HOW DO PRENATAL CARE CLINICIANS PERCEIVE THEIR ROLE IN CARE FOR LATINA IMMIGRANTS IN ALLEGHENY COUNTY, PA?

by

Lindsay A. Walker

BS, Ithaca College, 2007

Submitted to the Graduate Faculty of

Behavioral and Community Health Sciences

Graduate School of Public Health in partial fulfillment

of the requirements for the degree of

Master of Public Health

University of Pittsburgh

UNIVERSITY OF PITTSBURGH

Graduate School of Public Health

This thesis was presented

by

Lindsay A. Walker

It was defended on April 16, 2009

and approved by

Thesis Advisor:
Martha Ann Terry, BA, MA, PhD
Senior Research Associate
Director, Master of Public Health Program
Behavioral and Community Health Sciences
Graduate School of Public Health
University of Pittsburgh

Committee Member:
Patricia I. Documét, MD, DrPH
Assistant Professor
Coordinator, DrPH Program
Behavioral and Community Health Sciences
Graduate School of Public Health
University of Pittsburgh

Committee Member:
Eleanor Feingold, PhD
Associate Professor
Department of Human Genetics
Graduate School of Public Health
University of Pittsburgh

HOW DO PRENATAL CARE CLINICIANS PERCEIVE THEIR ROLE IN CARE FOR LATINA IMMIGRANTS IN ALLEGHENY COUNTY, PA?

Lindsay A. Walker, MPH

University of Pittsburgh, 2009

Latina immigrants living in the United States face many challenges when trying to access prenatal care, including lack of insurance, lack of citizenship, language barriers, and financial limitations. There has been little research conducted on prenatal care for Latinas from the clinical perspective. Bridging this research gap has the potential to significantly improve quality of care. Prenatal care providers in Allegheny County, PA, were interviewed on various topics regarding care for their Latina patients, focusing on challenges, protective factors, and opportunities for improvement. Providers included obstetrician/gynecologists, family medicine physicians, nurses and doulas. An interview guide was developed based on existing literature on prenatal care for Latinas and quality measurement theory, including Donabedian's theoretical framework. Language, citizenship issues, lack of health insurance, and financial burdens were some of the primary barriers identified by the providers also specified in the literature. Inadequate domestic violence and family planning resources were among the interview responses that were not emphasized in the literature. Recommendations included the expansion of state sponsored health insurance to all women during pregnancy, increasing the number of Spanish-speaking prenatal care providers, and improvements to informed consent procedures in the hospital system. In terms of public health significance, this research is directly related to several Healthy People 2010 goals, including increasing the number of women who receive adequate prenatal care and improving infant mortality rates.

TABLE OF CONTENTS

| PRI | EFA(| CEVIII |
|-----|------|---|
| 1.0 | | INTRODUCTION1 |
| 2.0 | | REVIEW OF RELEVANT LITERATURE |
| | 2.1 | POPULATION DESCRIPTION: LATINAS IN ALLEGHENY COUNTY . 5 |
| | 2.2 | DELAYED INITIATION OF PRENATAL CARE 6 |
| | 2.3 | BARRIERS TO CARE 8 |
| | 2.4 | LANGUAGE ISSUES9 |
| | 2.5 | CULTURAL COMPETENCE11 |
| | 2.6 | FACTORS ASSOCIATED WITH SATISFACTION12 |
| | 2.7 | SOCIAL SUPPORT13 |
| | 2.8 | ACCULTURATION15 |
| | 2.9 | DONABEDIAN'S QUALITY OF CARE MEASURES17 |
| | | 2.9.1 Accessibility of Care |
| | | 2.9.2 Technical Management |
| | | 2.9.3 Interpersonal Process |
| | | 2.9.4 Continuity |
| 3.0 | | METHODS |
| 4.0 | | RESULTS |

| | 4.1 | 1 | THEMES | 24 |
|------|-----|-------|--|----|
| | | 4.1.1 | Language | 24 |
| | | 4.1.2 | Cultural Competence and Cultural Norms | 26 |
| | | 4.1.3 | Social Support | 28 |
| | | 4.1.4 | Financial Issues | 28 |
| | | 4.1.5 | Citizenship and Documentation Issues | 30 |
| | | 4.1.6 | Explanation of the Hispanic Paradox | 31 |
| | | 4.1.7 | Acculturation | 32 |
| | 4.2 | F | EMERGING THEMES | 33 |
| | | 4.2.1 | Trust in Relation to the Patient/Provider Relationship | 34 |
| | | 4.2.2 | Cultural Dissonance | 35 |
| | | 4.2.3 | Domestic Violence Resources | 35 |
| | | 4.2.4 | Family Planning | 36 |
| 5.0 | | DISC | USSION | 38 |
| | 5.1 | S | SELECTED INITIAL THEMES AND THE LITERATURE | 38 |
| | 5.2 | 1 | THEMATIC RELATIONSHIPS | 45 |
| 6.0 | | CONC | CLUSION AND RECOMMENDATIONS | 47 |
| APP | ENI | OIX A | INTERVIEW QUESTIONS | 51 |
| APP | ENI | OIX B | SUPPLMENTAL QUESTIONS | 53 |
| BIBI | LIO | GRAPI | HY | 55 |

LIST OF TABLES

| Table 1 Dimensions of Prenatal Care Satisfaction | 13 |
|---|----|
| Table 2 Dimensions of Quality: Concepts and Perceptions | 13 |
| Table 3 Initial Theme List | 22 |
| Table 4 Interviewee demographics and professional characteristics (n) | 24 |

PREFACE

The author would like to gratefully acknowledge the support and dedication of her thesis committee members: Dr. Patricia Documét, Dr. Eleanor Feingold and committee chair Dr. Martha Ann Terry. Thank you all for your advice and time dedicated to the completion of this study. Gratitude is also expressed for each prenatal care provider's individual contributions to this study. Your insight and perspective have been extremely valuable and hopefully will be used to improve prenatal care for Latinas in Allegheny County. Finally, the author wishes to thank all of the Latina mothers she has met over the past two years in Pittsburgh who inspired this work. It is my sincere wish that this research be of benefit to you and your families.

1.0 INTRODUCTION

Lack of health insurance and poverty are two of the primary causes of health disparities related to obtaining prenatal care in the United States. Racial and ethnic minorities are the most vulnerable groups affected by this disparity, especially Latina immigrants. Latina immigrants are more likely than any other racial or ethnic group to be uninsured (Brown, Ojeda, Wyn, and Levan, 2000), undocumented (*Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000*, 2003), and living in poverty (DeNavas-Walt, Proctor and Hill Lee, 2004). Furthermore, English language skills may be limited, and recently immigrated women may be more likely to be isolated and therefore less aware of available health resources. When combined, these factors present significant challenges to seeking prenatal care, especially in an area such as Allegheny County, Pennsylvania (PA), which lacks adequate resources to accommodate its Latino population.

Bleak US infant mortality rates continue to persist. Internationally, the United States' infant mortality rank continues to slip each year, currently positioned at twenty-ninth, tied with Poland and Slovakia, with 6.71 deaths per 1,000 live births in 2006 (MacDorman and Mathews, 2008). Furthermore, the national average is much lower than the highest rates of infant mortality found in certain racial and ethnic groups, including non-Hispanic blacks (13.63 percent), Puerto Ricans (8.30 percent), and American Indians/Native Americans (8.06 percent). The first two

groups actually saw increases in infant mortality between 2000 and 2006 (MacDorman and Mathews, 2008).

The international medical community has come to universal consensus that quality, timely prenatal care initiated during the first trimester is one of the most effective means of reducing infant mortality. However, inadequate medical services and late initiation of prenatal care continue to plague certain minority groups in the US, especially African Americans and Latinas. This study focuses on prenatal care utilization patterns of Latinas because of additional barriers to care this population faces, including language, lack of medical insurance, low socioeconomic status, adjustment-related stress for recent immigrants, anxiety related to separation from family members, and fear of the legal system for those individuals without documentation.

Conversely, with the exception of Puerto Ricans, Latinas actually have some of the best infant mortality rates compared to most other races and ethnicities. This is referred to as the "Hispanic Paradox", which will be discussed throughout this document. For this reason, this study did not seek to identify ways to improve birth outcomes, but instead focused on improving prenatal care. While morbidity and mortality outcomes are generally good for this population, initiation of prenatal care often occurs later in pregnancy than recommended. If Latinas were able to improve access to quality prenatal care, it is possible that their excellent birth outcomes would further improve. In addition to improving infant mortality rates, quality and adequate prenatal care is also likely to reduce morbidity and postpartum complications for both mother and baby. While there is a growing body of literature that has researched prenatal care practices of Latina immigrants, there is certainly room for expansion in the field. Additionally, there is very little research that has been completed to garner the prenatal care provider's perspective.

