroad outside of Peru to receive their training and were therefore much more competent. An elderly indigenous migrant, Solana, who had an operation two years ago, said "algunos aquí no operan bien, algunos sí...los que estudiaron en México o Cuba...mas advansados de aca" (some here don't operate well, some yes...those who study in Mexico or Cuba [they are] more advanced than here). Another vendor who also had a recent operation said that her doctor was from Brazil, and that, doctors from Brazil "operan mejor...tratan mejor v son buenas" (they operate better...treat better and are good). I often found these statements praising foreign assets quite salient since participants were quick to take pride in their traditional food, festive costumes and scenery. In contrast they seemed embarrassed, if not ashamed, of Peru's lack of "advancement" in areas associated with modernity like science, education and technology. As expressed by the statements above, lack of confidence in nationally trained medical doctors may be the result of the lack of progress in other areas of Peru's society. Corruption may also fuel the lack of confidence in public, or nationally funded areas of health care.

Although too young to speak from experience, José believes that "there is a lot of corruption" at hospitals now compared to fifty or sixty years ago when they were "better". This signifies that it is not only traditional health beliefs that underlie participant's perceptions of hospitals, but that these beliefs may very well also be informed by historical context and politics. Corruption among police and other government officials seemed to be an assumed reality among many vendors. Vendors did not for instance report theft or counterfeit money because they figured nothing would be done²⁷, which may be the result of corrupt officials or policies. The president of the Feria was also said to be corrupt. From José's statement, even increased technology or modern advancements in the past 50 years have not improved hospitals, but that they are actually worse off now. In fact, there are indicators to show that the quality of biomedical care in Peru in terms of training may

_

²⁷ Ødegaard (2010) also suggests that these instances go unreported because vendors blame themselves for being careless enough to be victimized.

indeed be regressing. A 2006 study from the World Bank reports that government pay rates for health professionals have declined steadily since the 1970's (Webb & Valencia, 2006, fig. 6.4) As a result, many are leaving Peru to practice abroad, and those who stay often take on second jobs. The report also quotes a director at a Lima hospital that says, "by 10:30 a.m. most of my doctors have skipped out to their second or third jobs. But, how can I demand [compliance] when I know that on their salary they can't make ends meet" (p. 207). Preference and use of private and foreign health treatment may serve as a way to avoid having to submit to questionable levels of service and care. This attitude may present challenges in terms of building capacity for health. Even if the government increases pay for doctors and invests in improving medical training, public perceptions of trust and competency may be informed by other areas of government "corruption" in society highlighting the influence of non related health sector's possible influence on health ideas and practices. Health promotion can help advocate for those whose voices are not heard to those responsible for creating and implementing policies that affect them. Decreasing barriers and improving the quality of care however may not have any effect without considering what constitutes effective treatment.

Pharmacies, pharmaceuticals, & friendships

The value of foreignness may also translate to biomedicines, or in this case, pharmaceutical pills. Solana's doctor gave her medicine that was brought back from the U.S. by the doctor's assistant. She says, "la medicina de allí es buena, la medicina de aquí no es buena" (the medicine from there is good, the medicine from here is not good). Without any further explanation, Solana then asked me why I did not bring vitamins from the U.S. to sell in Peru. When discussing vitamins with participants, I had been told many times that taking vitamins daily in my country was okay, but I should not do the same with vitamins from Peru²⁹. These statements support the general lack of confidence and mistrust in both biomedical services and medicines in Peru. It may be too that vendors are particularly suspicious of items produced in the region due to the amount of counterfeit items available

²⁸ Solana no longer takes her U.S made medication because she said the doctor did not explain to her what it was or how to take it, and the writing on the label is all in English.

²⁹ My host family requested that when I return to the U.S. I ship them vitamins, as they did not have much "confidence" in the vitamins sold in Peru.

in the Feria as previously discussed. Despite the perceived superiority of foreign pills, these medicines were normally not a preferred treatment option. One participant, who was advised by her doctor to take a pill daily for hypertension, said "la medecina haceme mucho daño" (the medicine causes me much harm), specifically to her stomach and kidneys. Furthermore, she claimed that the pills "me da sueño" (make me sleepy), which she argued can make it difficult to work. As a result, she only takes the medication when she "feels very ill" and not every day as prescribed. This is likely putting her health at risk. It is typical in the biomedicine tradition to take pills daily in order to scientifically function effectively. Since she is not in the economic position to hire a helper, she makes the choice between taking her medication, and working well which may represent a health disadvantage for vendors on the lower end of the market's occupational ladder. It may also be that she perceives the regular use of biomedical pills as harmful.

A pill's "chemical" properties were perceived to make them potent and potentially dangerous, especially when ingested regularly. In reference to pills, Rita said, "los quimicos son al instante" (the chemicals are instant) while others often used the phrase "en un golpe" (one fallow swoop). In contrast, natural remedies such as herbal teas were preferred because of their natural, and therefore "safe" curative elements. These preferences seem to mirror attitudes towards food from the city and highlands, respectively. Natural foods and traditional medicines originating from rural areas were viewed as health promoting, whereas city food and pharmaceutical pills were capable of being harmful. Even though pills are perceived as potentially harmful, the speed at which they work is perceived as an advantage of their use. They also offer a level of convenience that is enticing for vendors. Rita for example prefers to treat her sicknesses (specifically with la gripe) with natural remedies like herbal teas. She laments though that there is nowhere to prepare them while she is vending. Therefore when she is sick she takes pills since they work fast and do not require time or facilities for preparation. Working as a vendor may limit preferred modes of treatment that those with more stable employment may be able to achieve. Without the best perceived course of treatment, one may not recover as quickly.

While many participants also reported taking pills for a variety of conditions, Rita's case is interesting because of the social aspects that may be at play when obtaining pills. On two occasions when Rita was suffering from *la gripe*, she showed me pills that she bought from a pharmacy across from where she vended. Rita referred to the pharmacist who she always buys pills from as her "friend". She then remarked that the pharmacist sometimes bought three or four cups of orange juice from her in a single day. On one particular occasion Rita visited the pharmacy with samples of the cookies she made and sold for the pharmacist to try, in hopes they would buy some. The pharmacist who Rita calls her friend bought some, where as the other pharmacist did not.

The process of creating social relationships in the Andes is generally based on acts of reciprocity that involve the exchange of food. Refusing to share food, or partake in meals, essentially says that one does not want to enter into social relations with a given person or group. In Rita's case, by refusing to buy her cookies, the pharmacist may have socially "rejected" her. Rita's preference for the pharmacist she considers her friend, may then be indicative of the importance of trust that underlies social relationships and perhaps also going on to influence treatment choice. If this is true, then the ability to form reciprocal relationships with pharmacists represents a considerable advantage to why pharmacies are preferred as a method of treatment over other facilities such as hospitals or clinics. This may be particularly the case for vendors since they work in close proximity to pharmacies on a daily basis, which allows them to establish social relationships with pharmacists. Also, vendors may identify with pharmacists because they too are a type of vendor. This may position them on a relatively similar position on the social ladder which then allows the mutual negotiation of their relationship through the goods they sell.

Rita was not the only participant to speak of her pharmacist fondly. A fruit vendor also talked about the "nice woman" who "always" helped him at the pharmacy. Another participant offered to introduce me to her dentist³⁰ without an appointment just as one may show up at a pharmacy. In contrast, participants (with the exception of María and her specialist) never made reference to a particular biomedical doctor. This shows a distance

-

³⁰ Participants seemed to regard dentist positively and used their services.

between doctors and participants. While this may be due to the many barriers to accessing the facilities where they practice, it may also be a result of one-way economic exchanges that are devoid of social reciprocity. In addition to "buying" attention in hospital waiting rooms, I was told that one must bring little gifts for nurses like chocolates when spending time in a hospital or they will not care for you. It is no surprise then, that these facilities were not positively regarded by participants. Because pharmacies were regarded positively, largely due to their staff and the ability to give back through buying goods, it may be that other settings for biomedical treatment can benefit from insights into the social aspects of treatment that participants seem to value, to promote use of their health services.

The importance of establishing social relations with health professionals in urban areas should not be overlooked just because health care may in many ways be accessible. Wayland and Crowder (2002) looked at an urban community located in the Andes in Bolivia and the attitudes people in the community had towards community health workers. The growth of the city prevented health workers from being able to make as many visits to communities as normally done. Community members' attitudes revealed that they perceived community health workers as "strangers" who were just like "anyone else on the street". Resulting evidence showed their health advice was rejected and unwanted. In this sense, Rita's friendship with the pharmacist may increase the degree to which she is willing to discuss her health and be receptive to treatment recommendations. This suggests a degree of trust that must precede relationships with health professionals. Wayland and Crowder's study is also important to highlight since it shows an urban health risk in terms of insufficient resources, (in this case community health workers). At the same time, community health workers should consider other "communities" that urban populations associate with beyond the neighborhoods where their homes are located. I sometimes traveled home at night by taxi with my host mother who was a vendor in the Feria. She would talk with other vendors who were also going home to try to share a taxi. Several times we discovered that the vendor we shared a ride home with, lived only blocks from our house. This may be a sign that the home community isn't as connected socially as what outsiders might assume as people travel daily to other parts of the city for work. In terms of

health, the work place may then be a significant setting to consider in terms of planning and implementing health initiatives.

