USE OF MANZANILLA TEA DURING THE CHILDBEARING PERIOD AMONG WOMEN OF MEXICAN ORIGIN WHO RESIDE IN THE U.S.–MEXICO BORDER REGION

by

Susan Marie Yount

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Susan M. Yount entitled Use of Manzanilla Tea During the Childbearing Period Among Women of Mexican Origin Who Reside in the U.S.-Mexico Border Region and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

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I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

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DEDICATION

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ABSTRACT

Hispanics are the fastest growing ethnic group in the United States with the states that border Mexico having a greater percentage of persons of Mexican origin residing in them. Herbs are widely used by persons of Mexican origin, however, little is known about specifics surrounding these cultural practices. An ethnographic study in the border region of Nogales, Arizona – Nogales, Sonora, Mexico, discovered the cultural components of values, beliefs, practices, and experiences of 9 women of Mexican origin who resided in the Arizona/Sonora, Mexico border region related to using manzanilla tea during the childbearing period. Data from semi-structured in-depth interviews were analyzed using a thematic, content analysis process. Intergenerational transmission of cultural health care knowledge emerged from abstraction of the findings. Details from the women’s voices provide enlightenment surrounding the values, beliefs, and practices related to the use of manzanilla tea for childbearing. Nursing should be able to integrate this knowledge into care practices and education thereby promoting more culturally relevant care during the childbearing period for women of Mexican origin.
CHAPTER ONE

Introduction

The overall purpose of this study was to explore the cultural practices of pregnant women of Mexican origin who reside in the United States (U.S.)-Mexico border region. In this study, the border region refers to the Arizona/Sonora, Mexico border. The specific purpose of this study was to explore the cultural context of using *manzanilla* tea during the childbearing period. The long term goal of this program of research is to determine whether cultural care practices of childbearing women are safe for both pregnant women and their unborn child. The statement of the problem; statement of the purpose; background of this research to include the U.S.-Mexico border region and its population, cultural context of health, and informal health care; research questions; significance of the study to nursing; and definition of terms will be described in this chapter.

Statement of the Problem

The U.S.-Mexico border region is populated largely by individuals of Mexican heritage. Census data suggest the population is growing in size, yet our knowledge of their health care practices is extremely limited. To better serve the growing numbers of pregnant women in this region,
health care providers must understand the women’s approaches to health and wellness, including culturally derived ways to promote health or stave off illness.

Knowledge about over-the-counter and natural herbal preparations is essential clinical history. Women in the border region frequently reported use of the herbal preparation of manzanilla (otherwise known as chamomile) tea when in active labor to health care providers in the El Paso, TX/Juarez, MX area. Stirred by an interest in cultural health practices, I discovered little related research in U.S. or Mexico on the use of manzanilla tea for Hispanic women. During a literature search using various databases it was noted much of the current literature on herbs comes from European studies and sources with articles available in German, Bulgarian or Spanish; articles not obtained. No research reports were located on the use of chamomile tea in pregnancy or during labor (Wilkinson, 2000).

Herbs are a widely used form of self care by women of Mexican origin (Dole, Rhyne, Zellman, Skipper, McCabe, & Dog, 2000; Kay, 1996; Keegan, 1996; Trotter, 1981a, 1981b; Zenk, Shaver, Peragallo, Fox, & Chavez, 2001). While researchers have studied herbs used by persons of Mexican
origin who reside in the border region (Poss, Pierce & Prieto, 2005; Kay, 1996; Keegan, 1996; Trotter, 1981a, 1981b), none have specifically targeted use of chamomile (manzanilla) tea. Kay (1996) compiled an ethnohistory and modern use of herbal medicine which mentioned manzanilla tea consumption during the childbearing process to either stop false labor or increase the efficacy of the uterine contractions. Little to no information beyond this is reported. Warrick, Wood, Meister and de Zapien (1992) reported that women of Mexican origin who lived in the Arizona/Sonora, Mexico border region adhered to several cultural beliefs one of which was to use manzanilla tea prior to delivery to ease the pain. However, cultural beliefs were not the focus of the Warrick et al., (1992) study and consequently the statement alone addressed this cultural care practice.

Studies since the 1960’s have addressed what is referred to in the literature as the “border paradox”, the “epidemiological paradox” or the “Latina paradox” (Karno & Edgerton, 1969 in Williams, 2002, McGlade, Saha & Dahlstrom, 2004; Williams, 2002); hereafter referred to as the epidemiological paradox. The epidemiological paradox describes in well documented observations and studies that
despite socioeconomic disadvantages, Hispanics in the U.S. experience birth outcomes comparable or better than those of Caucasian women in the U.S. (McGlade, Saha & Dahlstrom, 2004; Williams, 2002; Wingate & Alexander, 2006). Many theorized explanations for this paradox have been proposed and tested in studies since the 1960’s. Several explanations were provided in the literature such as: 1) the healthy migrant, 2) underreporting of infant deaths secondary to out-of-hospital births and the return of immigrants to Mexico, 3) a greater risk of premature fetal deaths has a selection effect, and 4) the process of segmented assimilations (the children of immigrants have a higher risk of being integrated into the lower social strata of the U.S. in ways that confuse the processes of acculturation and assimilation) (Peak & Weeks, 2005). These explanations have been called into serious question or proven invalid (Peak & Weeks, 2002). Women of Mexican origin who give birth in the U.S. appear to have better pregnancy outcomes than Caucasians and other Hispanic groups (McGlade, Saha & Dahlstrom, 2004; Wingate & Alexander, 2006). A recurrent theme in the literature is that cultural factors appear to be protective for women of Mexican origin who reside in the United States. The
compilation of information in this section supports the need for research on the use of manzanilla tea (a cultural factor) within the context of the beliefs, values, norms and lifeways of childbearing women of Mexican origin who reside in the border region.

Statement of the Purpose

The purpose of this study was to describe the cultural context of using manzanilla tea during the childbearing period for women of Mexican origin living in the Arizona-Sonora, Mexico border region. The overall goal is theory generation about cultural health beliefs and behaviors of this border region’s childbearing population leading toward culturally congruent care.

Background

United States-Mexico Border Region

To better understand the people who reside in the U.S.-Mexico border region and the border culture it is important to first understand the geographical boundary. The United States (U.S.)-Mexico border, or border region as referred to hereafter, is approximately 2000 miles long (Human Resources and Services Administration [HRSA] 1999), from California moving east through Arizona, New Mexico to Texas. The north and south boundaries of the international
line separating the U.S. and Mexico encompass the area within 100 kilometers or 62 miles either side of the international boundary. Thus, geographically, the border region is an identified strip of land running between California and the southeast edge of Texas. The area is largely uninhabited desert surrounded by various mountain ranges and is not always a welcoming or inviting environment. Most of the land in the border region is unpopulated; residents are concentrated in and around urban communities. The border region is estimated to have a total population of nearly 12 million. The population is expected to double by the year 2025. (U.S.-Mexico Border Health Commission [USMBHC], 2004)

The border region has a total of 14 "sister city" communities that are colorful in language, culture and diversity. Some of the better known sister cities are San Diego, California/Tijuana, Baja California; Nogales, Arizona/Nogales, Sonora; El Paso, Texas/ Ciudad Juarez, Chihuahua and Laredo, Texas/Neuvo Laredo, Tamaulipas. These sister cities represent unique opportunities for movement within the border region in each direction requiring additional vigilance by border patrol agents. The border region provides health care opportunities for residents on
either side of the international line. For example, Mexican residents might seek U.S. health care and U.S. residents might seek care from Mexico for dental work, optometry and cheaper pharmaceuticals. Additionally, folk or traditional health care providers can be accessed by both groups as alternatives to professional care systems.

Life in the U.S.-Mexico border region is unique but complex. The border region has been conceptualized as a separate state or region because it is neither Mexico nor the U.S. (Galloro, 2001; Homedes, Chacon-Sosa, Nichols, Otalora-Soler, LaBrec, & Alonso-Vazquez, 1994; HRSA, 1999). This “pseudo state” has its own culture created by blending of social, economic and cultural exchange among the peoples on both sides of the international boundary (HRSA, 1999; Russell, Williams, Farr, Schwab, & Plattsmier, 1999; Tita, Hollier & Waller, 2001).

The economic expansion, and hence population growth, has been occurring since the 1940’s. Growth in the border region was accelerated by the North American Free Trade Agreement (NAFTA) in 1994. Communities in the border region face significant problems related to economic prosperity, social well-being, basic infrastructure and deterioration of the environment; quality of life is threatened. Even
after the implementation of NAFTA, wages on both sides of the border remain low while unemployment is high for the U.S. border cities with the exception of San Diego, California. Significant economic differences exist between the U.S. and Mexico. Minimum wages are eight to ten times higher on the U.S. side. The disparity in wages is complicated by the high cost of living in the western U.S. border communities. In 2000, the poorest region in the U.S. was along the border with Mexico. (Ganster, Pijawka, Rasmussen & Van Schoik in Ganster, 2000).

Population Parameters

Hispanic groups are the fastest growing of all ethnic groups in the United States (Brown, Garcia, & Winchell 2002; Heilemann, Lee, Stinson, Koshar, & Goss, 2000; Jones & Bond, 1999; Pearce, 1998). While Hispanics account for nearly 13% of the U.S. population today, growth for this ethnic group is expected to reach 33% by the end of the century (U.S. Census Bureau cited in CBS News Release, 2003). Projections for the border region indicate significant growth is to be expected with increases of five to twelve million people during the 2000-2020 period (Peach and Williams in Ganster et al., 2000). The variance in anticipated population growth is accounted for by
calculating figures with ‘no migration expected’ to ‘no change in the rate of migration since 2000’.

There are many subgroups under the Hispanic umbrella. The term Hispanic refers to all Spanish speaking ethnic subgroups (Department of Human and Health Services [DHHS], 2001). The largest growth in the Hispanic subgroups has been those people of Mexican descent (Heilemann et al., 2000; U.S. Census Bureau, 2001). In 2003, the U.S. Census Bureau announced Hispanics surpassed African Americans as the largest minority group in the U.S. but this occurred in the U.S.-Mexico border region as early as 2000; this underscores the uniqueness of the border region. There is a higher concentration of Hispanics, primarily persons of Mexican origin, in the states that border Mexico. For example in 1999, Hispanics constituted 28% of the population for the state of Arizona compared to 13% of the entire U.S. population. Hispanics are the largest racial and ethnic minority group in the state of Arizona. (State Health Facts online, 2001)

Population growth in the border region is affected by two main factors; migration and birth rates (natural growth). Domestic migration occurs in Mexico as persons move from central Mexico to northern Mexico to enjoy higher
per capita incomes. Migration also occurs as Mexican residents cross the international line to the U.S. side, while immigration occurs if Mexican residents cross the line and stay in the United States. If the border population continues to grow at the rate it has historically, the population in 2020 will have increased by an additional 14 million people and the populations of most sister cities will more than double. The age structure of the population is different on the U.S. and Mexican sides of the border. The Mexican border population is younger than the U.S. border population resulting in a larger labor force population and a larger number of childbearing women. (Ganster et al. in Ganster, 2000)

In 1995, border municipios had higher numbers of persons than the U.S. border counties when compared by age structure. Two interesting findings were the higher number of labor force aged persons as well as persons aged 0 to 4 years of age. A population pyramid for the border region with this same demographic information portrayed a younger age distribution in Mexico border municipios with the majority 29 years of younger (Peach & Williams in Ganster, 2000). This population is still capable of reproduction in 2006 adding to the natural growth rate for the border
region. In fact, in Santa Cruz County Arizona, where this study was conducted, the largest age group in 2000 was 35-44 year olds with 25-34 year olds second.

The growth in the overall Hispanic population suggests a potential for more childbearing women of Hispanic ethnicity. Hispanics were the only group to have an increased fertility rate in the U.S. with a subsequent rise in births to Hispanic mothers of 4% in 2002 (National Vital Statistics Reports, 2002). The border states of Arizona, New Mexico and Texas reported Hispanic teens as having the highest rate of births in 1999 (State Health Facts online, 2001) while nationally births to teens between the ages of 15-19 were predominately from the Hispanic population group (Aday, 2001). It should be noted that Mexican-Americans aged 15-19 years are credited with 31% of the births to Hispanic teens (Burk, Wieser, & Keegan, 1995). In addition, the state of Arizona ranks highest for births by Hispanic teens (HRSA, 1999).

U.S.-Mexico border counties are experiencing rapid growth on the U.S. side, and this population is younger than the native population of the border states or the nation as a whole. This younger population presents higher birth rates along the border (Bureau of Primary Health Care...
HRSA (2003) identified the high teen birth rate as a health concern in the border region. For females aged 15-19 in 2003 nationally there were 49.6 births per 1,000 females compared to a rate of 64.8 in the border region (HRSA, 2003). In fact, the border county of Santa Cruz in Arizona where this study was conducted reported a birth rate of 59.9% per 1000 births for teens aged 15-19 years in 2003 (Arizona Department of Health Services [ADHS], 2003). Additionally, the Arizona border region reported birth rates for teens aged 15-19 years as 66.5% per 1000 births compared to 49.6% for all U.S. teens aged 15-19 years in 1999 (Aday, 2001; HRSA, 2003). This comparison demonstrates a significantly higher rate of live births along the Arizona-Sonora, Mexico border.

Cultural Context of Health

Culture has a strong influence on how individuals interpret health and illness. Culture is defined as learned, shared, and transmitted knowledge of values, beliefs, norms, and lifeways of a particular group that guides their thinking, decisions, and actions in patterned ways (Leininger, 1997). Leininger (1991) defined health as referring to a state of well being that is culturally defined, valued and practiced, and which reflects the
ability of individuals or groups to perform their daily role functions or activities in culturally expressed, beneficial, and patterned lifeways. Health care needs to be congruent with the client’s cultural values and meanings of care (Andrews, 2003) and acted upon in the context of culture.

Health care and use of medication is not just a pharmacological process for persons of Mexican origin. It is also a cultural and social process (Pylypa, 2001). Health culture has a strong influence on decision making regarding health care practices (DHHS, 2001). Leininger (1991) predicted in her theory that cultural beliefs, values, norms, and patterns of caring had a powerful influence on a human’s life to include: survival, growth, illness states, health and well being. Perception of wellness, illness, treatment, and health behaviors are influenced by one’s culture. Cultural behaviors are initiated at the moment of birth, learned in the early years, and reinforced throughout a lifetime. This early learning and lifetime reinforcement become ingrained cultural beliefs which form one’s world view (DHHS, 2001). Health culture in the border region is derived from the population’s understanding and experiences of health and
illness and it is culture that defines when and where to seek health care or what behavior is appropriate.

Persons of Mexican origin who reside in the border region may be influenced by the intersection of two distinct value sets; a traditional care system and a professional care system. For example, some residents in the border region believe in professional care systems but their religious and Mexican cultural values support belief in the power of herbs and traditional remedies (Williams, 2001). Persons of Mexican origin also have the view that some health situations are not medical, such as childbirth, and that diseases can arise from both natural and supernatural causes (Vargas, 2002). Home remedies or self-care practices are promulgated by environmental and economic factors. Some of the more predominant factors for Mexican-Americans or Mexican immigrants in the border region are social and physical isolation, providers not located within the community, lack of accessible transportation and poverty (Iniguez & Palinkas, 2003; Pylypa, 2001; Vargas, 2002). The lack of affordable and accessible health care influences the delay or avoidance of professional care treatment by persons of Mexican origin in the border region (Iniguez & Palinkas, 2003). Therefore,
home or folk remedies may be used as a first treatment option for persons of Mexican origin because this fits their culturally derived view of health and illness and/or because it is more cost effective to their way of life.

Pregnancy is viewed as natural and normal, and there is a strong emphasis on familial support. For example, information and advice about the birth process is sought from mothers and grandmothers. Familial support an important aspect of the culture. Pearce (1998) found that relatives provided most of the prenatal support with their own mothers being their first resource person. Moreover, persons of Mexican origin learn about herbal remedies from other family members, primarily close female relatives (Dole et al., 2000; Warrick et al., 1992) and it is known that women of Mexican origin are the primary source of knowledge on home remedies and their uses (Burk et al., 1995; Dole et al., 2000; Kay, 1996; Trotter, 1981a, 1981b; Warrick et al., 1992; Zenk, Shaver, Peragallo, Fox & Chavez, 2001). This suggests women have a strong influence on the health of childbearing women in the Hispanic culture, but it is not known if intergenerational sharing of health related knowledge is part of the contemporary
culture of persons of Mexican origin residing in the border region.

Informal Health Care

According to Leininger (1991) all cultures have a lay health care system which can be referred to as generic or indigenous (Andrews, 2003). So, too, have the people of Mexican origin along the U.S.-Mexican border. Studies have shown residents of the border region use traditional herbs and may consult traditional practitioners as a way to promote health (Burk et al., 1995; Iniguez & Palinkas, 2003; Keegan, 1996; Rappsilber, Castillo & Gallegos, 1998; Rivera, Anaya & Meza, 2003; Rivera, Ortiz, Lawson, & Verma, 2002; Ruiz-Beltran & Kamau, 2001; Trotter, 1981a, 1981b). There is extensive practice of traditional medicine represented by curandera’s, espiritistas, or healers within Hispanic communities (DHHS, 2001).

Herbal preparations are the most commonly sought form of folk therapy by Mexican Americans (Dole et al., 2000; Keegan, 1996). Herbs are used in the practices of curanderas (traditional healers) and espiritismo (spiritual healing) in the border region (Kay, 1996). For the larger Hispanic group, cost is cited as a motivation for choosing herbal preparations. It should be noted, that cost of
packed herbs tends to be less than prescribed drugs. Accordingly, many U.S. Hispanics and non-Hispanics cross the border to purchase herbals or cheaper prescribed pharmaceuticals. In some cases, Hispanics grow their own herbs for medicinal purposes as this is a cost saver. As well, some herbs are required in the raw state which necessitates they be grown and harvested by individual users or purchased at local herb shops or botanicas. It has been documented that persons of Mexican origin, primarily women, find herbal remedies an important aspect of health care (Gomez-Beloz & Chavez, 2001). This traditional practice may be part of the cultural protective factors which result in better pregnancy outcomes for women of Mexican origin.

Significance of the Study to Nursing

This study’s significance to nursing lies in its intent to understand a cultural health practice among pregnant women of Mexican origin. This is necessary because health care is a relationship between client and provider. Appropriate interactions that promote healthy pregnancy and childbirth must be culturally acceptable to pregnant women. In addition, there must be an understanding of women’s cultural self-care practices and traditional care systems.
Because herbs have pharmaceutic properties, they have the potential for adverse effects on pregnancy outcomes; they also have potential for enhancing outcomes. Recognition and understanding of risks and benefits associated with culturally relevant practices may be a catalyst toward more effective prenatal care. Thus, research needs to be focused on the use of herbs in pregnancy for the women of Mexican origin who reside in the border region as a first step toward understanding pregnancy outcomes.

This study identified uses of specific herbal preparations, while future work will examine the effects of these preparations on pregnancy and pregnancy-related outcomes. This information is critical for nurses who interact with the pregnant women of Mexican origin who reside in the border region in order to provide better education, labor management, and support that is satisfying, beneficial and meaningful to these women. In addition, this information may have relevance to the broader Hispanic community who may also share the health care beliefs and practices of women of Mexican origin who reside in the border region. Awareness of the women’s emic knowledge is imperative to accurately assess, know, and understand the world of the client (Leininger, 1990).
Understanding the use and beliefs related to manzanilla tea will enable nurses to provide culturally relevant, comprehensive health care to the growing number of pregnant Hispanic women.

Research Questions

The specific research questions addressed in this study were:

1. What are the culture care (emic) components (values, beliefs, and patterned lifeways) related to the use of manzanilla tea for women of Mexican origin living in the Arizona-Sonora, Mexico border region on the uses of manzanilla tea during the childbearing period?

2. What are the experiences of Mexican women of childbearing age in using manzanilla tea in the childbearing period?

Definition of Terms

1. Generic (folk, lay or traditional) care system: refers to culturally learned and transmitted indigenous (or traditional), folk (home based) knowledge and skills used to provide assistive, supportive, enabling, or facilitative acts toward or for another individual, group, or institution with evident or anticipated needs to ameliorate
or improve a human lifeway, health condition (or well-being), or to deal with handicaps and death situations (Leininger, 1991)

2. Professional care system(s): refers to formally taught, learned, and transmitted professional care, health, illness, wellness, and related knowledge and practice skills that prevail in professional institutions usually with multidisciplinary personnel to serve consumers (Leininger, 1991)

3. Culture care: refers to the subjectively and objectively learned and transmitted values, beliefs, and patterned lifeways that assist, facilitate, support or enable another individual or group to maintain their health, well being, to improve their human condition and lifeway, deal with illness, handicaps or death (Leininger, 1991).

4. Childbearing period: Late pregnancy (36 weeks on-labor preparation), labor and birth, through one month postpartum.

5. Culture: the learned, shared and transmitted values, beliefs, norms and lifeway practices of a particular group that guides thinking, decisions, actions and patterned ways (Leininger, 1991).
6. Mexican origin: Persons who were born in Mexico to include Mexican migrants, Mexican immigrants in the U.S. or Mexican-Americans.

Summary of Chapter One

Chapter One discussed the background which includes the U.S.-Mexico border region, population parameters, informal health care, and the cultural context of health. Also the statement of the problem, statement of the purpose, significance of the study to nursing, the research questions, and definition of terms were covered in this chapter. Chapter Two will cover conceptual orientation and a review of the literature.
CHAPTER TWO

Conceptual Orientation and Review of the Literature

Introduction

Chapter Two consists of two areas of concentration. The first is the presentation of the Culture Care Diversity & Universality Theory (Leininger, 1991; Leininger & McFarland, 2006), its theory and Sunrise Model, a brief overview of ethnomethods, and applicability of the theory to this study. Second, a review of the literature will be provided related to traditional care systems which include herbal preparations used in pregnancy by women of Mexican origin.

Culture Care Diversity & Universality Theory

Leininger’s (1991, 2006) theory is known for its broad, holistic, yet culture-specific focus to discover meaningful care to diverse cultures. Transcultural nursing (1978), the original theory name, was defined as a major area of nursing that focused on comparative study and analysis of different cultures and subcultures in the world with respect to their caring behavior; nursing care; and health-illness values, beliefs, and patterns of behavior with the goal of creating a scientific and humanistic body of knowledge to provide culture-specific and culture-
universal nursing care practices to individuals, families, groups, and communities (Alexander, Beagle, Butler, Dougherty, Robards, Solotkin, & Velotta, 1994). Culture Care Diversity & Universality (Leininger, 1991; Leininger & McFarland, 2006) is based on the belief that people of different cultures can inform and best determine the type of care they need or desire from professional caregivers. Culture care is considered the broadest holistic nursing theory because it takes into account the totality of human life and existence over time, to include the social structure, world view, cultural values, environmental contexts, language expressions, and folk and professional systems (Alexander, Beagle, Butler et al., 1994).

Leininger (1991) described theory as a systematic process with a comparative and interpretive focus toward the discovery of individuals, families, and groups behaviors, values, and beliefs based on their cultural lifeways to provide effective, satisfying, and culturally congruent nursing care. Culture Care Diversity & Universality was focused on the epistemic and ontological dimensions of cultural care knowledge and predicted to lead to health and well being of individuals, groups, families, and communities (Leininger, 1997). The central purpose of
this theory is to discover and explain diverse and universal culturally based care factors influencing the health, well-being, illness, or death of individuals or groups. The purpose and goal of the theory is to use research findings to provide culturally congruent, safe, and meaningful care to clients of diverse or similar cultures. (Leininger, 2002) A major prediction of Leininger’s (1991) theory is that health or well-being is able to be predicted by the epistemology of care (Alexander, Beagle, Butler et al., 1994).

Sunrise Model

The Sunrise Model (see Illustration 1) was created in 1997 by Leininger to assist nurses to discover areas needed to become culturally competent. The model was intended to be used in conjunction with the theory. The upper half of the circle represents dimensions of social structure and worldview factors that influence care and health through language and environment. These factors influence the folk, professional, and nursing systems which are in the lower half of the model. The two halves together form a full sun, which represents the universe of others nurses must consider to appreciate human care and health. Leininger (1991) saw the nursing subsystem as a bridge between the
folk and personal health systems through the three types of nursing actions. These dimensions of culture care are not to be viewed as fragmented, isolated, or unrelated parts as these represent the totality of one’s cultural world (Leininger, 1991). The model portrays human beings as inseparable from their cultural background and social structure, a basic tenet of Leininger’s theory. (Alexander, Beagle, Butler et al., 1996; Leininger, 2002)

**Ethnomethods**

Ethnomethods are methods within the qualitative paradigm that enable a researcher to learn from direct experiences with the people being studied within their context or own environment. Ethnomethods are people-centered methods such as ethnography, ethnonursing, and ethnoscience. Researchers are encouraged to be active co-participants in the research process and to discover cultural meanings and other meanings of holistic life experiences over time, or at a particular time.

Leininger developed ethnonursing research to study particular aspects of nursing phenomena in which emic and etic perspectives about cultural phenomenon became an integral part of the ethnonursing method. As of 1990, this was the only research method uniquely developed for

nursing. The method is helpful to discover illusive and complex phenomenon for nursing of cultures such as the meanings, experiences, and expressions of human care, wellbeing, health, and illnesses (Leininger, 1990).
Applicability of Culture Care Diversity & Universality Theory to this Research

Leininger's (1991, 2006) Culture Care Diversity & Universality theory fits well with the cultural orientation of this research. The focus of this study was on the emic and etic perspectives of a cultural practice within a specified cultural group. The theoretical perspective supports the researcher's view of diverse yet interrelated health systems, culture, social, and environmental contextual influences, and the active involvement of co-participants in the discovery process. A paradigm such as Leininger's (1991, 2006) is a philosophical view that guided the researcher to discover ontologic and epistemic knowledge about culture care of childbearing women of Mexican origin who reside in the border region thereby informing the profession of nursing. The study used ethnography as the methodology hence this theory solely informed the researcher and was not tested within the research. The ethnomethod of focused ethnography allowed the researcher to be a co-participant in the research process and discover cultural meanings at a particular time (during pregnancy) and place (the U.S.-Mexico border region of Nogales, AZ-Nogales, MX).
Review of the Literature

Generic (Traditional, Folk or Lay) care systems and Professional care systems

Traditional care systems refer to health practices, approaches, knowledge and beliefs incorporating plant, animal, and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being (Blumenthal, 2003). Traditional care systems are used in many countries for primary health care. In industrialized countries, adaptations of traditional care systems are termed complementary or alternative medicine (CAM) (www.who.int) and are more commonly utilized as adjuncts rather than substitutes for professional care systems.