This specific study also takes place in a geographic location with a relatively small, but growing Latino population, which could serve as a model for other cities with similar immigrant growth trends. Cunningham, Banker, Atriga, and Tolbert (2006) call these areas "new immigrant growth centers", where the Latino population is less than five percent of the total population but has doubled in size over the past decade. Approximately 10 million Latino immigrants live in these areas throughout the United States. These communities are inadequately equipped to manage the social and medical needs of these individuals as a result of language barriers, lack of documentation and lack of health insurance, the latter of which increased by six percent between 1996 and 2003. There have been other declines in resources over the past decade for Latinos living in these areas. For example, in 1996 the average household income for a Latino family in one of these communities was \$41,000 compared to \$35,000 in 2003. Latinos in these areas also have less access to medical safety net providers and are more likely to use emergency rooms as a regular source of care than other Latinos in areas with larger immigrant populations.

2.0 REVIEW OF RELEVANT LITERATURE

This study explores prenatal care for Latinas through the perspective of their clinicians. There is a growing body of literature about prenatal care for this population, but little research has been conducted from the clinician perspective. This study also seeks to gauge the provider's perspective on the "Hispanic Paradox" in relation to prenatal care and birth outcomes, which refers to the well-documented epidemiologic theory, supported by national morbidity and mortality statistics, showing that Latino health outcomes are more similar to non-Hispanic whites than non-Hispanic African Americans. This is considered paradoxical because Latinos are more similar to African Americans in regards to socioeconomic characteristics (Hummer, Powers, Pullum, Gossman, and Frisbie, 2007). Furthermore, Latinos have the lowest rates of health insurance and access to health care compared to any other racial or ethnic group in the US (Brown et al., 2000). For these reasons, Latinas could be expected to have some of the worst pregnancy outcomes; however, this has proven not to be the case time and time again.

As stated above, African Americans and Puerto Ricans have the highest rates of infant mortality in the US compared to all other racial and ethnic groups. Conversely, in 2005, infants born to mothers of Mexican (5.53%), South and Central American (4.68%), or Cuban (4.42%) origin were found to have much lower mortality rates than the United States' average (6.86%) (MacDorman and Mathews, 2008). Because national data show that babies born to Latina mothers have much lower rates of infant mortality, this research did not seek to investigate ways

to improve birth outcomes. However, the literature did support that Latinas do face many challenges when trying to access prenatal care in the US.

2.1 POPULATION DESCRIPTION: LATINAS IN ALLEGHENY COUNTY

This study seeks to understand what challenges persist in providing quality, timely care for Latina immigrants in Allegheny County, PA, an area of the country with a relatively small, but growing Latino population. The US Census Bureau estimated that 16,281 Latinos lived in Allegheny County in 2007, comprising 1.3 percent of the population (2005-2007 American Community Survey, 2007). Of that population, 32.0 percent were from Mexico, 20.0 percent were from Puerto Rico, 6.0 percent were from Cuba, 3.9 percent were from Central American, 11.2 percent were from South America, and the remaining 26.9 percent was considered to be "other Latino/Hispanic." For the purposes of this research, all future references to the term "Latino" or "Latina" will exclude Puerto Ricans unless otherwise noted.

Documét and Sharma published research in 2004 about the Latino population in Southwestern Pennsylvania, which included Allegheny County, regarding financial and cultural barriers to health care. The investigators found that few medical resources were available for the Latino population in the region. In their sample of Latinos, nearly half were from South America, while approximately 20 percent of respondents were from Mexico. Approximately 34 percent made less than \$20,000 annually, more than half had low English proficiency, and nearly 60 percent had low levels of acculturation (Documét and Sharma, 2004). Sixty-seven percent planned to stay in the US indefinitely. As most of Southwestern Pennsylvania is considered to be fairly similar in its demographic makeup, Pittsburgh being the largest metropolitan center located

in Allegheny County, their research provides a valid depiction of this study's prenatal patient population.

2.2 DELAYED INITIATION OF PRENATAL CARE

In order to reduce infant and maternal morbidity and mortality, Healthy People 2010's objective states that 90 percent of all pregnant women should seek and obtain prenatal care during their first trimester (*Healthy People 2010*, 2000). As of 2005, 69 percent of Latinas were receiving "early and adequate prenatal care" compared to 80 percent of whites, and 78 percent of Latinas had received prenatal care in the first trimester compared to 89 percent of whites (*Healthy People 2010*, 2000). Additionally, Latinas entering prenatal care during the first trimester rose more than 17 percent between 1999 and 2003, from 60.2 percent to 77.4 percent (Wheatley, Kelley, Peacock, and Delgado, 2008).

However, other studies that took place in geographic areas with large Latino populations found that Latina mothers actually had much lower rates of adequate prenatal care utilization. In 2004, Fullerton, Nelson, Shannon, and Bader studied 493 postpartum women living in the El Paso, Texas/Juarez, Mexico, border region and found that only 30 percent sought prenatal care during the first trimester, 26.8 percent in the second trimester, 12.2 percent in the third trimester, and 13.8 percent sought no prenatal care at all. One hundred sixty-three of the women were considered to have received "inadequate care" according to the Kotelchuck index definition utilized in that study. The Kotelchuck Index was used as a tool in this study to ascertain the adequacy of prenatal care based on biophysiological gestational parameters and standards of care. For the purposes of this study, the cutoff points were as follows: first trimester; one week to

14 weeks; second trimester; 15 weeks to 27 weeks; and third trimester; 28 weeks to 42 weeks. The Fullerton et al. study is particularly relevant for this research because its respondent cohort is very representative of the Latinas residing in Allegheny County; 77 percent of the women spoke only Spanish, more than 50 percent were uninsured, and more than 65 percent had less than a high school education.

Sarnoff and Adams conducted research in 2001 that included Mexican-born Latinas, Mexican-American Latinas (born in the US), African Americans and non-Hispanic whites. The study found that 22 percent of all women sought prenatal care after the first trimester. However, the Mexican-born Latinas had the highest percentage of women with delayed prenatal care at 30.5 percent, compared to White non-Latinas (17.4 percent), African Americans (24.0 percent), and US-born Mexican Americans (25.9 percent). A 2003 study by Buescher in North Carolina had similar findings; Mexican-born Latinas were the most likely to delay or fail to receive any prenatal care (35.7 percent). Latinas born in other countries (excluding the US) had the second highest rate at 26.4 percent compared to African Americans (25.5 percent), US-born Latinas (19.4 percent) and White, non-Latinas (9.6 percent).

In 2002, the Pregnancy Risk Assessment Monitoring System (PRAMS) reported on maternal/child health outcomes in seventeen states based on data from 1996 through 1999. In thirteen of the seventeen states (ethnicity data were unavailable in Ohio, West Virginia, Maine, and Alabama), mothers reporting Hispanic ethnicity were more likely than non-Hispanics to have either initiated prenatal care after the first trimester or received no care at all (Beck et al., 2002). The largest disparity was reported in North Carolina, where 50.9 percent of Hispanic mothers received no care or delayed care compared to 19.2 percent of non-Hispanics. While national infant mortality trends clearly show that Mexican, South and Central American, and

Cuban babies have excellent mortality outcomes, these study findings also show that Latinas born outside of the US are more likely to delay or fail to obtain prenatal care more than any other racial or ethnic group.

While the Sarnoff and Adams (2001) study found that Mexican-born Latinas were the most likely to have delayed entry into prenatal care, those women also reported to be the most satisfied with the time of initiation of care. More than 81 percent of Mexican-born mothers who entered care late were satisfied with their time of prenatal care initiation, compared to 43 percent of US-born Latinas, 45.9 percent of African Americans, and 53 percent of whites. The study was limited in its ability to assess why the Mexican mothers were the most satisfied with their late care; however, the authors hypothesized the primary reasons were related to cultural differences including different culturally-based perceptions of what constitutes "adequate" and appropriate prenatal care and Mexican social support systems that traditionally take a more important role in early prenatal care than medical facilities.