Summary

It is hoped that this chapter demonstrated that in order to reduce deterrents to biomedical health settings, one must consider factors like wait times and costs, but also give consideration to how these factors may be interpreted based on different perspectives of expectations in the delivery of health care. It seems that participants value social relatedness with health professionals but unfortunately, the low social status of vendors as well as limited opportunities to participate in social reciprocity with biomedical professionals may stand in the way of positive biomedical experiences. The exception of course was seen with pharmacists. Applying Crandon-Malamud's hypothesis, obtaining care from pharmacists (primary resource) may be perceived as a way to secure social relationships that may increase one's business, as with the case of Rita and her orange juice and cookies. In this sense, vendors may have economic gain from ongoing interactions with pharmacists that is in contrast to one-way transactions with doctors. I would like to conclude this chapter by stressing that it was my intention to show that cost is not the main determinant of accessing biomedical care. While participants' work demands did shape treatment decisions, socialpolitical factors seem to run deeper. Discrimination, either related to the low social status of vendor's work or background, as well as a lack of faith in biomedicine provided by the state, are issues that reducing the price of biomedical services will not fix. Promoting use of publicly run health facilities may start by examining more closely the reasoning behind the acceptability and desire for private care, foreign medicines and specialist doctors. Still even the most accessible and non-discriminatory biomedical facility is likely to develop more effective treatment plans if they also consider a broader range of health beliefs beyond medical science. Chapter eight, the last chapter of this study's findings, will explore in more detail traditional health concerns and how participants have treated and cured such illnesses.

Chapter 8: Traditional Medicine

Identification of illness & treatment efficacy

Participants acknowledged the existence of several traditional illnesses. The three traditional illnesses most discussed by name with participants were *susto* (fright sickness), *brujeria* (witchery), and sicknesses resulting from *kharisiri* attacks. While these will all be discussed, *susto* was reported among participants as experienced the most. Therefore several cases of *susto* will be examined to explore how participants came to diagnose *susto*, how *susto* is treated, and when used with other treatments systems, why a particular treatment was perceived as effective over other forms. Since various understandings of fright sickness exist in many Latin American countries and cultures, it is important to first report on how participants understand *susto*. Participants perceived *susto* as an illness that results when the soul is frightened and leaves the body. This was thought to happen after being startled by a loud noise, a traffic accident or an unexpected encounter with an animal. The wide range of possible sources indicates that *susto* can happen virtually anytime, anywhere—including at the market. Two participants for instance mentioned that rats in the market can cause *susto*. One of the participants actually experienced *susto* as a result.

When Laura's two-year-old daughter fell ill with symptoms of vomiting, not sleeping and crying more than usual, she brought her to the hospital. While she was waiting to see a doctor, she discussed her daughter's symptoms with another woman who was also in the hospital waiting room. The woman said it sounded like Laura's daughter was suffering from *susto* and gave her the contact information of a *curandera*. When I asked what caused her daughter's soul loss, she said a rat in the market frightened her while she was pregnant. Laura proceeded to see the doctor who "did nothing" but prescribe a liquid medicine. Laura gave her daughter the medicine, which she also said "did nothing" and contacted the *curandera* whom she was recommended at the hospital. That night the *curandera* came to Laura's house and a ceremony was performed to call her daughter's soul back.

The *curandera* arrived around nine o'clock and had all the family members who lived in the house gather in the same room. Together they preformed rituals with smoke from herbs and incense and also had a doll that belonged to Laura's daughter. Participants reported that the

use of a personal item, such as clothing or in this case a doll, is important so the lost soul will recognize where to return to. The ceremony lasted until two in the morning and Laura says her daughter was healthy again after a few days. Even though Laura also gave the biomedicine to her daughter, she credits the recovery to the soul calling ceremony. Why she perceived the traditional treatment as effective may be related to different understandings of time as well as influenced by social relationships.

Laura, like many participants, emphasized that soul calling ceremonies are typically held on Tuesdays and Fridays, which are considered the best healing days. If a ceremony is not believed to be effective, it can be repeated on the following healing day, up to a total of three times. Therefore, a week can pass before a complete "round" of traditional treatment can be completed, and evaluated. Biomedicine on the other hand, as was shown in the previous chapter, is expected by participants to work almost immediately. Laura did indeed give her daughter the medicine prescribed by the doctor but also commented that her daughter was better a few days after the soul calling ceremony. Perhaps because her daughter was not better immediately after taking the medicine, is why she says the medicine "did nothing". Since a week can pass before a soul calling treatment can be completed, the several days delay of her daughter's healing may be why she emphasized the role of the healing to restoring health over the biomedicine.

The time the *curandera* spent with the sick girl may also have contributed to the perceived efficacy of her treatment. The *curandera* spent five hours with Laura's sick daughter, which is likely to be much more time than the child spent with the biomedical doctor. This length of time may give the impression that the *curandera* "did something" whereas the doctor was said to "do nothing". The time spent with the child would allow the *curandera* to get to know Laura's daughter in a more holistic sense. Bastien (1982) quotes Abraham Maríaca's statement that "Andeans perceive the doctor without a heart because he charges a lot, treats them like a machine and keeps apart from them. The scientific method brings out these features in the doctor. On the other hand, Andeans love the curanderos who massage, console and communicate with them" (1982, p. 800). Children are believed to be especially

vulnerable to soul loss and other traditional illnesses³¹ since their soul is not yet considered strong. A biomedical doctor may be perceived not to hold these same beliefs and therefore not treat a child's sickness in the same holistic sense. The fact that the *curandera* treated the child at home, may also contribute to the efficacy of the traditional treatment in terms of social relations as it involved the whole family.

As outlined in the introduction, Crandon-Malamud (1993) suggests that medical treatment can be considered a "primary resource" and through it's use, one acquires "secondary" resources (1993, p. 11). Secondary resources are generally socially or politically motivated. One may choose a treatment for example to align oneself with one's community or as a statement of one's beliefs and values. Hospitals and biomedical doctors for instance were generally not regarded positively by participants, largely due to discrimination and long wait times. In contrast, many told positive stories of traditional healings and offered to introduce me to a curanderos they knew. By having treatment in the home, one would not be subjected to passively waiting for treatment in the way required of hospital visits. Additionally, during the traditional healing Laura and her family were actually active participants in the treatment process. This would be likely to contribute to Laura feeling a sense of responsibility, or having the ability to positively influence her daughter's health. If she were to credit biomedicine with curing her daughter, Laura would be aligning herself with treatment that she has little or no ability to influence. Crediting traditional treatment on the other hand Laura would be validating a healing system that the community seemed to value and that worked with the sick rather than intensifying social differences. Because vendors rarely run their businesses on their own, it may be important to make treatment decisions that reinforce social bonds that represent "secondary" resources.

Laura, for example, depends on her family to run a successful banana stall. Her husband is in charge of acquiring and restocking the bananas she sells every day at their stand. Her stand is quite established since her mother bought the space years ago when the Feria was first built. She has also been able to retain many of her mother's regular customers. Laura's

³¹ "*Mal de ojo*" (evil eye) was another traditional disease mentioned by participants, but nearly always in reference to children. It was said that if ill meaning strangers looked at (usually particularly good-looking) children too long, the child's soul could be taken over by evil forces.

customer base helps her to vend all of her bananas often before the market officially closes, allowing her to leave a few hours before her neighbors. Laura's mother also cares for her children six days a week while Laura vends, and one day a week her mother vends so Laura can have a day off. Without the help of her family she would be likely not to have a stall of her own, she would have to pay for transport of the bananas and would have to work many more hours. According to Crandon-Malamud then, it may be that Laura accredited the traditional healing as being effective in order to maintain positive ties with her family that continue to support her success. By validating the traditional healing (primary resource), she also validated her family's time and efforts, which would work to promote her economic well-being (secondary resource). This case then demonstrates how different ideas of time and social motivations may determine efficacy when multiple treatment systems are used simultaneously. It also would support the translation of Crandon-Malamud's hypothesis from a rural to an urban setting. If Laura sided with biomedicine, it could be argued that she was rejecting her indigenous background and attempting to redefine herself as a "modern" city dweller through the value she would then be placing on biomedicine. The following case will explore efficacy in terms of when multiple treatments are used one at a time rather than simultaneously.

Rita told me of a time when her brother was involved in a car accident which caused him to have a very strong headache. He waited two days to see if the pain would subside, but when it didn't he went to the pharmacy and bought pills in the hope they would cure his headache. After taking the pills he waited several more days but the headache persisted. Rita said, "no sana, no sana las pastillas" (not heal, the pills did not heal). Since the pills did not work, the family decided that the pain must come from "something different". They concluded that during the accident his soul was frightened and it "fell, fell, fell into the land". To reclaim his soul, they returned at night to the scene of the accident with a curandero and held a mesa. The mesa included llama fat and coca, which the curandero instructed they offer to the land in exchange for his soul. Almost immediately, Rita said her brother was cured of his headache. Unlike Laura's case, the speed at which he recovered after the traditional healing does not open this case up for debate over efficacy. What is interesting here though is that the failure of one form of biomedicine served as evidence that the headache was non-

biomedical in nature making all other forms of biomedicine irrelevant and ineffective. If the healing ceremony had also failed, it is conceivable that the origin of his headache may again be open for negotiation. This could be an ongoing cycle until one's health deteriorates beyond the curative power of any form of treatment. This is perhaps the process one goes through before arriving at the hospital as a last resort, causing participants to believe that the hospital is where you go "to die".