Professional care systems relates to organized, institutionalized, educational knowledge and skills about health, illness, and wellness. These professional systems function in institutions with multidisciplinary teams and personnel to serve consumers (Leininger, 1991). Comparatively, traditional care systems are more focused on primary health care while professional care systems are focused on secondary and tertiary care.
The history of medicinal herbs in North America seems to follow the same path as traditional care practices. Once people were introduced to professional care systems, traditional practices waned. Until the 1930s in North America, herbs and herbal medicines presented a significant portion of the used and accepted medications. But introduction of pharmaceutical drugs began a change in choice of care practice. Herbs were replaced in the marketplace in the 1920s, not because herbs were unsafe or ineffective but because their actions were not as pharmacologically dramatic as the newer synthetic drugs. Also, synthetic drugs were more profitable, and economic concerns are a driving force in the marketplace.

(Blumenthal, 2003)

Two seminal articles presented varied statistics of the use of traditional medicine in the U.S. The location of the survey, sample composition, and the definition of CAM by the researchers are factors to consider when reading and interpreting statistical information and study results. Eisenberg, Davis, Ettner, Appel, Wilkey, Van Rompay, & Kessler (1998) reported CAM usage rate of 42% in 1997, up from 36% in 1990. This work did not include non-English speaking person or persons without telephone access;
limiting generalizability. Results from an analysis of the 1999 National Health Interview Survey reported an estimated 28.9% of the U.S. adults used at least one CAM therapy (from a choice of 12) in the preceding 12 months from the survey date (Ni, Simile, & Hardy, 2002). The definition or inclusion of what constituted traditional medicine or CAM in these two studies varied and this makes comparisons difficult. However, in both surveys, over 25% of people reported CAM usage. This finding suggests interest as well as wide acceptability.

Traditional medicine or CAM is sought for varying reasons. These include but are not limited to: dissatisfaction with professional medicine; greater belief in the safety and efficacy of herbs; chronic diseases not alleviated by prescription medications; and a holistic view of health. Users of traditional medicine in professional health care environments, use traditional medicine not to replace but as an adjunct to professional medicine; this represents a more holistic approach (Berman, Swyers, Hartnoll, Singh, & Bausell 2000; Eisenberg, Kessler, Van Rompay, Kaptchuk, Wilkey, Appel, & Davis, 2001; Ni et al., 2002).
The evolution of health care practitioners’ use and understanding of traditional medicine is not well documented. Blumenthal (2003) noted the credibility of herbs and plant medicines has increased in the last decade amongst the professional health care community secondary to evidence-based studies published in respected medical journals. Leach (2004) found nurses believe natural therapies support health and healing as well as augment their professional practice. Medical practitioners thought traditional medicine could be effective when professional health care techniques were ineffective (Leach, 2004).

Health Care Providers in western medicine reflected a positive position on traditional medicine. Interestingly, medical practitioners tended to limit recommendations to either acupuncture or manipulative therapies because the efficacy of these two approaches have been studied (Leach, 2004). More research and published literature is needed on the other approaches of traditional medicine.

Use of Generic Care Practices

Much of the published literature highlights patients are reluctant to report use of traditional medicines and therapies to their health care provider (Berman et al., 2000; Doyle & Faucher, 2002; Eisenberg, Kessler, Van Rompay
et al., 2001; Keegan, 1996; Mahady, Parrot, Lee, Yun, & Dan, 2003; Poss, Pierce & Prieto, 2005; Rivera et al., 2002; Sleath, Rubin, Campbell, Gywther & Clark, 2001). A large part of non-disclosure is due to uncertainty about the views of health care providers and acceptability of these practices. Bharucha, Morling, & Niesenbaum (2003) reported that non-Latino Whites based their own attitude toward traditional medicine on that of their medical doctor’s opinion while the Hispanic American subjects based their attitudes on their ability to obtain herbal medications. Health care professionals’ surveyed had more negative attitudes toward traditional medicine and more negative attitudes toward using herbal medications than non-health care professionals.

Limited studies about herbs or herbal use have been conducted within the border region. One study was done in the Texas Rio Grande Valley (a border region) with a Mexican American population of which 66% of the participants responded “never” to discussing alternative healing therapies with their provider(s) (Keegan, 1996). Sixty-nine percent of respondents, who were mostly (83%) Hispanic, in one study conducted in the El Paso, Texas area did not inform their health care providers of the use of
traditional medicine (Rivera et al., 2002). In a descriptive study on the use of herbal products in Mexican-American patients with and without HIV infection in El Paso, Texas most (n = 439 of 474) had not disclosed herbal product use with their physician and even less of the HIV-positive (n = 35 of 474) participants shared this information with their physician (Rivera, Anaya & Meza, 2003). A limitation for all studies was that data were collected only at sites with a professional health system association. Varied sites were used to collect data but each had an established medical link. Close percentages of nondisclosure were reported (66 vs. 69) and even though the studies differed in socioeconomic levels they found commonality in ethnicity. All socioeconomic levels participated as part of the convenience sample in El Paso, Texas and the majority (62%) of the participants from the Texas Rio Grande Valley earned less than $10,000 per year (Keegan, 1996; Rivera et al., 2002). For these studies, socioeconomic level did not impact sharing of information with health care providers for Hispanics along the border.

Poss et al. (2005) conducted a quantitative study using a structured interview instrument with a sample of 100 migrant farmworkers in the border region of El Paso,
Texas. One hundred percent of the sample self-reported ethnicity as Mexican (82%), Mexican American (12%), or Hispanic/Other (6%) of which 90% reported they were born in Mexico. The majority (98%) reported the use of herbal remedies or other natural products. Almost one-third upheld cultural tradition as the principal reason for choosing herbal remedies in this group. The principal reason (33%) for choosing herbal remedies was because they were considered more effective than pharmaceuticals (Poss et al.). Ethnicity may be an influencing factor for the use of herbal medicine/remedies/products as the reported rate of use and non-disclosure to health care providers has been higher.

Keegan (1996) conducted a descriptive study in the Texas Rio Grande Valley to determine alternative health practices used by Mexican Americans. Keegan (1996) defined Mexican Americans as persons of Mexican descent residing on the U.S. side of the U.S./Mexican border to include immigrants from MX or one who has lived in the U.S. for generations. His survey used the same alternative therapies identified by the Eisenberg, Kessler, Foster, Norlock, Calkins, & Delbanco (1993) study and these were herbal medicine, prayer/spiritual healing, massage, relaxation
techniques, chiropractic, *curandero*, megavitamins, imagery, energy healing, acupuncture, biofeedback, hypnosis, and homeopathy. Among the 213 subjects herbal medicine was the most commonly used (44.1%) modality with prayer/spiritual healing second (29.5%) (Keegan, 1996).

Another study using semi-structured interviews conducted in the border region in 2000 found that 77% of the 547 participants used some form of traditional medicine. This is higher than the national rate reported by Eisenberg and colleagues (1998) (Rivera et al., 2002). However, Hispanics (Mexican or Mexican American with 54% U.S. born) accounted for 83% of Rivera et al.’s sample. The most common traditional practices used were massage therapy and herbal medicine. Chamomile and aloe vera were the two most common herbal or home remedies used and these were taken as teas or applied as topical agents (Rivera et al.).

Nationally, CAM use is more prevalent among women and the more common therapies are spiritual healing/prayer (13.7%), herbal medicine (9.6%), and chiropractic therapies (7.6%) (Ni et al., 2002). Hispanics are more likely to use biologically based therapies such as herbal medicine or therapies that incorporate herbs (Ni et al.). The overall CAM use was higher (30.8%) for non-Hispanic white persons.
than for Hispanic (19.9%) and non-Hispanic black (24.1%) persons. These data analyses reported 28.9% of U.S. adults had used at least one CAM therapy in the past 12 months in a large sample (n = 30,801) (Ni et al.). These results were reported as result of data analyzed from the 1999 National Health Interview Survey by the researchers (Ni et al.).

The extant literature appears to agree on the more common therapies which are herbal medicine, spiritual therapy/prayer, massage, or chiropractic. The largest CAM use disparity was reported as national Hispanics (28.9%) and border region Hispanics (77%) (Ni et al., 2002; Rivera et al., 2002). It may be that higher use rates among persons of Mexican origin in the border region can be explained by geographic area and the close ties to the Mexican cultural tradition. It is not known if length of residence in the border region correlates with CAM use. It is not known if literacy was a factor in these study results because the researchers did not report differences between participants who were literate and those who were not. There was a large difference in sample sizes, as one of these studies was a national survey. It is not known if data collection methods affect participant’s willingness to report CAM use.
Because research reports vary on definitions of CAM it is difficult to compare findings (Blumenthal, 2003; Ni et al., 2002). Not all researchers ask about herbs or other traditional practices and some limit participant choices in quantitative studies. More exploratory work is needed to adequately describe CAM use in diverse cultural groups. This study is intended to fill in some of these gaps.

In New Mexico, the prevalence of herbal use was associated with ethnicity and so was herb choices, form of administration of herbal products, sources of information used, and perceived medical problems for which herbs were used (Dole, Rhyne, Zellman et al., 2000). These differences remained statistically significant after age, income, and educational levels were controlled (Dole, Rhyne, Zellman et al.). A cross-sectional study at a university health center in Albuquerque, New Mexico had a sample size of 205 of which 64% were Hispanic (Sleath et al., 2001). Herbal medicine was the most commonly used CAM and no patient characteristics influenced whether a patient reported using one or more alternative therapies in the previous month in the bivariate or multivariate analyses (Sleath et al.).

Ethnicity is a factor in traditional medicine usage. Use of herbs, source of knowledge, and whether they shared
this information with their physician agreed with findings in other extant literature. Neither study (Dole, Rhyne, Zellman et al., 2000; Sleath et al., 2001) provided descriptors for the term “Hispanic” thereby limiting the full understanding of the specific population group the data was collected from. A limitation of these studies is that the researchers focused solely on participants over 50 years of age; this limits generalizability of the findings. In the Sleath et al. study physicians may have been more apt to talk to their patients about CAM due to their awareness of the study. This certainly could skew the statistics on physician-patient communication about CAM. However, the age group the researchers addressed undoubtedly was aware of their own alternative practice options.

Ethnic groups differ in their classification of substances considered herbal medications. For example, Hispanics believe some foods are medicinal such as garlic or milk. Hispanics are significantly (p=0.002) more likely to use herbal therapies, held stronger desires to use them in the future (p=0.01), had more positive attitudes toward use (p=0.001), and had social support for the use of herbal therapies (p=0.03) (Bharucha et al, 2003). Bharucha and
colleagues (2003) conducted a quantitative study in Pennsylvania and New York of 81 subjects of which 22 were Hispanic. The Hispanic sample was recruited from the Hispanic American Organization of Allentown, PA. The convenience sample completed an eight page survey. The findings in this study concurred with Dole, Rhyne, Zellman et al. (2000) in that non-Hispanic Whites identified substances sold in pharmacies as herbal supplements and Hispanic subjects identified more raw substances and food items.

Traditional Care Practices

The work of Trotter (April 1981, September 1981) has significantly contributed to our knowledge of traditional health practices of border Hispanics. Trotter’s (1981a, 1981b) purposes were to generate a community based typology of ailments and to produce a preliminary profile of remedies and common illnesses within the Mexican American communities in the U.S.-Mexico border region. The sample contained ethnographic field data from 378 participants, all of who identified themselves as Mexican American, for the open-ended case study in the Lower Rio Grande Valley. A substantial list of community based typologies and home remedies were produced from the data. The top four female
reproductive herbs were: chamomile, rue, mint and orange tea tree leaves. Female reproductive ailments these herbs addressed included: menstrual cramps, induction of menstruation, uterine hemorrhage, induction of labor, infertility of womb, insufficient milk production and cleansing of the uterus. These core ailments are most frequently treated by home remedies. There are multiple remedies for the same ailment and multiple uses of a single remedy.

The overall rate of herbal product use in the border region by a sample of adult Mexican American men and women was 78% (79%, n= 439 HIV-negative participants; 71%, n=35 HIV-positive participants) (Rivera et al., 2003). Chamomile was listed among the most frequently used herbs for both groups. The sample reported chamomile was mainly purchased locally, in raw dosage form and prepared as tea. In this same study, over one-third of the herbal products used for medicinal purposes were not well known outside of a Mexican community. (Rivera et al.) This study expanded knowledge of CAM use by utilizing the CAM categories suggested by Eisenberg and colleagues (1998) but extended findings by including qualitative questions not restricted by Eisenberg’s category list.
Traditional folk beliefs and remedies have been described for pediatric ailments (Risser & Mazur, 1995). Fifty-one Hispanic caregivers of children with a mean age of 10 were interviewed with a series of open-ended questions. In this convenience sample from Houston, Texas, 48 subjects were first generation immigrants with the majority \((n = 40)\) from Mexico. Remedies used for common pediatric illnesses included: 62% used herbs for colic, 45% used herbs for upper respiratory infection (URI), 40% used herbs for fever, and 35% used herbs for abdominal pain and asthma. Participants reported western pharmaceuticals were used as well for URI, fever, diarrhea, and abdominal pain. Thirty-nine percent of the participants believed the medical practitioner’s medicine was more reliable and effective and yet 31% believed in the curandera’s medicine. (Risser & Mazur, 1995)

In a Mexican community in Chicago, Illinois, 47% of women reported taking herbals during midlife with 57% taking only one herb. The nonprobability sample was comprised of 30 self-identified Mexican or Mexican American women aged 40 to 60 years. Most of the subjects \((n = 26)\) were first generation immigrants who were born in Mexico. Women listed chamomile (manzanilla) as a common herb used
for female complaints. Statistically significant differences about beliefs of herbs were found between users and non-users of the remedies (p = 0.024) (Zenk et al., 2001). Women with exclusive use of herbal therapies popular in American culture were more acculturated and women who used culturally traditional herbs such as oregano were less acculturated (Zenk et al.). Although this research was not conducted in the border region it has relevance to the present study. This study points out that women of Mexican origin may be particularly likely to use herbal therapies as a form of self-care. Cultural practices in this sample appear to have been influenced by acculturation and this may be an important factor in persons residing in the border region.

Cultural Values & Lifeways

Gomez-Beloz & Chavez (2001) conducted an ethnographic study in a Mexican American community in Chicago, Illinois of the botanica as a culturally appropriate health care option for Hispanics in the U.S. The sample was comprised of 26 persons of Mexican origin (n=2 males, n=24 females) with a mean age of 38 years. All but two of the participants were born in Mexico. The importance of this work is that it identified herbal remedies as a major
factor in persons of Mexican origin’s approach to health care and in fact, 33% reported herbs as their primary way to treat ailments (Gomez-Beloz & Chavez (2001). This study demonstrated that herbal preparations meet the needs of persons of Mexican origin by overcoming both economic and systematic barriers. Herbs play an important role in some cultural groups approach to health promotion and illness containment.

Hispanic women embrace self-care as their primary health care. A cross-sectional study was completed in Houston, Texas with 706 female Hispanic adolescents; 16% of the sample reported living in the U.S. for less than 5 years (Banikarim, Chacko & Kelder, 2000). Information is passed on from mother to daughter and home remedies are tried before seeking professional health care systems (Banikarim et al.). For example, 50% of those who drank tea for pain relief chose manzanilla tea (Banikarim et al.). But self-care can include appliances such as heating pads; homemade preparations such as herb teas, baths, and salves; changes in activity; avoidance behaviors; or changes in diet (Lieberman, Stoller & Burg, 1997). Ethnomedical beliefs influence self-care or traditional medicine/practices such as the imbalance of hot and cold in
the body which is known as a humoral theory of health care (Lieberman et al.). Mexican Americans are known to eat particular foods if they feel the illness is caused by an imbalance of “hot” and “cold” (Lieberman et al.).

Care Expressions, Patterns and Practices

Uses of Specific Herbs and Pharmacology of Medicinal Plants

There are a number of researchers who have focused on use of specific medicinal plants from Mexico. This has relevance to the present study as a majority of persons in the border region are of Mexican origin or have family ties in Mexico.

In an ethnographic study of six Hispanic families in Colorado manzanilla (Matricaria chamomilla) and ginger (Zingiber officinale) were most often used for female health-related problems. Preparation involved brewing the flower heads into a tea for carminative and calming effects. Matricaria is derived from the Latin word “matrix” which has been translated as “womb” and it is interesting that manzanilla carries this word in its genus, implying use for female health-related problems (Appelt, 1985). Roman chamomile (one of several classes of chamomile) is recommended for painful, intermittent, colicky, contraction
patterns in labor (Stapleton, 1995). Gerard (1633 in Kay, 1996) explained,

Matricaria is a great remedy against the diseases of the matrix; it procureth women’s sickness with speed; it bringeth forth the afterbirth and the dead child, whether it be drunk in decocotion or boiled in a bath and a woman sit over it; or the herbs sodden and applied to the privie part, in manner of cataplasme or poultice. (p. 70)

Additionally, manzanilla is recommended to treat hardened breasts, retained menses, and retained placenta (Esteyneffer [1719] 1978 in Kay, 1996).

A number of uses have been identified for Chamomile in addition to treating female complaints. For example, Appelt’s (1985) ethnographic study to define medicinal herbs that are popular in Hispanic folk medicine identified Chamomile tea also as a sedative. Sedative effects occur within 10 minutes of ingestion. It has been noted the most active ingredient of M. chamomile is alpha-bisabolol which has an anti-peptic action that is dose dependent (Appelt, 1985). Manzanilla is a gentle, effective herb which is high in calcium and is considered a tonic which strengthens the body (Belew, 1999; Woolven, 1997).

A major contribution to our understanding of medicinal plants was made by a study in rural eastern and southern Mexico. This ethnobotanical study described herbs/plants
that are used during pregnancy and labor. An extensive amount of information was gathered from this population during the three years of fieldwork. The major herbs relating to parturition are described below (Zamora-Martinez & Nieto de Pascual Pola, 1992).

1. Crescentia cujete L., Bignoniaceae, ‘jicaro’, wild and cultivated tree: the concoction and infusion of the cortex is used to accelerate childbirth.

2. Ipomoea crassicaulis Rob., Convolvulaceae, ‘linda manana’, wild shrub: the leaves in baths, are used to accelerate childbirth.


It appears the active ingredient in manzanilla is a rhizome, which also appears in Black Cohosh. Black Cohosh is known to be alterative, antispasmodic, astringent, emmenagogue, narcotic, and sedative among others. The rhizome binds to estrogen receptors (McKenna, Jones, Humphrey & Hughes, 2001). The most common preparation is a tincture made from the fresh roots. Black Cohosh tincture has been used before, during, and after labor, and is commonly given during the last four weeks of pregnancy as a
partus prepartor (McKenna et al.). As early as 1885, reports emerged about Black Cohosh’s utility in pregnancy. For example, the Eclectics stated the tincture was mildly sedating, reduced discomforts in the first stage of labor, and increased rhythmicity of contractions in the second stage, but specifically relaxed the cervical tissues. No recent studies have clarified its pharmacological effects (McKenna et al.).

Manzanilla shares the properties of being an antispasmodic, emmenagogue, and sedative (Applet, 1985; Linares & Bye, 1987). Manzanilla is used as an anti-inflammatory, sedative, and digestive aid (Dole, Rhyne, Zellman et al, 2001). The close associations between Black Cohosh and Manzanilla may be why manzanilla tea is used for labor preparation or labor assistance by Hispanics. However, too little is known about women’s specific use of manzanilla, how they learned about it, and what their treatment goals are. This information must precede a much needed study of physiological responses.

Educational Factors: Uterine Contractility

Some research has been conducted on the physiology of uterine contractility that has led to theory generation and testing. This information may provide some insight into the
mechanisms by which manzanilla affects the phenomenon. The two major theories of uterine contractility are: 1.) substances such as oxytocin and prostaglandins cause an increase in free intracellular calcium, which promotes uterine contractility (Bernal, 2001; Navitsky, Greene & Curry, 2000; Payton & Brucker, 1999); 2.) Prostaglandins cause a rise in DHEA levels found to be associated with labor initiation (Maciulla, Goolsby, Racowshy & Reed 1998).

Szczepaniak (1993) presented a list of herbal, food based, and homeopathic labor induction agents while stating that although they may be generally regarded as safe, little is known about their potential toxicity and other adverse effects, due to the minimal amount of controlled testing so far. What is known is that herbs are shown to be effective in stimulating uterine contractions as powerful agents, even though several proponents consider them natural and therefore gentle. The exact mechanism by which these substances induce labor is not known, however, it can be hypothesized that these products either stimulate prostaglandin release, mimic prostaglandin activity, or in some way affect DHEA production or metabolism.
Knowledge Limitations to Use of *Manzanilla*

A thorough review of all related literature revealed a number of gaps in knowledge. One of the most outstanding knowledge gaps is the paucity of information related to beliefs, usage, and treatment intent for women of Mexican origin. It appears that *manzanilla* is a general tonic for women’s ailments, plus anecdotal reports suggest it is widely used during late pregnancy and parturition but specific reports about this are missing in the literature. As well, little is known about the physiological manifestations and properties of this botanical. An exploratory study of women of Mexican origin’s values, beliefs, norms, experiences, and knowledge acquisition surrounding the use of *manzanilla* tea is an essential start point into understanding.

Summary of Chapter Two

Chapter Two presented an overview of the Culture Care Diversity & Universality Theory (Leininger, 1991, 2006) which informs this researcher’s philosophical view. The literature included extant knowledge related to generic/traditional and professional care systems; use of generic care practices; traditional care practices; cultural values & lifeways; care expressions, patterns and
practices focusing on the use of specific herbs and pharmacology of medicinal plants; and educational factors: uterine contractility. Not all of the reviewed literature utilized participants obtained from the U.S.-Mexico border region. However, the information gleaned has relevance to this population. Limitations to this body of work were described.

Chapter Three will focus on design and methodology for the proposed study of the culture care components (values, beliefs and patterned lifeways) related to the use of manzanilla tea for childbearing women of Mexican origin living in the Arizona/Sonora, MX border region.
CHAPTER THREE

Methodology

This chapter provides a description of the qualitative methodology that was used to answer the research questions. Detail will be provided on the research method of ethnography, procedures for protection of human subjects, the recruitment of participants, compensation of informants, and the setting for this study. Data collection procedures, instrumentation and data analysis for this study will be discussed in chapter three as well.

The study process was formulated with the idea of deriving culturally meaningful and relevant knowledge about the culture care components surrounding the use of manzanilla tea for childbearing among the population of interest to share with the professional health system. To accomplish this goal, the investigator used the concepts of cultural knowledge, sensitivity, and collaboration to facilitate the development of culturally competent research findings (Sawyer, L, Regev, H., Proctor, S., Nelson, M., Messias, D., Barnes, D., & Meleis, A., 1995). These concepts are disseminated throughout each phase of the research process by: using Leininger (1991, 2006) as a guiding framework, the choice of methodology and method,
the data collection process, data analysis and interpretation.

Investigators Assumptions/Biases about the Population or Phenomenon

Leininger’s Theory of Culture Care Diversity and Universality (1991, 2006), courses in anthropology, and doctoral nursing coursework contributed to this investigator’s philosophical view on women of Mexican origin who reside in the border region’s use of manzanilla tea for late pregnancy and parturition. Assumptions include:

1. Culture is socially constructed; therefore, cultural beliefs, meanings and experiences are socially constructed. (Anthropology)

2. The population that resides in the U.S.-Mexico border region represents both a marginalized and vulnerable population. (Nursing)

3. Self-care practices or home remedies (generic care practices) vary in meaning and therapy in different cultures. (Leininger)

4. Eliciting the cultural values, beliefs, and practices along with kinship and social factors will provide a
worldview of the unique environment and women in the border region. (Leininger)

5. While generic care (traditional, folk or lay) practices of a culture provide valuable care knowledge to guide professional nursing practices, generic care is still undervalued and lacking in understanding by nurses and other health professionals. (Leininger and Personal experiences).

6. The person is most knowledgeable about their own lived experiences. (Leininger and Individual belief)

Ethnography

A focused ethnography was utilized to explore the culture care components related to the use of manzanilla tea during pregnancy by women of Mexican origin who reside in the Arizona/Sonora, MX border region. Ethnography acknowledges the importance of obtaining cultural knowledge of the often unexamined realities of life in the subculture or cultures of the researchers own society (Germain in Munhall, 2001). A focused ethnography is an ethnography that selects a behavioral or belief area for study of its meaning among a specific group of people (Muecke in Morse, 1994).
A focused ethnography was chosen for various reasons. First, the design incorporates both the *emic* and *etic* perspectives. The *emic* perspective is at the heart of ethnographic research - it is the insider’s view or the informant’s perspective of reality (Boyle in Morse, 1994). Leininger (1990) defined the term *emic* as referring to the local, indigenous, or insider viewpoints and experiences about a certain phenomenon. This view of what is happening and why is instrumental in understanding and accurately describing events and behaviors. In addition, the *emic* perspective is relevant to understanding the vulnerability of this unique and complex population. The *etic* perspective is the outsider’s framework or the researcher’s abstractions. Both are necessary to understand and accurately describe situations and behaviors. (Boyle in Morse, 1994) Second, the research design preserves the sociocultural context. (Boyle in Morse, 1994; Germain in Munhall, 2001). Third, the aim of this research was twofold: 1) to describe the culture care components related to the use of manzanilla tea by women of Mexican origin living in the U.S.-Mexico border region of Arizona-Sonora on the uses of manzanilla tea during the childbearing period and, 2) to discover the experiences of Mexican women
of childbearing age using *manzanilla* tea for the childbearing period. The meaning of a behavior or belief among a specific group of people is focused ethnography; this is essentially what the research was looking to discover. The design assisted the investigator in accomplishing the aim. Discovery occurred through various mediums. The study incorporated partially structured interviews, participant observation and extensive field notes. Specifics on instrumentation are provided under the Data Collection section.