2.3 BARRIERS TO CARE

The assumption that Latina immigrants face barriers when trying to obtain prenatal care has been studied throughout the United States, especially in California and the US-Mexico border regions. Obvious barriers include limited or lack of English proficiency, lack of insurance, financial constraints, transportation issues, and difficulty obtaining appointments that do not conflict with work schedules. In a review of the current state of sexual and reproductive health services available to Latinas, Foulkes, Donoso, Fredrick, Frost, and Singh (2005) identified facility hours, child care arrangements and payment as major barriers to making an appointment and receiving

care. As a result of these barriers, the authors found that Latina women are often forced to forego contraception, even when trying to avoid pregnancy, or use "underground suppliers" of birth control when they are unable to access family planning services. The study also cited lack of Latina doctors, doctors who speak Spanish and adequate on-site translators as barriers to communication, and thus to adequate care.

2.4 LANGUAGE ISSUES

Ideally, all individuals would like to be treated by doctors who speak their language, especially when seeking high priority care, such as during pregnancy. US Executive Order 13166 requires federally funded facilities to provide appropriate translation services at appointments (Clinton, 2000); however, patients who do not speak English are often unaware of this legislation or, as a result of a language barrier, are unable to advocate for this service. Latinas in the US are often forced to see doctors who do not speak Spanish in offices that do not provide translators. While this is particularly true in geographic areas with small Spanish-speaking populations, such as Allegheny County, PA, this problem persists throughout the US.

In 2007, Hunt and de Voogd studied a prenatal care center in Texas and found that Latina patients with limited English proficiency were not being administered informed consent properly, using the criteria of failure to adequately communicate "voluntariness, discussion of alternatives, adequate information, and competence" by the facility staff (pg. 601). This was attributed to the utilization of untrained interpreters and clinicians' use of their own limited Spanish abilities. Ninety-one percent of the women with limited English proficiency did not receive adequate informed consent compared to only 32 percent of English concordant women.

A qualitative study (Julliard, Vivar, Delgado, Cruz, Kabak, and Sabers, 2008) in Brooklyn investigated Latina patients and nondisclosure of medical information to physicians in prenatal care settings. Eighty-two percent of the women cited language discordance as a barrier to full disclosure of information. The study participants reported that language barriers prevented them from communicating information to the doctors, prevented clinicians from adequately explaining treatments and procedures, and led to fears about confidentiality when inappropriate translators, such as friends or family members, were used. Even translators hired by the facility made some women uncomfortable. Having a non-clinician third party in the room during intimate exams (e.g. Pap smears and pelvic exams) embarrassed many of the women. In this study, having a Spanish speaking clinician was the most ideal solution to eradicate communication barriers.

Studies have been conducted about language barriers from the clinical perspective. Gurman and Moran (2008) surveyed clinical labor and delivery staff in five cities on the East Coast and found that only 18.5 percent of respondents were appropriately utilizing interpreters. Some of the principal mistakes committed by the clinicians included failure to make eye contact with the patient when using translators and the use of family members as interpreters, the latter of which is considered to be inappropriate according to professional conduct standards for licensed interpreters for the deaf ("NAD-RID Code of Professional Conduct," 2005). Many of the physicians agreed that training in norms in the Latino culture as well as seeking information from colleagues who are more knowledgeable about the population could improve their ability to care for their patients. It was also evident from the study that physicians could benefit from training on how to appropriately use translators (Gurman and Moran, 2008).

2.5 CULTURAL COMPETENCE

Cultural competence is closely linked to language barriers in the case of medical care for Latina patients; it is not enough to simply speak Spanish, but the clinician must also understand the cultural environment of these women in order to provide truly quality care. Several studies have examined Latino culture's influence on patients' inclination toward warm, caring relationships with their doctor. This has been referred to as "simpatía—a preference for positive interpersonal relations" in Latino culture (Stewart, Napoles-Springer, and Perez-Stable, 1999, pg. 317). Additionally, the authors found that Latinas have been well documented seekers of medical advice from family and friends, in addition to or instead of advice from a trained clinician.

A study of women (Tandon, Parillo, and Keefer, 2005) receiving prenatal care in Palm Beach, Florida, revealed that both cultural discordance and language barriers had negative effects on Latinas' perceptions of receiving respect from office staff and doctors; those barriers also decreased understanding of medical information, decreased ability to ask questions, and decreased desire for follow-up visits. The study investigators suggested the initiation of a prenatal care "group" for Latina mothers as a solution. Such a group exists in Pittsburgh, called *Nueve Lunas* or Nine Moons. This independent group operates as a support organization for pregnant Latina immigrants and provides information about prenatal care and maternal-child health issues, such as finding a doctor and breastfeeding.

In a study (Wheatley et al., 2008) that conducted focus groups about pregnancy experiences of ethnically diverse, low income women, four major themes emerged as markers of "quality, patient centered care," including careful listening, thorough explanation of diagnoses, procedures, and treatments, demonstrated respect, and adequate time spent with the patient by the physician. This study also found that Mexican-American participants were more likely than

other women to rate their care as inadequate if they did not feel their physician was sufficiently attentive and emotionally available.

2.6 FACTORS ASSOCIATED WITH SATISFACTION

Language concordance, cultural understanding, and provider empathy and friendliness are all closely linked to Latinas' satisfaction with their prenatal care experiences. With increasing focus on patient-centered care, patient satisfaction has become a key indicator of quality of care in addition to measurable health outcomes. Raube, Handler and Rosenberg (1998) sought to identify which main concepts effectively measure satisfaction with prenatal care for ethnically diverse, low-income women. Based on their review of literature and follow-up research, the authors identified six dimensions of satisfaction that were found to be both reliable and valid in the assessment of prenatal care: art of care, technical quality, physical environment, access, availability, and efficacy (see Table 1).

A similar study of ethnically diverse women, including second generation Mexican Americans and Puerto Ricans, identified the following markers of quality and satisfaction with prenatal care: "art of care, the technical competence of the practitioner, continuity of caregiver, and the atmosphere and physical environment of the care setting" (Handler, Raube, Kelley, and Giachello, 1996, pg. 34) (see Table 2). The study actually found few differences between different ethnic groups on perceptions of quality prenatal care; however, no foreign-born Latinas were included in the study. Although foreign-born Latinas may have socioeconomic profiles similar to other racial minorities, language barriers and cultural norms play an enormous role in

what constitutes patient satisfaction and perceptions of quality of care in their unique subpopulation.

Table 1 Dimensions of Prenatal Care Satisfaction

| Art of Care | Technical | Physical | Access | Availability | Efficacy |
|---|--|---|--|---|-------------------------------|
| | Quality | Environment | | | |
| Modernness of equipment Respect shown by nurses or receptionists Concern shown by nurses or receptionists Comfort shown by nurses or receptionists Respect shown by doctors or nurse-midwives Concern shown by doctors or nurse-midwives Comfort shown by doctors or nurse-midwives Equity of treatment | Technical skills of doctor or nurse- midwife Thoroughness of examinations Explanation of procedures | Cleanliness of office or clinic Comfort of waiting room Attractiveness of office or clinic Atmosphere of waiting room | Location of office or clinic Waiting time at office or clinic Waiting time to get an appointment Hours of office or clinic | Availability of nutritional services Availability of doctors or nurse-midwives Availability of substance abuse referrals Availability of social workers or counselors | Helpful- ness of advice |

SOURCE: Raube, Handler and Rosenberg 1998

2.7 SOCIAL SUPPORT

Numerous protective factors could support foreign-born Latinas' high rates of healthy birth weight babies and consistently low rates of infant mortality (MacDorman and Mathews, 2008), such as healthy diet (Harley and Eskenazi, 2006) and low rates of smoking during pregnancy (Acevedo, 2000; Buescher, 2003). However, all of these behaviors appear to be linked to social support, a crucial protective factor for Latinas during pregnancy.

In a 2006 study by Harley and Eskenazi, in a population of farm workers of Mexican origin in California, women with strong social support during pregnancy exhibited more positive

pregnancy behaviors, such as eating healthy diets, using prenatal vitamins and not smoking. The study showed that having come to the US from Mexico at an older age was a protective factor; however, age of immigration was trumped by level of social support, defined as any support by others and categorized as emotional, informational, or instrumental support.