Following my conversation with Rita about her brother, I asked her if one could cure *la gripe* in the same way that her brother was healed with the *mesa*. She laughed and said no, because the *la gripe* has nothing to do with the soul. Rita's health beliefs, and certainly her family's, then seem to be relatively divided between biomedicine and traditional systems in the sense that treatment from one system is not used or effective in treating an illness from another system. Other participants' advice on curing *susto* reflected the same beliefs—traditional methods were the only methods effective for retrieving one's soul. Additionally, *naturistas* in the Feria also told me that traditional cures were also the only effective means to cure *susto* and *mal de ojo*. There are however conditions that were perceived to be treatable by biomedicine as well as traditional methods, such as healing broken bones, *debilidad* and depression. Therefore, since there are conditions that are perceived as treatable by multiple systems, it is worth discussing advantages that traditional treatment might have over biomedicine and especially in regards to vendor's daily routines.

Practically speaking, traditional treatments may be more accessible in terms of affordability and time. One participant who recently experienced *susto* said the *curandero* was "*muy barato*" (very cheap). Another participant, a young *ambulante* said that a visit to a *curandero* costs about 10/s (\$3.70 USD), which is about the same price as a public clinic ³². As already demonstrated, *curanderos* often visit the homes of their clients and tend to work at night. *Susto* ceremonies, for instance, typically occur at night when it is most quiet so the soul can hear it's name being called. Ceremonies to remove curses from witches are also reported to take place during the night (Glass-Coffin, 1998). Nighttime treatment may be

³² It is important not to generalize too much about the cost of a *curandero* since their qualifications, services and thus cost can very greatly. The quote of 10/s was in reference to an office visit that is likely cheaper than a home visit, and also for a less serious condition. Other estimates for witches for instance, were quoted much higher.

convenient for vendors who worry about missing work during the daytime and especially morning hours. Regardless, the wide array of traditional healers in cities offers perhaps many more options than biomedicine through increased accessibility. One participant said, "Hay curanderos aca que se curan de susto, se curan de huesos. Hay varios curanderos aca, artos aca" (There are curanderos here who cure susto, cure bones. There are various curanderos here, lots here). The services they offer then gives one many choices that enables one to perhaps customize their treatment experience that may not be possible in rural areas or with biomedicine. This is an area where biomedicine is comparably limited for participants as pharmacies, and public facilities were the only mentioned as accessible options. Beyond accessibility, traditional healing may also be appealing to vendors because it is typically non-invasive.

When talking about susto, one participant said "Curanderos solo miran los ojos, nada mas." Si estás mal de hígado también hace el mismo, y si tu vas al doctor y dice "me duele el hígado" la doctor te hace estudios, exámenes al sangre, pero el curandero no hace esto." (Curanderos only look at the eyes, nothing more. If you are sick with the liver, they also do this, and if you go to the doctor and say "my liver hurts" the doctor will do tests, exams to the blood, but the *curandero* does not do this). People in the Andes commonly perceive disease as being able to enter, but also be pulled out, or extracted from the body through openings like the mouth, nose or even through skin. Traditional healers tend to observe these beliefs through their healing practices. Participants mentioned that eggs and guinea pigs are often a tool used by traditional healers. These tools are used to "draw out" the disease and is done by spreading them or hovering them over the body (Koss-Chioino & Greenway, 2003). When compared to biomedicinal healing practices, these non-invasive methods may be beneficial to vendors since they do not result in physical wounds that requiring healing time. Two participants mentioned successful experiences with bonesetters who were able to cure by applying a paste to their injured bones. In contrast, recovering from biomedical operations for example may cause vendors to miss many days of work and income. Pain from operations may also be felt long after operations, further showing how one's occupation may influence treatment choices.

Camilla, who had a recent hysterectomy, regularly complained about the pain she continued to have under the scar that the surgery left. At the market, this pain made it difficult for her to reach items stored high in her stall. Pulling down heavy metal doors at night that closed her stall also caused her much discomfort and many times welcomed the help of a friendly security guard. Rita also said she experiences pain in her abdomen after an operation. The pain only occurs when she is pushing her cart and also when she feels cold at night while vending. Rita's recovery may have been compromised, when after her operation, she was hurried along by nurses while she was bathing, causing her stitches to tear. A long and painful recovery may be further complicated by post surgery instructions that do not consider vendor's daily lives.

Camilla's doctor for example prescribed expensive medicine that she says she cannot afford and also told her to stop chewing coca leaves. Chewing coca however was a highly social act that she much enjoyed participating in with her friends at the market. She also said coca gave her energy to work³³. Camilla's use of coca is health promoting in that it encourages social interaction and aids in her ability to be economically productive. As a natural unprocessed plant it possesses qualities that are contrasted to biomedical pills' "harmful chemicals". The doctor in essence took away a health promoting substance and replaced it with a harmful one. In contrast, traditional healers often incorporate coca leaves and other trusted natural elements into healing. Traditional healers' treatments then may be understood as promoting health rather than a source of pain and harm that biomedicine's practices may be associated with. As I will illustrate below, traditional healing may also offer the option to bypass use of a healer all together, which may be an additional advantage to this treatment system.

The power of belief

Marisol believes her children experienced soul loss on an occasion when they were playing outside and a thunder and lightning storm moved in quickly. They suffered from fever, diarrhea, slept during the day and cried at night. Fearing that *susto* is deadly if left untreated,

³³ The medicinal benefits of coca have been seen to aid in digestion, help regulate circulation and the nervous system and benefit the heart (as referenced from Gironda Cabrera 2000 in Sikkink, 2009, chap. 7)

she knew she had to do something to get their souls back. Unable to afford a *curandero*, she decided to construct a mesa³⁴ and perform a soul calling ceremony herself. For three nights (Tuesday, Friday and the following Tuesday) she did this ritual and she says her children returned to health little by little after each ceremony. Marisol emphasized that for a soul calling ceremony to be effective, all you have to do is "believe". The power and healing efficacy of belief may be a significant advantage because believing is a choice that does not require resources like time, money, scientific knowledge or a health professional. Belief may contribute to a sense of autonomy in health, which in this case can be empowering. Marisol was able to use her own skills to restore the health of her children and thus avoided any belittling treatment that was often reported among vendors in biomedical settings.

The power of belief was also found to be effective in preventing harm caused by *brujeria*. Many participants said that they do not fear *brujos* (witches) because they "do not believe" in them. It seemed if you do not believe, then they cannot harm you. Participants did not seem to associate witches directly with causing harm in terms of health³⁵, but rather as capable of affecting one's progress in life (see: Ødegaard, 2010). Since economic success is generally correlated with progress, witchery may have particular significance for vendors. Many other participants did in fact believe in witches, but often said they were not in Arequipa but that they lived in the highlands near or in Bolivia, and therefore they were generally not afraid. Two participants however did speak of experiences when they were victims of witchery, though not at the hand of a fellow vendor. Still, it seems that according to the literature, the market environment is a setting ripe for witchery.

Glass-Coffin (1998) explains that witchery's primary aim is to "even the score, to remove competitors from the marketplace or to avenge perceived inequities in resource distribution" (p. 4). She goes on to explain that "sorcery" is on the rise in urban areas of Peru because there is insufficient government infrastructure and social welfare programs that have "led to

.

³⁴ The items required for a *mesa* and those useful for calling one's soul like herbs and incense, are widely available in the market for a nominal price. *Naturalistas* in the Feria, though not necessarily *curanderos*, were also knowledgeable on these rituals and were able to offer instructions on how to conduct a soul calling ceremony.

³⁵ Witchery has been documented as attributing to sickness and death. Glass-Coffin explains that witchery can be used to "trick" one into not noticing a health condition until it is too late, or by causing health professionals to "misdiagnose" health conditions, causing further harm and suffering (2003, chap. 13)

fierce competition for scarce resources" (p. 4). If this is so, then it highlights the need to consider such beliefs that when researching the health and well-being of those in such urban contexts that are characterized by high degrees of informal trade activities.

It should be emphasized that there is a strong association between social relationships, envy and witchery. Envy is generally a reaction that results when one achieves or attains something that which is desired by another. This typically happens among those who are socially connected. On a daily basis, there may be much envy among vendors. Vendors are in competition with each other for example for the resource of customers. When I asked vendors about fights or conflicts in the market, they were almost always in reference to another vendor "stealing" a customer. To avenge a fellow vendor who has enjoyed good business, a vendor may practice acts of witchery themselves to avenge the other, or as Ødegaard (2010) argues, change the flow of resources. It must be stated that while two participants believed they had experienced witchery, no participants reported either performing acts of witchery, or being victimized by fellow vendors. I found witchery to be one of the more difficult subjects to discuss since there were often many vendors within earshot of interviews. Because other researchers have noted cases of witchery among vendors, it is worth exploring and discussing their findings from a health promotion perspective.

Ødegaard (2010) refers to one vendor who believed she had many times been the victim of a curse from her neighbors who were jealous of her economic success. She believed that flowers laid in a particular formation found in front of her stall were a sign of witchery. Bredhold Stensrud (2011) reports of vendors in Cusco who believed piles of salt near their stalls were put there by others who were envious of their business. She goes on to explain that salt represents infertility in terms of the land, and fertility is for agricultural reasons vital to the livelihoods of those in the Andes. Therefore, finding salt near one's business, seems to be understood as an act intended to affect the fertility of one's business and discourage sales. Bredhold Stensrud's research shows that vendors themselves perform acts of witchery to control the flow of resources in their environment. For vendors who, as we saw in chapter three, feel limited in their ability to influence the market through participation in formalized

activities, acts of witchery may serve as an outlet to control their work setting. Being on the other end of an act of witchery however is not health promoting since it may lead to lasting economic misfortune.