**Procedures for Protection of Human Subjects**

These study participants were protected from harm when participating in this research. After approval of the proposal a Project Review Form with supporting forms and Subject’s Consent Forms were submitted to the Institutional Review Board (IRB) at the University of Arizona. Human subjects protection was approved by the Human Subjects Committee at the University of Arizona (Appendix E). A letter of approval was obtained from Mariposa Community Health Center’s director Jo Jean Elenes as assurance of access to appropriate participants (Appendix C).

Informants have the right to know the investigator’s aims of the research (Spradley, 1979). For this study,
verbal review with each informant included explaining the purpose of the study, reviewing the participant selection, procedures, confidentiality, compensation, risks and benefits, how to contact the investigator, and their right to withdrawal without repercussions. There were no known risks to participation in this study. All information obtained from the participants was treated in an anonymous and confidential manner. The consent forms were handed directly to a research specialist for the Office of Nursing Research at the University of Arizona’s College of Nursing. The forms are stored at the University to protect privacy.

Pseudonyms were used which protected identification of the informants in the field notes, the demographic questionnaire and audio-taped interviews. The pseudonyms are used in the final report. Spradley (1979) recommends the use of pseudonyms in the field notes and final report as a minimum act of protecting the privacy of the informant. The signed participant recruitment scripts were kept separate from the data and were destroyed at the completion of the research. In addition, audiotapes were destroyed once transcription and analysis were completed.
Recruitment of Participants

After IRB approval from the University of Arizona and the letter of approval was obtained from Mariposa Community Health Center (MCHC), the research study was presented to the director of the Health Start Program and the promotoras at MCHC. Promotoras are community health workers (Office of Border Health, 2003) who are trained to promote health within their own communities. The DHHS (2001) commented that promotoras can play a key role in establishing trust with potential participants and within the community. Several benefits exist regarding the use of community health workers in research. Some of the benefits are: to provide or expedite the investigator’s access to the population, to provide direct referrals, to identify barriers within the community, to reduce the uncertainty regarding research in their community, to enrich the experience, and to accelerate participant recruitment (Hill, Bone, & Butz, 1996).

The promotoras asked several questions after the investigator presented information about the study, the reason for the study, and review of the Participant Recruitment Scripts. Questions were immediately addressed and the investigator was continuously available via phone
conversations and visits to their MCHC office. Development of trust between the investigator and the promotoras was an integral part of conducting this research. Even though the investigator had previous exposure and experience with the director of the program and other members of the clinic, the promotoras did not know the investigator prior to this endeavor.

The promotoras at MCHC in the Health Start Program were primarily responsible for recruitment of the participants for this study. The Health Start Program focuses on health education, emotional support, and assistance in accessing needed social services for the developmental periods encompassing early prenatal care and birth to two years of age. These services are accomplished through monthly home visits and case management (Mariposa Community Center of Excellence in Women’s Health, retrieved November 28, 2005).

Recruitment of the participants occurred through the MCHC clinic in Nogales, Arizona. Mexican immigrants or persons of Mexican origin residing in the border region represent marginalized groups. The validity and reliability of the study may be compromised by the participants’ misunderstanding of the purpose or intent of the research,
or because they may have been or perceive they have been coerced into consent (Mackenzie, 1994) as representatives of a marginalized and vulnerable group. To minimize these potential risks, the promotoras of MCHC helped identify and recruit eligible participants for the study. In addition, interpreters helped clarify any questions that arose when appointments were scheduled as well as during the consent process.

The bilingual, bicultural, interpreters are local community members who could identify culturally with the informants. The interpreters’ presence along with the investigators could have enhanced development and maintenance of trust. Both cultural identity and trust not only enriched the data obtained but will lend support to the development of culturally competent knowledge.

Initial contact with the possible participants took place either at the clinic or in the participant’s homes during their scheduled home visits with the promotoras. The potential participant was introduced to the project via the Participant Recruitment Script (Appendix B) by the promotoras in the participant’s preferred language. The study was explained by the promotoras and the Participant Recruitment Script which provided a complete description
and purpose of the study. If the potential participant was unable to read, the Participant Recruitment Script was read to them by the promotoras. All of the participants were literate in either English or Spanish and capable of reading the forms independently. The potential participants were asked on the Participant Recruitment Script to write their preferred language. Appointments were made for each interview by the investigator or one of the bilingual interpreters after potential participants agreed to be contacted for the study by signing the Participant Recruitment Script. The bilingual interpreters scheduled the majority of the appointments as a method to address the acknowledged language challenges and barriers that exist in the chosen research population. The scripts were written in English and Spanish which provided a sense of familiarity for the participants.

The participants’ identities were kept confidential. A pseudonym was chosen by each participant that was used on all data throughout the research. Each participant received a copy of the Subject’s Consent Form (Appendix A) after explanation and signature. The participants interviewed in their homes received a copy of the signed consent form in the mail. The participants who were interviewed at the
Southeast Arizona Area Health Education Center, Incorporated (SEAHEC) received a copy prior to completion of the interview session. Participants were assured at the beginning of the session study withdrawal or lack of participation would in no way influence the health care they receive from MCHC.

The Subject Consent Form, the Participant Recruitment Script and the Demographics Questionnaire (Appendix D), were written in both English and Spanish at a sixth grade reading level. A professional bilingual, bicultural person translated the forms into Spanish. The forms were then back translated for cultural equivalency. The forms were reviewed several times by the different interpreters at SEAHEC who were native to the region. The only word that was removed from the original consent form was the word herb. The investigator was advised by one of the bilingual readers the word ‘herb’ would be misunderstood to mean weed or marijuana. The word was removed from both consent forms.

Consent forms were signed by the informants after reading the consent forms, questions were answered, and prior to the initiation of the research study. Each consent form was signed by the informant, the investigator and the presenter (interpreter) when applicable. The informants
were assured any identifying information would be deleted if noted on the tapes. However, none were located. Pseudonyms were used during taping of the interview and the informants were informed the audiotapes would be destroyed once transcription and analysis were completed. The interviews were audiotaped following verbal consent and written consent from the participants.

Informant Compensation

Each informant was compensated for their participation in and contribution to this research study. The Participant Recruitment Script stated “When the interview is completed, you will be compensated for participating in the interview”. While the Consent Form stated, “You will receive $10.00 (106.00 pesos) for your participation.” Two of the informants refused to take the compensation. Payment to participants was funded by an educational scholarship the principal investigator received from the University of Arizona, College of Nursing. The amount of compensation was not considered to be coercive as the informants were not aware of the amount until they read the consent form.

The people in the border region are amongst the poorest people the U. S. health care system. The compensation was chosen for a few reasons: 1. as a way to
thank the informants by providing a small token which could assist in their monetary struggle against the very high rates of unemployment in the border region; 2. to acknowledge the participant’s time considering their complex lives; 3. to show appreciation for sharing their traditional knowledge; and 4. in hopes of promoting thorough, thoughtful responses to the questions posed by the investigator.

Criteria for Participant Selection

A purposive sampling technique was used to invite 12 Hispanic women of childbearing age to participate in the study. Nine of the invited women participated in the research study. Reasons the other three were not interviewed included the informants cancelled or rescheduled more than once, priorities had interfered, one person was no longer at the phone number provided after she had cancelled once, and their contributions were no longer needed because saturation of the data had occurred.

An ethnographer seeks out ordinary people to talk about the knowledge they possess (Spradley, 1979). Ultimately, the ethnographer’s goal is to produce a cultural description. The investigator set forth the
following eligibility criteria in order to produce a rich cultural description of the phenomenon of interest.

The eligibility criteria are: a) self-declared as of Mexican origin; b) 18 years of age or older; c) reside in the U.S.-Mexico border region of Nogales, Arizona/ Nogales, Sonora; d) are presently pregnant or have given birth within the last year; e) have either used manzanilla tea for the childbearing process or have knowledge of the traditional practice; f) are able and willing to talk about their experience(s) and knowledge; g) speak and write in either English or Spanish; h) are currently receiving health care through MCHC; and i) are willing to participate in the scheduled interview. Eligibility criteria were set to include the specific group of participants for the research study. If the participant was unable to read in either English or Spanish, the information was to be read to her in her language of choice.

Initially, all informants acknowledged they fit the eligibility criteria verbally and by signing the Participant Recruitment Script. Acknowledgement was verified by the informant’s signature on the Subject Consent Form. Most informants were bilingual in Spanish and English. The bilingual, bicultural interpreters were not
present for two of the interviews as the informants preferred English and stated understanding of the concepts discussed.

Setting

The setting for data collection was Nogales, Arizona adjacent to Nogales Sonora, Mexico. Nogales is the county seat of Santa Cruz County with an approximate population of 38,000 of which 81% are Hispanic (U.S. Census Bureau, 2000). Santa Cruz County is a medically underserved area (MUA) and a health professional shortage area (HPSA) (Office of Rural Health Policy [ORHP], 2004). The community of Nogales has a population of almost 21,000 of which 94% are Hispanic with 81% of Mexican origin. Based on the previous six months, the average number of new prenatal clients for MCHC’s Health Start program each month was forty-six pregnant moms (Joyce Latura, personal email communication November 30, 2005). The birth rate for Nogales, Arizona in 2003 was 22 per 1000 persons (MCHC, 2005). These data suggested an adequate population from which to obtain sufficient numbers of participants.

Secondary to a mass migration of Mexican residents relocating north to the U.S.-Mexico international boundary, the border region has less than ideal living conditions in
some of the sister cities. Poverty is the number one problem behind so many of the issues the people face on a daily basis. In Nogales, Arizona the overall percent of families who live below the poverty level is 30.8%. For families with children under five that number increases to 41.3%. In a female headed household with children under five 60.4% live below poverty level in Nogales, Arizona. For some, the economic situation is dismal at best. To add to the barriers 93% speak Spanish of which 51% speak English “less than very well” and the majority of the population over 25 years of age have less than a 9th grade education (U.S. Census Bureau, 2000).

For the year 2003, the pregnancy rate, number of pregnancies per 1,000 females of childbearing age, in Santa Cruz County Arizona was 96 percent. (ADHS, 2003) Additionally, the following statistics were obtained from ADHS (2003). In Nogales, Arizona there were 456 live births. Four hundred thirty-nine births were to mothers of Hispanic or Latino ethnicity. For births by age group the majority, 123, were 25-29 years of age. The 20-24 year age group and the 30-34 year age group were very close in births at 110 and 108 respectively. Likewise, 18-19 year olds gave birth to 42 while 35-39 year olds registered 43
births. Teen Hispanics less than 15 reported 2 live births and 15-17 years olds reported 22 births. Of the 456 live births in Nogales, AZ in 2003, 302 births were paid for by Arizona Health Care Cost Containment Services (AHCCCS), one by Indian Health Services, 108 by private health insurance, 43 by self, and 2 unknown. These payee statistics for the community were not divided by ethnicity or race. Fifty-three percent of the Hispanic mothers giving birth in AZ are unmarried. (ADHS, 2003) The facts that over 50% of Hispanic mothers are unmarried and only 27% of total births in Nogales were paid for by private health insurance compounds the socioeconomic problems that lie ahead for this vulnerable group of women.

Some of the interviews were conducted within the informant’s home. The setting was chosen to enhance the richness of the data obtained from participant observation. However, since a few of the informants primary residences were in Mexico, some interviews were conducted at SEAHEC. This did not take away from the richness of the data collected instead it provided an accurate picture of the informant within the complex context of the border community.
Data Collection Procedures

The data collection procedures consisted of in-depth interviews, extensive field notes and selected episodes of participant observation. Each data collection method will be introduced and supported with an explanation of how each was integrated into the study. These methods represented facilitation of culturally competent knowledge through a cultural knowledge base, sensitivity, and collaboration.

Interviews

An assumption of qualitative interviewing is that the perspective of others is meaningful, knowable, and able to be made explicit. The purpose of interviewing is to allow one to enter the other person's perspective. (Patton, 2002). This was facilitated by predetermined questions relevant to answering the posed research questions. A Data Collection Instrument (Appendix D1) that is a General Interview Guide with the grand tour questions is attached. Data collection began with the partially structured interview questions and was followed by the Demographic Questionnaire (Appendix D2).

In-depth interviews were conducted with 9 women of Mexican origin. The majority of the interviews were conducted by the investigator and one of the bilingual
(Spanish/English), bicultural interpreters in the language preferred by the informants. However, even the bilingual informants benefited from having the bilingual-bicultural interpreters present for the interviews. When the interpreter was present for the interview, both languages were used interchangeably by some of the informants. Only two informants commented they did not need to have an interpreter present for the interview process. Subsequently, the investigator interviewed these informants without an interpreter.

The interview consisted of eight open-ended, focused questions. The lead in questions from the General Interview Guide allowed room for additional probing questions that helped elicit more descriptive data. The main types of questions asked of the informants were descriptive and structural. Permission for the study to take place in the informant’s home was requested from each informant. If this was not possible or the informant preferred a neutral location the interviews took place at SEAHEC. When applicable, every effort was made to thank the informants for inviting us into their homes. A couple of the informants had family members present at the interviews which at times made the tapes hard to understand and
produced segments of inaudible transcription. Appreciation and gratitude was shown to each informant.

The interviews were audio-taped with the informant’s verbal permission as well as via signature on the consent form. Privacy was provided for the interviews despite the varied contextual settings. The interviews continued until saturation of the developing categories occurred. The interviews were 60 to 120 minutes in length per informant. The interview time consisted of describing the study, obtaining permission via the signed consent form, the taped interview session and friendly conversation. The extra time allocated appeared to put the informants at ease during the interview process and after. Many times more information was shared outside of the formal interview. Each informant had the option to share their responses either in Spanish or English; their preferred language.

Collaboration in the research was encouraged as the investigator hired three bilingual, bicultural interpreters from SEAHEC to translate during the interviews. Three interpreters were made available in order for one of them to be available for the scheduled interview times as they each had other duties to attend to at SEAHEC simultaneously. The investigator is not fluent in Spanish;
however, she does understand and speak some of the language. The ability to communicate both in language skills and familiarity was crucial to comprehension of meaning and cultural nuances. In addition, the investigator understands the benefits of greater accessibility and sharing of information when someone is familiar with the community, the people, and the language. The bilingual, bicultural interpreters performed simultaneous interpretation as (or after) the participant was talking. The interpreter was asked to share verbatim what the participant was saying.

A bilingual transcriptionist who was not familiar with the informants transcribed the recorded data into both Spanish and English transcripts. The transcriptionist was originally from the community of Nogales, Sonora, Mexico. The transcriber was asked to check the translation of the interpreter from Spanish to English and back to Spanish. Once the transcripts were received, the investigator asked the Spanish-English interpreter who was present for the interview to check to make sure the transcriber didn’t make any translation errors on the transcripts. Approximately 25% of the transcribed interviews were checked for back translation. If any questions or discrepancies arose, the
investigator, interpreter, and transcriptionist discussed the concern and reached consensus. The back translation procedure mimics Brislin’s (1986) model used for translating and back-translating instruments in cross-cultural research in a modified manner. The back translation process is essential for the validity of a cross-cultural instrument (Jones, Lee, Phillips, Zhang, & Jaceldo, 2001) as it should be for a cross-cultural interview. Additionally, all tapes were audibly reviewed and compared by the investigator to the existing transcripts. Once the transcripts were considered valid, data analysis was initiated.

Field Notes

Field notes are documents generated from observations. “Relying on personal observations alone can be misleading” according to Roper and Shapira (2000, p. 70 cited in Speziale & Carpenter, 2003, p.166). All observations should be validated. The field notes collected recounted what was seen, heard, artifacts and answers to questions asked. (Speziale & Carpenter, 2003) Patton (2002) found field notes to have more strategic uses such as: to formulate new questions as the interview moves along; stimulate early insight; facilitate later analysis; and as
backup. Field notes were written during the interview process to add to the thick descriptiveness and in the time frame immediately after to summarize and reflect. Some of the new questions that arose throughout the data collection and simultaneous analysis were:

1. Tell me about any other reasons you can think of that you might drink manzanilla tea during pregnancy or labor. (This question was added to help the informants think about reasons they had not shared yet).

2. Describe for me what a typical labor experience is like when you drink the tea. For example,
   a. What do you do when the pains start?
   b. To get the pains to start?
   c. When do you decide to go to the hospital or call the doctor or la partera?

3. How do you think Americans (non-Hispanics) perceive the use of the tea?

4. During the interview process I was told that some White providers interfere with taking the tea or that being married to someone who is White can keep a Hispanic woman from taking the tea. Tell me what your experiences with this perspective have been.
5. I have been told that the tea can’t be taken in early pregnancy because it is considered hot and that it is good to take late in pregnancy because it is considered hot. What does hot mean in these situations?

6. Is pregnancy a hot or cold time? Can you tell me what your daily concerns would be if for example pregnancy was a hot time in your life?

Participant Observation

One strength of ethnography is the ability of the method to fully explain the experiences and meanings of people in their natural settings (Leininger, 1990) and this study did lend strength to the ideal of performing data collection in the participant’s own natural surroundings whether it was personal or community.

As has been mentioned, ethnography involves both the emic and etic perspectives. Both are important to present a holistic conception of a social group within its relevant context of meaning and purpose (Boyle cited in Morse, 1994). The etic perspective of the holistic conception of this social group was enhanced by the investigator’s previous fieldwork with MCHC at the Arizona-Sonora border. The investigator has been involved in educational related
activities within the community and across the line over the course of the last four years. Prior to these experiences, the investigator practiced and lived in another community in the border region along the Texas/Juarez, Mexico border. In addition during the process of data collection, the investigator lived part-time in the community of Rio Rico, AZ which is about 10 minutes north of the U.S.-Mexico border. The exposure and immersion allowed the investigator to better understand the community and complexity of the border lifestyle.

Participant observation was used as a data collection method for the research process. Focused ethnographies are time limited studies which gather data through selected episodes of participant observation (Muecke cited in Morse, 1994). The informants' homes, informal situations, SEAHEC and MCHC in Nogales, Arizona were sources in which discussions and participant observation occurred to provide enrichment of data collection and analysis. Data collected from the local community members and health care providers were for the purpose of framing the experiences shared by the informants.

The data, visual and verbal, obtained were recorded as close to verbatim as possible in specific detailed field
notes. As an ethnographer, movement between the insider and outsider occur within and between experiences. Therefore, objective observation and subjective feelings were recorded in detailed notes as a way to circumvent overlooking any relevant or important data. Germain (as cited in Munhall, 2001) shares that a consequence of participant observation can be change in the participant-observer as this requires sharing the sentiments of the people in social situations. The suggestion is to note the change and use them as part of the data being analyzed. The reflexive log helped provide a deeper insight for analysis as well as assist with the confirmability of the study.

Instrumentation (Demographic Questionnaire)

Participants were asked to complete a short demographic questionnaire after the interview. The questionnaire contained questions about the following categories: age; date of birth; members living in home with you; number of pregnancies (gravida/para); age at first pregnancy; what month during the pregnancy did they begin prenatal care?; current employment status; your occupation; years of formal education; where (US or MX or both); place of residence (US or MX); how long at residence in US;
primary language spoken in home; language read; speak or read any English?; and generation since immigration.

The demographic questionnaire was developed by the investigator. The questions were either determined from previous experiences of the investigator in the professional setting and within the border region, or derived from an example of Dr. Judith Berg’s demographic questionnaire used with a culturally specific population. In addition, acculturation rating questions were integrated into the demographic questionnaire. Coronado, Thompson, McLerran, Schwartz, and Koepsell (2005) found an abbreviated four-item acculturation scale had nearly as high an internal validity as the Cuellar, Arnold and Maldonado (1995) Acculturation Rating Scale for Mexican Americans–II. The referent portion of the demographic questionnaire addresses three of the four pertinent measures for acculturation - language used for speaking, ethnic identification of self, and birth place of self. The missing measure in this study’s questionnaire is language used for thinking. In lieu of language used for thinking the investigator asked language read in the home. The data obtained from the instrument was used for illuminating and situating the findings, not for drawing conclusions.
Data Analysis

Data analysis generally begins in qualitative research when data collection begins (Speziale & Carpenter, 2003) and continues throughout the study. During analysis of the interviews, descriptive data provided new information that led the investigator to develop new questions. These questions were posed to facilitate the sharing of additional information or clarification of information. The analysis helped refine the interview questions to obtain even richer data. Data analyses began with the field notes. Data collection stopped once saturation occurred. Saturation is the repetition of data obtained during the process of the study signifying completion of data collection (Speziale & Carpenter, 2003). Germain (cited in Munhall, 2001) comments that even though the investigator engages in the process of coding, categorizing, and questioning the data throughout the data-collection phase, the major work of analysis and interpretation takes place leaving the field and is guided by the assumptions and research questions.

Germain (cited in Munhall, 2001) also remarks that even though the descriptive data are provided by the members of the subculture and can be validated by them, the
final analysis and conclusions are actually the researcher’s – as these are guided by their own etic theoretical perspectives. Speziale & Carpenter (2003) describe "...the goal of data analysis is to illuminate the experiences of those who have lived them by sharing the richness of lived experiences and cultures" (p. 37).

**Process of Analysis**

Inductive analysis requires an immersion in the details and specifics of the data to discover patterns, themes and interrelationships. This process begins with exploring, then confirming (which is guided by analytical principles) and ends with creative synthesis. (Patton, 2002) Ethnographic analysis uses an iterative process (Thorne, 2000 in Speziale & Carpenter, 2003) until a full picture of the culture emerges. A systematic data analysis is essential to meet the criteria for rigor of a qualitative study.

The process of data analysis occurs throughout data collection as analytic notes (Hammersley & Atkinson, 1995). Post data collection analysis involved the following steps: 1) reading the transcripts; 2) identification of predominant story lines and summarizing each interview; 3) line by line reading, re-reading and reflection; 4)
inductive creation of domains, categories, sub-categories and eventually cultural themes.

To begin the post data collection analysis process the interview transcripts were read over several times to discover the key terms or story lines of the key informants experiences and meaning pertaining to manzanilla tea for childbearing from the raw data. After each interview a narrative summary of the session was created to capture the essence of the informant's story. As stated earlier, the accuracy of the audiotapes was checked by the investigator by comparing each audiotape to the corresponding typed transcript. Both the transcripts from the audio tapes and the Fieldwork Journal were typed in Word. The documents were formatted so that each line of text was numbered to facilitate coding. The data from the Demographic Questionnaire were structured into tables and integrated into narratives in chapter four.

Thematic analysis (Leininger, 1991, 2006; Spradley, 1979) provided the ethnographic analytic principles used by the investigator for data analysis. The investigator became very familiar with the raw data and used the data to think with. Analysis began with notations inserted in the margins of the transcripts and comments in the fieldwork journal.
After segments of interest were identified and extracted from the raw data, they were labeled with code words that were representative of their meanings. The transcripts were read over multiple times to continue to extract and clarify emerging common patterns. Recurrent patterns evolved into categories and domains. The data were scrutinized to discover recurrent patterns of meaning, interpretations, or explanations. The coded data were noted for their similarities and differences to other data from which new categories or sub-categories emerged. Interrelationships were considered between the common patterns, categories, domains and possible themes. Abstraction of the data upward from categories to domains, then themes occurred while reading and re-reading for cohesiveness. Domains were conceptualized into broader patterns of meaning. Cultural themes were synthesized from the domains. A meta-theme was abstracted from the emergent cultural themes. The informants’ responses were also considered in relation to the research questions.

Evaluation of Qualitative Research

In qualitative inquiry, the researcher is the instrument. The researcher is not a physical instrument per se, but is the central researcher who has the skills
through preparation to conduct a qualitative study (Leininger, 1990). The ways to measure or evaluate validity and reliability in quantitative research is not applicable to qualitative research. However, evaluation criteria are necessary to assess rigor. In qualitative studies, the concept of trustworthiness is equivalent to the general quantitative terms of reliability and validity. Trustworthiness helps the reader establish that the data and findings can be trusted. (Lincoln & Guba, 1985) Lincoln and Guba (1985) identified the following terms that support the rigor of the work or in other words establish trustworthiness in a qualitative study: credibility, dependability, confirmability, and transferability. Leininger (in Morse, 1994) has six evaluation criteria and definitions which differ slightly from Lincoln and Guba (1985). Dependability is not included and meaning-in-context, recurrent patterning, and saturation are part of the evaluation criteria. Leininger (1990) commented that Lincoln and Guba (1985) used similar criteria but the emphasis here will be Leininger’s criteria for qualitative methods. Each of the criteria will be discussed in relation to how they were performed within this study.


Credibility

Credibility includes activities that increase the probability that credible findings will be produced. Lincoln and Guba (1985) point out one of the best ways to establish credibility is through prolonged engagement. Credibility is referred to as the truth value or believability of the findings (Leininger, 1990). Credibility is established through prolonged engagements, observations, or participation or lived-through experiences of those being studied (Leininger, 1990). Another way is to see whether the participants recognize the findings of the study to be true to their experiences. The participants are validating their lived experiences. Lincoln and Guba (1985) refer to this as member checks. Triangulation, peer debriefing, and reflexivity add to the strength of the rigor of the study. Triangulation and reflexivity will be discussed separately below. For this study, credibility of the data and conclusions was established through prolonged engagement and observations, triangulation, peer debriefing and reflexivity. Each will be presented separately with a description of application within the study.
**Peer Debriefing**

Peer debriefing ensured rigor throughout data collection and the interpretation process. This process helped refine questions as the research process ensued and contributed to deriving conclusions in the analysis process. All interview data was sent or brought to Dr. Judith Berg, dissertation chair, and Dr. Marylyn McEwen (for her expertise with the method and the cultural group) via person, email and/or mail for review, peer debriefing, analysis and feedback. The peer debriefing, analyses and thought processes by audit trail helped to establish trustworthiness of the data. Dr. Elaine Jones was also consulted as needed throughout the qualitative research process.