Table 2 Dimensions of Quality: Concepts and Perceptions

Access

Personal accessibility

Convenience of locations

Transportation types

Travel time, costs

Hours/days of service delivery

Technical management

Availability of resources

Ability of providers to elicit and respond to questions

Treatment/advice is provided according to professional

standards of care diagnostic, therapeutic, preventive

Interpersonal processes

Personal acceptability of care

Language spoken/interpreter

Humanness

Information gathering

Information giving

Pleasantness of surroundings and staff

Continuity

Continuity of care/follow-up appointments

Perception of improvement/protection of health

Finances

Efficacy/outcomes of care

Satisfaction

Referral as appropriate to standards

SOURCE: Handler, Raube, Kelley, and Giachello, 1996

Early social support research was more focused on structural support and the sheer size, i.e., number of people, of one's support group. However, that framework has changed after the realization that not all relationships are constructive or supportive. Social support is best

measured by how much a support an individual *perceives* she has, as opposed to any formula that attempts to measure resources or number of social contacts. More recent research calls for an even broader view of social support that incorporates the cultural environment as the primary foundation of social support. The cultural framework impacts health via social support, social norms, social persuasion, and access to resources (Berkman, Glass, Brissette, and Seeman, 2000).

Acculturation and time spent in the US have been shown to impact individuals' perceptions of social support (Harley and Eskenazi, 2006). Recent immigrants are more likely to have lower levels of perceived social support than women who have been in the US longer. More recent immigrants have not yet had the opportunity to develop social networks to fill the void caused by separation from family and friends, and as a result are more likely to feel isolated and unsupported. Furthermore, inadequate social support is more likely to have detrimental effects on an individual who perceives it is a critical impetus behind personal decisions. Latinas often include their family members in their decision making process in regards to medical care, especially during pregnancy, and lack of such a support network can be quite difficult for recent immigrants (Dunkel-Schetter, C., Sagrestano, L., Feldman, P., and Killingsworth, C., 1996).

2.8 ACCULTURATION

While social support has been viewed as a protective factor in prenatal care for Latinas, acculturation has proven to be a major risk factor. Foreign-born Latinas who immigrate to the US may begin to adopt American behaviors and attitudes, thus assimilating into American culture. This acculturation occurs in different ways and to varying degrees over time in the many

fragmented sub-groups that comprise the group that has been labeled "Latina." As a result, acculturation of the Latina population is just as varied as the group itself. However, studies have shown that pregnant Latinas who are more assimilated into American culture are more likely to exhibit negative pregnancy behaviors, including smoking cigarettes (Balcazar, Peterson, and Cobas, 1996) and drug and alcohol abuse (Zambrana, Scrimshaw, Collins, and Dunkel-Schetter, 1997). For example, Buescher's 2003 study of Latino health behaviors in North Carolina found that only 0.6 percent of Mexican-born Latinas and 1.7 percent of other non US-born Latinas smoked during pregnancy compared to 7.8 percent of American-born Latinas.

While the Hispanic Paradox has been studied and supported for many years, now that second generation Latinas are starting to have children in much larger numbers, the paradox is beginning to unravel. Latinas who were born in the US are more likely to experience poorer pregnancy outcomes (e.g., low birth weight, intrauterine growth retardation, and preterm delivery) than their mothers who were born outside of the US (Balcazar, Krull, and Peterson, 2001). For this reason, researchers want to know what aspects of traditional Latino culture are so protective during pregnancy.

Family cohesiveness and support are two of the most important protective factors of traditional culture. Family members have been found to discourage "bad" American behaviors during pregnancy, such as smoking and drinking, while encouraging "good" practices like eating healthy diets and using prenatal vitamins. However, individual behaviors, which impact psychosocial and health outcomes, vary greatly from person to person, and depend on the woman's level of acculturation, time spent in the US, social support system and personal, emotional and psychological characteristics (Acevedo, 2000; Balcazar, Peterson, and Cobas, 1996; Balcazar, Krull, and Peterson, 2001).

2.9 DONABEDIAN'S QUALITY OF CARE MEASURES

In 1980, Avedis Donabedian's work on quality assessment in the American health care system laid extensive groundwork for quality evaluation measures that are still used today. Donabedian's research incorporated classification approaches of many theorists pursuing quality measures, and this multi-dimensional approach resulted in an evaluative method that primarily focuses on *structure*, *process* and *outcome*. (Donabedian, 1980). Within that approach, Donabedian refers to four main constructs of quality: *Accessibility*, *Technical Management*, *Management of the Interpersonal Process*, and *Continuity*; each is analyzed in relation to structure, process, and outcomes (Donabedian, 1980).

2.9.1 Accessibility of Care

Accessibility of care refers to the physical space and socio-organizational characteristics of a health care facility. Structural characteristics, including the facility's hours of operation, ability to make an appointment and accessibility of location, are all key components of quality, accessible care for this population. These structural issues pertain to Latinas' preference for non-traditional times for appointments that do not interfere with work schedules, difficulties scheduling appointments at facilities without Spanish-speaking staff, and reliance on public transportation to get to their appointments. Practitioner-related outcomes are also an important component of accessibility, referring to physicians' perspective on the accessibility of care and how that affects their patients.

2.9.2 Technical Management

Technical management structure has a number of facets, but most importantly, it emphasizes the provider's satisfaction with "conditions of work, facilities, equipment, staffing, remuneration, relationships with colleagues, relationships with patients, prestige, opportunities for learning, etc." (Donabedian, 1980, pg. 95). Practitioner related outcomes under technical management are especially relevant to this research including satisfaction with time allowed for patient care and suitable work conditions. As prenatal care normally requires additional clinical hours, clinicians who work with non-English speaking patients from different cultural backgrounds will undoubtedly require more time and additional resources.

2.9.3 Interpersonal Process

The management of the interpersonal process may be the most relevant aspect of Dondabedian's work for this study. As stated above, Latinas associate quality care and satisfaction with courteous, kind clinical staff and doctors who take time to develop a personal relationship with them. In structure, Donabedian says quality care should include a stable patient-doctor attachment and adequate time for the doctor to spend with the patient (Donabedian, 1980). Process also comes into play at this point. Inadequate communication as a result of language dissonance is a well-defined barrier to quality care for many Latinas.

Donadedian (1980) said quality process in the management of the interpersonal should include "concern, courtesy, respect for the client's autonomy, maintaining privacy, explanation, reassurance, support; non-judgmental acceptance of the patient, his illness, and his behavior" (p. 96). By addressing these issues, clinicians can improve patient satisfaction, even with the

existence of a language barrier. Donabedian's practitioner-related quality constructs were incorporated into the interview questions as they relate to satisfaction with patient relationships, opinions about patient behaviors, and knowledge of patient concerns and problems.

2.9.4 Continuity

Finally, Donabedian (1980) refers to *continuity*, a critical element of all medical care, but found to be a major desired element of quality prenatal care. Continuity refers to an idea of a "central, coordinated source of care" (p. 97), often referring to a primary care physician, but in this case, to the primary source of a woman's obstetric care. Process is an immensely important part of continuity in terms of prenatal care because it refers to the coordination of all physicians and facilities participating in the patient's care. As prenatal patients often receive various tests, ultrasounds, and other screenings at multiple sites during their pregnancy, the effective management of this care is vital to maintain quality in terms of continuity. The organization of prenatal care is particularly difficult for this population, as they may have limited options as a result of financial, language and citizenship barriers.

3.0 METHODS

The remainder of this thesis is based on open-ended interviews conducted with seven prenatal care providers in Allegheny County, PA. This study received exempt IRB approval from the University of Pittsburgh in January 2009. A consent script was developed and provided to all interview participants.

It is fair to assume that doctors are unable to adequately judge their patients' perceptions of quality of care; therefore, clinicians were only asked about the quality of the logistical aspects of their facilities and how they *personally* perceived the quality of their work environments. Dimensions of quality measurement theories were used to develop the Interview Guide for the providers (*see Appendix A, pg. 51*). While measuring quality of care was not the ultimate objective of this study, reliable and valid methods of quality assessment were used as the main foundation for question development. Questions were asked to gauge the provider's perspective on appointment duration, patient privacy, recommendations for improvements, challenges, the doctor-patient relationship, facility resources, payment and accessibility. Factors associated with prenatal care for Latina immigrants identified in the literature were also used in question development. These questions referenced language barriers, initiation of care, the Hispanic Paradox, acculturation issues, and social support. Demographic questions were also developed as part of a Supplement Question guide (*see Appendix B, pg. 53*).

Clinicians were contacted via email or telephone. Selection criteria included the following: prenatal care provider to Latina immigrants and currently or recently (within the last five years) worked in Allegheny County, PA. Interviews were conducted in clinicians' offices, personal residences, and by telephone between February and April of 2009. All interviews were digitally recorded. A semi-structured interview format was followed.