One of the few participants from this study who did mention being a victim of witchery was Lupe, who blamed her lack of economic progress on witchery. Around the time she was separating from her husband, she returned home one day to find all her family photos laying face down on the ground. Since witches were reported to need pictures of their intended victim, the fallen pictures seemed to serve as evidence that an act of witchery had occurred and Lupe believed her ex-husband's mistress to be responsible. Ever since this incident, Lupe claims to have had bad luck in business. I indeed witnessed her many times struggle to pay debt collectors and wholesalers. It is possible that her ex-husbands mistress was jealous of the economic ties he still had with Lupe. Lupe reported that her two oldest sons have their own televisions and DVD players, which their father (Lupe's ex-husband) purchased for them. This may have caused envy from the mistress, preferring the money to be spent on her interests. According to Lupe, removing, or "treating", this curse would cost about 500/s (\$185 USD), which was a price she said she could not afford. This can serve as an example of the commodificiation of treatment in an urban setting that may have negative health consequences. In rural areas, this treatment may be paid for by a system of exchange, or is likely be more affordable.

It is difficult to theorize as to why someone would believe in witchery then if it is both a source of misfortune and difficult to treat. Believing in witchery perhaps offered Lupe a means to make sense of, or justify, her perceived lack of economic progress. Quoting a high price of treatment may reflect an unwillingness or inability to remedy the curse. This relates to an argument by Bastien (2003) in which he explains some marginalized people in/from the Andes may deny the efficacy of biomedical treatment, because accepting it's efficacy would also be accepting that there is a cure that they, in many cases, do not have access to, and this is a reality that is difficult to accept. If Lupe were to take measures to remove the curse, she then would also have to accept "responsibility" of any future misfortune. In this sense Lupe also views her economic situation, or access to resources, as being controlled by

"magical" forces. Different notions of the "forces" shaping one's socio-economic circumstances may be a challenge to health promotion. Health promotion advocates that people and groups identify what they need to attain a better state of well-being and use the resources available to achieve their goals. Achieving such goals generally requires change at the society level through public policy that is capable of changing the status quo. This may be through for example, new laws for workers' rights, improvement to city infrastructure or distribution of resources that support health. If vendors, such as Lupe, perceive their livelihoods to be determined by "magical" sources, then the likelihood of vendors organizing for change at a societal level may be improbable.

Up to this point we have seen that traditional illnesses and healing are strongly relational. Witchery is a result of jealousy and the diagnosis and curing of *susto* may depend strongly on interactions, as well as motivations, within one's social network. As a common thread, these traditional conditions were ultimately cured with traditional treatment. Or in other words, biomedical treatment was not credited for curing these traditional illnesses. In the next and final section of this study's findings, one last traditional source of illness, the *kharisiri*, will be discussed. The *kharisiri*, compared to the other traditional illnesses, may be unique in several ways that has contributed to an adaptation of biomedical pills as an efficient source of treatment.

Kharisiris: losing fat, gaining treatments

Kharisiris were described by participants as being a person that can transform into a black dog³⁶ and steals the fat and blood of unsuspecting victims. People were most likely said to be attacked while they were alone at night, while traveling and when sleeping. Participants reported that the *kharisiri* uses a long needle, and even lasers, to extract fat and blood from the hip area of their victims. About half the time participants believed *kharisiri* attacks to leave a little mark, and the others said it left no mark at all. A *kharisiri* attack was suspected if three factors were present. One, the victim had to have been in one of the vulnerable states described above. Because a *kharisiri* related sickness came on slowly, when and where an

-

³⁶ Other animals like pigs, cats and birds were on occasion also mentioned but in every case the animal was described as black.

attack occurred could be at any point over the previous several months. For vendors, sleeping while traveling alone by bus at night seemed to be the most risky position of all. This of course combines all vulnerable conditions. Secondly, the suspected victim must have seen a black dog around the time they were in a vulnerable state. Generally the animal was seen at night or under some other circumstance that may have been considered unusual or frightening. Thirdly, one must experience pain in the area where the *kharisiri* takes their bodily substances. This is most commonly the hip area but was also reported as around the lower abdomen and lower back. Other symptoms included fatigue, fever, headache and vomiting. Biomedical interpretations of the symptoms are inconclusive. It has been traced to Chagas disease (Bastien, 2003), cholera and tuberculosis (Yana Villasante, 2005). Biomedical health professionals from this study suggested that *kharisiri* victims might be experiencing appendicitis or anemia. Non-biomedical participants in this study believed that symptoms develop over the course of several days to several months and if left untreated, one "dies slowly" over time. It was said that the sooner it is treated, the quicker, and better, chance one has of recovering.

Like witches, *kharisiris* were also thought to reside mostly in areas surrounding Bolivia³⁷ and therefore did not seem to be feared on an everyday basis. Unlike witches however, most participants acknowledged *kharisiris* as a legitimate source of harm when traveling to these areas. This may be because witchery is often associated with those whom one knows personally. In contrast, the *kharisiri* as one participant stressed, can be anyone. When traveling away from home then, one is less likely to encounter those who wish to cause harm based on envy. The *kharisiri's* objective seems to be obtaining the bodily substances needed to feed the devil as a means to benefit their own well-being, not driven by a desire to personally harm a particular victim. Keeping positive social relations and balance with the land cannot protect one from the *kharisiri*, and thus anyone can be a victim, possibly being why the *kharisiri* was "believed" in more frequently and feared more than witches. My discussion of the *kharisiri* will focus on the area of it's perceived origin as well as the vendors who travel to and from Bolivia for trade.

_

³⁷ The city of Puno and boarder town of Yunguyo were specifically mentioned as places where *kharisiris* exist. The word *kharisiris* is actually Aymara in origin (Fernández Juárez, 2006), which may be why it has associations with this region.

Many vendors in the Feria travel regularly around Peru and Bolivia to obtain their goods. In Bolivia, it is possible to obtain many goods at a cheaper price than in Peru. If they can be brought across the border with few or no taxes, a significant profit can be made (Ødegaard, 2010). Most participants in this study bought their goods from wholesalers in Arequipa, but some did otherwise. One participant for example traveled to Bolivia every week to purchase leather goods. She made enough profit that she was able to work much fewer hours at the market than others on the days she was there, and perhaps as a result, reported that she was "very satisfied" with her life. These trips can however have significant risks including paying high fines at border controls, being robbed, and transportation accidents³⁸ (for a more detailed account of those who make their living transporting goods across borders, or contrabandistas, see Ødegaard, 2010, chap. 7). The vendor in this study who travels weekly to Bolivia appears to fear *kharisiris*. She showed me garlic she carries in her purse to protect her from attacks and recommended I do the same for my trip to the area.

The Feria has two less established sections where vendors travel regularly to obtain their goods directly. One section is characterized by vendors from rural areas that is only open two days a week when the vendors are in the city. The other days they generally return to the rural highlands. The other section is slightly more established in that it operates every day but the vendors are there with varying consistency and seem to cover their goods with blankets if they are not there for a day or two at a time. The goods in these sections are usually always fruits and vegetables. This might be because many vendors are selling produce from their own land. It might also be because there is little security of their goods at night and loosing goods of higher value would represent a higher loss of capital. Limited storage may also require regular travel to replace items originating from the highlands. I found it quite difficult to talk with many vendors in this section because of their unpredictable presence. Also, many did not speak Spanish as their first language, and seemed to be suspicious of my questions and motives. On one occasion however, Pablo, a

³⁸ During fieldwork I regularly saw reports in the newspaper of those who worked as vendors being killed in bus accidents. As the cheapest form of travel, some often ride in open bed trucks.

potato vendor from a rural area near Puno opened up to me about the time he fell ill from an attack.

Several years ago Pablo was traveling from Puno to Arequipa with goods to sell when he says he fell asleep, and that's when a *kharisiri* struck. He pointed to his hip area and said "*me han sacado*" (translated roughly as: "they have removed it from me"). He expressed having much pain around the side of his stomach and lower back and also had a fever. The pain started slowly and persisted more and more over time. While it is not clear where he found treatment, he said a witch sold him a piece of fat to eat as treatment. Just a little piece, he stressed, was enough to cure him. He was better soon after and has never experienced an attack since. He now takes precautions when traveling. He suggested one should eat food with garlic, carry garlic and drink alcohol and soda while traveling. Almost all participants mentioned the importance of garlic in prevention. It was said that garlic affects the taste of one's blood and makes it undesirable.

Participants also said *kharisiris* prefer blood and fat from people who live "purely". Those who refrain from smoking and drinking alcohol and eat natural food were said to be more attractive to the *kharisiri*. Practicing a health promoting lifestyle from a biomedical perspective, may indeed compromise one's health from a participant's perspective. This is not to suggest that vendors would habitually practice unhealthy behavior like smoking as a means to prevent *kharisiri* attacks, but it does highlight possible health benefits of the occasional use of items like alcohol, soda or smoking in certain ritualistic contexts. Though it must be recognized that the risk of continual use of these substances may increase if used even on occasion. Regardless, in terms of treatment, Pablo expressed no difficulty in obtaining fat to cure his illness, but this may not be the case for all.