**Triangulation**

Triangulating data sources means cross-checking and comparing the consistency of information derived at different times and by different means within qualitative methods. Triangulation of data and methods contributes to the richness and depth of the phenomena being studied. In this research study triangulation of data was incorporated through the following: in-depth informant interviews, field notes, participant observation, the Demographic
Reflexivity

Ethnography has a reflexive character. This implies the researcher is a being in the world in which he or she studies and they are ultimately affected by it. "Ethnography as a process always consists partly of participant observation and partly of conversation or interview" (Werner & Schoepfle, 1987a cited by Boyle in Morse, 1994). Reflexivity is the process that is an interface between the two. The combination of the insider/outsider perspectives provides a deeper insight into the phenomenon of interest; a third dimension. (Boyle cited in Morse, 1994) A good ethnography will be explicit about the nature that reflexivity impacted the ethnographer throughout the study. The informants' stories, experiences and understanding are represented in this context. The investigator used the fieldwork journal as a medium for expressing this third dimension.

Confirmability

Confirmability is a process criterion. Lincoln and Guba (1985) reference the use of an audit trail to record activities over time so that another individual may follow
thoughts and actions. The trail will provide relationships between the raw data and final conceptualizations. (Lincoln & Guba, 1985) The researcher’s log of reflexive thoughts is a part of the audit trail. Leininger (1990) remarks that mutual agreement between researcher and researched establishes confirmability. It means one obtains direct and often repeated affirmations of what the researcher has heard, seen, or experienced with respect to the phenomena under study. Repeated affirmations lead to saturation of the data thereby establishing confirmability. Leininger (1990) adds that periodic confirmed informant checks and feedback sessions directly from the participants are important ways to establish confirmability of the data. Data was confirmed by other informants through structural questions.

Meaning-in-context

Meaning-in-context refers to data that have become comprehensible within holistic contexts to the informants or people studied in different or similar environmental contexts. This focuses on the contextualization of ideas and experiences within a total situation, context, or environment (Leininger, 1990). Meaning-in-context occurred for the informants in the border region of Nogales,
AZ/Nogales, Sonora, Mexico related to intergenerational sharing of knowledge. Meaning-in-context is known to the investigator for women of Mexican origin in similar environmental contexts, however, only through past clinical experiences not this research study.

**Recurrent patterning**

Recurrent patterning refers to the repeated sequence of events, experiences, lifeways, or instances that tend to be patterned and recur over time in designated ways and in different or similar contexts (Leininger, 1990). Recurrent patterns arose from the data. The study provides data that shows the patterning regarding sharing of knowledge about the use of manzanilla tea among women. The pattern of sharing occurs in both different and similar contexts among this population.

**Saturation**

Saturation refers to the full immersion into the phenomena in order to know it as fully, thoroughly, and comprehensively as possible. The researcher has done an exhaustive exploration in which no further explanation, interpretation, or description of the phenomenon under study by the participants is able to be found. Redundancy of information is appearing on repeated inquiries at this
point (Leininger, 1990). Saturation was obtained on the phenomenon under study about the women’s values, beliefs, patterned lifeways and experiences.

Transferability

As Leininger (1990) words it, transferability refers to whether particular findings can be transferred to another similar context or situation and still preserve the particularized meanings, interpretations, and inferences from the completed study. This research could be relevant to other childbearing women of Mexican origin who reside in the U.S.-Mexico border region. It is the responsibility of the researcher to provide the thick and rich descriptive information of the data for the potential users; this was accomplished.

Summary of Chapter Three

Chapter Three provided a description of the research methodology that was used to explore the perceptions of women of Mexican origin’s cultural practice of manzanilla tea use for the childbearing period. Details for the research design of focused ethnography, the setting in Nogales, Arizona, along with data collection, analysis and evaluation were included in this chapter. Assumptions and biases about the population and phenomenon are identified
and presented in this chapter as well. Through the integration of cultural knowledge, cultural sensitivity and collaboration with the community into the phases of research, the anticipated outcome is development of knowledge that has greater cultural competence. Chapter Four will provide descriptions of the participants.
CHAPTER FOUR

Participant Description

Chapter four provides a portrayal of the interviewed nine childbearing women of Mexican origin who reside in the U.S.-Mexico border region about their descriptions of culture care components related to the use of Manzanilla tea for the childbearing period. The following sections of Chapter four will provide a summary of the sample characteristics, demographic data from the informants, and a synopsis of each participant.

Sample Characteristics

To be considered eligible for this study women had to meet the following criteria: a) self-declared as of Mexican origin; b) 18 years of age or older; c) reside in the U.S.-Mexico border region of Nogales, Arizona/Nogales, Sonora; d) are presently pregnant or have given birth within the last year; e) have either used manzanilla tea for the childbearing process or have knowledge of the traditional practice; f) are able and willing to talk about their experience(s) and knowledge; g) speak and write in either English or Spanish; h) are currently receiving health care through MCHC; and i) are willing to participate in the scheduled interview. A total of 12 women were recruited
into the study. Two of the women cancelled, one more than once, and the other woman did not show up for her scheduled interview and was not able to be contacted by phone. Cancellations were common as only four of the nine informants (Sally, Ana, Lucy, and Lucia) allowed the interpreter to interview at the first scheduled time. Three out of four of these interviews were conducted in the informant’s home. Maria’s interview was delayed by two hours due to her being detained crossing the border between the U.S. and Mexico referred to as the line. Cultural appropriateness and flexibility in data collection were displayed through the investigators understanding of the informants’ different sense of time (present oriented) and the need for numerous changes in scheduled appointments.

Demographic Data of the informants

The data were derived from informant responses to the Demographics Questionnaire (Appendix D2). The demographic questionnaire was physically divided into two sections: background information and health history. Upon reflection, the demographic questionnaire is actually divided into three sections with a short acculturation scale as the third section. Coronado, Thompson, McLerran, Schwartz, and Koepsell (2005) found in their research an abbreviated
four-item acculturation scale had nearly as high an internal validity as the Cuellar, Arnold and Maldonado (1995) Acculturation Rating Scale for Mexican Americans-II. The referent portion of the demographic question addresses three of the four pertinent measures for acculturation – language used for speaking, ethnic identification of self, and birth place of self. The missing measure in this study’s questionnaire is language used for thinking. The aggregated analyses of the informant’s responses will be divided into three sections: a) background information; process of cultural change; and health history. Data collected from the demographic questionnaire were calculated quantitatively to determine ranges, means or percentages. Both similarities and diversity exist within the group.

Background Information

Education History

The highest year of school completed ranged from junior high school to having been granted a graduate degree. The outliers were one having a junior high level education (11%), one completing partial high school (11%), and the other having a graduate degree (11%). Forty-four percent of the informants stated they had partial college
or specialized training. The remaining 22% had completed a high school degree.

There was an even split as 44.4% of the informants received their formal education in Mexico while another 44.4% received their formal education in the United States. One informant (11.1%) stated both countries.

Employment Information

More than one response was received from informants regarding their current employment status. One informant responded that she was both unemployed and a homemaker. A second responded that she was a student, homemaker, and working part-time. Another responded that she was both a homemaker and a student. The rest of the informants only chose one response. The two main areas of employment among this sample of women were homemaker (38.5%) and student (38.5%). The employment status of the remaining were each 7.7% of the sample, or one person in each, which included working full-time, working part-time, and unemployed.

Not all responded to describing their current or most recent job. Student and sales were listed once each. Homemaker was listed twice as a current job. One informant is an instructional aide for the Nogales Unified School District. Both veterinary assistant for a veterinarian and
receptionist for the Humane Society were listed as current and most recent by one informant.

Home and Family Composition

The majority (37.5%) of the informants responded their partner/spouse lived with them in their home. Approximately 31.3 percent of the informants have children living with them. Almost all of the informants who responded they had children living with also had a spouse or partner in the home. One informant who had a child living with them lived with their mother (6.3%). The same two informants that commented they lived with their parents (12.5%) also had brothers who lived in the same home (12.5%).

Table 1 includes items 1-5 under the Background Information on the Demographics Questionnaire (Appendix D2). The tables include collective data from the informants.

Process of Cultural Change

Informant Birthplace

The majority (44.4%) of the women in this sample were born in Nogales, Sonora, Mexico. One informant (11.1%) was born in Tucson, Arizona. Another informant was born in Nogales, Arizona (11.1%) Hermosillo, Sonora, MX (11.1%) and
### Table 1

**Background Information**

<table>
<thead>
<tr>
<th>Participant (Pseudonyms)</th>
<th>Education Attained</th>
<th>Formal Education</th>
<th>Employment Status</th>
<th>Current Job</th>
<th>Lives at Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>Partial College</td>
<td>U.S.</td>
<td>Student</td>
<td>no response</td>
<td>Spouse &amp; children</td>
</tr>
<tr>
<td>Ana</td>
<td>High School</td>
<td>U.S.</td>
<td>Unemployed Homemaker</td>
<td>no response</td>
<td>Parents &amp; brother</td>
</tr>
<tr>
<td>Rosa</td>
<td>Partial College</td>
<td>MX</td>
<td>Student</td>
<td>Student</td>
<td>Parents &amp; brother</td>
</tr>
<tr>
<td>Pamela</td>
<td>Partial College</td>
<td>MX</td>
<td>Homemaker</td>
<td>Homemaker</td>
<td>Spouse</td>
</tr>
<tr>
<td>Maria</td>
<td>Graduate Degree</td>
<td>MX</td>
<td>Part-time Homemaker</td>
<td>Sales</td>
<td>Spouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Student</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucy</td>
<td>High School</td>
<td>Both</td>
<td>Full-time Instructional Aide</td>
<td>Instructional Aide</td>
<td>Spouse &amp; children</td>
</tr>
<tr>
<td>Lucia</td>
<td>Junior High</td>
<td>MX</td>
<td>Homemaker</td>
<td>Homemaker</td>
<td>Spouse &amp; children</td>
</tr>
<tr>
<td>Hailey</td>
<td>Partial College</td>
<td>U.S.</td>
<td>Homemaker</td>
<td>Vet. Assistant and Receptionist</td>
<td>Spouse &amp; children</td>
</tr>
<tr>
<td>Guera</td>
<td>Partial High School</td>
<td>U.S.</td>
<td>Student</td>
<td>no response</td>
<td>Mother &amp; child</td>
</tr>
</tbody>
</table>

*Guaymas, Sonora, MX (11.1%) were named as places of birth for two of the informants. Mexico City, Distrito Federal, MX (11.1%) was the birth place for one informant. Most of these women were transnational as 77.7% were born in Mexico while 86% of the sample born in Mexico was born specifically in the state of Sonora.*
Years in the United States

Only 66.6% of the informants claimed they lived in the United States. Three (33.3%) of the informants responded they presently reside in Mexico. Of the informants who were born outside of the U.S. but presently live in the U.S., the years lived in the U.S. ranged from 6 to 22 years. The mean age of years lived in the U.S. since immigration was 16.25 years.

Family Migration History

One informant is a third generation Mexican-American while another is second generation. All informants who were born outside the U.S. but presently live in the U.S. responded they were first generation since immigration to the United States. The remaining three had not claimed to have migrated to the U.S. to date.

Language Spoken and Read in Home

Spanish was the primary language spoken in the homes of the informants in this study. Seven out of nine (77.8%) responded Spanish was the primary language spoken in their home while 22.2%, or 2 of the informants, responded English. The opportunity to answer both was not on the demographic questionnaire, however, 2 informants wrote in both as well as choosing one of the other answers. Lucy
said she spoke English to her daughters and both languages to her husband.

The primary language read in the homes of the informants was Spanish. The majority (66.7%) of the informants responded that Spanish was the primary language read in their homes. Two of the informants (22.2%) responded with English and one (11.1%) responded both. Again, the choice for both was not an option for this question. However, I have seen that it is necessary to add both as a potential response to these questions.

The majority (66.7%) of the informants do speak English. Only 33.3% did not speak any English. A higher percentage (88.9%) of the informants read English than spoke the language. One informant (11.1%) did not read any English.

Table 2 includes items 2-7 from the Health History section of the Demographics Questionnaire (Appendix D2). This is a compilation of the responses from the informants. 

Health History

Age

The women ranged in age from 19 to 35 years. The mean age for these 9 women was 25.44 years of age.
Table 2

Process of Cultural Change

<table>
<thead>
<tr>
<th>Participant (Pseudonyms)</th>
<th>Place of Birth</th>
<th>Presently live</th>
<th>How long in U.S. (years)</th>
<th>Generation in U.S.</th>
<th>Spoken Language In home</th>
<th>Language Read in home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>Nogales, Sonora, MX</td>
<td>U.S.</td>
<td>20</td>
<td>1st</td>
<td>Spanish</td>
<td>Both</td>
</tr>
<tr>
<td>Ana</td>
<td>same</td>
<td>U.S.</td>
<td>22</td>
<td>1st</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Rosa</td>
<td>same</td>
<td>MX</td>
<td>NA</td>
<td>NA</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Pamela</td>
<td>Mexico City, DF MX</td>
<td>MX</td>
<td>NA</td>
<td>NA</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Maria</td>
<td>Hermosillo, Sonora, MX</td>
<td>MX</td>
<td>NA</td>
<td>NA</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Lucy</td>
<td>Nogales, Sonora, MX</td>
<td>U.S.</td>
<td>17</td>
<td>1st</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Lucia</td>
<td>Guaymas, Sonora, MX</td>
<td>U.S.</td>
<td>6</td>
<td>1st</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
<tr>
<td>Hailey</td>
<td>Tucson, AZ</td>
<td>U.S.</td>
<td>NA</td>
<td>3rd</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Guera</td>
<td>Nogales, AZ</td>
<td>U.S.</td>
<td>NA</td>
<td>2nd</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
</tbody>
</table>

Pregnancy History

Years of age during first pregnancy ranged from 16 to 27 years. The mean age for first pregnancy was 20.9 years. The majority (55.6%) of these women have only been pregnant once. Three of the informants (33.3%) have been pregnant three times while one (11.1%) has been pregnant twice. Of
those women who have delivered, six out of nine, half (50%) carried one pregnancy to full term (38 weeks or greater). The other half (50%) had two pregnancies carried to full term. Of those, 2 of the women had one preterm delivery each. The majority (50%) of these women have one living child. Of the remaining women who have given birth, 33.33% have three living children and one (16.66%) has two living children.

*Initiation of Prenatal Care*

Most of the women (77.8%) began prenatal care at MCHC while one month pregnant. The remaining (22.2%) began their prenatal care at two months.

The data for Table 3 was obtained from questions 1 and 10-14 in the Demographics Questionnaire (Appendix D2).

*Informant Synopses*

Each informant chose a pseudonym after providing consent for the study. The pseudonyms are in place to protect the identity of the informants. Interestingly, about one-third of the women wanted to use their own names even after explanation regarding protection of identity. These participants were highly encouraged to come up with any other name for this study; all complied. The synopses
Table 3

Health History

<table>
<thead>
<tr>
<th>Participant (Pseudonyms)</th>
<th>Age</th>
<th>Age at First Pregnancy</th>
<th>Times pregnant</th>
<th>Full-term pregnancies</th>
<th>Living children</th>
<th>Month Began Prenatal Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally</td>
<td>22</td>
<td>19</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>first</td>
</tr>
<tr>
<td>Ana</td>
<td>22</td>
<td>21</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>first</td>
</tr>
<tr>
<td>Rosa</td>
<td>20</td>
<td>19</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>first</td>
</tr>
<tr>
<td>Pamela</td>
<td>27</td>
<td>27</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>second</td>
</tr>
<tr>
<td>Maria</td>
<td>26</td>
<td>26</td>
<td>1</td>
<td>NA</td>
<td>NA</td>
<td>second</td>
</tr>
<tr>
<td>Lucy</td>
<td>35</td>
<td>24</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>first</td>
</tr>
<tr>
<td>Lucia</td>
<td>30</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>first</td>
</tr>
<tr>
<td>Hailey</td>
<td>28</td>
<td>18</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>first</td>
</tr>
<tr>
<td>Guera</td>
<td>19</td>
<td>18</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>first</td>
</tr>
</tbody>
</table>

should provide a contextual setting to match up with each woman’s voice.

Interview 1: Sally

Sally is a 22 year old Gravida (G)2 Para (P)1 Hispanic who came to the Southeast Arizona Area Health Education Center, Inc. (SEAHEC) for her interview. Sally expressed that she was too embarrassed to have us come to her home before the maid came to clean the house. Sally was fluent in English and spoke English throughout the entire interview. Both languages are spoken and read in the home, but Spanish is preferred. The members of her family that
live with her are her husband and children. Sally was born in Nogales, Sonora, MX and has lived in the U.S. for 20 years. She is presently a student in college and has received all her formal education in the U.S. Sally had a bubbly personality who described herself as “not shy”. She was about 35 weeks pregnant at the time of the interview.

Interview 2: Rosa

Rosa is a 20 year old G1P0 Hispanic who met me at SEAHEC for her interview. She was expressive visually and vocally throughout the interview. Rosa was 7 months pregnant at the time of the interview. Rosa is a student in college who lives with her parents. Her formal education was obtained in Mexico. Rosa was born in Nogales, Sonora, Mexico and claims to still live there. Spanish is the primary language read and spoken in her home. Rosa does not read or speak English. Rosa’s mother brought her to the interview.

Interview 3: Ana

Ana is a 22 year old Hispanic G1P1 who invited us into her home for the interview. She lived in an older area of town that was east of the railroad tracks and placed behind commercial properties. The neighborhood had smaller homes, however, neat with few cars parked on the street. Ana’s
house was hidden behind tall bushes providing the appearance of privacy. Outside the house was a welcoming comfortable sitting area that appeared to welcome plenty of company by the placement of furniture. The house was decorated nicely with furniture that was not new but well taken care of. The house was neat and clean. Ana was holding her baby throughout the interview. The baby was about one week old and easy to identify as a girl with all the pink she was dressed and adorned in. Depending on her answer, Ana responded to the posed questions in English or Spanish. Ana’s household preference was to speak and read in Spanish even though she was able to read and speak English. She was born in Nogales, Sonora, MX but presently lives in Nogales, AZ with her parents and brother. Ana’s boyfriend was present for the birth of their daughter but no other mention was made of the father of the baby. She is a high school graduate who received her education in the U.S. Ana claims to be both unemployed and a homemaker at this point in her life.

**Interview 4: Pamela**

Pamela is a 27 year old G1P0 Mexican who came to SEAHEC for her interview. She actually showed up a little early for the interview. Pamela could read and speak
English and was very literate as well as fluent. She was very expressive with her hand gestures. Pamela also thought very carefully about the words she chose to use in her responses. Spanish is the main language read and spoken in her home. Pamela has completed some college in Mexico. Her major was psychology. All of her formal education was obtained in Mexico. Presently, Pamela is a homemaker but plans to return to the university someday. She lives in Mexico with her husband. Pamela was born in Mexico City, Distrito Federal. Pamela was six months pregnant at the time of the interview. She began her prenatal care in the second month. Her father is a physician and her mother is a nurse. They both practice in Nogales, Sonora, MX.

Interview 5: Maria

Maria is a 26 year old G1P0 Mexican who was seven months pregnant at the time of the interview. Maria came to SEAHEC to interview because she is presently residing in Nogales, Sonora, MX. Maria was very apologetic for being 55 minutes late for her scheduled time. Again, crossing the line was an issue. She was very excited to be sharing her knowledge and would light up with a smile and hand gestures to describe her stories. Maria is seeing two different providers; a physician in MX and one in Nogales, AZ. She
offered to bring me a sample of the manzanilla that is
grown in her home town. Her home town is approximately 45
minutes from Hermisillo, Sonora, MX where Maria was born.
Maria presently lives with her husband where Spanish is the
language both read and spoken primarily. She claimed to
read English but not speak in English. At the end of the
interview she relayed via the interpreter that she had
understood about 99% of the questions I posed. Maria has a
graduate degree and completed her formal education in
Mexico. She claimed to work part-time in sales, be a
homemaker and a student.

Interview 6: Lucy

Lucy was a 35 year old G3P2 Hispanic who invited me
into her home for the interview. The house had the Spanish
influence with stucco exterior and saltillo tile throughout
the main living areas. The homes in the neighborhood were
spaced fairly far apart. The road in the neighborhood was
narrow. The majority of the driveways were rock as was the
informant’s. The appearance from the road was that each
property had between 2-5 acre lots. From the exterior one
could see the religious influence as a statue of Virgin
Mary and a paper sign that read “Este Hogar El Catholic”
(This home is Catholic) were readily visible in the front
window of the home. The importance of family was evident in both a picture of her mother on the coffee table and pictures that almost covered the front of the refrigerator. Lucy was very polite and offered me a drink more than once. She gave me a big hug before I left her home.

Lucy was approximately 3 months pregnant. She is a first generation immigrant who was born in Nogales, Sonora, MX but had lived in the U.S. for 17 years. Lucy is bilingual speaking English at home with her daughters and both English and Spanish with her husband. English is the language that is primarily read in her home. Lucy has a high school degree and received her formal education in both the U.S. and MX. She works full-time as an instructional aide for the Nogales Unified School District.

Interview 7: Lucia

Lucia is a 30 year old G3P3 Hispanic who was interviewed in her home. Lucia lived in a part of Nogales the interpreter referred to as unsafe. The interpreter commented that the street was known for its gang activity. To get to the apartment complex we drove up and down steep hills ending up about 4 blocks from the U.S.-Mexico border. The street was lined with cars making passage a little challenging. The apartment complex was built up the hill so
it appeared the separate one-story apartments were stacked side by side as one ascended the hill to Lucia’s home. The apartments were not new and displayed signs of aging. Passage into the home was through a wrought iron screen door prior to the regular door. Not all the apartments had this feature. Once in her home, the most impressionable concept was familialism. Pictures of both her mother and her husband’s mother were displayed. In addition, many other framed pictures were hung on one wall.

Lucia handed her 8 month old son to her husband to take outside on the back patio while I conducted the interview. She was still breastfeeding the baby as he was suckling on the breast toward the end of the interview. Lucia preferred to be interviewed in Spanish. Spanish is the primary language read and spoken in her home. Lucia did respond that she read in English but did not speak in English. Out of her 3 living children, the last child was delivered preterm. Interestingly, Lucia did not disclose she had more than the one child until she was answering the demographic questionnaire. There was no evidence in the house of any other children outside of photos on the wall. Her oldest child was 14 years of age. Since she immigrated not too long ago it is possible the children are not with
her - I did not ask the informant. Lucia was born in Guaymas, Sonora, MX. She has lived in the U.S. for 6 years and is presently a homemaker. Lucia received her formal education through junior high in Mexico.

Interview 8: Hailey

Hailey was a 28 year old G3P3 who allowed me to come into her home for the interview. Hailey is Hispanic who is married to a blond-haired Caucasian. Her house is in an area where the houses appear to be in a planned development. No landscaping was done outside the stucco home with a clay tile roof. The house was sparsely decorated with little furniture and no wall coverings providing the appearance of not having lived there very long. There were an abundance of toys scattered all over the front room and the kitchen area which was easily seen from where the interview took place.

Hailey was born in Tucson, AZ and is a third generation American. She speaks and reads only English. As well, English is the primary language read and spoken in the home.

Two of the three pregnancies were term. She did not specify which child was born prematurely. Hailey received her education in the U.S. and was about to finish up her
bachelor’s degree. Her husband was very proud of this accomplishment. Hailey did not claim to be a student but rather a homemaker. In the past she has worked as a veterinary assistant for a veterinarian and as a receptionist for the Humane Society. Hailey lives in Rio Rico with her husband and children. Hailey’s husband commented that “granny” would know so much more about my questions than Hailey did.

Interview 9: Guera

Guera is a 19 year old G1P1 Hispanic who resides in Nogales, AZ with her baby and mother. She came to SEAHEC for her interview escorted by her mother who was watching the 9 month old baby. Guera was dressed very nicely but was more reserved in her interaction than I was hoping for considering she had experience with the tea for her labor. Even though Guera was born in Nogales, AZ Spanish is the primary language read and spoken in the home. She is bilingual and conducted the interview in English. Guera is able to read English as well and filled out her forms in English. Guera completed only some of her high school education in the U.S. At the present time she is a student.
Summary of Chapter Four

Chapter four provided a picture of the nine informants who compiled the sample in this study as a way to familiarize the reader with each informant’s contextual setting in the border region. The demographic data helped highlight the potential vulnerability of the informants as women who face border issues and health disparities along the U.S.-Mexico border. Chapter five will describe the results of the study.
CHAPTER FIVE

Results

Chapter five presents the results obtained from the interviews with nine childbearing women of Mexican origin who reside in the U.S.-Mexico border region about their descriptions surrounding the use of Manzanilla tea for the childbearing process. The purpose of this study was to describe the cultural context of using manzanilla tea during the childbearing period for women of Mexican origin living in the U.S.-Mexico border region of Arizona-Sonora, Mexico. The overall goal was theory generation about cultural health beliefs and behaviors of this border region’s childbearing population using the qualitative method of ethnography. The specific research questions for this study were:

1. What are the culture care (emic) components (values, beliefs, and patterned lifeways) related to the use of manzanilla tea for women of Mexican origin living in the Arizona-Sonora, Mexico border region on the uses of manzanilla tea during the childbearing period?
2. What are the experiences of Mexican women of childbearing age in using *manzanilla* tea during the childbearing period?