Of the providers who were initially contacted, three declined, one no longer lived in Allegheny County, one was out of the country and unavailable for interview; the remaining seven agreed to participate. Two interviews were conducted in person and five were conducted via telephone. The interviewees included one obstetrician/gynecologist, two currently practicing family medicine physicians, one non-practicing family medicine physician, one nurse, and two doulas, who have been trained to provide physical, emotional, and educational support to pregnant women during pregnancy, delivery, and after birth.

Initial themes were developed based on the review of literature and assessment of quality theories. These themes were used as a preliminary analysis guide (*see Table 3*). Each interview was recorded and transcribed. Transcripts were then analyzed using systematic qualitative analysis methods. Initial themes were identified and coded within the transcript. Additional emerging themes were also identified and coded on the transcripts. An interview discussion topic was classified as a theme if at least two providers mentioned it specifically. Initial themes were eliminated if fewer than two providers talked about the topic.

Table 3 Initial Theme List

01.0 Language barriers

- 01.1 Lack of communication
- 01.2 Lack of adequate translators
- 01.3 Friends and family as translators
- 01.4 Inability to properly discuss medical information

02.0 Social support

- 02.1 Social support as a protective factor
- 02.2 Support from friends and family

03.0 Acculturation

- 03.1 Varying levels of acculturation
- 03.2 Effects on behaviors and lifestyle

04.0 Socioeconomic barriers

- 04.1 Lack of insurance
- 04.2 Inability to pay

05.0 Patient-doctor relationship

- 05.1 Warm personalities of Latina patients
- 05.2 Desire of Latina patients develop bonds with doctor

06.0 Latina culture

- 06.1 Challenges
- 06.2 Strengths and protective factors

07.0 Hispanic Paradox

- 07.1 Explanation of theory
- 07.2 Validity of theory

4.0 RESULTS

All seven interviewees were women. Three, including one who is a native Spanish speaker, spoke Spanish to varying degrees of fluency. The two non-native speakers did not use interpreters during consultations with Spanish-speaking patients. Interviews ranged from 17 to 48 minutes in duration. Three had worked with Latina immigrants in other parts of the US outside of Allegheny County. Refer to *Table 4* for more specific respondent demographic information.

The providers generalized that more than 90 percent of their Latina patients are low-income, undocumented and uninsured. They usually live with a boyfriend, male partner or husband and range in age from late teens to mid-thirties. They primarily have immigrated from Mexico and South and Central America. Most women have been in the US for less than years, work at low wage jobs without benefits and are in the US to provide financial support to their families. Providers also identified another group of Latinas that mostly consists of graduate students and other professionals residing in the US legally to work or study, however that group made up less than 5 percent their Latina patients. Latinas comprised approximately 10-20 percent of the providers' obstetric patient base.

4.1 THEMES

The following themes relate to topics that were discussed in the provider interviews. Some of these themes were included in the original theme list; however, several new topics also emerged: including language, citizenship issues, and financial burdens directly tied to lack of health insurance.

Table 4 Interviewee demographics and professional characteristics (n)

| Gender | Female 7 |
|-----------------------------|-----------------------------|
| Occupation | OB/GYN 1 |
| | Family medicine physician 3 |
| | Doula 2 |
| | Nurse 1 |
| Spanish fluency | Yes 3 |
| | No 4 |
| Length of time working in | 0-2 years 1 |
| prenatal care | 2-5 years 4 |
| - | 5-10 years 0 |
| | 10 years+ 2 |
| Length of time working with | 0-2 years 3 |
| Latinas in Allegheny County | 2-5 years 3 |
| | 5-10 years 1 |

4.1.1 Language

It's really important who the interpreter is.

Language issues emerged as the one of the principal obstacles in providing prenatal care for Latina immigrants. Every provider emphasized this as an issue, even those who had Spanish language skills. Language was mentioned as a barrier for many reasons, beyond the basic breakdown in patient-provider communication. Providers linked language discordance to trust issues, decreased communication, lack of understanding, negative impact on patient decision making, inadequate interpreters, and having insufficient time during appointments to accommodate translation needs.

One non-Spanish speaking provider felt that patient trust was strongly linked to language skills. She felt that if she knew how to speak Spanish, her patients might have more initial trust, enhancing the patient-provider relationship.

If I was Spanish speaking it shows to them that I took the time to learn their language. It's a common thing. It says ... she understands more about me and my culture. (Interview One)

The same physician thought that language barriers sometimes prevented her from adequately conveying treatment options to a patient because those options were first filtered through an interpreter. When friends or family members served as translators, the doctor believed that their cultural or personal biases prevented the patient from getting the opportunity to fairly assess all of her options. For this reason, this clinician believed that translators should have no personal affiliation with the patient, nor should they be medical professionals, both of which could lead to translation biases in the exam room.

Interpreter bias was a common difficulty mentioned by many of the providers. Several providers were adamant about the need for neutral translators as opposed to friends or family members. It was mentioned repeatedly that it was more difficult to ensure confidentiality and privacy when using a friend or family member as an interpreter. One of the doctors stated that it was unethical to use family members or friends, and several doctors said that friends and family were unreliable resources as far as translation accuracy was concerned. To accommodate

Spanish-speaking patients, doctors reported the use of other Spanish-speaking staff members, professional translators, and Internet or telephone-based interpreting services.

Language barriers also emerged as a major challenge in regards to informed consent and release forms. Many of the providers felt that local hospitals serving as labor and delivery facilities were negligent in providing appropriate translation resources, especially in regards to consent. One of the providers shared a story about a mother who spoke no English who was administered a narcotic during labor without receiving informed consent in Spanish. The mother had planned on having a natural birth without pain medication, but didn't know what kind of drug she had been given. This provider, along with several others, felt that the hospitals do not prioritize the provision of adequate translation services. Interviewee Seven elaborated in saying that "Informed consent is the law. I guess they [the hospitals] are comfortable that somebody will not have the resources to complain or file something against them. Which is probably true, but still just not right."

4.1.2 Cultural Competence and Cultural Norms

There's going to be a cultural barrier, even if we have perfect language interpretation.

All of the providers acknowledged difficulties in regards to cultural differences, but in general, care was not negatively impacted by those differences. One doctor likened the translation process to a game of "cultural telephone" between the patient, translator and doctor, with each individual bringing her personal and cultural worldview to the table, which is then further filtered by translation of language. This same doctor felt that having cultural dissonance with her Latina patients was an additional barrier to providing quality care, noting that she did not always know

if her medical recommendations were culturally appropriate, especially in regards to genetic testing or abortion services.

According to the literature, Latina immigrants are more likely to initiate care after the first trimester compared to other racial and ethnic groups, although interviewees' experiences with this finding were mixed. Some had a few Latina patients who initiated care during their third trimester, while others providers found that most of their Latina patients initiated care during their first trimester. One clinician found that 78 percent of her Latina patients sought care after the first trimester and 50 percent of those same women failed to have enough follow-up appointments to meet the criteria of an adequate prenatal care schedule. Another provider felt that her Latina patients were the least likely group to miss or cancel appointments. Those providers who frequently saw late entry to care did not attribute it to cultural differences but rather lack of knowledge about available resources, failure to recognize signs of pregnancy, or apprehension about seeking medical care because of fear of deportation or financial concerns.

One provider did mention embarrassment related to pelvic exams as a cultural barrier that was also addressed in the literature:

The exam is usually more challenging because of the cultural background they have about their vulva. It's actually been a really limiting factor in a couple of cases. I couldn't even perform an exam. ... They don't want to hear about it. They don't want to know about it. It's taboo big time. (Interview Four)

Another provider found her patients to have much more positive attitudes toward pregnancy than other patients. She found her Latina patients were less fearful of the birth process and in general had healthier behaviors, such as not smoking, that she attributed to cultural norms. Every provider mentioned that her Latina patients were far less likely to smoke or drink during pregnancy than any other racial or ethnic group, a finding supported by the literature.

4.1.3 Social Support

When they have a support network, they really know how to use it.

When asked about social support of Latina patients, every provider had witnessed the supportive network of the Latino community, especially when a woman is pregnant and may require additional resources. One provider linked this social support to the presence of male partners and found that the vast majority of her Latina patients were either married or living with a male partner. Another provider spoke of the importance of trusted friends and female relatives who already had children and the impact of their advice on the prenatal care decisions of her patients. Another provider noted that she was less worried about postpartum depression in her Latina patients because she knew most of them had strong social support networks that would notice any out-of-character behavior and would offer help in the event there was a problem.