It appears that certain types of fat are more effective than others in treating attacks, and I got the impression that human fat was perceived to be the most effective. This may be problematic for a number of reasons. Beyond the obvious questions of legality among the participants who mentioned this treatment, they felt it was relatively inaccessible. Witches who sold human fat were reported to be hard to find, and also that fat was very expensive.

While I did not ask Pablo what kind of fat he ate, he did state that he acquired the fat from a witch, and later added that the umbilical cord of a baby is a particularly good treatment. The umbilical cord would of course contain blood, which is also a substance taken by *kharisiris*. Pablo said that one must consume "whatever was taken", demonstrating the belief that one must replace what was lost to restore balance, and health, to the body. Drinking blood of any kind that is not one's own however can transmit any number of diseases. While this treatment may be a rare occurrence, such practices show major differences in health beliefs across biomedicine and traditional systems. The drinking of blood and eating of fat are obvious evidence of the use of traditional cures for a traditional illness. In the area of Peru bordering Bolivia however, there appears to be evidence that *kharisiri* attacks may be treated by nontraditional, or biomedical, methods. During fieldwork in Yunguyo, my thesis advisor heard mention of a commercially packaged pill to treat such attacks.

I met a woman, Anita, in Yunguyo who was working behind the counter at the pharmacy she has owned with her husband for fifteen years. When she is not at the pharmacy, she works as a nurse and her husband is a medical doctor. She is only at the pharmacy two days a week, Saturdays and Sundays, which are the busiest days for business at the pharmacy. Every Sunday in town there is a market that is comprised mostly of vendors from the surrounding rural highlands. This is often the only opportunity the traveling vendors have to purchase the goods they need before returning to their rural villages. I observed several of these visiting vendors come into the pharmacy and buy any number of products and pharmaceutical pills. I asked Anita about the *kharisiri* and if her customers ever ask for pills to treat a *kharisiri* related illness. She said "*aaaaarta gente vienen*" (a lot of people come) asking for medicine for *kharisiris* every weekend. She told me that she used to think people who believed in the *kharisiri* were ignorant but the more time she spent in the pharmacy, the more she began to see the importance of understanding their beliefs in order to help them. She said that people have a lot of "faith" in the *kharisiri* and therefore it is important that they also have "faith" in the pills that she sells them in order for them to get better, saying "mente importante" ([the] mind [is] important] many times. She generally prescribes three

different pills³⁹ to treat the three most common symptoms and instructs them to be taken three times a day, with breakfast, lunch and dinner, for three days. Anita's pharmacy does not appear to be unique. Many pharmacists in Yunguyo and Puno also attested to people seeking pills to treat *kharisiri* attacks. On several occasions participants even mentioned that there are pills at pharmacies to treat attacks before I even asked if it was possible to treat with pharmaceuticals. In Yunguyo it was rumored that there was a particular pharmacy that prepared a pill for *kharisiri* attacks on a case-by-case basis. These reports gave me the impression that pills were perceived as being an effective form of treatment, which is interesting given the contrasting health practices of biomedicinal and traditional conceptions of health. Reasons for why this may be so will be discussed in the remainder of this chapter. However, not all biomedical treatment methods however were perceived as effective and it is worth discussing why not, before theorizing about the acceptance of biomedicinal pills.

The majority of informants across all research sites said that if you go to the hospital after a kharisiri attack, they will give you an injection and you will die almost instantly. Why then is it that injections are perceived to kill but pills are perceived to heal? There are likely to be several explanations to consider. It may be that injecting the body with foreign substances may throw off the "balance" of body fluids necessary for health that is understood under humoral health beliefs. Biomedical doctors of course are also suspected of selling human substances like fat for profit. Fernández Juárez (2006) writes that doctors and others who work with biomedicine are commonly viewed as "allies" of the *kharisiri* (p. 54). In a hospital then one would be surrounded by those who have the knowhow to extract fat and perhaps doctors are the ones who's caused them harm in the first place. Killing the patient may increase a doctor's, (or a kharisiri's), "profit" even more. Considering participant's positive and reciprocal exchanges with pharmacists, it may be that the pharmacist's ability to relate to clients (vendors) increases trust and therefore, effectiveness, of biomedicinal pills. In Anita's particularly case, her "belief" in the *kharisiri* may contribute to relatedness and trust. Also, since it is perceived that *kharisiri* attacks must be treated immediately, the instantaneous speed that pills are thought to work may be why they are thought to be

_

³⁹ Pill 1: an antibiotic for infection (Quemicetina). Pill 2: an antiacid for stomach (Ranitidina) Pill 3: an "antipasitmodtico" to treat fever.

effective treatment. While biomedical injections were also thought to take immediate effect, the immediate effect was not healing but instead unanimously thought to be death. The difference in outcome of the use of injections and pills may be explained by the liquid properties of injections that may upset the humoral balances of the body. Regardless, what is more worthy of discussion is why biomedcinal pills are even considered as treatment for this traditional illness in the first place. The history and social context of the *kharisiri* may give some insight.

According to scholars, the *kharisiri* is understood to have appeared in Aymara history around the time the Spanish arrived (Bastien, 2003; Crandon-Malamud, 1993; Fernández Juárez, 2006). There has since been an association of the *kharisiri* as being a foreigner, or stranger⁴⁰. Some have argued that there is a connection between ideas of fat in the Andes and the "dominating" foreigner (Bastien, 2003). Fat, as we have seen, is valued as an important source of strength, energy and health for vendors, and indeed also a belief held by many in the Andes. The loss of fat at the hand of foreigners is, according to Bastien (2003), symbolic of "social and political meanings" whereby it's loss causes "dis-empowerment" (p. 173). *Kharisiris* then are often thought to be those who are in a position of authority, such as politicians or religious leaders. While ideas of the *kharisiri* vary across Andean communities, in Crandon-Malamud's (1993) research in a small Bolivian village, she writes that up until the 1950's the *kharisiri* was "universally the image of a dead Franciscan monk" (p. 120), who gave victim's fat to a bishop to make holy oil. In the following decades the kharisiri was associated with North Americans after the community had contact with foreign aid programs that were interpreted "as an attempt by the United States to practice genocide for imperialist gain" (p. 120). Then again in the 1970's the kharisiri was associated with the Bolivian elite, and really "any *mestizo* who participated in the trade of human kidney fat" (p. 120). Her point is that the *kharisiri*'s identity changes according to who is the oppressor and furthermore stresses that society's social structure is strongly linked to one's understanding of health. She mentions how in the late 1970's there was a period of reform in the particular community she studied. A health clinic was built and distribution of land became more

_

⁴⁰ It should be stated that *kharisiris* are not necessarily strangers or foreigners. Ødegaard for example reports of a case whereby a man who worked in small-scale trade felt the father of his sister's child was *kharisiri*. (Personal conversation, February 2012).

equitable. At the same time, it became possible to cure a *kharisiri* attack, which previously was perceived as deadly.

Also changing seems to be the methods and tools *kharisiris* use for removing the bodily substances. Fernández Juárez (2006: referencing Morote 1988) writes that the *kharisiri* used to be perceived as "cutting" victims with their own knife. Now he says, modern tools are used in extraction such as cameras, tape recorders and syringes. Participants in this study almost always mentioned syringes or needles. One participant even mentioned the use of lasers, which he explained could be used from afar. The evolving nature of this sickness due to a changing society perhaps contributes to the many treatments participants mentioned, and also affects the type of treatment.

Remedies for treating a *kharisiri* attack included several traditional treatments like eating fat, drinking blood, wrapping one's stomach with the hide of a black sheep and various homemade brews. There was not a single cure that was unanimously recommended. In contrast, participants only mentioned one treatment for *susto*, which was a soul calling ceremony. Removing a witch's curse was reported to successful with the use of white magic. Susto and witchery are not linked to the arrival of the Spanish, indicating that they and their cures—are more "established" in Andean history. In Arequipa, Pablo told me that if I wanted to learn more about the *kharisiri*, I should buy a book on black magic. Black magic he said, originated in Spain and Rome. The "newness" of the sickness may leave treatment up for debate and experimentation, and biomedical pills may be associated with "modern" tools that are responsible for the taking of fat or blood. Participants, as mentioned in previous chapters, generally regarded pharmaceuticals as working fast because of the chemicals they contain, but at the same time being dangerous because of their "powerful" properties. These "powerful" chemicals may be perceived to be effective in combating an illness that is caused by a "powerful", oppressor who at this point in time, according to Crandon-Malamud's hypothesis, may be the one who has access to modern things that are used to remove fat.

There may be other reasons why biomedicine is considered as treatment when understood within the context of some traditional illnesses. Kharisiri illnesses for example were not generally reported to involve loss of the soul. Attacks were also thought to occur regardless of whether or not one upheld social and ritual payments. Therefore being a victim was neither one's fault nor a result of an envious family member, friend or co-worker. Proper treatment then does also not appear to give concern for social relations or ritual payments and ceremonies. This is evidenced by the different traditional cures participants listed, which all involved obtaining various substances and usually ingesting them to "replace" what was lost. In one pharmacy a pharmacist was said to "prepare" a pill for those who request it. This "preparation" may be perceived to include ingredients that were thought to be curative. By ingesting the pill, this too would replace the missing elements and restore health mimicking traditional cures but incorporating aspects of biomedicine. The acceptance, or perhaps use of biomedicine here, should not be taken a sign of "progressing" away from traditional systems, but instead highlight the capacity for treatment systems to work together to fulfill health needs. Ultimately however, if socio-political oppression promotes kharisiri attacks, only by eliminating social inequity will the illness truly be cured.