An interpretive theoretical perspective was employed to maintain consistency with an ethnographic methodology. Construction of the themes, domains, categories and sub-categories occurred with the understanding that knowledge is socially constructed through interaction with one’s environment. The constructionist view of allowing both subjective and objective data to establish knowledge was also integrated into the iterative process. This epistemological stance values the emic perspective. Upward abstraction of data bits assisted in the conceptualization of domains as well as the synthesis of cultural themes and the meta-theme.

The meta-theme synthesized from the supporting themes is Intergenerational Transmission of Cultural Health Care Knowledge. Two main cultural themes support the meta-theme which are: 1) Differences and Tensions and 2) Manzanilla Tea: Values, Beliefs, and Practices. Differences and Tensions has three domains: 1) Don’t Drink the Tea, 2) I Drink it Anyway, and 3) Confused and Afraid. This theme describes the tension and differences experienced by the
informants between what they knew or believed through intergenerational transmission and what was experienced, inferred or imposed by other sources of information about health care knowledge. The second theme, Manzanilla Tea: Values, Beliefs, and Practices, has three domains which include: Generational Knowledge; Nothing Bad Happens, and Why We Use Manzanilla Tea. This theme describes how the knowledge about manzanilla is passed along from generation to generation – how this actually occurs – and what information is actually transmitted intergenerationally. Supporting data describe and explain the values, beliefs, and practices adopted by this population regarding cultural health care knowledge. The domains, categories and sub-categories are shown in Table 4 with descriptions for each within this chapter.

Each cultural theme and related domains, categories, and sub-categories will be presented. Bilingual, bicultural interpreters were used to gather data consequently some of the data excerpts will be in the third person. Each excerpt will be labeled by the informant’s pseudonym and numbered transcript line(s) to facilitate transferability and confirmability.
Table 4

Manzanilla Tea: Values, Beliefs, and Practices

<table>
<thead>
<tr>
<th>Domain</th>
<th>Categories</th>
<th>Sub-categories</th>
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<tbody>
<tr>
<td>Generational Knowledge</td>
<td>Everybody Knows</td>
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<tr>
<td></td>
<td>Because of our Mothers and Grandmothers</td>
<td></td>
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<tr>
<td></td>
<td>Passing Along Knowledge</td>
<td></td>
</tr>
<tr>
<td>Nothing Bad Happens</td>
<td>Get Ready for Labor</td>
<td>Start drinking before</td>
</tr>
<tr>
<td>Why We Use Manzanilla Tea</td>
<td>Makes Labor Faster</td>
<td></td>
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<td></td>
<td>Managing Discomforts</td>
<td>More Relaxed</td>
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<td></td>
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<td>Pain Would Be Less</td>
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<td></td>
<td>Everything Back into Place</td>
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<tr>
<td></td>
<td>For Colicos</td>
<td>After Baby</td>
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<tr>
<td></td>
<td></td>
<td>When I’m not pregnant</td>
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<tr>
<td>Clear the eyes</td>
<td></td>
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<tr>
<td>It’s more natural</td>
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Differences and Tensions

Differences and Tensions emerged as a cultural theme from this focused ethnography. As experiences about the use of manzanilla tea were shared the stories told of advice from family members, professional health care providers, organizations and media. Many times variation existed between the popular shared knowledge about using the tea within families and those outside the sanctity of the
informant’s shared cultural beliefs. The voices of the women expressed their strong desire to adhere to tradition despite conflicting advice. Three domains were constructed in this theme.

Don’t Drink the Tea

Data in this domain illuminated the advice received from sources outside of the family or outside the cultural health beliefs that were embedded in the participant’s worldview. The informant’s statements spoke of the advice they were given, heard or received along with their thoughts or responses.

“Now that I’m pregnant I don’t drink it because the doctor told me not to drink any types of teas” (Rosa, 31-32)

“In reality I started going for consultation and they [the doctor] told me not to, not to drink it” (Maria, 142-143)… “she was drinking it everyday three times a day because her mom told her… and then the doctor said no, so when did she stop?” (investigator, 160-162) “like at three months” (Maria, 169)

Even though the doctor’s advice was against consuming the tea, family members continued to share their advice as well. At times the informant’s would adhere to the professional advice.

“You know they tell you about teas like if you want to drink the [manzanilla] tea just drink juice or that’s why I didn’t take it, I went with a doctor instead of the old advice” (Lucy, 77-79)

“I’m always afraid of doing something wrong so I always go ask the doctor and he is like well maybe nothing will happen, but I would just stay away from it or because you never know, so I’ve
never taken it and my mom and my grandma were always like go ahead nothing happens... (Lucy, 17-22)

"When you came home [from the hospital] and you took the Tylenol did you drink any more tea when you were home?" (investigator, 149-150) "No"... "they told me no at the hospital" (Ana, 152,156)

Other times the women would go with what their family recommended. Maria spoke with her mother every day and would tell her what the doctor would say.

"Maria says but the doctor told me not to [drink the tea], she [Maria’s mom] says no, no you drink the manzanilla because it’s gonna help you, so she drinks the manzanilla" (interpreter for Maria, 647-649)

Doctors were not the only health care professionals to advise against drinking the tea. In the hospital setting nurses discouraged drinking the tea.

"They told me I couldn’t take it [manzanilla tea] at the hospital because it would make the baby’s heart beat faster" (Ana, 120-121)... I asked them [the nurses] if I could take it and they said no" (Ana, 125)

"Maybe the hospital has [some rules], yeah, because she [the nurse] said that I couldn’t drink anything not even water, so that’s why my mom snuck my cup [of manzanilla tea] inside..." (Sally, 276-277)

When asked about who told them not to drink the tea, Rosa brought up a magazine as a source of reference.

"Because there is a magazine I got from the hospital and it talks about the teas, but I think it’s referring to some teas, maybe the ones some women use to abort or the teas that provoke abortion" (Rosa, 241-246)

Interestingly, university personnel were a source of advice about the use of the tea in pregnancy.
"Because well some people told me at the university um psychology that drinking tea was like dangerous, because you don’t want to even if the plant, it’s natural, it can contain like some other things that can be dangerous for the woman so, if I’m not sure then its better to quit” (Pamela, 63-67)

"But in the school they just don’t really tell me exactly if it’s good or bad because they don’t know, it has caffeine and everything is like recent so they don’t really know if it’s dangerous or everything else” (Pamela, 99-102)

The media of television provided another source for education about herbs.

"I heard it once on TV (pause) it wasn’t exactly about manzanilla but it was like all about all this kind of yerbas” (Pamela, 107-109) "All kinds of uh yerbas in Mexico because they really use it lots in Mexico all kinds of not only manzanilla and they just sell it like to anyone can buy of that and that can be dangerous” (Pamela, 114-117)

Doctors in Mexico are also advising the general public not to drink the tea.

"But in my town [where she grew up] not too long ago people are talking about doctors saying that we shouldn’t drink the manzanilla tea, but we always drank it” (Maria, 424-425)

A couple of contrast cases became visible within the data for this domain. Ana was asked what her mom thought when the nurses at the hospital told her she could not drink the tea during labor.

"She [her mom] thought it was weird ... and I asked Rosa [Women’s Health Care Nurse Practitioner at MCHC] and she said it was true” (Ana, 422, 426).

In this excerpt the professional health care provider is comfortable with the cultural care practice and reinforces the belief about the tea. In the next example the doctor in
Mexico was the one who advised Maria not to take the tea. An interesting twist was the doctor who now practices in Nogales, Sonora has practiced at MCHC in Nogales, AZ in the past. This physician is imposing the adopted Anglo view in his practice in Mexico.

"The doctor here she [Maria] says hasn’t told her anything, the doctor in Mexico was the one that told her not to drink it [manzanilla tea] ... he is Mexican but he has worked here in Mariposa" (Interpreter for Maria, 483-484, 488).

One informant shared the hospital in Nogales, AZ had served her manzanilla tea after she had given birth. This was contradictory to all the stories shared about the professional health care providers in the hospital setting.

"Right there in the hospital, not before, but they brought me manzanilla tea after the birth, with my food" (Guera, 888-889, FN) "Where did you have your baby?" (investigator) “Holy Cross ... yeah, they brought it to me the next day” (Guera, 890, FN).

I Drink it Anyway

The informants gave consideration to discounting the professional and organizational advice regarding drinking manzanilla tea. This domain describes the women’s decisions and actions surrounding drinking the tea even against medical advice.

"No [the doctor hasn’t said anything] she says she doesn’t even ask and she is planning to drink it” (interpreter for Maria, 494-495)

"But I still do drink a little bit, maybe half a cup” (Maria, 151)
“She [mom] says she’ll give me some the last day” (Rosa, 130)

“Because when you’re here [in the hospital] and she [my mom] gave it to me hiding” (Sally, 246-247)… “She [my mom] said it [the cup of manzanilla tea] was hers, but I drank it” (Sally, 256)… “so when the nurse came in she is like, is that yours and I’m no it’s my mom’s” (Sally, 260-261)

One woman talked about using both prescribed and traditional medicine simultaneously when she was ill.

“When I was like four and a half months I got sick again and I was drinking medication but I was also drinking a little bit of manzanilla, I would drink like half a cup in the morning and half a cup in the afternoon, but not too hot” (Maria, 175-180)

Rationalization to use the tea existed secondary to lack of specificity on the part of the provider.

“I think I’m going to drink it because actually the doctor didn’t specify the manzanilla tea, he just said teas, but I think he was referring to other types of teas” (Rosa, 154-157)

The tea was used as self-care prior to seeking professional advice.

“I did take her to the doctor, but I used that [manzanilla tea] on her, you know when you’re desperate and your baby’s crying” (Lucy, 304-305)

Sometimes rituals using manzanilla tea were carried out by the elders despite parental wishes. In the following excerpt an infant boy was assumed to have a fallen fontanel and the grandma did what she felt was best for the baby anyway. The grandma was confident in her knowledge of the traditional practice to by-pass the father of the baby who possessed other beliefs because of his professional medical
education. A difference in health care belief systems existed which ultimately created tension due to the initiative of his mother.

"She [grandma] told me that actually she used manzanilla tea in the mollera" (Pamela, 282-284) "And then she turned him like this (holding her hands in the air as though lifting the baby upside down) and puts some [manzanilla tea] here and some here and then she (flicking noise) hit him (Pamela, 288-289) "on the palms of his feet" (Pamela, 293) "and my father was really angry because he is a doctor, so she did it when he wasn’t there" (Pamela, 297-298)

Confused and Afraid

This third domain of Differences and Tensions describes the internal conflict some of the women experienced surrounding whether to use manzanilla tea or not. These women were struggling with previous life experiences, the knowledge that has been shared with them by family members about traditional practices, and what new information others have shared.

"My decision was not to use it during my pregnancy, because I heard a lot of things like they, can I say it in Spanish?" (Pamela, 48-50) "She heard some things that got her confused" (interpreter for Pamela, 52)

"I don’t know, it has been difficult because all my life I have been drinking manzanilla" (Pamela, 83-84) "When I have the flu and when my stomach aches, everything, so it was like confusing whether to use it or not" (Pamela, 88-89) "My family they’re okay with the manzanilla they really believe in that" (Pamela, 94-95)

"I haven’t talked to them [my mom and grandma] about that [the manzanilla tea during labor], because sometime ago I used to talk to my grandma a lot about this, but then I realized that she [grandma] has like little customs that are not used anymore so I didn’t really want to, to have her invest in everything because
it’s like really confusing its my first baby and it’s like everyone tells you different things and it’s really hard” (Pamela, 193-198)

"I did go buy it in little bags I did go by it to tell you the truth, but I did not, I just never got to” (Lucy, 137-138) “I had it in case because they [mom and grandma] wouldn’t stop talking to me” (Lucy, 142)

"For me I don’t know yet, so I have to ask, I thinking I’m going to have to ask my doctor here [in Nogales, AZ] so maybe he can tell me if it’s good or bad, because I don’t know about any for induction or all those things and I know that whatever I eat goes to the infant, my baby, so I know that I have to be careful with that, but I don’t know if that’s good or not I have to take it or not” (Pamela, 136-141)

As the core category of Uncertainty emerged from the data more specific questions were asked of the informants as to why they felt this sense of confusion or what they were concerned about if they used the tea. A couple of the women voiced that potential physical effects created by drinking the tea founded their concerns.

"I didn’t [drink the tea] during the last month, the last two or three months I had cramping and because it’s hot, I thought, maybe the baby would come earlier” (Lucia, 24-27) “I didn’t use it the last three months, because I was afraid because it’s hot and then” (Lucia, 44-45)

"When I’m pregnant that’s when I was confused. I wasn’t sure” (Lucy, 172-173) “I thought maybe the pains were gonna be worse or maybe it was gonna be before the due date and I didn’t want that to happen, that was my main concern” (Lucy, 185-187)

Manzanilla Tea: Values, Beliefs, and Practices

The data obtained from this study’s exploration into the cultural practice of using manzanilla tea during the
childbearing period assisted in the synthesis of this cultural theme. Many stories were told by the women connecting their life experiences with their cultural health care knowledge. Social construction of the culture in the border region for these women is evident in the findings. This cultural theme has three domains, 10 categories, and five sub-categories (refer to Table 4). Each will be presented with the supporting data excerpts.

**Generational Knowledge**

This domain explains how the knowledge surrounding the traditional uses of the tea is passed on generation after generation. The three categories lending descriptive support to this domain are: Everybody Knows, Because of our Mothers and Grandmothers, and Passing Along Knowledge. Informants were asked “Can you tell me how you learned about manzanilla tea and it’s uses?” Many times with the source came information about what was shared by the source.

**Everybody Knows**

This category encompasses knowledge obtained about the traditional practice of drinking manzanilla tea from various sources within social circles, communities or geographical region.
"My mom and friends and people that I know have told me to drink the tea" (Lucia, 265-266)

"From a lot of people, but I was wondering if it was true" (Ana, 508)

"I have actually inquired with friends and they told me about the contractions getting faster... but I’ve been asking around" (Maria, 309-312)

"She’s heard she has a friend in Tucson and a friend in her town where they both drank manzanilla and they both have told her that its [labor] been rapid" (interpreter for Maria, 551-553)

"I was talking with this lady from another town, she said that when the labor pains start and you drink manzanilla the labor pains intensify and get harder and harder and the contractions faster, faster and faster, and to drink it hot and the contractions get faster and faster and pains are more intense" (Maria, 241-246).

"My la mama de mi esposa" (Pamela, 448-449) mother-in-law (investigator, 451) “okay, uh, she has told me that if I want to calm the baby I should drink a little manzanilla tea” (Pamela, 453-454).

"My friend had mentioned that she had used it [manzanilla] in her first pregnancy a lot and she didn’t really tell me what she used it for, but that um when it came time for her to be in labor that it was the best labor she ever had” (Hailey, 129-133)

"Well at least with the people I know and have had babies, I’ve been there and they drink it...” (Rosa, 723-724)

"I guess everyone in some moment [has told her about manzanilla tea] because that’s the magic cure or something you know so I don’t know like my aunts and many people have told me in some part of my life something about the manzanilla” (Pamela, 491-495)

Even one of the husbands learned about the tea from seeing the effects and how it helped his wife have a better labor.

"He [her aunts husband] didn’t know about the tea well and now he believes about the tea” (Sally, 618-619)
The sharing of knowledge and uses for the tea extends beyond what to do for pregnancy and labor.

"Well I’ve heard of a lot of people that drink it, but not necessarily for inducing labor, but yeah, I know everybody uses it” (Sally, 360-361)

“When you drink it really, really hot you lose your baby". [She learned about this] “In high school from everybody” (Guera, 901-902, FN)

Because of our Mothers and Grandmothers

This category describes the informants’ perceptions of how and why they see their mother’s and grandmother’s as the primary source of knowledge transmission. Tradition emerged as a strong concept from this category as a reason for intergenerational sharing of knowledge.

"Because of their mothers also being taught the same thing, and then, well her grandmother and you know mother teaching them (interpreter for Rosa, 690-695)

"I lived with my grandma for a couple of years and she told me to drink it for pregnancy” (Maria, 426-427).

"My mom says it really works, it really works, the belief people have and also it works, it works” (Maria, 677-679).

"They used it for many, many years like I told you with my grandmother and I guess from her mom and that goes on, and on uh, its happened and they were so used to it and they would tell me [about the manzanilla]” (Lucy, 116-119).

"I really think that its because we hear it from our family, that they used it so much that they give it to us and they’re like, its gonna be good for you, go ahead and take it and nothing is gonna happened and its gonna help you, that’s what I think it is” (Lucy, 215-219) “generation after generation that’s used to hearing the same thing” (Lucy, 223-224)
"My grandma said her family has used it before (pause) her mom introduced it to her" (Sally, 527-530)

The following question was asked at times for specificity,

"How did you (she) actually learn about the manzanilla tea?"

"My mom, my family, my grandma just in like family, we say tradition, culture, that we use it for everything" (Ana, 285-286).

"My mom and grandmother use it, the belief, tradition... I believed all my life" (Guera, 903-905, FN)

"Well through immediate from my family, my mom, my grandma" (Lucia, 295) "They’re remedies that we use" (Lucia, 301).

Some informants provided stories of their mothers and grandmothers passing on traditional knowledge through actions from one generation to the next.

"In the morning my mom was in a hotel in Nogales and I called her, Mom could I go walking from my house to the hotel? and she said you’re crazy it’s five in the morning and I’m like I can’t and so I went, I left in the car and when I got there she had the [manzanilla] tea ready for me, she is like drink this and I’m like what is it for, she is like just drink it, so I drank two cups". (Sally, 19-24)

"My cousins couldn’t drink it [manzanilla tea] because they were pregnant, because my grandma, she is like don’t give tea to them because they’re pregnant" (Sally, 70-72) ... "one was three [months] and the other was seven [months] and she is like they can’t drink it" (Sally, 76) ... "you can’t drink it until you’re, you’re almost due" (Sally, 78-79) ... "well grandma just said until, uh they were ready (pause) to pop". (Sally, 85-86)

"The first one I know she [my sister], she drank it the whole time I don’t know about the other ones, because she wasn’t here so my mom wasn’t there" (Lucy, 223-224) "but let me tell you when she [my mom] went to visit, she took the manzanilla with her (laughing) after the baby was born" (Lucy, 273-274)
When family members are not living close substitute mothers and grandmothers are consulted.

"When I go to the supermarket or to Walmart where they sell plants and it’s really difficult for me to find the one that I’m looking for, I know the name, but I don’t know how it smells or how it looks so it’s like difficult and I have to be talking to all the people or other mothers or grandmothers that I see in the supermarket to tell them to help me because I have no idea". (Pamela, 623-629)

**Passing Along Knowledge**

The informants were asked if they would share their knowledge about uses for *manzanilla* with their daughters or children.

"I will teach my daughters what I know and I feel confident that my mother will teach them too" (Lucy, 504-506, FN)

"Yes, oh yes, instead of medicine they [my children] will have *manzanilla* just like my mom did with us because it always works, I’ll do the same thing". (Maria, 691-692)

"Oh definitely I’m giving it to her definitely... but I’m definitely giving her the tea. I don’t know if it’s maybe a superstition that it does work or it doesn’t work, but just in case it [the information about *manzanilla* tea] will be ready [from mom] for her [to daughter]". (Sally, 483, 485-487)

**Nothing Bad Happens**

This domain expresses the confidence these women had in the safety of *manzanilla* during pregnancy and labor. If the tea provided good, effective, safe results for grandma or other female family members, use of the tea must be acceptable. The positive stories reinforced confidence in
planned use. Tradition intertwines and links intergenerational knowledge.

"Everything came out good for them and they used it for many, many years" (Lucy, 116-117).

"Yes [I will take it] because all my family have done it my mom had five children, natural births, and she drank a lot of manzanilla during all her pregnancy and nothing bad ever happened" (Maria, 221-223).

"Because my grandma she had 8 daughters and also her daughters drank it so" (Rosa, 211-212), "and nothing bad has happened" (Rosa, 222-223).

"She [my sister] used it [the manzanilla], she did listen to them and nothing happened, nothing bad happened, nothing, she would take it like they told her" (Lucy, 244-246).

"I asked my grandma does it help you to have your baby faster and she said, she had 12 girls and she is like, I’m done pretty good" (Sally, 538-540)"She [grandma] always had a good, a good delivery" (Sally, 552).

Why We Use Manzanilla Tea

This domain has the most detail within the segments as many of the descriptive questions would have elicited this information. Women provided a lot of information about why and how the tea was used; cultural expectations of the tea. Expected physical outcomes are presented even though physiological effects are not common knowledge for these women. Manzanilla has diverse uses for persons during the childbearing period. Seven categories with supporting sub-categories are inclusive to this domain. Both lived experiences and intergenerational transmission of knowledge
assisted in the construction of this domain and supporting areas.

Get Ready for Labor

This category highlights the women’s responses about using the tea as preparatory modality for labor. Use of the tea was generally not encouraged until women approached the end of pregnancy.

"I took manzanilla before when I was pregnant, when I was like 8 months or 9th because it helps, it makes it faster the delivery that’s what I heard" (Ana, 22-24).

"They [mom and grandma] say the body starts preparing itself for the birth, when you drink it [manzanilla]" (Maria, 438-439).

"They [mom and grandma] would always tell me at the end of pregnancy to take it, because it helps you like get into labor" (Lucy, 15-17).

Start Drinking Before

This sub-category reflects the specificity of transmitted intergenerational knowledge relating to when to begin drinking the tea.

"My mom says I should drink it three weeks before labor, to start drinking it around that time" (interpreter for Maria, 318-319).

"Before, like, like if my due date was like August like with my older daughter it was August 19th and they told me two weeks before, when to start taking it so it helps with the pains and all that" (Lucy, 28-31).

A couple of the women shared how much of the tea they were instructed to drink to assist with labor preparation.
"Start drinking the manzanilla 2 weeks before I was due... one cup a day" (Guera, 884-885, FN).

"The last month when I used to take, I took it like once every day or I took it once every two days" (Ana, 62-64).

**Makes Labor Faster**

Many of the women spoke of the benefits of *manzanilla* during the labor process. This category will elucidate the cultural care knowledge surrounding the ease and speed of labor when using this cultural care practice.

"When we got there [to the hospital] I asked her [my mom] what happened with, what did you give me? She said its just manzanilla tea and I’m like but what is it for, is it like for inducing labor or what?, and she said well I just heard it helps you deliver faster" (Sally, 31-34) "My mom just said that it induces faster, it helps you faster" (Sally, 36-37).

"It [the manzanilla tea] helped, it [labor] went faster" (Ana, 75)

"They [family] told me to drink the tea once the labor pains started and that would make things go faster" (Lucia, 265-267).

"A partera (midwife) in Mexico who delivers all the women would tell everyone to put cocoa powder in the manzanilla tea (pause) makes less pain and faster" (Ana, 236-238, FN) "Makes the tea heavier and your labor faster" (Ana, 243, FN).

Some of the women were very short and to the point about what they thought the *manzanilla* actually did for them in labor.

"The only thing, it dilates faster" (Rosa, 854).

"They [mom and grandma] have told her uh that it would be more rapid" (interpreter for Maria, 449-450).

"The labor would be faster and pain would be less" (interpreter for Lucia, 458-459)
The reference to hot tea being more effective for contractions was brought up by the women. Here Maria and Lucia speak specifically to the hot tea creating a more effective labor pattern.

"When the labor pains start and you drink manzanilla the labor pains intensify and get harder and harder and the contractions faster, faster and faster, and to drink it [the tea] hot and the contractions get faster and faster and pains are more intense" (Maria, 241-246)

"She did drink it here and there – not regularly, drank it when she had labor pains, she drank and walked and drank and walked, her other two children were a lot faster to deliver [because she drank the tea]” (interpreter for Lucia, 629-632, FN)

Others shared their knowledge of how to prepare and consume the tea during labor.

"And usually the day of... when the day came to have birth that they would cook, like in big pots, a lot of manzanilla in big pots and then they would have to drink it all, all of it” (interpreter for Rosa, 421-422, 424-427).

"They just told me to make a big pitcher and just drink it like regular water ... drink both [water and tea], that’s what my mom told me, drink both, drink it like instead of two cups of water drink one cup of water and one manzanilla (pause) and then they will tell me drink it warm because it helps a lot” (Lucy, 57-60).

"So I had one [cup of manzanilla tea] at five, five, six, probably like ten minutes before seven and one like at, like at eight and two hours after I had my daughter and ten minutes in labor” (Sally, 142-144).

There were a couple of outliers on what the tea helped with during the labor process. These were not saturated in this study however anecdotal stories have provided the same information.
“She says that the other thing they have told her about when you drink manzanilla is that when her baby is born, that it doesn’t is not born with all that white cream stuff, that its born cleaner” (interpreter for Maria, 503-505).

“For the baby to come down easily and also for the baby to be more wet at birth” (Guera, 881-882, FN).

Managing Discomforts

This category represented the women’s voices about how drinking the tea was beneficial. The common beliefs are organized in two sub-categories.

More Relaxed

In this sub-category the women spoke about the calming effect of the tea. Being more relaxed allowed these women to experience or anticipate less pain.

“So I drank a cup and I was like still anxious and so I went around the pool, I walked for another hour and then she [her mom] gave me like another cup and then she said, this will make you feel better and as soon as I drank that other cup I sat on the sofa and I was falling asleep and I was actually comfortable and then and relaxed” (Sally, 112-116)

“Her mom told her that that her muscles would be a bit more relaxed and they wouldn’t be – contracting as much, would be more relaxed, the labor would be easier” (interpreter for Maria, 338-342)

“Just that it calms” (Pamela, 253)

“She [Lucy’s sister] did say it would calm her down a little bit, she was, she would mention that” (Lucy, 251-252)

“You know making it easier and it would calm down and the pains won’t be so strong and that they would tell me it helps you in labor, it helps you make it easier for you” (Lucy, 331-334)
Pain Would Be Less

As in any health situation management of pain was key to these women. Many knew to drink the tea for pain management.