All of the providers mentioned the support group *Nueve Lunas* during their interviews and viewed the organization as a vital source of support to these women during pregnancy. Many of the providers noted the absence of more traditional family support relationships (i.e., mother, sister, cousin) but found that most of their patients had linked up with friends, neighbors, and community volunteers for sources of support. Most providers viewed social support in the Latino community as a distinguishing characteristic they were less likely to see in other patient populations.

4.1.4 Financial Issues

They want to contribute to their care. They aren't trying to get away with nothing.

Many of the doctors interviewed work at health centers where many of the patients are low-income and either uninsured or on Medical Assistance. As a result, these clinicians are not unaccustomed to working with the financial challenges of serving a poor population. However, the vast majority of their pregnant Latina patients are not only low-income and uninsured, they are undocumented as well. That unique combination of demographic factors makes obtaining costly prenatal care services for these Latina patients quite difficult. One family medicine doctor noted that she was extremely limited in the services she was able to obtain for her high-risk Latina patients. Under normal circumstances she would refer them to a specialist obstetrician, but is unable to do so for her Latina patients because they do not qualify for Medical Assistance and cannot afford thousands of dollars in out-of-pocket expenses. This doctor was also limited in the testing she was able to obtain for her Latina patients and was unable to offer much diagnostic care other than the blood tests available at her facility. Even if she was able to obtain an ultrasound at a discounted rate, she noted that any evidence of an abnormality could only be treated after upfront payment of thousands of dollars to a specialist.

Another doctor discussed how she personally had negotiated down the out-of-pocket costs of ultrasounds for all of her uninsured Latina patients from \$1200 to \$296 at a local hospital. That agreement was reached only after the doctor managed to persuade the hospital that it would be far more cost effective to diagnose any problems early in the pregnancy than deal with a far more expensive medical problem during delivery or after the baby was born. The doctor was adamant about the fact that finances should not interfere with her ability to provide quality care. Many of the providers acknowledged the cost of diagnostic ultrasounds as the primary financial burden for their patients, with some costing as much as \$1,000. No one included in this interview worked at a facility with advanced diagnostic ultrasound testing onsite.

The same doctor who negotiated down the price of ultrasounds also mentioned difficulties in obtaining patient education materials and breast pumps for her Latina patients, the latter of which are normally covered by Medical Assistance. She admitted frustration in knowing that adequate resources for this population exist; however, adequate funding does not. Obtaining patient education materials in Spanish was a costly challenge that plagued many of the providers.

Three providers had significant concerns about the application process for Emergency Medical Assistance (EMA) at the delivery hospitals. These providers found that social workers at the hospitals are not fulfilling their obligations to help the Latina mothers complete the necessary paperwork to cover the cost of labor and delivery under EMA, which covers the majority of costs of those services for low-income women, regardless of citizenship status. As a result of failing to fill out the appropriate paperwork, patients end up receiving very expensive medical bills for services that should have been covered under EMA. Interviewee Six stated that "One of the problems that we are seeing is that the hospitals are ... assuming zero responsibility for this. People are getting bills for upwards of thousands and thousands of dollars for their births." Overall, lack of insurance coverage was one of the top barriers providers reported to face.

4.1.5 Citizenship and Documentation Issues

If I could wave a magic wand, I would make these women immune from prosecution during the duration of their pregnancy and even up to the first or second year of the baby's life.

Look I'm not here to report you or anything, I just need the truth.

The physicians were not specifically asked if they believed that citizenship status affected the care of their Latina patients; however, it clearly emerged as an obstacle. Many of the physicians found that their patients were distrustful of their medical facility because of fear that their

information would be given to the government, and sometimes that distrust caused patients to lie or withhold pertinent information. All physicians experienced difficulty assuring their patients that they were not sharing information with anyone and only wanted to provide quality care. Lack of a social security number was frequently cited as a barrier to care, especially when trying to obtain care in the local hospital system, apply for financial assistance, or qualify for Medical Assistance or other types of health insurance. One physician, who works at a community health center that has no citizenship requirements for patients, believed that it was imperative that more outreach be done in the Latina community to let women know they can receive quality care without fear of deportation. That doctor was matter-of-fact about the extensive documentation barriers facing her Latina patients: "I don't think they suffer because of their language barrier, they suffer because of their green card barrier."

4.1.6 Explanation of the Hispanic Paradox

It all has to do with the family support, the community support, the faith-based support and the avoidance of bad behaviors.

Although each of the providers had at some point heard of the Hispanic Paradox, no one was completely certain of its definition. After hearing an explanation of the phenomenon, most of the doctors attributed it to social support, cultural norms and customs carried over from native countries. Of the seven providers, only one respondent stated that she did not believe in the validity of the theory based on her experiences with this population. Several providers suggested that Latinas may have healthier attitudes toward pregnancy than American women, but also acknowledged that this attitude may wear off after the first generation of immigration. One physician noted that her Latina patients were far less likely to smoke or drink alcohol during

pregnancy compared to her other patients, but saw how substance use increased with time spent in the US.

Another clinician discussed differences in prenatal care utilization between her Latina and African American patients. She found that her African American patients, who do not have the same language, insurance, and documentation barriers as Latinas, are less likely to initiate prenatal care in a timely fashion. However, when referring to her Latina patients, she said "If given an opportunity to get medical care and utilize the system, they do have healthier babies and the outcomes are usually good." She believed that Latinas were more likely to utilize the resources they had available and found that they knew the value of timely, quality prenatal care and its positive effects on their own health and the health of their babies.

4.1.7 Acculturation

While acculturation had been portrayed as negative in the literature, providers found both positive and negative aspects of Latina women adapting to life in the US. Many providers saw that more acculturated women tend to be more empowered and confident than recently immigrated women. As a result, the more acculturated women have better skills to obtain prenatal care resources. In terms of seeking care, one provider found that "People are becoming more comfortable with the idea that they won't be met with hostility when seeking care." Several providers also noticed that there was a lower level of fear of deportation by women who have been in the US longer. Conversely, women who had been in the US longer were more likely to have adopted American diets consisting of processed foods, compared to a more traditional Latino diet based on fresh produce. Also, according to the providers, more acculturated Latina mothers are more likely to prefer medical intervention during birth and less likely to breast feed.

In general, acculturation was viewed as a positive change by the providers. Latinas who have been in the US longer were more likely to "know the ropes" as far as navigating the health care system and were therefore able to assist other, more recently immigrated women during their pregnancies. One provider shared a story about two pregnant Latinas who met on a bus. One of the women asked the other woman where she was going for prenatal care. The other woman ended up taking the woman, a complete stranger, along with her to her next prenatal appointment. It was clear to providers that Latinas in Allegheny County are very concentrated in their efforts to help other women during their pregnancies, a process which Interviewee Six described as "a really beautiful example of organic community building; to actually be intentional about helping one another and offering skills and help to one another."

4.2 EMERGING THEMES

Several themes emerged from the interviews that were not included in the initial list. Citizenship issues were mentioned repeatedly as barriers to providing adequate care, especially in reference to obtaining services outside of the physician's facility. One of the doctors stated that she believed citizenship barriers were the number one issue in providing completely adequate prenatal care. Lack of a social security number prevented many doctors from obtaining necessary screening exams for their Latina patients at other facilities. This issue also created distrust between the patient and facility, and at least in one case, caused a patient to lie about her age. This distrust was fueled by fear of deportation and information sharing between the medical facilities and the government.

4.2.1 Trust in Relation to the Patient/Provider Relationship

It's all about, this is what happened to my friend. Because I figure if my friend trusts you, I'm going to trust you.

Trust, not included initially, emerged as a significant theme. Trust was discussed in relation to competence of the provider, distrust of authority, and suspicion of the medical establishment. One of the providers noted the importance of word-of-mouth recommendations in the Latina community. In the event that one person had an adverse outcome, a friend of that individual was more likely to be distrustful of the circumstances of that care. In the event an individual had a good outcome, her peers were more likely to completely trust the system of care that person had used.

Another provider found that Latinas she served were very distrustful of authority and many believed that there was a link between her facility and the government. In one case, the physician discovered a woman was lying about her age, which created a problem as far a medical testing was concerned:

I have one now for instance that is pregnant, and comes in and the identification she provides to us in order to get her registered says that she is twenty-five years old. But when you talk to her and ask her to verify the birth date and all, she gives you information that makes her nineteen. (Interview Three)

When confronted, the patient refused to reveal her actual age, which detrimentally impacted the patient-provider relationship. Furthermore, without knowing the patient's true age, the doctor was unable to know if she was ordering the appropriate lab work and interpreting the results accurately, both of which are dependent on the patient's real age.