Summary

By presenting many varying types of cases whereby traditional treatments were relied on, it was intended to illustrate that much like biomedicine, deciding on the course of traditional treatment methods involves considerations beyond matters of accessibility. Still, in many ways, traditional treatment appears to be more accessible to vendors than biomedicine in terms of the vendor's daily routines. Traditional healing ceremonies tend to take place in the late hours of the night when the market is closed for business. The non-invasiveness of traditional treatments also means that vendors' physical abilities to work is likely to be unaffected by traditional treatments. Also in terms of work, Crandon-Malamud's hypothesis may help explain why vendors choose traditional treatment and furthermore, when multiple treatment methods are used, why people credit it to healing. This was demonstrated in Laura's case. By validating her family's contribution in curing her daughter of *susto*, she perhaps also sent a message to her family that she values their time and efforts. This strengthening or maintenance of their bonds may work to benefit Laura in her business since

she relies on family for many aspects of managing her stall. Perhaps this shows that social relationships are perceived as an important resource for livelihoods among participants. While the literature often tends to focus on degeneration of the social fabric in urban settings, this case shows a desire to uphold such relationships and recognizes their importance. Also in terms of resources, this chapter showed that participants may understand the flow economic resources in the market to be influenced by "magical" sources. Lupe's case whereby her ex-husbands' mistress inflicted a curse on her was perceived to be the cause behind her economic misfortune demonstrates this. Such a perspective is relevant to health promotion since it may signify that access to resources that support health is determined by conditions not capable of changing though means such as organizing to promote changes in public policy or worker's rights.

The traditional illnesses explored in this chapter seemed to be capable of affecting any vendor, regardless of one's position within the market's social gradient. This may be in contrast to biomedically understood conditions such as overuse injuries that are likely to more strongly affect those who cannot hire helpers, afford to take time off or have access to capital to buy and sell goods that are less physically demanding. In the case of the *kharisiri* attacks for example on those of low market status (i.e. Pablo) and on those of higher status (i.e. the vendor who sold leather goods) both expressed fear of being victims of this ailment sicne traveling to a dangerous area was the major risk factor of being attacked. In other words, a vendor's work (unless traveling is concerned) does not make one more or less susceptible to traditional illnesses than other vendors.

In terms of treatment, *kharisiri* attacks were the only traditional illness explored in this study where biomedicine was considered a possible treatment. This may be because other traditional illnesses, such as witchery and *susto*, have stronger social and spiritual causations. The *kharisiri*, on the other hand, may have roots in broader socio-economic influences that are relatively less personal on an individual level in terms of one's social network. Furthermore, attacks seem to be relatively random or not associated with social reciprocity or relationships. The "impersonal" nature of the *kharisiri* attack then may allow one to consider forms of treatment that are not dependent on social motivations or resources.

The key to effectively treating *kharisiri* attacks, and very well other traditional sicknesses with biomedicine, may be in the attitudes of those in a position to give health care. In the small town of Yungoyo there were cases of biomedical health professionals who "believe" in *kharisiris* for their patients' sake. Perhaps as a result of relating to the patient, people come seeking treatment feeling comfortable enough to express their health concern. It is likely that without fear of mistreatment or disrespect, patients may return seeking biomedical treatment before their illness reaches an incurable state.

Concluding Remarks

This thesis has explored themes relating to marketplaces, the work of vendors, differing concepts of health and vendors' rationale behind treatment choices. It contributes to existing bodies of literature by drawing connections between these themes while also adding the perspectives of market vendors. Research on markets tends to be from NGO's and furthermore focused on consumer safety rather than the well-being of workers. From this study it was demonstrated that vendors perceive their work as having both health risks and benefits. Health risks included exposure to extreme temperatures, accidents and overuse injuries. In terms of benefits, vendors enjoyed being self-managing, social camaraderie and having daily access to money. Many were also positive in that they expect to progress in their current occupation.

Yet at the same time, most reported being "accustomed" to their work and did not express a strong desire to improve their work environment and conditions in interest of their health. Instead their motivation for improvement came from a desire to modernize the market to increase business. While it was felt that this would attract more customers, bettering the market may also be perceived as a means to improve one's social status. The discussed implementation of uniforms for example, may be perceived as a means to raise one's status relative to other small-scale trade workers, like street vendors. Participants appeared to be aware of the benefits that a higher position on the social ladder may bring in terms of health. Vendors reported that those who look like they "don't have money" are being discriminated against in hospitals. By raising their occupational status, they may anticipate more respect in settings for biomedical treatment as well as in their everyday lives. In terms of health promotion, initiatives in the marketplace that aim to improve the work environment, may gain more support from market workers by emphasizing how structural changes would "modernize" the market appearance-wise, rather than focusing on potential safety benefits that changes could bring.

Understanding how vendors maintain their health was also a central aspect of this study since, according to a health promotion perspective, everyday settings may promote, or discourage, health. Within the market it was found that vendors maintain their health by

dressing warmly and eating at regular intervals. Food, particularly when from kin in the highlands, was thought to provide strength to work and also to ward off illness. The urban market setting was found to represent a challenge to health maintenance practices. The relatively open-aired construction and damaged roof increased susceptibility to temperatures changes. In terms of eating, food in the city—not just the market—was thought to be less pure as it was perceived to contain chemicals and also lack vitamins. The city air was also thought to be harmful. Vendors however did not generally practice behaviors to minimalize risks from "contaminated" food or air. It seems then that health practices informed by indigenous beliefs are observed by participants but, at least to some degree, existing practices have not accounted for additional health risks that urban life may represent.

In terms of treatment, social interactions as well as health related actors and products in the market seemed to influence health ideas and behaviors. Customers alerted María to her pills' side effects. Camilla insisted her fellow vendor's bee pollen was counterfeit. Traveling salesmen were able to sell packets of Chinese tea on the promise of purging brain cancer causing parasites. Conversations surrounding these products seemed to expose a level of vulnerability. It may be that the variety of health information makes for uncertainty among vendors in the Andes about what treatment is in their best interest. Vendors however are generally aware of the risk of counterfeit goods. Camilla's decision to buy retail noni and her declaration that the bee pollen bought in the market was counterfeit, attest to this. This suggests that unfamiliar biomedicine products may be met with the same suspicion. Trust between sellers, in many cases pharmacists, and buyers may help to bridge this gap. Given the proximity of pharmacies to the Feria, and the ability for vendors to establish social relationships with pharmacists, there is an advantage of pharmacies as a source of treatment for vendors. This sense of trust was found to be missing in public clinics and hospitals. Pharmacists then could perhaps be important players in community or public health. As Wayland and Crowder's (2002) study demonstrated about the lack of sufficient community health workers in urban Bolivia, the pharmacy may be worth exploring as a venue to reach groups who, like vendors may not spend much time in their home neighborhoods or communities.

In terms of attitudes regarding types of treatments, pharmaceutical pills were perhaps the most contested. They were thought to work fast, but their chemical properties were perceived as a source of harm. Therefore participants expressed an unwillingness to take pharmaceutical pills on any regular basis. One vendor even stopped taking the pills she was instructed to take every day for her heart, because they made her sleepy and thus made vending difficult. This is in contrast to research in other urban areas or in medically pluralistic settings, where as Nichter (1994) theorizes, people take medicines to "numb" themselves to the stresses of urban living and even unfavorable work conditions. In contrast, natural remedies and traditional medicinal herbs were perceived to be safe and affordable but they required much time to take effect, which was not ideal considering the energy required for work. The market setting was also said to make it difficult to prepare such treatments. In terms of vending work schedules, traditional healing may be advantageous because it can be done in the home, and commonly at night. Biomedical facilities however were perceived to have long wait times that required cueing early in the day, which is a significant consideration for vendors given the amount of business that occurs in the morning hours at the market. When healing at home, one may be shielded from disrespectful treatment, but in hospitals discrimination was reported and this may be a considerable disadvantage of this treatment setting. Despite the many advantages and disadvantages of the various treatment options, choosing a course of treatment is not as simple as weighing costs, time and location, since differing health beliefs and social relationships may also motivate health decisions.

Crandon-Malamud's work in the rural Andes suggested that in medically pluralistic settings, treatments, as a primary resource, may be decided upon based on the social outcome, that may result from their use, or secondary resource. This study demonstrated that this theory may also be useful in exploring treatment choices in an urban setting. We saw how Laura, a vendor who relies on her family's support for her business, attributed her daughter's healing to a traditional method that her family was a part of over biomedical treatment whereby her family did not play a role. With Maria, we saw that she credited her *casera*'s observation that she looked unwell as causing her to seek an alternative treatment, and she says that this new treatment was responsible for returning her to health. In both these cases, decisions

were made regarding health that positively reinforced social bonds relevant to vendor's work. Treatment choices, or efficacy when multiple treatment systems are used, then may be rationalized based on social relationships, including those relationships that may benefit one's business. Such decisions then may work to re-affirm ties that may be vital to economic well-being in an urban setting. In many cases however, the range of appropriate treatment choices were fewer depending on the perceived source of illness.