"Just for the contractions and all that, you know the pain that they feel" (Pamela, 203-204)

"Just for the pain... so it can go away". (Ana, 390, 394)

"I think for the pain, maybe decreases the pain some" (Rosa, 342)

"It [her labor] went fine, didn’t have much pain" (Guera, 885-886, FN).

“When it came time for her [her friend] to be in labor that it was the best labor she ever had and it helped her handle the pain better and keep in control, keep in control is the word she used” (Hailey, 132-134).

"Calming the cramping, that’s what they [mom and grandma] would tell me it's gonna calm down the pain" (Lucy, 154-155).

"They’ve also said to drink it because the manzanilla is good for the pain" (Lucia, 148-149).

Management of discomforts with manzanilla tea continued into the postpartal period for some of the women.

"I think only for cramping, pain, or discomfort" (Rosa, 487-488).

"I used it for the pains after and bloating" (Guera, 886, FN)

"They [her mom and grandma] told me that it would help me after labor and after I had my c-section they told me go ahead and take it, this is gonna help you relax and everything with the pains you know those crampings that you get" (Lucy, 39-42)
Everything Back Into Place

Involution of the uterus emerged as a category within the data. A couple of the women shared this information their family members passed on to them.

"For me for my stomach to go down..." (Ana, 221)

"It’s good to drink a lot of manzanilla after the pregnancy to help everything get back into place" (Maria, 359-360).

"Yeah that to drink it because it will clean her stomach from anything that might [have] stayed, um but it will cleanse your stomach and everything would go back to place" (interpreter for Maria, 578-580).

For Colicos

This category under why manzanilla is used encompasses varied developmental and life stages for women. Incorporated within the data are uses that revolve around menses, postpartum, breastfeeding and infant care. Two of the women brought up drinking the tea during the antenatal period to calm the baby. This provided an anticipated direct effect on the fetus while inutero.

"I had a lot of cramping because she was moving a lot, but it seemed that with the tea she didn’t move as much" (Ana, 257-259)  
"She would calm down, at first she moved a lot but then she calmed down". (Ana, 267-268).

"Now that its [the baby] moving sometimes it moves a lot" (Pamela, 448-449)  "She [her mother-in-law] told me that if I want to calm the baby I should drink a little manzanilla tea" (Pamela, 453-454).
After Baby

This sub-category shares the women’s stories about using the tea after the baby has been born. The tea could be either taken by the mother to help the baby via breastmilk or feed directly to the infant.

"Yeah they said that if I take it she won’t get colicos … cramps because I’m breastfeeding" (Ana, 203, 207).

"After she had the baby she did drink it… She drank it for cramping and she drank it for the baby because it would be good for the baby, like she was breastfeeding the baby and so the baby would also have some of the, would have some of the effects [decreased cramping] … through the milk” (Interpreter for Lucia, 72, 82-85, 89).

The majority of the women in this sample either gave manzanilla tea to their infants or were advised to do so.

"After the baby is born we give it to the baby for colics” (Rosa, 449) "In Mexico for example, my best friend just had a baby and the doctor told her to give the baby three ounces of milk and then three hours later two ounces of manzanilla tea and then one ounce of water and then three ounces of milk and so on” (Rosa, 460-463).

"With the colic to give him manzanilla, hmm and when he is like suelto del estomago (diarrhea), or colics, the flu of course, that’s like the basic” (Pamela, 643-648).

"Yes, because I know for sure its not gonna affect, because there is another thing I wanted to mention, they [mom and grandma] told me to give it to the baby, when the baby was born and I did do that, I did it and nothing bad happened it was really good, it would calm both of them, I actually used it with both so I really like it” (Lucy, 168-172).

"Yes that it is good and to also give it directly to the baby for colic to give the manzanilla tea instead of water and the baby would be calmer” (Lucia, 132-134).
And we used the tea for uh the baby’s for upset tummies” (Hailey, 26-27).

“For the baby for their colics” (Guera, 880-881, FN) “[Give the baby] warm tea, one cup three times a day” (Guera, 906, FN).

When I’m not Pregnant

A common thread in this sub-category was the use of manzanilla tea for menstrual cramping. Drinking the tea for colicos (cramps) during menstruation represented another aspect of benefiting uterine activity.

“I used to take it [manzanilla tea] a lot before because I used to have really strong cramps, really bad, and I would take it during my period... when I had, [I would drink the tea] when I had uh cramps like once or twice a day... [the tea would help] my cramps go and my bloating” (Ana, 447-448, 453-454, 459).

“Well the example with the tea, when I was on my period... I used to drink it when I had my colicos (cramps)... for the pain I used to drink the tea and I called good” (Pamela, 217-218).

“I used it when I’m not pregnant, I have used it in the past like just to relax or when my stomach it’s upset because they [family] also told me that its good for that so I drank it like what can I say, not really often, but I do (pause) before I used to get a lot of bad cramps, very bad when I was during my period and I would take it to see if it would make it easier, sometimes it would, sometimes it wouldn’t” (Lucy, 65-71).

“She says that the tea is very helpful with your menstrual cycle because your cramping is less” (interpreter for Lucia, 477-478).

“For cramps it will help a lot” (Guera, 907-908, FN).

“[I drank] mostly one cup and then I waited and if I (pause) I felt like a relief when it was like falling maybe because of the hot the water or something but it was like relief and then if the pain started again, I tried another cup” (Pamela, 682-685)
Clear the Eyes

This category was constructed as many of the women spoke of using the tea for eye care. The use of manzanilla on the eyes could be for conditions at any age.

"And about the baby, my grandma used to put some manzanilla on the in the eyes of the baby... [for] the view... like not having problems with like contaminacion, contamination" (Pamela, 147-149, 153, 161-162) "Actually I think it’s more to clean, actually when they give birth they actually do that to the children, well right after birth, when they take the baby home and the mother would always put in some manzanilla to clear out any like uh, uh whatever like anything that they have in their eyes like uh what you call like placenta stuff" (interpreter for Pamela, 171-174) "The vernix, the white?" (investigator, 176) "Yeah the white thing, that’s what they tried" (interpreter for Pamela, 178).

Not only was the use preventive but also palliative for eye infections. Stories were shared of using both moist tea bags and of purchasing Manzanilla eye drops across the line.

"You know what they do use the tea bags for when they have eye infections, they put it on the eyes" (Lucy, 283-284) "Yeah, yeah they cool it down and then, I used it on my daughter once, she had her eyes were really red and they were like really swollen and I put some and it did bring them down, the swolleness it brings it down" (Lucy, 292-295).

"[For] eye infections ... [the tea] cleans the eye... [use a] warm cotton ball on the eyes and then use the medicine, [the tea is] just to clean the eye" (Guera, 893-894, FN)

"For the kids, yeah, for eye infections like we used it for the pink eye" (Hailey, 42-43).

"My mother has dry eyes and it [manzanilla tea] helps her ... [she] rinses her eyes with warm water that has manzanilla tea ... the solution helps with pink eye and allergies in the eyes" (Ana, 239-242, FN)
The term “natural” was used in various ways by different informants. According the many of the women, it was important to purchase and prepare the tea from the plant for the most effective results. This category primarily explains natural as an important reason to use the tea.

"Because it was like really natural and the hot water maybe the manzanilla I don’t really know what it was but it was calming" (Pamela, 218-219).

"Because in her way of thinking its better than drinking uh pills or stronger medicine especially medicine … for being natural, cause its natural" (interpreter for Lucia, 358-359, 363).

"My mom says the little flowers are more natural than the little bags” (Rosa, 599-600).

"Well it’s [the manzanilla] just natural, you know its just herbs” (Hailey, 60) and “Oh yeah, it’s really easy its not expensive and it’s all natural” (Hailey, 115).

"There in Mexico we have markets that are really different from here I mean they’re markets and the people just sell it [manzanilla] like that like plants and they are used to have it like that, and she [grandma] used to buy it like that” (Pamela, 596-599).

"[I was told] to get the plants not the little bags just go for the real thing and then do it” (Lucy, 119-120) “They just told me to get it, like we are used to going across the line, and they told me go across the line and go to the store where they sell it and they would give it to you, they already know” (Lucy, 134-137).

Maria’s family who reside outside of Hermisillo, MX will only drink the manzanilla they grow. Maria’s expectation of natural involved including nature in the process.
"We plant it and cut it and package it" (Maria, 101-102) “That’s what we do in my town, its not possible to do it here because there is no space, I live in a town like 5 hours from here” (Maria, 111-112).

Research Questions

This section will address the research questions posed at the beginning of this research study. For this ethnography, an interview guide was utilized to keep the transactional interview process focused while allowing the subjective perspectives and experiences to emerge. The purpose of this dialectical study was for discovery and meaning. The various types of questions (Patton, 2002) asked of the informants from the interview guide were experience and behavior questions, opinion and values questions, and knowledge questions. The Demographic Questionnaire asked background and demographic questions. All the questions were addressed throughout each interview with the corresponding data providing rich, descriptive findings. As the data analysis progressed, more descriptive and structural questions were asked for enhanced detail and more specificity.

Research Question 1: What are the culture care (emic) components (values, beliefs, and patterned lifeways) related to the use of manzanilla tea for women of Mexican origin
living in the Arizona-Sonora, Mexico border region on the uses of manzanilla tea during the childbearing period?

Most of the questions on the interview guide related to this research question. Discovery surrounding this traditional practice in this specific population arose from the informant’s responses. Meanings were revealed as the women’s voices shared what has been shared traditionally. 1a. Tell me what you know about manzanilla tea for late pregnancy, labor and right after birth?

Each informant had experienced or knew about using manzanilla tea for health care. Family members had passed on information pertinent to health care during the childbearing period within this culture. Consistency arose among the information for each area of the childbearing process: late pregnancy, labor and birth, and after the birth of the baby. None of the women knew the physiological reasoning for the tea, they just knew it was effective because of their strong belief in the knowledge of their elders.

Explanations and examples for late pregnancy incorporated easing the last month’s discomforts, ability to relax, sleep better, decrease stomach inflammation (bloating), and to prepare for birth. The most common of
these was to use the tea to prepare the body for the upcoming labor and birth.

"They [her mom and grandma] would always tell me at the end of pregnancy to take it, because it helps you get into labor" (Lucy, 15-17).

"They say the body starts preparing itself for the birth, when you drink it" (Maria, 438-439).

In addition, a couple of informants described using the tea to calm the baby in utero. Maternal consumption of the tea resulted in fetal effects.

Many similar terms were used to describe what they knew the manzanilla would help with during the labor and birth process. Table 5 will provide descriptors in the voices of the women pertaining to what manzanilla was known to do for labor and birth. Both psychological and physiological effects/expectations of the tea were described by the women. Data excerpts will be provided after the table for confirmability.

**Table 5: What is known about manzanilla for labor and birth**

<table>
<thead>
<tr>
<th>Description</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relaxes you</td>
<td>Labor pains intensify</td>
</tr>
<tr>
<td>Deliver faster</td>
<td>Pains get faster</td>
</tr>
<tr>
<td>Calm the pain</td>
<td>Pains get more intense</td>
</tr>
<tr>
<td>Relieve stress from giving</td>
<td>Less pain, it’s easier</td>
</tr>
<tr>
<td>birth</td>
<td>Labor will be easier</td>
</tr>
<tr>
<td>Decreases the pain</td>
<td>Muscles will relax more</td>
</tr>
<tr>
<td>Dilates faster</td>
<td>Labor is more rapid</td>
</tr>
<tr>
<td>Induces faster</td>
<td>Baby is born cleaner</td>
</tr>
<tr>
<td>Makes you feel sleepy</td>
<td>Increases the pain</td>
</tr>
<tr>
<td>Good for the pains</td>
<td>Have the baby sooner</td>
</tr>
</tbody>
</table>
"Drink the tea once labor pains started and that would make things go faster" (Interpreter for Lucia, 267-268).

"My grandma told me that it calms you down, since it’s hot its good for the labor pains” (Rosa, 58-60).

"When it came time for her to be in labor that it was the best labor she ever had and it helped her to handle the pain better and keep in control, keep in control it’s the word she used”. (Hailey, 129-132).

Two of the women expressed that hot tea intensifies the tea’s effect on contractions. Drinking the tea is discouraged in the early months of pregnancy because it can intensify uterine contractions which can lead to aborting the fetus. Late in pregnancy the practice of drinking hot tea is encouraged to stimulate or increase the intensity of the contractions. Lucia avoided the tea because she was experiencing preterm contractions and did not want to aggravate her body into early labor.

"The hot tea would make her baby come sooner, so she didn’t drink it at all, because she was trying to keep the baby from coming” (Interpreter for Lucia, 218-220).

These women also knew of uses for the tea after the baby was born. Some of the uses for the tea pertained to the uterus after the birth of the baby; all were physiological. At this stage drinking the tea assisted with involution, decreased the cramping uterine pain, and cleaned out the remnants of birth. Decreasing colicos
(cramping) and colics (gas) were mentioned for both mom and baby postpartum. An interesting finding was the belief the infant could receive the effects from consumption by the mother via the breastmilk.

1b. I’m curious to know what you think about the use of manzanilla tea.

This question provoked many of the feelings these women had about using the tea during pregnancy and birth. Women discussed the conflict between the intergenerational knowledge with their embedded cultural beliefs and the professional care system or organizational influence. Rosa and Pamela represented many of the informants who were exposed to differences in health care beliefs. Rosa had not used the tea up to the point of the interview with her, but expressed that she would do so at the end of her pregnancy.

"But my mom says that she always drank a lot of it, especially the last day, it helped her, she thinks it’s good for the labor ... she says she’ll give me some the last day" (Rosa, 117-119, 130-131).

"Lets see, pregnancy is like difficult for me because in my family they used it a lot, but my decision was not to use it during my pregnancy, because I heard a lot of things like they que me confundieron (that confused me)” (Pamela, 47-50).

"Well it’s just natural, you know it is just herbs, there is no caffeine and so I don’t think it would hurt the pregnancy at all” (Hailey, 58-59).
lc. Can you tell me how you learned about manzanilla tea and its uses?

Family members were more often the source of traditional knowledge for the women in this study with mothers and grandmothers most often. Friends and women in the community were also sources of knowledge about this cultural care practice.

"Her grandmother told her mom and her mom is telling her" (Rosa, 65-66)
"My mom, my family, my grandma, just in my family we use it for everything" (Ana, 267-268)
"Her grandmother the same thing as her mom ... her grandmother from her Dad's mom too" (Maria, 586, 594).
"My mom" (Hailey, 103).
"My mom, friends, people that I know" and "Through her mom, her grandmother, they're remedies that her family uses, her mom" (Interpreter for Lucia, 266, 293, 297).

Sources outside of the cultural or familial circle such as professional health care providers and various sources of media generally provided conflicting information.

ld. Have your ideas about manzanilla tea changed over time? Why/why not?

For some, the experiences are what solidified their belief in the cultural practice while others have just held on to tradition by using the tea even though the use was discouraged. A state of fluidity created by opposing views on the use of manzanilla caused some wavering from
traditional values, but if confident in the practice or the outcomes were good and safe these women held firm to their belief.

"She [grandma] feels really, really stronger about it that it does work, and I mean I’m starting to believe too" (Sally, 542-543).

"For this baby I’m planning to drink like a whole gallon [of manzanilla tea] before, I am so ready with the box and everything I got it at home" (Sally, 35-36) “Because I’m due March 26, so when I feel like I felt before ... I’m planning to [use it again]” (Sally, 166-168).

"Now that I know it [manzanilla tea] doesn’t harm the baby I’d like to take it during my uh labor” (Ana, 330-331).

"Not really, maybe a little bit no exceeding, because I see my grandma and she is taking manzanilla like every day for everything” (Pamela, 442-444).

"She believes the same, she says she continues to believe strongly and the same and every time she goes back to her home town she brings back a new bag of manzanilla tea”. (Interpreter for Maria, 614, 620-622).

"That I can remember no, and I didn’t use it with the oldest one, I thought it was something like wives tale, you know for the second one and with her [newest daughter] I have used it” (Hailey, 66-68).

"Yes, because there are other things now, but [the tea is] still good” (interpreter for Lucia, 308, 312).

1e. In your opinion why do you think women drink manzanilla tea?

Many of the answers to this question revolved around the history of effectiveness, a belief in the effectiveness, and a history of no problems. Tradition was important to the belief in the tea as well as to receiving
the information intergenerationally. Use or planned use was strengthened by use in the previous generations. The concept that the tea could be taken in lieu of a drug was pleasurable; the tea was considered more natural. An important belief among this population is that medicine is reserved for the sick; otherwise you try something natural.

"My grandma just said because her family has used it before, because her mom introduced it to her" (Sally, 515-516).

"I guess that if you ask people I mean is more like a drug because I mean maybe it really relaxes the hot water, I mean the flavor is like really nice and comforts down" (Pamela, 489-491).

"Because all my family have done it my mom had five children natural birth and she drank it during all her pregnancy and nothing bad ever happened" (Maria, 222-224).

"My mom says that it really works, it really works, the belief people have and also it works, it works" (Maria, 670-671).

"She says that in her way of thinking its better than drinking pills or stronger medicine, especially medicine … for being natural, cause it’s natural" (Interpreter for Lucia, 358-359, 363).

If. Is there anything else you would like to tell me about manzanilla tea?

This question either opened up the door for anything and everything or the informant had nothing to add. Stories of other uses for manzanilla were vast and included: miscarriage, upset stomach, menstrual cramps and bloating with periods, calm the pain of menstrual cramps, ovarian cysts, eye infections, allergies in eyes, nerves, when cold, when hot, stress, depression, for everything, to
decrease belly fat and as preventive medicine to ward off illness. Many women pointed out they have drank the tea all their lives for various conditions. Their family members, mostly mom or grandma, just gave them the tea when it was needed to restore health. Some data excerpts are presented to clarify meaning. It appears there are many uses within the childbearing process and outside of the process. Many of the uses for the tea weave into women’s health care.

"I’ve always drink the tea all my life, because my mom was always giving it to me, when like I have an upset stomach or it just calms me down and it made me go to the bathroom calmly” (Sally, 302-304).

"I really had bad pain [with the cysts] so when I used to have the manzanilla and all that with my pain it was like better for me and all the time I didn’t really know when those came back” (Pamela, 582-585).

"I drink it for everything, I have a big bag at home I drink it for depression, colics, headaches, even for stomach inflammation and she says I should drink a lot of it after the birth” (Maria, 364-366).

"After a shower her mom has always given them like a manzanilla the manzanilla tea cup of manzanilla tea just in case so they won’t get sick, every time they take a shower” (Interpreter for Maria, 718-720).

"The first three months is a delicate state and therefore is not good to drink any kind of teas, because there is the danger of loosing the baby”. (Interpreter for Lucia, 181-183).

"The tea is very helpful with your menstrual cycle because your cramping is less”. (Interpreter for Lucia, 477-478).
Research Question 2: What are the experiences of Mexican women of childbearing age in using manzanilla tea during the childbearing period?

The questions that were central to capturing the emic perspectives of the informants' experiences will be presented.

2a. Tell me about your experiences with manzanilla tea.

Many times this question had been previously answered. As pointed out previously, stories were used to explain what was known by the informants consequently the informants' experiences had already been shared. Experiences were shared about not drinking the tea, drinking it for preparation, labor, and postpartum. At times experiences outside of pregnancy and birth were shared but most related to the childbearing process. This question helped facilitate discovery about the uses of manzanilla.

"I was six centimeters dilated when I came in to the hospital so I was here for like two hours and so I got her by 7:30 and by almost 8:00 that’s when I was ready in the room and then the doctor just said okay we’re ready". (Sally, 48-50)

"I took manzanilla before when I was pregnant, when I was like 8 months pregnant or 9th because it helps, it makes it faster the delivery... I took one [cup] every night ... they told me to put cocoa it would help me" (Ana, 22-24, 35, 40)
"[I drank] sometimes a cup [of manzanilla] in the morning, one in the afternoon and one at night ... in reality I started going for consultation [around three months pregnant] and they [the doctor] told me not to, not to drink it" (Maria, 85-86, 144-145).

"Well to tell you the truth I didn’t [drink it] during the last month, the last two or three months I had colicos (cramping) and because its hot, I thought, maybe the baby would come earlier“ (Lucia, 29-31)

"She drank it for cramping and she drank it for the baby because it would be good for the baby, like she was breast fed baby so the baby would also have some of the, would have some of the effects ... through the milk” (interpreter for Lucia, 81-84, 88)

2b. Where do you get the manzanilla tea?

This question assisted in acclimating the investigator to the locale(s) the informants would use to acquire the manzanilla. Other probing questions stemmed from this such as whether the informants found a difference in the tea purchased in the U.S. versus across the line, their preference between the two, and how it was prepared. Much of this detail may prove to be helpful in future studies. Most of the women preferred the tea across the line due to the flavor of the tea and stated effectiveness however, at times convenience of the local supermarket in the U.S. superceded.

"the little flowers at the herbal store or bags at any supermarket” (Rosa, 567-568)
"...across the line, it’s definitely stronger the one from across the line” (Sally, 408-409, 416)
"It’s little bags, I think it’s from Mexico, it’s called farmacia or something” (Ana, 295-296).
"Now that I live here, I prefer to buy it in the store in Walmart or the supermarket" (Pamela, 499-500).
"I actually buy [the eye drops] in Mexico, I haven’t seen the eye drops here, the uh the tea pouches we buy them here" (Hailey, 74-75).

Reflective Journal

A journal was kept throughout the data collection and analysis segments of this research in order to address the issue of reflexivity. Numerous issues arose that were reflected upon in the journal. Similarities and differences within the cultural discovery and meanings were noted, feelings about connectivity with the cultural discovery and meanings, and feelings about events which occurred in an attempt to provide a sense of understanding were reflected upon in the journal. The reflective journal assisted the researcher in merging the emic perspectives with etic observations and assumptions.

Two issues were prevalent throughout the data collection process; the border as context and respecto. To demonstrate reflexivity on the part of the researcher, a summary of these two issues will be presented. The interviews were intended to be performed in the informant’s homes. Secondary to varying circumstances some of the informants did not wish to have the interview conducted in their home or they claimed their main residence was on the
Mexican side of the international line. Due to liability, the interpreters were unable to venture across the line for any of the interviews. At first the thought of interviewing the informants in another setting outside of their own surroundings would take away from the contextual setting, however, instead realization was the dilemma spoke volumes about the border as context. Barriers exist between the nations and create an atmosphere that is very much a part of the border region. The people on the U.S.-Mexico border, more specifically the Nogales, AZ/Sonora border, are used to crossing the line daily. Crossing the line is part of everyday life or at least part of life; 800,000 crossings occur daily along the border. It was not an abnormal occurrence for the informants to cross the line and meet me for an interview however it could be an inconvenience due to wait times at the border. Most of the informants still have family across the line into Mexico they frequently visit or cross the line to do shopping for items they cannot locate on the U.S. side. In addition, health care is sought from this border population on both sides of the line. The reality is crossing the line or the inability to cross the line is the border in context. The researcher felt fortunate for the opportunity to interact and obtain
stories from women claiming to straddle the border. Their transnational status was reflected in their ease of movement between both countries as well as their continued integration of traditional practices.

The concept of respeto was seen in the professional health care setting and in the privacy of the informant’s homes. Respeto is a term used in the Spanish language which means respect, consideration, reverence or regard for others (Castillo & Bond, 1987). The first encounter in this study occurred when the study was being presented and explained to the promotoras at MCHC. The promotoras requested as much of the information as possible be presented in Spanish. This was somewhat of a challenge in that the researcher is not fluent in Spanish. Many times English was used and the director assisted with interpretation of meaning if needed. Initially, the feeling was that the promotoras did not quite understand what the study was about and why someone would inquire about such an issue. However, each one nodded and stated they understood. Acknowledgement is a typical cultural response of respect for “a professional”. Ultimately, the promotoras did assist with recruitment of the participants.
Other examples of respecto occurred in the informants homes. The informants would guide us to sit in the formal living area for the interviews. Refreshments were always offered. Generally, family members were asked to stay in another area by the informant than where the interview was taking place. Many interviews began more formal than they ended as the comfort levels increased for the informants while simultaneously the request was extended to act as though we were just having a normal conversation. It may have been somewhat intimidating to have a health care professional in their homes. It was mentioned this may have been as important as inviting their doctor into their home as the potential participants were cognizant of the fact that the researcher is a Certified Nurse Midwife. Some of the informants did not feel comfortable with the idea of outsiders coming into their homes and may not have participated in the study had an alternate site not been available. Again, this could have been construed as too intimidating for the informant and out of respect requested a neutral ground.

To address respecto from another angle, one must consider the major importance of carrying culture between generations. This transmission of knowledge and values
surrounding culture and gender among women of Mexican origin involves a shared respect (Ayala in Weis & Fine, 2000). Shared respect surrounds the reciprocity of knowledge about culture between mother and daughter or close female relatives. This shared respect was extended to the researcher during the interviews with the informant’s freely passing on the knowledge about this cultural practice.

Summary of Chapter Five

Chapter five presented the results obtained through the ethnographic study. Supporting data was provided for the cultural themes, domains, categories and sub-categories surrounding the culture care components and experiences of using manzanilla tea by women of Mexican origin in the AZ/Sonora, MX border region. In addition, the research questions were presented with excerpts from the voices of these women as they related to the posed questions. Third, the reflective journal was incorporated into this chapter. Chapter six will allow for discussion and conclusions of this study.
CHAPTER SIX
Discussion and Conclusions

Introduction

This next chapter will address three pertinent areas: 1) interpretation of the findings to include a summary of the conceptual model; 2) a discussion of the findings as related to the cultural themes and relevant literature; 3) and conclusion which includes strengths and limitations of the study, implications for nursing, recommendations for future research, and the epilogue.