Interviewee Five emphasized the critical role that knowing even a little bit of Spanish can play in improving trust and the patient-provider relationship. She said that "Knowing even a little

bit of Spanish can open up the door like a miracle," meaning that even an attempt to speak minimal Spanish on behalf of the doctor vastly increased trust and communication. This respondent also was emphatic about the critical need for more Spanish speaking OB/GYN physicians in the local area, citing that having only a few family medicine physicians who are able to speak Spanish has created an enormous gap in reproductive health services for Latina women.

4.2.2 Cultural Dissonance

Culture dissonance also emerged as a theme. Providers found that their Latina patients may have different expectations for care if they had previously given birth in a Latin American country. The physicians were also less comfortable talking about sensitive subjects, like genetic testing and abortion options, not knowing if it was culturally appropriate to even mention those options. In general, the providers recognized that they had cultural barriers to navigate with their Latina patients, but those barriers did not seem to significantly impact quality of care.

4.2.3 Domestic Violence Resources

Two interviewees were extremely concerned about lack of resources for victims of domestic violence for Latinas during pregnancy and postpartum. One provider shared a story about a Latina mother who showed up at the medical facility injured with her infant after a domestic violence dispute. The distraught woman spoke no English, and there were no Spanish speaking staff members at the facility. A Spanish-speaking doula was located and brought to the site to help translate; however, it was determined that there were no available resources for this woman

and her child in Allegheny County because she did not speak English. Only one Spanish-speaking domestic violence counselor in Allegheny County was known to any of the interviewees, and it was noted that there was an extremely high demand for her services.

The interviewees were particularly concerned about this issue for several reasons. The providers had found rates of domestic violence to be higher during pregnancy, which is already an extremely vulnerable time period. Providers had witnessed a few cases of domestic violence related to paternity issues, which the women had no way of resolving because of financial constraints. Furthermore, because of their documentation status, Latinas were afraid to report their abusers to the police for fear of being deported. Also, the providers had found that many Latina immigrants who were in the US to work were not necessarily in love-based relationships, but rather financially-dependent partnerships, which often resulted in domestic violence situations.

4.2.4 Family Planning

One provider mentioned that family planning resources for Latinas in Allegheny County were inadequate. She felt that many of the problems Latina immigrants face when dealing with an unplanned pregnancy could be resolved with improved family planning resources. Interviewee Seven stated that "The fact that there isn't a sort of coverage for women to have those family planning services just leads to more pregnancies and more births." She noted that many women who were in the US to work or were not in healthy relationships really desired to avoid pregnancy, but did not have the adequate resources to do so. She noted that many of her Latina patients are now electing to have an intra-uterine device (IUD) placed postpartum as a more convenient, reliable method of birth control. The provider reported that IUDs, which can cost

more than \$500, can sometimes be obtained at no cost to low-income women through manufacturer-sponsored patient assistance programs.

5.0 DISCUSSION

Based on the literature, an initial list of themes was developed to analyze the interview data, and it was hypothesized that those themes would surface in the clinician interviews. It was also hypothesized that additional themes not included in the original list would emerge. Many of the initial themes were mentioned, several new concepts were generated, and some of the original themes turned out to not play very significant roles in prenatal care for Latinas according to the data.

5.1 SELECTED INITIAL THEMES AND THE LITERATURE

Latina immigrants. Every provider stated that language played an important role in the prenatal care of Latinas. Research regarding Latinas during prenatal care shows that, from the patient perspective, language is a major barrier to communication with the doctor and comprehension of medical advice. While the literature was clear in its rejection of using friends or family members as translators, it was not anticipated that most interviewees would also oppose the practice. With the lack of adequate translation resources available in Allegheny County, it was assumed that providers would welcome any source of translation. However, every single medical doctor stated that she believed family and friends were inadequate and unreliable interpreters, and their usage

compromised patient confidentiality and privacy. Only one provider stated that she would use family or friends as a translator; however her facility had no Spanish-speaking staff members or access to an external, qualified translator and was relying solely on Internet and telephone-based translation services.

As expected, providers stated that they believed Latinas had strong social networks that positively impacted their prenatal care. Providers varied on their perspectives on *who* they believed was providing this support, ranging from husbands to female relatives to friends. The providers also felt that this population relied heavily on peer references and word-of-mouth recommendations. This finding coincides with the research that lacked a conclusive definition of "social support" (Berkman, et al., 2000) and also backs up the idea that social support is more so defined by a how supported a person feels as opposed to quantifying resources or relationships.

A variety of studies in many diverse parts of the US have found that Latino immigrants are more likely to be uninsured and living in poverty than any other racial or ethnic group. For this reason, it was not surprising that providers stated that approximately 90 percent of their pregnant Latina patients were uninsured and low-income. However, some providers appeared to be more acutely aware of the extreme financial challenges faced by Latinas than others. For example, two providers who worked at the same medical facility had very different impressions of the financial struggles of their Latina patients. One provider made no mention of financial barriers, while the other provider felt that paying for outside services was one of her biggest challenges to providing completely adequate prenatal care.

As the physicians were essentially treating the same population, this difference in perspective may be explained in a number of ways. The clinician who felt particularly burdened by the financial restrictions of her patients is a family medicine physician and therefore may

have felt limited in her obstetric expertise in high-risk cases, whereas the other physician, who is an OB/GYN specialist may be able to handle more difficult cases without having to refer to other sources of care. Also, the family medicine doctor treated the majority of her pregnant Latina patients before a Spanish-speaking social worker/case manager had started working at the facility. This case manager spends a great deal of her time working with Latina patients and locating referrals to low-cost medical services. The OB/GYN doctor has worked with this social worker since beginning her position at this particular practice; therefore, she has experienced limited difficulties in obtaining services for her Latina patients.

Another doctor mentioned that she personally negotiated reduced rates for ultrasounds for her uninsured Latina patients. It was not anticipated that the doctors would be so involved in the finances of their patients. While it appears that the doctors are aware of the many services their Latina patients lack because of finances, the doctors' hands are often tied because of citizenship requirements. While it was known that the vast majority of the patient population of interest would be undocumented, it was not foreseen, based on the literature, that lack of legal citizenship would be such a significant barrier in the eyes of the providers.

In general, providers have more difficulty locating resources for any low-income patient, but with Medical Assistance provided by the state of Pennsylvania or other patient assistance programs, nearly all of a woman's prenatal care will covered if she is legally residing in the US. In the event she is in the US without documentation, she is completely ineligible for any state sponsored insurance and most patient assistance programs. All of the providers included in this study work at facilities without citizenship requirements that offer free or low-cost services to uninsured patients; however, they are still presented with a major roadblock when it comes to any kind of costly specialty services, especially in cases dealing with high-risk OB patients. Even

in the event that a Latina immigrant could afford the exorbitant out-of-pocket expenses incurred through specialist services, she might not even be able to get in the door as a result of her documentation status.

While the literature review revealed a range of results regarding late initiation of prenatal care, it was found that Latinas are the most likely ethnic group to delay care. A major knowledge gap exists in explaining why this occurs. While the providers included in this study varied on whether or not they believed their Latina patients were more likely to delay initiation of care, they did share reasons for why they believed this happened, including lack of knowledge of resources, not knowing one's pregnancy status, fear of deportation when seeking care, and financial concerns. It was evident that all of the providers had at least some experience with Latinas who initiated care after the first trimester and sometimes as late as the third trimester. While more research should be done from the patient perspective as to why this occurs, providers were adamant about the need for more outreach to educate woman about the availability of safe, quality, affordable prenatal care resources.

The acculturation findings were not as expected. The literature viewed acculturation as a negative change that causes Latinas to adopt unhealthy behaviors such as smoking and drinking while dropping positive behaviors like a healthy diet. The providers actually found women who had been in the US longer to be more successful in their pregnancies because they were more aware of resources, better advocates for their own care, and had less fear of deportation. There are a number of explanations as to why the respondents in this study may not have witnessed the negative impacts of acculturation in their Latina patients. For one, the majority of Latina patients these providers are seeing are first generation immigrants who have lived in the US for less than ten years. As a result, the women living in Allegheny County have had less time to acculturate

compared to Latinas in other parts of the county who have been in the US for more than a decade. Also, as the Latinas in Allegheny County are from many different parts of Latin America, it would be difficult to profile the behaviors of a "typical Latina" living in Pittsburgh and then make judgments about how American culture may have changed her. Also, interviewees were not provided with a formal definition of acculturation, which may have led to uncertainty about what classified an individual as "acculturated." Finally, it is difficult to discern which behaviors are influenced by American cultural norms compared to what actions are simply due to personal preferences and lifestyles. As the Latino population in Allegheny County continues to grow, this issue may emerge more clearly as more second generation Latinas begin to have children.