Traditional illnesses in many cases were perceived to be treatable only with traditional methods and likewise with biomedically understood conditions and biomedicine. Susto was regarded to be treatable with a soul calling ceremony or the giving of a payment to mother earth. Lifting curses, typically motivated by envy, was thought possible only with the use of "white magic". Treating *la gripe* was thought to be effective using pills from the pharmacy or various herbal teas and remedies that did not concern spiritual elements. In other words, illnesses from different medical systems tended to be treated only with methods from their respective system. Yet this was not always the case. Kharisiri attacks as we saw, were thought to be treatable with biomedical pills, raising interesting questions as to why this is so. It may be that the quickness one needs to treat an attack makes the fast working chemical properties of pills useful. It may also be that the pharmacists who dispense pills for *kharisiri* attacks "believe" in this illness and thus know how to cure it's affects. But perhaps a more compelling explanation of this case is that it's cause does not seem to be connected to social relationships or one's lack of ritual payments. Rather the *kharisiri* can attack anyone, particularly if in the vulnerable position of sleeping while traveling alone at night. The literature suggests that who the kharisiri is and the seriousness of an attack vary throughout history and also demonstrates that these factors correlate with socio-economic and political conditions. Thus treating an attack may be less socially motivated than other traditional illnesses. Furthermore, like changing societal contexts that appear to influence how kharisiris are perceived, what is considered effective treatment, may also be continuously evolving.

From these cases we can see that perceptions of traditional illnesses, as a single category, is not sufficient when exploring rationalization of treatment choices. Instead, the underlying

cause of a traditional illness, whether it be social, spiritual or a reaction to changing economic or political conditions, may greatly enhance understandings of such ailments and their treatment. Tolerance and respect for those suffering from these conditions may in some circumstances promote the seeking of care across medical systems. If this is so, then drawing on the strengths of multiple medical systems may led to more appropriate treatment better health outcomes.

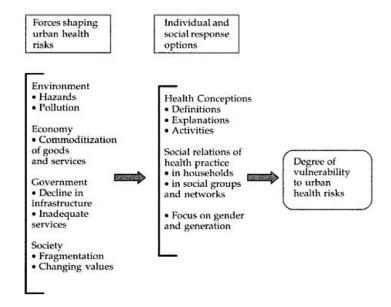
But what does this all mean for health promotion? Health promotion strives for a more equitable distribution of resources that are perquisites to achieve "health for all". Vendors expressed many barriers to such resources for health such as primary health care. For example, most participants did not have health insurance. Insurance was not offered as a benefit through work nor was it, with the exception of Rita, attained on one's own initiative. This left most to regard biomedical care, or at least acceptable biomedical care, as a considerable expense. It may be a matter of increasing access to information regarding insurance before promoting the use of biomedicine. Also in terms of health promotion, there was no expressed desire to take actions towards changing working conditions in the market or through worker's rights laws. For instance, while there was a desire to improve the market in terms of appearance, there was no voiced concern for improving infrastructure that would better regulate air quality and temperature that may promote health. The lack of taking action in the market over conditions that affect health and well-being may suggest that vendors are also unlikely to demand supportive public policy and environments that benefit their heath and well-being outside of the market. Insights from this study can be used to advocate for worker's rights and to better understand the health related needs of those who earn their living through forms of unprotected small-scale trade. Without one's health, participating in any form of work may become a challenge and a burden to economic progress, at the individual, community and societal level. I hope that by sharing the stories of the hardworking vendors in this study, I have contributed to a better understanding of what health means to people in the Andes, and, in an increasingly urban and globalizing context, how health may be promoted in a manner that is culturally relevant.

Appendixes

Figure 1.1 Vendor type by product sold

Product	# of Vendors
Fruit	8
Vegetables	4
Potatoes	4
Clothes	5
Meat	3
Natural Health Products	2
House wares	1
Dairy	1
CDs/DVDs	1

Figure 1.2 Obrist's Urban Health & Vulnerability Framework



Obrist, B. (2006). Struggling for Health in the City: an anthropological inquiry of health, vulnerability and resilience in Dar es Salaam, Tanzania. Peter Lang. (p. 63).

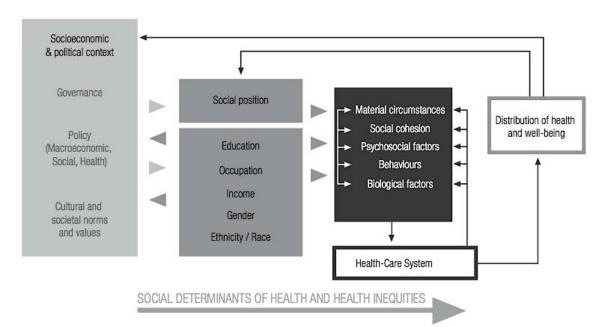


Figure 1.3 WHO Social Determinants of Health Framework

WHO. (2008). Closing the Gap in a Generation: health equity through action on the social determinants of health. Final Report of the Commission of Social Determinants of Health. (p. 245). Geneva.

Sources

- Akhtar, R. (2002). Urban health in the third world. APH Publishing.
- Aliaga Linares, L. (2010). *Informal Economy Budget Analysis in Peru and Metropolitan*Lima (No. 5) (p. 44). Women in Informal Employment: Globalizing and Organizing (WIEGO) Inclusive Cities. Retrieved from
 http://www.inclusivecities.org/research/RR4_Linares.PDF
- Amnesty International. (2007, June 28). Amnesty International. *Health Professional Action Health without barriers -- economic, social or cultural*. Retrieved May 8, 2011, from http://www.amnestyusa.org/document.php?id=ENGAMR460102007&lang=e
- Amnesty International. (2011, October 31). Peru to reopen investigation into forced sterilizations of women. Retrieved November 17, 2011, from http://www.amnesty.org/en/news/peru-reopen-investigation-forced-sterilizations-women-2011-10-31
- Babb, F. E. (1989). Between field and cooking pot: the political economy of marketwomen in *Peru*. University of Texas Press.
- Baer, R. D., & Bustillo, M. (1993). Susto and Mal de Ojo among Florida Farmworkers:

 Emic and Etic Perspectives. *Medical Anthropology Quarterly*, New Series, 7(1), 90–100.
- Bastien, J. W. (1982). Exchange between Andean and Western medicine. *Social Science & Medicine* (1982), 16(7), 795–803.
- Bastien, J. W. (2003). Sucking blood or snatching fat. Chagas' disease in Bolivia. *Medical Pluralism in the Andes* (Vol. 9, pp. 166–187). Routledge Press.

- Bird flu virus kills Chinese man. (2011, December 31).*BBC*. Retrieved from http://www.bbc.co.uk/news/world-asia-china-16372348
- Bredholt Stensrud, A. (2011, February). "Todo en la vida se paga": Negotiating life in Cusco, Peru (Department of Social Anthropology). University of Oslo, Oslo, Norway.
- Broadhurst, C. L. L. (2011). *User's Guide to Propolis, Royal Jelly, Honey, and Bee Pollen:*Learn How to Use Bee Foods to Enhance Your Health and Immunity (Large Print 16pt). ReadHowYouWant.com.
- Bromley, R. (1978). Introduction the urban informal sector: Why is it worth discussing? *World Development*, 6(9–10), 1033–1039. doi:10.1016/0305-750X(78)90061-X
- Carrion, J. F. (2006). The Fujimori Legacy. Penn State Press.
- Chambers, S. C. (1999). From subjects to citizens: honor, gender, and politics in Arequipa, Peru, 1780-1854. Penn State Press.
- Conaghan, C. M. (2005). Fujimori's Peru: deception in the public sphere. University of Pittsburgh Pre.
- Constitution of the World Health Organization. (1946). Presented at the International Health Conference, New York.
- Crandon, L. (1983). Why Susto. Ethnology Pittsburgh, Pa, 22(2), 153–167.
- Crandon-Malamud, L. (1993). From the Fat of Our Souls: Social Change, Political Process, and Medical Pluralism in Bolivia. University of California Press.
- Creswell, J. W. (2009). Research design: qualitative, quantitative, and mixed methods approaches. Sage Publications.

- Dana, J. (2008, February 9). Noni juice may have killed man in Spain. *Deseret News*. Provo, Utah. Retrieved from http://www.deseretnews.com/article/695251608/Noni-juice-may-have-killed-man-in-Spain.html
- Davies, C. A. (1999). *Reflexive Ethnography: A Guide to Researching Selves and Others*.

 Psychology Press.
- de Soto, H. (1989). The other path: the invisible revolution in the Third World. New York:

 Harper & Row.
- Declaration of Alma-Ata. (1978). Presented at the International Conference on Primary Health Care, USSR.
- Elkins, R. (1996). Bee Pollen, Royal Jelly, Propolis and Honey: An Extraordinary Energy and Health-Promoting Ensemble. Woodland Publishing.
- Ember, C. R. (2004). Encyclopedia of medical anthropology: health and illness in the world's cultures. Springer.
- Ewig, C. (2010). Second-wave neoliberalism: gender, race, and health sector reform in *Peru*. Penn State Press.
- Fernández Juárez, G. (2006). Kharisiris de Agosto en el Altiplano Aymara de Bolivia. *Chungará (Arica)*, 38(1), 51–62. doi:10.4067/S0717-73562006000100006
- Fetrow, C. W., & Avila, J. R. (2000). *The Complete Guide to Herbal Medicines*. Simon and Schuster.
- Glass-Coffin, B. (1998). The gift of life: female spirituality and healing in northern Peru.

 UNM Press.
- Glass-Coffin, B. (2003). Anthropology and Shamanism: Bottom-line considerations in image and practice. *Medical pluralism in the Andes* (pp. 234–249). Routledge.