Interpretation of the Findings

Cultural Themes of Women of Mexican Origin Who Reside in the Border Region on the Use of Manzanilla Tea for Childbearing

Two cultural themes were abstracted from the data which express the voices of women along the U.S.-Mexico border while capturing the being of these women through their lived experiences. Cultural themes are the overarching statements that explicate the relationships between the components of the phenomenon under study (DeSantis & Ugarriza, 2000). The two cultural themes are 1) Differences and Tensions (figure 2), and 2) Manzanilla Tea: Values, Beliefs, and Practices (figure 3). The meta-theme
(DeSantis & Ugarriza, 2000), Intergenerational Transmission of Cultural Health Care Knowledge, emerged to provide unification of meaning (figure 1). The meta-theme was abstracted as a unifying theme from the two cultural themes. The two cultural themes are supported by data and reflect the experiences and understanding of the traditional care practice among women of Mexican origin who reside along the U.S.-Mexico border.

These cultural themes and meta-theme which emerged through the ethnographic process portray the worldview of some of the border women of Mexican origin. World view is the integration of cultural values, beliefs, and practices with kinship and social behavior (Leininger, 1991). The stories told invite the reader into seeing the use of this cultural care practice through their eyes or the perspective of the one experiencing the event. The constructed ethnographic picture provides illumination of what is important and valued, what is known, how it is transmitted, and conflicts encountered in varied cultural health care beliefs by this population. Controversy between traditional care practices and professional care practices can be a daily dilemma for women in the border region.
Summary of Conceptual Model

This ethnographic study did not test or integrate a theory instead Culture Care Diversity and Universality (Leininger, 1991, 2006) was used as an organizing framework. The basic tenet within the theory referring to human beings as being inseparable from their cultural background and social structure rang true in the shared stories of the women in this study. The findings in the study assisted in the construction of the conceptual model of Intergenerational Transmission of Cultural Health Care Knowledge (Figure 1) and the supporting cultural themes: Differences and Tensions (Figure 2) and Manzanilla Tea: Values, Beliefs, and Practices (Figure 3). Each cultural theme will display the domains, categories and sub-categories discovered in this study which support the cultural themes.

Using the ethnographic methodology, the meta-theme of Intergenerational Transmission of Cultural Health Care Knowledge was synthesized. The meta-theme describes the interactive social processes necessary to transmit knowledge about traditional care practices. In addition, the meta-theme coalesced the oppression and resistance
experienced between and among health care values with the accumulation of traditional knowledge intergenerationally.

Figure 1: Conceptual Model for Use of Manzanilla Tea

This conceptual model arose out of rich, thick descriptions from nine women of Mexican origin about the values, beliefs, and patterned lifeways surrounding the use of manzanilla tea for the childbearing period. Active listening and valuing the voices of these women assisted in capturing the life experiences of women of Mexican origin as they progressed through the process of becoming related to childbearing. The purpose for this model is to visually portray the interrelationship of differences and tensions with the values, beliefs, and practices surrounding the use of manzanilla tea with intergenerational transmission of knowledge. Each cultural theme will be presented in
Women along the U.S.-Mexico border who participated in this study spoke to the overarching, yet interwoven influence of intergenerational transmission of knowledge. Culture created a strong foundation from which decision making was based. Decisions regarding adherence or non-adherence of traditional health care practices dealt with controversy from outside sources. Intergenerational transmission of information was woven into both what is known about values, beliefs, and practices, and the differences and tensions these women experienced as they decided whether to adhere to tradition or not.

Figure 2: Theme 1: Differences and Tensions
This study sought to explore the values, beliefs, and patterned lifeways related to the use of manzanilla tea during the childbearing period as well as to learn about the experiences of Mexican women who have used the tea for childbearing. However, as data interpretation was in process it became evident that there was more to the concept of using the tea. The mutual process included social exchange, popular knowledge about the tea, and controversies that exist between and within concepts of cultural health care. Social exchange was represented in the categories of Everybody Knows, Because of our Mothers and Grandmothers, and Passing along Knowledge (Figure 4). Controversy between health care beliefs was discovered and portrayed in Don’t Drink the Tea, I Drink it Anyway, and Confused and Afraid (Figure 2). Popular knowledge about the
tea will be explained by the domains of Nothing Bad Happens (Figure 3) and Why We Use Manzanilla Tea (Figure 5) along with the supporting categories and sub-categories. The findings were theoretically consistent with the simultaneity ontological perspective in which this research was based.

Discussion

Differences and Tensions

This theme emerged as women described their experiences of using manzanilla tea. “Tell me about your experiences with manzanilla tea” and “I’m curious to know what you think about the use of manzanilla tea” were questions from the General Interview Guide posed to the informants from which this cultural theme was constructed. The theme, Differences and Tensions, narrates advice
received from both perspectives; traditional and professional. Physicians, nurses, university members, and the media were sources of advice regarding the use of manzanilla tea during the childbearing period. Some of the informants expressed confusion and reasons they were leery or afraid to use the tea in pregnancy despite embedded traditional knowledge.

Confusion can be elevated when the variable of culture is added on top of numerous forms of knowledge transmission. Confusion and fear were also sparked by the anticipated effects caused by drinking the tea. Consumption of the tea in early pregnancy could cause a spontaneous abortion. This fear was voiced by a few of the informants.
"When you’re barely pregnant you can’t drink it … 1st or 2nd months … when you drink it really, really hot you lose your baby” (Guera, 900-902, FN)

"I heard that, I heard that I don’t know if it’s true that if you take it the first month it can harm the baby like you can have a miscarriage or something, because it’s hot” (Ana, 489-491)"That’s why I didn’t want to take it because I was scared" (Ana, 503).

"The first three months, is a delicate state and therefore is not good to drink any kind of teas, because there is danger of loosing the baby” (Lucia, 173-175).

Other informants articulated the desire to uphold this cultural practice because of strong cultural beliefs, sidestepping the professional view, or resistance against professional practice. There appears to be a definite division between values and beliefs that is masked within the care systems for this population.

One informant brought up an interesting issue revolving around the differences between Anglos and Mexican beliefs related to the use of this cultural care practice.

"My three month [pregnant] cousin … she married somebody in Phoenix, so they’re Americans so they don’t believe in anything like that so her mother-in-law wouldn’t let her take it and the, so she didn’t take it … because she was ready [to drink the manzanilla]” (Sally, 189, 191-194)

"So they [White people] think the camillian (chamomile) tea it is not good, so they do the green tea and some Chinese tea and well I don’t know what’s in them, like you read the tea bags and you can’t even tell what they say so I’m like sticking with my tea, I’m fine thank you” (Sally, 381-384)

This was a single informant so this information was considered as an outlier. However, the question arises as
to whether this perception about Anglo versus Mexican exists and whether this impacts the acceptability or discouragement of initiating this traditional practice. This information was presented to the community members via questions. The responses received encompass the view that these ethnicities have definite differences that exist between health care beliefs. Caucasian or Non-Hispanic White health care professionals or mixed relationships (Mexican and Caucasian) were the areas where the most controversy was evident to these members. The perception of Non-Hispanic White’s views about using manzanilla could have a tremendous impact on health care relations with persons of the Mexican cultural group. This area was not saturated in the data collection and requires further investigation.

Shared meanings important to this cultural group arose from social and cultural exchange of information. The mutual interchange with the environment was crucial to obtaining meaning about this traditional practice. The findings supporting this cultural theme are consumed in the concept of intergenerational knowledge transmission. The differences and tensions would not exist without the
established worldview, health culture, and values created through familial and culturally based social exchange.

Contextual settings influenced values, beliefs, and practices, creating temporary change or conflict. Women either felt oppressed by other sources of information or resisted the outsiders’ information because of tradition and familial influence surrounding the use of the tea. Professional care systems and traditional care systems (Leininger, 1991, 2006), in general, appeared to be opposing forces toward health care in this study. Published literature (Berman et al., 2000; Doyle & Faucher, 2002; Eisenberg, Kessler, Van Rompay et al., 2001; Keegan, 1996; Mahady et al., 2003; Poss, Pierce & Prieto, 2005; Rivera et al., 2002; Sleath et al., 2001) highlighted the reluctance of persons to report the use of traditional medicines and practices to their health care providers primarily secondary to health care providers views and acceptability of these practices.

In contrast to literature, these women were not afraid to discuss the use of the traditional practice with their health care providers. This may have been attributed to the border region itself and the informant’s assumption that the providers would be aware of traditional practices. Even
though the hesitancy may not have existed, the difference in views and lack of acceptability regarding this cultural practice was prevalent among the findings. The findings about confusion and fear experienced by these women will add to the existing literature surrounding the different health care views. As Poss et al. (2005) found in their study along the El Paso, TX/Juarez, Chihuahua, MX border, the majority of these women used the herb under study as well as upheld cultural tradition as the primary reason to use the tea.

*Manzanilla Tea: Values, Beliefs and Practices*

This cultural theme is substantiated by the rich, thick descriptions contributed by the informants. As stated, this theme captures the individuals’ perceptions about the values, beliefs, and practices surrounding the use of *manzanilla* tea. Three domains represent identified categories which are: Generational Knowledge, Nothing Bad Happens, and Why We Use *Manzanilla Tea*. The domain of Generational Knowledge spoke to the passing or receiving of traditional knowledge about the tea. Pylypa (2001) found health care and use of medication for persons of Mexican origin was a social and cultural process. In this study, knowledge about the tea encompassed reception from friends,
family, and community members. This cultural care practice was known to everyone; primarily female members within the culture. This finding substantiates the literature (Dole et al., 2000; Warrick et al., 1992) which addressed close female relatives were the members of the family persons of Mexican origin learned of herbal remedies.

The primary sources of intergenerational knowledge transmission were mothers and grandmothers. Knowledge transmission could occur verbally or through participatory actions. The transmission of knowledge from generation to generation appears to be deeply embedded in tradition. Everyone shares information about this traditional practice and stories emerge with successful outcomes. Cultural values, beliefs and a strong sense of tradition facilitate generations of women to continue to pass along knowledge.

Nothing Bad Happens is a domain in which women express their confidence in the safety of using manzanilla tea for the childbearing process. Positive stories with good outcomes reinforced the women’s confidence in use or planned use. Anticipation of use is supported strongly by the fact that other female family members have taken the tea and nothing bad happened. The history of good outcomes spurs generations of women to transcend professional health
care values adhering to traditional values and beliefs. None of the women knew the physiological reasoning for the tea they just knew it was effective because of their strong belief in the knowledge of their elders.

Cultural expectations of the tea for the childbearing process embody preparing the body for labor; making labor more efficient; the efficacy of consuming the tea; managing discomforts through relaxation and calming the pain; involution of the uterus; managing the cramping during menses, postpartum, breastfeeding, and infancy; and prevention and curing eye infections. As Trotter (1981a, 1981b) mentioned there are many uses for one remedy; as is evident in this study. Women knew to use manzanilla tea for all the aforementioned conditions secondary to intergenerational transmission of this cultural care practice. The knowledge is not just transmitted in one encounter a mutual rhythmic interchange with their environment occurs to promote each person’s process of becoming.

The common beliefs were that the tea would calm, and increase relaxation thereby decreasing the pain making the situation(s) easier to handle. Expansion of the use of the tea to calm the cramping pain during the non-pregnant state
adds important knowledge toward self-care management in women’s health. Labor or birth was the most knowledgeable are for the informants in this study. The intergenerational knowledge regarding this process revolved around being faster and easier. Some controversy existed in that one informant was told the labor pains intensified, the pain would be more intense but would still result in an easier birth. Most of the stories told of decreasing the pain and having a faster easier birth. However, the end result was still an expedited, smooth labor and birth. Local community members validated this cultural belief of manzanilla tea being drunk to provoke or increase contractions. Comments were shared by both informants and community members that the hotter you drink the tea the more effective the anticipated outcome.

Among the women who described how it was used during the postpartum period, a common practice was to start drinking the tea as soon as they got home from the hospital. However, one of the community members commented that hot liquids could only be resumed two weeks after delivery. If initiated before the allotted time frame, a woman could experience increased bleeding postpartum. This
detail was not explored in this study, thus not substantiated by participants.

This study's findings substantiate extant literature while offering new detail to nursing knowledge. Values, beliefs, usage and treatment intent discovered in this study regarding manzanilla tea for this population will be a valuable addition to nursing knowledge. As per the literature, mothers and grandmothers were the primary sources of knowledge transmission surrounding the use of manzanilla tea (Burk et al., 1995; Dole et al., 2000; Kay, 1996; Pearce, 1998; Trotter, 1981a, 1981b; Warrick et al., 1992; Zenk et al., 2001). Familial support is very important to women in pregnancy and labor (Jones & Bond, 1999; Pearce, 1998). An expectation of familial support is sharing of knowledge to help maintain a healthy status. Intergenerational sharing of knowledge is part of the contemporary culture in the border region. Home remedies are used as a first treatment option for various conditions in lieu of pharmaceuticals. Culture defined as values, beliefs, norms, and lifeways (Leininger, 1991, 2006) had a strong influence on health care decision making as many of the women in this study focused on cultural tradition – as was substantiated in the literature (DHHS, 2001). Even
though these women were in a state of flux most valued their traditional beliefs.

Warrick et al. (1992) did point out that women of Mexican origin along the border region of AZ/MX adhered to the cultural belief of using manzanilla tea prior to delivery to ease the pain. This study supported this finding as well as discovering details and other uses for the tea. Kay’s (1996) reference to the tea being used to stop false labor or increase the efficacy of the contractions was not entirely substantiated in this study; it was not noted to stop labor. The pharmacological properties of being an anti-inflammatory, sedative, and digestive aid (Dole et al., 2001) was found to be true among this population in addition to a uterine stimulant, anti-flatulent, cleanser for eyes and vertex on fetus, and diet enhancement.

This study provided an interesting finding from the demographic questionnaire regarding initiation of prenatal care for women of Mexican origin in the AZ/Sonora, MX border region. Women’s claims of initiating prenatal care in the first and second months portray adequate dissemination of education among this population to seek early health care during pregnancy as generally Hispanics
are twice as likely to not seek early prenatal care (http://www.shapleigh.org/news). This finding could either be a misunderstanding of the question posed or the adequate community education surrounding early prenatal care in this area with accessible health care. This may need to be studied further for clarification of the findings.

Strengths and Limitations of the Study

A notable strength in this study was prolonged engagement of the border culture adding credibility to the study. Prolonged contact in the field was accomplished through previous fieldwork encompassing two summer sessions and two months of uninterrupted data collection consisting of in-depth interviews, informal conversations and selected episodes of participant observation. Due to the investigator’s previous integration into the community, familiarity with the community’s health care providers, and residing part-time in the local community, she was able to develop close, trusting relationships with members of the community. Threats to truth value were minimized by employing local bilingual, bicultural interpreters and a native transcriptionist. The researcher’s previous exposure and experience with the women of this culture made the research process unthreatening for the informants,
interpreters, community members and herself; familiarity reinforced comfort.

This study was limited by a reliance on interpreters and translators with the Spanish speakers. Although great care was taken in the selection of the interpreters and transcriptionist, the primary investigator did not have sufficient Spanish language fluency to assure accuracy. However, reliance on native speakers is very common in health care research, and this study could not be achieved without these valuable individuals. Nevertheless, the ideal would be for a native or fluent Spanish-speaker to conduct research with women of Mexican origin living along the U.S./Mexico border. The degree to which this limitation affected study findings cannot be estimated. One could posit, however, that only two subjects had their interviews in Spanish and the majority was interviewed in English. Therefore, this limitation affected only two participant's data. Another limitation of this study was the researcher's novice status. The researcher, otherwise known as the research instrument, is a crucial piece in ethnographic research. Peer debriefing with committee members assisted the novice qualitative researcher throughout the data collection and analysis process.
Implications for Nursing

The research questions for this study elicited the perceptions of women of Mexican origin who reside in the U.S.-Mexico border region surrounding the values, beliefs, patterned lifeways and experiences surrounding the use of manzanilla tea during the childbearing process. Knowledge gained from this study contributes to nursing knowledge and provides pertinent information that the use of this traditional practice is multi-leveled and needs to be integrated into women’s health care practices surrounding childbearing. In addition, social and cultural aspects must be integrated into the understanding of using manzanilla tea and studied in relation to values, beliefs and practices among this population group.

A major contribution of this study to nursing knowledge involves a deeper and more inclusive understanding of how the use of manzanilla is intertwined into the health care practices and social exchange occurring through the childbearing process for women of Mexican origin who reside in the AZ/Sonora, MX border region. While the literature provides much on the importance of herbal use among women in this population, the evidence base from which to understand the values,
beliefs, and practices surrounding the use of manzanilla for late pregnancy, labor, birth and postpartum was limited or unclear. Findings from this study will not only help nurses and other health care providers become culturally sensitive to the meanings and barriers surrounding maintaining this traditional care practice, but will also provide the details and knowledge about why and how this is integral in these women’s lives. Acceptance among outsiders should come with knowledge and understanding pertaining to different cultural practices. This knowledge can be integrated into the prenatal, antenatal and intrapartal care as well as teaching for women of Mexican origin. The art of healing for Mexicans begins within each family with one person serving as the first source for curing (Jones & Bond, 1999). It is of utmost importance for nurses, health care providers, researchers, educators, and community members to incorporate family members to enhance cooperation surrounding health care.

Nurses must also understand the importance of being aware of current issues affecting the lives of this border population. Many persons of Mexican origin cross the border daily; 800,000 people crossed the line daily in 2003 (USMBHC, 2004). A current historical event is overhauling
the immigration law. This bill passed by the U.S. Senate will allow more undocumented immigrants the opportunity to earn citizenship in the U.S.

(http://www.usatoday.com/news/washington/2006-03-27-senate-immigration_x.htm). The downside is the possibility of longer wait times at the border or the possibility of not being able to return due to increase of border patrol agents, the proposed extended border wall creating the illusion of separation, and the virtual wall monitoring the border. These could alter the border context of fluidity in the region and the transnational (Hilfinger Messias, February 2006) identification many of these women have. In addition, this could hamper the reciprocity of cultural knowledge with potential separation from familial support and involvement in health care. Nurses and the impacted communities may need to incorporate more culturally appropriate support systems.

While preliminary findings of this study have been shared with some of the community members and health care providers in Nogales, AZ, final results should be shared with local health care organizations within the community. A goal of sharing the culturally related findings is to impact people’s awareness regarding the importance of this
traditional practice to this population including internal conflict between systems of care as well as the meanings behind use and adherence. Knowledge from this study will guide nurses to develop interventions regarding educating health care professionals and involved community organizations on the values, beliefs, and practices surrounding manzanilla during this vulnerable state.

Recommendations for Future Research

This study’s intent was exploratory. Immediate future research will concentrate on the development of a culturally relevant tool to test the findings relevant to the labor process from this study quantitatively among this population. The most recurrent praxis for the women in this study was engaged for the labor process. The anticipated program of research will include an evidence-based intervention study involving the consumption of manzanilla tea for labor after the descriptive study is completed.

Additional areas of interest emerged from the data. One is the perception of women of Mexican origin regarding Non-Hispanic Whites views about the use of the tea for childbearing. Another area is what meaning lies behind these women drinking the tea hot. Both of these could be
pursued in future research as an offshoot from the developing program of research.

Epilogue

The informants clarified the multiple uses of manzanilla tea for the childbearing process, women’s health, and the uncertainty that occurs with conflicting health care beliefs and values created by the intersect of two distinct value sets. The purpose of this study was configured from specific prior knowledge that was acquired over the years and experiences with border women while providing women’s health care as a Certified Nurse Midwife; the researcher’s personal and historical context. Curiosity was sparked by women of Mexican origin’s smoother, faster, and easier birth experiences after drinking manzanilla tea. The researcher’s mission was to bring understanding of the traditional practice to the health care profession, informing nurses and health care providers, and ultimately protecting the women’s desires and health while providing culturally congruent and meaningful care. Due to the knowledge gained from these women’s lived experiences, specific details regarding the use of manzanilla tea for childbearing can be disseminated among health care professionals. In addition, this knowledge can be used to
provide more holistic, culturally relevant, and comprehensive care to childbearing women of Mexican origin who reside in the border region.
Appendix A1:

Subject Informed Consent Form: English
SUBJECT'S CONSENT FORM

Project Title: Use of Manzanilla Tea during the Childbearing Period among Women of Mexican Origin who reside in the U.S.-Mexico Border Region

You are being asked to read the following material to ensure that you are informed of the nature of this research study and of how you will participate in it, if you consent to do so. Signing this form will indicate that you have been so informed and that you give your consent. Federal regulations require written informed consent prior to participation in this research study so that you can know the nature and risks of your participation and can decide to participate or not participate in a free and informed manner.

PURPOSE
You are being invited to participate voluntarily in the above-titled research project. The purpose of this project is to describe the use of manzanilla tea during the childbearing period for women of Mexican origin living in the U.S.-Mexico border region. The focus will be to describe the use of manzanilla tea for the last month of pregnancy, labor and birth, through the first month after the baby is born. This is a step toward learning more about culture specific practices for women during pregnancy in the border region.

SELECTION CRITERIA
The Principal Investigator or a member of her study staff will discuss the requirements for participation in this study with you. To be eligible to participate, you must be a) self-declared as of Mexican origin; b) 18 years of age or older; c) reside in the U.S.-Mexico border region of Nogales, Arizona/ Nogales, Sonora; d) are presently pregnant or have given birth within the last year; e) have either used manzanilla tea or have knowledge of the traditional practice; f) are able and willing to talk about their experience(s) and knowledge; g) speak and write in either English or Spanish; h) is currently receiving health care through Mariposa Community Health Center; and i) is willing to participate in the scheduled interview. A total of 8 to 10 individuals will be enrolled in this study locally.

PROCEDURE(S)
The following information describes your participation in this study which will take place during a one-time interview lasting up to two hours. You are being asked to allow tape recording of the 60 to 90 minute one-time interview. The researcher and bilingual, local interpreter will meet you in your home at a time of your choice. The researcher will also observe any physical aspects you wish to share about the herb if the herb is readily available within your home. After all the information is shared, you will be asked to fill out a short questionnaire. The questionnaire will be available in either Spanish or English. If you are unable to read, either the researcher or promotora (depending upon language preference) will read it to you.

Version Date: January 19, 2006
RISKS
Participants incur the risk of being uncomfortable with some of the questions. To minimize this, they can decline to answer any of the questions and they may withdraw from the study at any time.

BENEFITS
There is no direct benefit to you from your participation outside of the cultural sharing of your knowledge about this traditional practice. The information shared will add to the knowledge base for culturally competent health care. The broader benefit is to introduce and gain respect for this cultural practice into professional care systems while enlightening health care providers.

CONFIDENTIALITY
Confidentiality will be maintained by pseudonyms (false names) being assigned for each participant’s recorded session. The researcher will keep the list identifying which pseudonym was assigned to which participant, the tape recorded tapes, the transcripts, and any field notes locked in a file cabinet or safe to protect confidentiality. Linkage information (pseudonyms) will be kept in a separate locked cabinet. Linkage information will be destroyed and recorded tapes will be deleted when the data has been confirmed. To ensure further confidentiality, subject contact information will be destroyed unless the participant initiated to be contacted if and when the data is used in any further studies. In this case, the participant’s contact information only (no link information) will be kept in a locked cabinet for up to ten years. If the participant provided full consent or declined use of the material, the contact information will be destroyed after validation of data has occurred. The signed consent forms will be sent to the Office of Research at the College of Nursing for safe keeping upon collection. All remaining material obtained and compiled from this study will be destroyed 10 years after completion of study. Future studies are likely in which the data collected from this study will find value and relevance. Susan M. Yount, PhD, Doctoral Candidate, CNM, RN and her dissertation committee members (Dr. Judith Berg, Dr. Elaine Jones, & Dr. Marylyn McBwen) will have access to the data. The participants’ data are protected by pseudonyms. The committee members will only work with de-identified data and will have no way to identify specific participants. The committee will serve as auditors of the data trail and to assist in interpretation of the data. No one outside of the Primary Investigator, Susan M. Yount, PhD Doctoral Candidate, CNM, RN will have access to the names of the subjects.

The data may be used for future research studies. At this point in time any future studies are not well defined. Permission for use of the data obtained in this study in future studies is requested.

My initials designate my choice regarding using my data for future studies.

I give permission at this time to use my data for future studies.

I do not give my permission at this time to use my data for future studies.

I would like to reconsider the future use of my data. Please contact me when this is likely.

Version Date: January 19, 2006  Page 2 of 3  Subject’s Initials
PARTICIPATION COSTS AND SUBJECT COMPENSATION
There is no cost to you for participating except your time. You will receive $10.00 (106.00 pesos) for your participation.

CONTACTS
You can obtain further information from the principal investigator Susan M. Yount, Ph.D. Candidate, CNM, RN at (480) 704-3772 or (903) 285-2906. If you have questions concerning your rights as a research subject, you may call the University of Arizona Human Subjects Protection Program office at (520) 626-6721. (If out of state use the toll-free number 1-866-278-1455.)

AUTHORIZATION
Before giving my consent by signing this form, the methods, inconveniences, risks, and benefits have been explained to me and my questions have been answered. I may ask questions at any time and I am free to withdraw from the project at any time without causing bad feelings or affecting my medical care. My participation in this project may be ended by the investigator for reasons that would be explained. New information developed during the course of this study which may affect my willingness to continue in this research project will be given to me as it becomes available. This consent form will be filed in an area designated by the Human Subjects Committee with access restricted by the principal investigator, Susan M. Yount, Ph.D. Candidate, CNM, RN or authorized representative of the College of Nursing. I do not give up any of my legal rights by signing this form. A copy of this signed consent form will be given to me.

__________________________  ________________
Subject's Signature        Date

__________________________  ________________
Witness (if necessary)      Date

INVESTIGATOR'S AFFIDAVIT:
Either I have or my agent has carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who signed this consent form was informed of the nature, demands, benefits, and risks involved in his/her participation.

__________________________  ________________
Signature of Presenter      Date

__________________________  ________________
Signature of Investigator    Date

Version Date: January 19, 2006          Page 3 of 3          Subject’s Initials ___
Appendix A2:

Subject Informed Consent Form: Spanish
CONSENTIMIENTO DEL SUJETO

Titulo del Proyecto: El uso del Té de Manzanilla durante el Período del Embarazo en Mujeres de Origen Mexicano que Residen en la región Frrontera de los E.U.-México

Se le pide que lea el presente documento para asegurar que ha recibido la información sobre la naturaleza de este estudio de investigación clínica y que usted sabe cómo va a participar, si es que consiente en participar. Su firma en este documento indica que usted ha recibido la información y que acepta participar. Las normas federales requieren que, antes de participar, usted otorgue su consentimiento por escrito, habiendo recibido previamente la información sobre este estudio de investigación clínica de modo que, conociendo la naturaleza del estudio y los riesgos que implica su participación, puede decidir libremente si participa o no.

PROPÓSITO
Se le invita a participar voluntariamente en el proyecto de investigación clínica descrito arriba. El propósito de este estudio es poder obtener información y describir el uso de Té de Manzanilla durante el Periodo del Embarazo en mujeres de origen Mexicano que residen en la región Fronteriza de los E.U.-México. Este proyecto es un paso hacia adelante para obtener conocimientos de las prácticas culturales en mujeres que residen en la región fronteriza durante el periodo del embarazo.

CRITERIO PARA LA SELECCIÓN
La Investigadora Principal o un personal del proyecto le explicará los requisitos necesarios para participar en el estudio. Usted es elegible para participar en el estudio si usted a) declara que es de origen Mexicano b) tiene 18 años o más; c) reside en la región Fronteriza de Nogales, Arizona/ Nogales, Sonora d) está embarazada o ha dado a luz en el último año e) tiene conocimiento del uso tradicional del Té de Manzanilla f) está dispuesta a compartir su experiencia y conocimiento sobre el uso del Té de Manzanilla g) puede hablar y escribir, ya sea en inglés o español h) recibe cuidado médico en el Centro Comunitario de Salud de Mariposa i) desea participar en la entrevista. El proyecto registrará de 8 a 10 individuos para participar en el estudio.

PROCEDIMIENTOS
La siguiente información describirá su participación en el estudio. Será entrevistada solamente una vez por dos horas. Se le pedirá permiso para grabar la entrevista de 60 a 90 minutos. La Investigadora Principal y un asociado bilingüe e interprete local, la entrevistarán en su hogar y a la hora más oportuna para usted. Si usted tiene disponible la hierba de manzanilla en su casa y desea compartir con la investigadora, la investigadora principal observará la hierba de manzanilla y su aspecto físico. Inclusive, con su permiso la investigadora tomará una foto de la hierba para su estudio. Al concluir la entrevista, se le pedirá que complete un cuestionario corto disponible en inglés o en español. Si usted no puede leer el cuestionario, la investigadora o promotor, dependiendo su idioma preferido, le interpretará el cuestionario.
BENEFICIOS
No existen beneficios directos asociados a su participación, fuera de compartir culturalmente sus conocimientos sobre esta práctica tradicional. La información compartida representará un aumento a la base de conocimiento para la aplicación del cuidado de la salud de una forma culturalmente competente. El beneficio más amplio consiste en introducir y aumentar el respeto por esta práctica cultural dentro del sistema profesional del cuidado de la salud, al mismo tiempo que los proveedores de la salud reciben esta información.

CONFIDENCIALIDAD
La confidencialidad se mantendrá mediante el uso de seudónimos (nombres falsos) que serán asignados para cada participante durante las sesiones grabadas. La investigadora mantendrá una lista que identificará que seudónimos fueron asignados a los participantes, las cintas grabadas, los dictados y las notas de campo en un gabinete de legajos o caja fuerte para proteger la confidencialidad. La información de enlace (seudónimos) se mantendrá en otro gabinete separado y cerrado con candado. Se destruirá la información de enlace así como se borrarán las cintas grabadas cuando se confirme la información. Para asegurar una mayor confidencialidad, la información para contactar al sujeto se destruirá a menos que el (la) participante firme sus iniciales para ser contactado en caso de que los datos se usen en otros estudios posteriores. En este caso, solamente la información para contactar al sujeto (sin la información de enlace) se mantendrá en un gabinete cerrado hasta por diez años. En caso de que el participante de un amplio consentimiento o decline el uso del material, la información para contactarlo será destruida una vez que sean válidos los datos obtenidos. Las formas de consentimiento firmadas se enviarán a la Oficina de Investigación del Colegio de Enfermería para mantenerlas guardadas después de reunirlas. Todo el material obtenido y compilado durante este estudio se destruirá a los 10 años después de que el estudio concluya. Podrán llevarse a cabo estudios futuros en los cuales los datos obtenidos encuentren valor y relevancia. Susan M. Yount, PhD, Candidata a obtener el Doctorado, CNM, RN y los miembros del comité de disertación (Dr. Judith Berg, Dr. Elaine Jones, & Dr. Marylyn McEwen) tendrán acceso a los datos. Los datos de los participantes están protegidos por seudónimos. Los miembros del comité trabajarán solamente con la información sin identificación y no tendrán forma de identificar a los participantes de una manera específica. El comité servirá como auditor de los datos y ayudará en la interpretación de los mismos. Nadie fuera de la Investigadora Principal, Susan M. Yount, PhD Candidata a Doctorado, CNM, RN tendrá acceso a los nombres de los sujetos.

Los datos serán usados para estudios de investigación futuros. En este momento ningún estudio ha sido definido. Se requerirá permiso para usar los datos obtenidos en este estudio para futuros estudios.

Doy permiso en este momento para usar mis datos para estudios en el futuro.
No doy permiso en este momento para usar mis datos para estudios en el futuro.
Me gustaría reconsiderar el uso de mis datos en un futuro. Favor de contactarme cuando esto suceda.

COSTOS DE PARTICIPACIÓN Y COMPENSACIÓN AL SUJETO
No hay ningún costo, mas que el tiempo del participante. El participante va recibir $10.00 (106.00 pesos) por participar.

Fecha de Version: 19 de Enero 2006
CONTACTOS
Puede obtener más información de parte de la investigadora principal Susan M. Yount, PhD, Candidata Doctoral, CNM, RN, al (480)704-3772 o (903) 285-2906. Si tiene preguntas sobre sus derechos como sujeto de investigación, puede hablar a la oficina del Programa de Protección de Sujetos Humanos a la Universidad de Arizona al (520) 626-6721. El número de teléfono gratuito fuera del estado es 1-800-278-1455.

AUTORIZACIÓN
ANTES DE DAR MI FIRMA DE CONSENTIMIENTO EN ESTE FORMULARIO, SE ME HAN EXPLICADO LOS MÉTODOS, INCONVENIENCIAS, RIESGOS, Y BENEFICIOS, Y SE ME HAN CONTESTADO MIS PREGUNTAS. YO PUEDO HACER PREGUNTAS EN CUALQUIER MOMENTO Y PUEDO RETIRARME DEL PROYECTO EN CUALQUIER MOMENTO, SIN CAUSAR PROBLEMAS Y SIN AFECTAR MI CUIDADO MÉDICO. MI PARTICIPACIÓN EN ESTE PROYECTO PUEDE SER TERMINADA POR LA INVESTIGADORA POR RAZONES QUE SE ME EXPLICARÁN. SE ME HARÁ SABER CUALQUIER INFORMACIÓN NUEVA QUE LLEGARE A SURGIR DURANTE EL CURSO DE ESTE ESTUDIO Y QUE PUEDA AFECTAR MI VOLUNTAD DE CONTINUAR. ESTE FORMULARIO DE CONSENTIMIENTO SERÁ ARCHIVADO EN UN ÁREA DESIGNADA POR EL COMITÉ DE SUJETOS HUMANOS, CON ACCESO LIMITADO A LA INVESTIGADORA PRINCIPAL SUSAN M. YOUNT, PhD CANDIDATA, CNM, RN O A UN REPRESENTANTE AUTORIZADO DEL COLEGIO DE ENFERMERÍA. YO NO PIERDO NINGUNO DE MIS DERECHOS LEGALES AL FIRMAR ESTE FORMULARIO. SE ME ENTREGARÁ UNA COPIA DE ESTE FORMULARIO DE CONSENTIMIENTO.

Firma del Sujeto ___________________________ Fecha ___________________________

Testigo (Si es necesario) ___________________________ Fecha ___________________________

TESTIMONIO DE LA INVESTIGADORA
Yo o mi investigador hemos explicado cuidadosamente al sujeto el tema del proyecto descrito arriba. Por medio de la presente certifico que, según lo que sé, la persona que firma este formulario de consentimiento comprende claramente el tema, exigencias, beneficios y riesgos involucrados con su participación, y su firma es legalmente válida. Ningún problema médico, de idioma, o de educación han sido impedimento para este entendimiento.

Firma del Presentador ___________________________ Fecha ___________________________

Firma de la Investigadora ___________________________ Fecha ___________________________

Fecha de Version: 19 de Enero 2006 3 of 3 Inicial del Sujeto __________
Appendix B1:

Participant Recruitment Script: English
The University of Arizona College of Nursing

Use of *Manzanilla* Tea during the Childbearing Period among Women of Mexican Origin who Reside in the U.S.-Mexico Border Region

PARTICIPANT RECRUITMENT SCRIPT

You are being invited to participate voluntarily in the above titled research study. **The purpose of this study is to explore what you believe manzanilla tea is used for during late pregnancy through one month postpartum. You will be asked to describe your understanding, beliefs, ideas, and stories about use of manzanilla tea and what you think are the reasons women use manzanilla tea for pregnancy, labor and birth. The results of this study will give us better understanding about the use of manzanilla tea and how this knowledge is shared.**

Participating in this study means that you will allow the investigator, Susan M. Yount, PhD(c), CNM, RN, and a native local interpreter to interview you at your home. There will be one taped interview that will last one hour to one and one half hours (60 – 90 minutes). You must be 18 years of age or older; reside in the U.S.-Mexico border region of Nogales, Arizona/ Nogales, Sonora; be pregnant or have given birth within the last year; have either used manzanilla tea for the childbearing process or have knowledge of the traditional practices; self-declare as of Mexican origin; are able and willing to talk about your experience and knowledge; speak and write in either English or Spanish; willing to participate in the scheduled interview.

If you decide to withdraw from this study, your care at Mariposa Community Health Center will not be affected in any way. Information that you give in these interviews will remain confidential. There is no cost for participating in this study except for your time for the interview which will be very much appreciated by the researcher. When the interview is completed, you will be compensated for participating in the interview.

If you agree to be contacted about your participation in this study, please write your contact information on the bottom of this form and return it to the Mariposa Community Health Center staff before your home visit is over. Susan M. Yount PhD(c), CNM, RN or the bilingual interpreter will contact you within a week to set up the meeting.

Name ____________________________

Contact Information: Phone Number ____________________________

Address: ____________________________

Language preference: English ________ Spanish ________

Thank you for your interest in this important study about *Manzanilla* Tea.

Susan M. Yount PhD(c), CNM, RN
1430 S. Boulder St. #A
Gilbert, AZ
Home Phone 480-704-3772
Appendix B2:

Participant Recruitment Script: Spanish
Colegio de Enfermería de la Universidad de Arizona

El uso del Té de Manzanilla durante el Período de Embarazo en Mujeres de Origen Mexicano que Residen en la región Fronteriza de los E.U.-Mexico

Se me invita a participar voluntariamente en el proyecto de investigación descrito arriba. El propósito de este estudio es explorar su creencia del uso de Té de Manzanilla durante la última etapa de embarazo hasta un mes de postparto. Se le preguntará que escriba su conocimiento, creencia, y historias sobre el uso de el Té de Manzanilla. Inclusive se le preguntara sus pensamientos en porque mujeres toman el Té de Manzanilla durante embarazo, o parto. Los resultados de este estudio nos va dar mejor entendimiento y conocimiento en como se comparten el uso de el Té de Manzanilla.

Al participar en este estudio, usted va dar su consentimiento que la Investigadora Principal (PI), Susan M. Yount, PhD(c), CNM, RN y/o un Asociado interpretador de su origen nativo, lo entreviste en su hogar. Se llevara acabo una entrevista audio-grabada de aproximadamente una hora a una hora y media (60-90 minutos). Usted debe tener 18 años de edad o mayor, residir en la Region Fronteriza de los E.U., declara que es de origen Mexicano, y que esta dispuesta a compartir su experiencia y conocimiento sobre el uso de Té de Manzanilla. Usted puede hablar y escribir, ya sea en ingles o español y desea participar en el proyecto.

Durante la investigación si decide renunciar al proyecto, su cuidado medico en el Centro Comunitario de Salud de Mariposa no sera afectado por su renuncia. Confidencialidad acerca toda la informacion que usted compartir sera mantenida durante el estudio. No habra ningun costo personal, mas que su tiempo. En agradecimiento por su tiempo, a concluir la entrevista usted sera recompensado.

Si acepta participar por favor de anotar su informacion de contacto en la parte inferior de esta hoja, antes de concluir su estudio en casa, por favor entrega su informacion con un empleado de el Centro Comunitario de Salud de Mariposa. Susan M. Yount PhD(c), CNM, RN o un Asociado estara en contacto con usted dentro de una semana para hacer un cita fija.

Nombre: ____________________________________________
Informacion de Contacto:
   Numero de Telefono: _____________________________
   Domicilio: _____________________________
   Idioma Preferido: _____________________________

Gracias por su interes en el estudio de Té de Manzanilla

Susan M. Yount PhD(c), CNM, RN
1430 S. Boulder St. #A, Gilbert, AZ
Numero en Casa: (480) 704-3772
Celular: (903) 285-2906 o (480) 252-8761
Appendix C:

Mariposa Community Health Center Letter
December 2, 2005

Susan M. Yount, PhD(c), CNM, MSN, RN
University of Arizona, College of Nursing
101 Diane Lane
Mt. Pleasant, Texas 75455

Dear Ms. Yount:

The Mariposa Community Health Center (CHC) is a federally qualifying health care organization that is dedicated to providing the highest quality health care to the people of Santa Cruz County, Arizona regardless of their ability to pay. We work primarily with a Hispanic population. Through our Health Promotion/Disease Prevention department we have access to and work with women of child-bearing age in most of our programs.

Mariposa CHC fully supports your dissertation project related to Manzanilla Tea use by women of child-bearing age through the University of Arizona. Mariposa CHC will translate and disseminate information regarding your study to clients through our community programs. Those clients who are interested will be encouraged to contact you. We will provide them with access to means to contact you i.e. long distance calls and/or internet. We will also provide logistical support for interviews locally. Mariposa promotoras may be available to offer assistance with interpretation as well.

Please feel free to contact me if you require additional information or have further questions. I may be reached at (520) 375-6050.

Sincerely,

Jo Jean Elenes
Director of Health Promotion and Disease Prevention
Mariposa Community Health Center
1852 N. Mastick Way
Nogales, AZ 85621
jelenes@mariposacho.net
Appendix D1:

General Interview Guide
Data Collection Instrument

General Interview Guide

1. Tell me what you know about *manzanilla* tea for late pregnancy, labor and right after the birth?
2. I’m curious to know what you think about the use of *manzanilla* tea.
3. Can you tell me how you learned about *manzanilla* tea and it’s uses?
4. Tell me about your experiences with *manzanilla* tea.
5. Have your ideas about *manzanilla* tea changed over time why/why not?
6. In your opinion why do you think women use *manzanilla* tea?
7. Where do you get the *manzanilla* tea?
8. Is there anything else you would like to tell me about *manzanilla* tea?
Appendix D2:

Demographics Questionnaire: English
University of Arizona College of Nursing

Use of *Manzanilla* Tea during the Childbearing Period among Women of Mexican Origin who reside in the U.S.-Mexico Border Region

**DEMOGRAPHICS QUESTIONNAIRE**

Susan M. Yount, PhD Doctoral Candidate, CNM, RN, Principal Investigator

Phone: (480) 704-3772 or cell phone: (903) 285-2906; (480) 252-8761

Judith A. Berg, PhD, RNC, WHNP, Dissertation Advisor

Phone: (520) 626-2206

Please answer all questions which apply by circling the correct answer or filling in the appropriate blank. All information will be held in complete confidence by the researcher, assistants, and advisors involved in this research project.

**ID#________________________**

**Today’s Date________________**

**BACKGROUND INFORMATION**

1. What was the highest grade or year of school you completed?

1. Less than 7th grade
2. Junior high school
3. Partial high school (10th or 11th grade)
4. High school graduate
5. Partial College or specialized training
6. College graduate
7. Graduate degree
8. Unsure or decline to state
2. Where did you receive your formal education?
   1. United States
   2. Mexico
   3. Both

3. What is your current employment status?
   1. Working full-time
   2. Working part-time
   3. Temporarily laid off
   4. Unemployed
   5. Homemaker
   6. Student
   7. Volunteer

4. If you have been or are employed, please describe your current or most recent job.
   (Please write in your answer)
<table>
<thead>
<tr>
<th>Occupation/Job Title</th>
<th>Type of Business or Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Who lives at home with you now? (Please check all that apply)
   1. Live alone
   2. Spouse/Partner
   3. Children
   4. Stepchildren
   5. Parents
   6. Roommate(s)
   7. Sister
   8. Mother
   9. Other (specify)
HEALTH HISTORY

1. What is your date of birth? _______________ Age? _______ in years

2. What city, state, and nation is your place of birth? __________________________

3. Where do you presently live?
   - United States
   - Mexico

ONLY ANSWER QUESTIONS 4 AND 5 IF YOU ANSWERED UNITED STATES TO QUESTION #3.

4. If you were born outside the U.S., how long have you lived in the U.S.? ______ years

5. What generation are you since immigration to the U.S.? ____________

   1st: You were born in a country other than the U.S.
   2nd: You were born in the U.S., either of your parents were born in a country other than the U.S.
   3rd: You were born in U.S., both of your parents were born in the U.S. and all grand parents born in country other than the U.S.
   4th: You and your parents were born in the U.S., and at least one grandparent was born in a country other than the U.S.
   5th: You, your parents, and all of your grandparents were born in the U.S.
6. What is the primary language spoken in your home?
   0Spanish
   1English

7. What is the primary language read in your home?
   0Spanish
   1English

8. Do you speak any English?
   0Yes
   1No

9. Do you read any English?
   0Yes
   1No

10. How old were you at your first pregnancy? ________ in years

11. How many times have you been pregnant? ________

12. How many full-term pregnancies (38 weeks or greater) did you have? ________

13. How many living children do you have? ________
14. What month of pregnancy did you begin prenatal care?

0 One month
1 Two months
2 Three months
3 Four months
4 Five months
5 Six months
6 Seven months
7 Eight months
8 Nine months
Appendix D2 cont:

Demographics Questionnaire: Spanish
Cuestionario Demográfico

Susan M. Yount, PhD Candidata Doctoral, CNM, RN, Investigadora Principal
Teléfono: (480) 704-3772 o Teléfono Celular: (903) 285-2906 y (480) 252-8761
Judith A Berg, PhD, RNC, WHNP, Consejera de Disertación
Teléfono: (520) 626-2206

Por favor conteste todas las preguntas que aplican por medio de marcar con un círculo o llenando el espacio apropiado. Toda la información será contenida en confidencialidad completa por la investigadora, asistentes, y las consejeras de este proyecto.

#ID: ______________________

La Fecha de Hoy: ______________

Información Antecedente

1. ¿Cual es el último nivel de estudio que completó?

1. Menos del séptimo nivel
2. Escuela intermedia
3. Parte de secundaria (Nivel 10 o 11)
4. Graduada de secundaria
5. Parte de Colegio o entrenamiento especial
6. Graduada de Colegio
7. Licencia de graduada
8. No está segura o no quiere decir
2. ¿Dónde recibió su educación formal?
   1 Estados Unidos
   2 México
   3 Los dos

3. ¿Qué es su estado actual de empleo?
   1 Trabajo tiempo completo
   2 Trabajo parte de tiempo
   3 Temporalmente en desempleo
   4 Desempleado
   5 Ama de casa
   6 Estudiante
   7 Voluntaria

4. ¿Si esta empleada, o ha estado en desempleo, por favor describa su trabajo más reciente o presente. (Por favor escriba su contestación)

   Ocupación / Título de Trabajo          Tipo de Negocio o Industria
   1. ___________________________________
   2. ___________________________________

5. ¿Quién vive en su hogar aparte de usted? (Por favor marque todo lo aplicable)
   1 Vivo sola
   2 Esposo/Pareja
   3 Hijos
   4 Hijastros
   5 Padres
   6 Compañero de cuarto
   7 Hermana
   8 Mama
   9 Otro (especifique) __________________
HISTORIA DE SALUD

1. ¿Cuál es su fecha de nacimiento? _______________ Edad? ________ años

2. ¿Qué ciudad, estado y nación es su lugar de nacimiento? _______________

3. ¿Dónde vive actualmente?
   0 Estados Unidos
   1 México

SOLO CONTESTE LAS PREGUNTAS 4 Y 5 SI USTED CONTESTÓ LOS ESTADOS UNIDOS EN LA PREGUNTA #3.

4. ¿Si usted nació fuera de los E.U., que tanto tiempo ha vivido en los E.U.? _____ años

5. ¿En cuál generación está usted desde que emigró a los E.U.? ____________________
   1ero; Usted nació en otro país fuera de los E.U.
   2ndo; Usted nació en los E.U., cualquiera de los dos padres nacieron en un país fuera de los E.U.
   3ero; Usted nació en los E.U., sus dos padres nacieron en los E.U. y sus abuelos nacieron en un país fuera de los E.U.
   4rto; Usted y sus padres nacieron en los E.U. y por lo menos uno de sus abuelos nacieron en un país fuera de los E.U.
   5nto; Usted, sus padres, y todos sus abuelos nacieron en los E.U.
6. ¿Cuál es el idioma primario que se habla en su hogar?
   0 Español
   1 Ingles

7. ¿Cuál es el idioma que se lee en su hogar?
   0 Español
   1 Ingles

8. ¿Habla Ingles?
   0 Si
   1 No

9. ¿Lee en Ingles?
   0 Si
   1 No

10. ¿A que edad fue su primer embarazo? ____________ años

11. ¿Cuántos embarazos ha tenido? ____________

12. ¿Cuántos embarazos de término completo (38 semanas o más) ha tenido? ____________

13. ¿Cuántos hijos viven? ____________
14. En qué mes de embarazo comenzó usted su cuidado prenatal?

0 Un mes
1 Dos meses
2 Tres meses
3 Cuatro meses
4 Cinco meses
5 Seis meses
6 Siete meses
7 Ocho meses
8 Nueve meses
Appendix E: Human Subjects Approval Letters
8 February 2006

Susan Yount, Ph.D. candidate
Advisor: Judith Berg, Ph.D.; RNC
College of Nursing
P.O. Box 210203

RE: BSC B06.39 USE OF MANZANILLA TEA DURING CHILDBEARING PERIOD AMONG WOMEN OF MEXICAN ORIGIN WHO RESIDE IN THE U.S.-MEXICAN BORDER REGIONS

Dear Ms. Yount:

We received your research proposal as cited above. The procedures to be followed in this study pose no more than minimal risk to participating subjects and have been reviewed by the Institutional Review Board (IRB) through an Expedited Review procedure as cited in the regulations issued by the U.S. Department of Health and Human Services [45 CFR Part 46.110(b)(1)] based on their inclusion under research category 6 and 7. As this is not a treatment intervention study, the IRB has waived the statement of Alternative Treatments in the consent form as allowed by 45 CFR 46.116(d). Although full Committee review is not required, a brief summary of the project procedures is submitted to the Committee for their endorsement and/or comment, if any, after administrative approval is granted. This project is approved with an expiration date of 8 February 2007. Please make copies of the attached IRB stamped consent documents to consent your subjects.

The Human Subjects Committee (Institutional Review Board) of the University of Arizona has a current Federal Wide Assurance of compliance, number FWA00004218, which is on file with the Department of Health and Human Services and covers this activity.

Approval is granted with the understanding that no further changes or additions will be made either to the procedures followed or to the consent form(s) used (copies of which we have on file) without the knowledge and approval of the Human Subjects Committee and your College or Departmental Review Committee. Any research related physical or psychological harm to any subject must also be reported to each committee.

A university policy requires that all signed subject consent forms be kept in a permanent file in an area designated for that purpose by the Department Head or comparable authority. This will assure their accessibility in the event that university officials require the information and the principal investigator is unavailable for some reason.

Sincerely yours,

Theodore J. Glatcke, Ph.D.
Chair, Social and Behavioral Sciences Human Subjects Committee

TJG:pm
cc: Departmental/College Review Committee
Susan Yount, PhD candidate
Advisor: Judith Berg, PhD, RNC
College of Nursing
PO Box 210203

RE: **BSC 306.039 USE OF MANZANILLA TEA DURING CHILDBEARING PERIOD AMONG WOMEN OF MEXICAN ORIGIN WHO RESIDE IN THE U.S.-MEXICAN BORDER REGIONS**

Dear Ms. Yount:

We received your letter dated 22 February 2006 and accompanying revised Verification of Training form for the above referenced project. Permission is requested to:

- add Lourdes Paez-Badji, Mireya Velasco, and Sandra Romero as interpreters to the study.

These changes do not impact subject safety. Approval of these changes is granted effective 20 March 2006.

The Human Subjects Committee (Institutional Review Board) of the University of Arizona has a current **Federal Wide Assurance** of compliance, number FWA00004218, which is on file with the Department of Health and Human Services and covers this activity.

Approval is granted with the understanding that no further changes or additions will be made either to the procedures followed or to the consent form(s) used (copies of which we have on file) without the knowledge and approval of the Human Subjects Committee and your College or Departmental Review Committee. Any research related physical or psychological harm to any subject must also be reported to each committee.

Sincerely yours,

Theodore J. Gartke, Ph.D.
Chair, Social and Behavioral Sciences Human Subjects Committee

TJG:md

cc: Departmental/College Review Committee
REFERENCES


DeSantis, L. & Ugarriza, D. (2000). The concept of theme as used in qualitative nursing research. Western Journal of Nursing Research, 22(3), 351-372.