- Green, J., & Tones, K. (2010). *Health Promotion: Planning and Strategies*. SAGE Publications Ltd.
- Green, & Thorogood, N. (2009). *Qualitative methods for health research* (2nd ed.). Los Angeles: SAGE.
- Greenway, C. (1998). Hungry earth and vengeful stars: soul loss and identity in the Peruvian Andes. *Social Science & Medicine*, 47(8), 993–1004. doi:10.1016/S0277-9536(98)00163-4
- Hart, K. (1973). Informal Income Opportunities and Urban Employment in Ghana. *The Journal of Modern African Studies*, 11(1), 61–89.
- Houtman, I., & Jettinghoff, K. (2007). Raising awareness of stress at work in developing countries: a modern hazard in a traditional working environment: advice to employers and worker representatives. World Health Organization. Retrieved from http://www.who.int/entity/occupational_health/publications/raisingawarenessofstress.pdf
- INEI (2009). Migraciones Internas 1993-2007 (p. 166). Lima, Peru.
- INEI (2007) Census Nacionales XI de Poblacion y VI de Vivienda http://www.inei.gob.pe/
- Juárez, G. F., & Bolhispana, A. (2004). Salud e interculturalidad en América Latina: perspectivas antropológicas (1st ed.). Ciudad Real, Spain: Universidad de Castilla.
- Klarén, P. F. (2000). Peru: Society and Nationhood in the Andes. Oxford University Press.
- Koss-Chioino, J., & Greenway, C. (Eds.). (2003). *Medical pluralism in the Andes* (Vol. 9). Routledge Press.
- Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. Sage Publications.

- Larme, A. C. (1993). Work, reproduction and health in two Andean communities

 (Department of Puno, Peru). Dept. of Anthropology, University of North Carolina at

 Chapel Hill. Retrieved from

 http://static.dss.ucdavis.edu/winterweb/html/research/andean/larmeWRH/glossary.ht

 m
- Larme, A. C. (1998). Environment, vulnerability, and gender in Andean ethnomedicine.

 Social Science & Medicine, 47(8), 1005–1015. doi:10.1016/S0277-9536(98)00162-2
- Macía, M. J., García, E., & Vidaurre, P. J. (2005). An ethnobotanical survey of medicinal plants commercialized in the markets of La Paz and El Alto, Bolivia. *Journal of Ethnopharmacology*, 97(2), 337–350. doi:10.1016/j.jep.2004.11.022
- Masterson Creber, R., Smeeth, L., & Miranda, J. (2010). Physical activity and cardiovascular risk factors among rural and urban groups and rural-to-urban migrants in Peru: a cross-sectional study. *Rev Panam Salud Publica*, 28(1), 1–8.
- Miles, Ann. (1998). Science, Nature, and Tradition: The Mass-Marketing of Natural Medicine in Urban Ecuador. *Medical Anthropology Quarterly*, 12(2), 206–225.
- Miles, Ann. (2003). Healers as entrepreneurs: constructing an image of legitimized potency in urban Ecuador. *Medical pluralism in the Andes* (pp. 107–128). Routledge.
- Miles, Anne, & Leatherman, T. L. (2003). Perspectives on Medical Anthropology. *Medical pluralism in the Andes* (pp. 3–15). Routledge.
- Ministry of Health. (2006). Encuesta Nacional de Indicadores Nutricionales, Bioquímicos, Socioeconómicos y Culturales Relacionados con las Enfermedades Crónicas Degenerativas (p. 163). Lima, Peru.

- Moy, G. G. (2001). Healthy marketplaces: an approach for ensuring food safety and environmental health. *Food Control*, *12*(8), 499–504. doi:10.1016/S0956-7135(01)00031-7
- NIH National Institutes of Health. (2011, January 31). Gastritis: MedlinePlus Medical Encyclopedia. *Gastritis*. Retrieved November 25, 2011, from http://www.nlm.nih.gov/medlineplus/ency/article/001150.htm
- Naidoo, J., & Wills, J. (2000). *Health promotion: foundations for practice*. Elsevier Health Sciences.
- Nichter, M. (1996). Anthropology and international health: Asian case studies. Routledge.
- Nichter, M., & Vuckovic, N. (1994). Agenda for an anthropology of pharmaceutical practice. *Social Science & Medicine* (1982), 39(11), 1509–1525.
- Obrist, B. (2006). Struggling for Health in the City: an anthropological inquiry of health, vulnerability and resilience in Dar es Salaam, Tanzania. Peter Lang.
- Ødegaard, C. (2010). Mobility, markets, and indigenous socialities contemporary migration in the Peruvian Andes. Farnham, Surrey, England; Burlington, VT: Ashgate Publishing, Ltd.
- Oeser, C. C., Escombe, A. R., Gliman, R. H., Friedland, J. S., Evans, C. A. W., & Moore, D. A. J. (2005). Des Traditional Medicine Use Hamper Efforts at Tuberculosis Control in Urban Peru? *The American Journal of Tropical Medicine and Hygiene*, 73(3), 571 –575.
- Orlove, B. (1998). Down to earth: race and substance in the Andes. *Bulletin of Latin American Research*, 17(2), 207–222.

- Oths, K. S. (1992). Some Symbolic Dimensions of Andean Materia Medica. *Central Issues* in Anthropology, 10(1), 76–85. doi:10.1525/cia.1992.10.1.76
- PAHO. (2007). *Health in the Americas* (No. Volume II) (pp. 577–595). Pan American Health Organization. Retrieved from http://www.paho.org/hia/archivosvol2/paisesing/Peru%20English.pdf
- PAHO, & EMBARQ. (2011). *Moviéndonos hacia una Ciudad Saludable* (p. 16). Retrieved from http://www.embarq.org/sites/default/files/EMB2011_Moviendonos_Hacia_Una_Ciudad_Saludable.pdf
- Pick, W. M., Ross, M. H., & Dada, Y. (2002). The reproductive and occupational health of women street vendors in Johannesburg, South Africa. Social Science & Medicine (1982), 54(2), 193–204.
- Richards, L., & Morse, J. M. (2007). Readme First for a User's Guide to Qualitative Methods. Sage Publications.
- SALTRA: project for the health of street vendors in Honduras. (n.d.). *Programa Salud y***Trabajo en America Central. Retrieved March 12, 2011, from

 http://www.saltra.info/index.php?module=Pagesetter&func=viewpub&tid=28&pid=38
- Sachs, J., & Paredes, C. E. (1991). Peru's path to recovery: a plan for economic stabilization and growth. Brookings Institution Press.
- Seligmann, L. J. (2004). Peruvian street lives: culture, power, and economy among market women of Cuzco. University of Illinois Press.

- Sikkink, L. (2009). New cures, old medicines: women and the commercialization of traditional medicine in Bolivia. Cengage Learning.
- Skar, S. L. (1994). *Lives together--Worlds apart: Quechua colonization in jungle and city*. Scandinavian University Press.
- Thomas E., J., & Glade J., M. (2010). Stevia: It's Not Just About Calories. *THe Open Obesity Journal*, (2), 101–109.
- United Nations Population Fund. (2007). *UNFPA state of world population, 2007:*unleashing the potential of urban growth. New York: United Nations Population Fund.
- United Nations/Unicef. (2008, July 26). Peru fake medicine. Lima, Peru: United Nations

 Television/America Television Canal 4 Del Peru. Retrieved from

 http://www.unmultimedia.org/tv/unifeed/d/8756.html
- WHO. (1986). Ottawa Charter for Health Promotion (p. 4). Presented at the First

 International Conference on Health Promotion, Ottawa, Ontario, Canada: WHO.

 Retrieved from www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf
- WHO. (2000). World Health Organization Assesses the World's Health Systems. Geneva:

 World Health Organization. Retrieved from http://www.who.int/whr/2000/en/
- WHO. (2006). A guide to healthy food markets. WHO Press. Retrieved from http://www.who.int/foodsafety/publications/capacity/healthymarket_guide.pdf
- WHO. (2008). Closing the Gap in a Generation: health equity through action on the social determinants of health. Final Report of the Commission of Social Determinants of Health. (p. 245). Geneva. Retrieved from http://www.searo.who.int/LinkFiles/SDH_SDH_FinalReport.pdf

- WHO. (2011a). WHO Report: 2011 Global Tuberculosis Control (p. 246). Geneva.
- WHO. (2011b). Physical Inactivity: A Global Public Health Problem. *Global Strategy on Diet, Physical Activity and Health*. Retrieved December 9, 2011, from http://www.who.int/dietphysicalactivity/factsheet_inactivity/en/index.html
- Wayland, C., & Crowder, J. (2002). Disparate Views of Community in Primary Health Care:

 Understanding How Perceptions Influence Success. *Medical Anthropology*Quarterly, 16(2), 230–247. doi:10.1525/maq.2002.16.2.230
- Webb, R., & Valencia, S. (2006). A new social contract in Peru: an agenda for better education, health, and anti-poverty programs (Country Study No. 35037).Washington, D.C.: The International Bank for Reconstruction and Development/The World Bank.
- Wilkinson, R. G., & Marmot, M. G. (2003). *Social determinants of health: the solid facts* (2nd ed.). Denmark: World Health Organization.
- Yana Villasante, O. (2005, August). El Khari-Khari Entre Realidad Y Creencia. Retrieved from http://www.ifeanet.org/temvar/SIII-ANTSC27.pdf