By including Donabedian's framework in question development, this research also looked at quality measures from the provider perspective. In regards to technical management, referring to work conditions and resources, several major resources are lacking for these providers. Adequate, consistent translation was available at all times at only two of four sites. Every other site either relied on the schedule of an external translator or used translation services through the Internet or phone. Every provider stated that having an onsite Spanish-speaking staff member would immensely improve management of care. Lack of patient education materials in Spanish was also a technical management deficit. Additionally, providers felt that they could alleviate a great deal of financial burden for their patients if they had access to onsite affordable diagnostic ultrasounds. Providers were also asked about time allotment for appointments, and most stated that Latina patients' appointments required at least twice as much time to accommodate translation. In general, the providers were content with their working conditions,

but felt that they lacked all the resources necessary to provide a 100 percent adequate prenatal care experience for their Latina patients.

Accessibility of care was questioned in regards to hours of operation and how patients get to their appointments. Most believed that their Latina patients either took the bus or received a ride from a friend or community volunteer, and transportation was not perceived as a major barrier by the providers. All of the medical facilities that were included in this interview offered alternative office hours to accommodate patients. One provider commented on the inflexibility of many of her patients' employers, stating that they were usually not allowed time off for doctor's appointments, so that the early morning and late evening appointments were often filled by Latina patients. No provider believed that her facility's office hours or accessibility affected her patients' access to care.

In regards to management of interpersonal processes, it was anticipated that this would be the most important quality measure, supported by a large body of literature that has focused on the intimate patient-doctor bond that is a distinct characteristic of care for Latinas. Stewart, Napoles-Springer, and Keefer (2005) clearly define Latinas' preference for a close, warm relationship with their doctor known as *simpatía*. When asked about this, none of the providers believed that their Latina patients had any more preference for such a relationship compared to their other patients. All of the doctors stressed the importance of developing a strong bond with all of their patients and felt that they were equally friendly with all patients, regardless of their race or ethnicity. It is possible that most patients do seek an intimate bond with their doctor, regardless of race or ethnicity. This finding could also be attributed to the fact that all of the interviewees have chosen to work with low-income and medically underserved populations, and therefore may have more patient-centered practice philosophies compared to other clinicians.

While most of the providers noted that their Latina patients tended to have very warm and friendly personalities, this was not reported to either increase the intimacy of care. This outcome was not anticipated as it directly contradicts a large volume of research that recognizes Latina patients' preference for a warm relationship with their doctor. It is possible that this desire has been masked by language barriers, and the doctors are simply unaware of their Latina patients' preferences for this bond. As stated above, it is also possible that the personality types of the clinicians attracted to work with underserved populations cause them to treat all patients with the same level of kindness and affection, therefore making them unaware of their Latina patients' preference for that kind of treatment.

While an especially intimate doctor-patient bond was not reported by the providers, there were other aspects of interpersonal processes that emerged as very important themes including inadequate communication, maintenance of privacy, explanation of treatment, and informed consent. According to Donabedian (1980), all four of these factors are directly linked to the quality management of interpersonal processes, and all four were found to be lacking in this study as a result of language barriers. Providers reported to be most concerned about this inadequacy at local hospitals where the mothers are delivering their babies.

Continuity of care is the final quality measurement that was investigated in this research. Based on the interviews, it appears that most of the providers were having considerable success in serving as the central role of obstetric care for their Latina patients. One provider's primary duties actually included the coordination of care for all pregnant patients at her medical facility, in order to ensure quality and continuity. Continuity of care may actually be easier to manage for this population as it is less likely that they are seeing multiple medical resources as result of lack of insurance and financial concerns. What appears to be the most significant element of

continuous care for this population is the offering of multiple services at one site, including lab services, pharmacy, immunizations, diagnostic screenings etc. All of the sites included in this study were able to offer a variety of resources; however, lack of affordable diagnostic ultrasounds emerged again and again as a barrier to providing completely adequate prenatal care.

5.2 THEMATIC RELATIONSHIPS

The nature of the challenges that Latinas face is extremely complex and often cyclical. They come to the US to make money, often to support their families. Because they are poor, uninsured, and undocumented, they fear seeking contraception from a doctor and often become pregnant because of lack of family planning services at a time when they are not financially stable. This financial instability creates conflict and stress in the home, which may lead to domestic violence, as witnessed by one of the respondents. Seeking prenatal care is even more challenging than obtaining contraception, and as a result, they may not receive care until their second or even third trimester. If they are able to locate low-cost prenatal care, they will still likely incur hundreds of dollars in medical bills from diagnostic testing. As a result, they may fear returning to the medical system for birth control, which may result in another unintended pregnancy.

It is difficult to find a medical facility with any Spanish-speaking staff and even more rare to find a physician who actually speaks Spanish. Latinas have little flexibility with their work schedule and may be forced to miss appointments in order to keep their job. When they are finally ready to delivery, many of the hospital systems in Allegheny County do little to accommodate the mothers' language needs and birth preferences, often resulting in unwanted

medical interventions. After the baby is delivered, social workers have been known to fail to help the mother fill out the appropriate paperwork for Emergency Medical Assistance, which eventually results in a hospital bill for thousands of dollars. This cycle is likely to start all over again in the event the woman is unable to obtain family planning services postpartum, which she may be afraid to seek out if she is being sent bills for thousands of dollars and being harassed by debt collectors.

Of course this narrative is not necessarily representative of all prenatal experiences of Latina immigrants in Allegheny County. As the Latina social network in the greater Pittsburgh area continues to grow and become more organized, women will be better able to get connected to medical resources and support organizations like Nueve Lunas. However, for every woman who enters prenatal care during the first trimester and has a healthy, safe delivery, undoubtedly there is still a woman who may not begin her prenatal care until she enters the emergency room when she goes into labor. While much progress has been made over the past decade, there is still immense room for growth, and the Allegheny County area is most definitely experiencing growing pains as it attempts to catch up to the current demand for services from the Latino community.

6.0 CONCLUSION AND RECOMMENDATIONS

This study sought to capture the perceptions of a small and unique population: clinicians who provide prenatal care to Latina immigrants in Allegheny County. The respondents provided an interesting perspective on the many challenges they face when trying to provide quality care for a population that is usually poor, uninsured and undocumented. In addition, these women often do not speak English and are more inclined to prefer Latino cultural practices and customs. With all of these barriers, these patients are dedicated to having healthy pregnancies and babies and are usually supported by strong social networks. While there are many hurdles to face when looking at providing "optimum" prenatal care for this population, there are also many opportunities.

Financial issues and citizenship concerns go hand in hand as far this group is concerned. Based on federal poverty guidelines, many of these Latinas would qualify for Medical Assistance to cover the costs of necessary medical services during their pregnancy. However, in the state of Pennsylvania, their lack of legal documentation makes them completely ineligible for any state sponsored health insurance, with the exception of the costs incurred during labor and delivery. Other states, such as New York and California, cover the prenatal care costs of all women during pregnancy, regardless of their citizenship status. If Pennsylvania were to adopt similar legislation, the majority of these women would qualify for free prenatal care and would not be forced to choose between completely adequate care and financial obligations.

In the absence of such legislation, more money should be devoted to Spanish-speaking social workers and case managers who dedicate their time to obtaining resources for these women. Most doctors simply do not have the time to help their Latina patients search for low-cost alternatives and because of lack of language skills, the patients are usually unable to do the searching on their own. By hiring more social workers, practices with large Latina populations can connect their patients to more necessary services that they would normally forego as a result of financial limitations. In addition, it is critical that social workers at local hospitals receive appropriate training on how to assist non-English-speaking, undocumented immigrants apply for Emergency Medical Assistance. Evaluative measures should also be put into place to ensure that the social workers are adequately and appropriately assisting these women.

In addition to improving the quality of interaction between social workers and Latina mothers, hospital administrators need to make certain that they are adequately addressing the translation needs of their Spanish-speaking patients. By failing to provide informed consent and release forms in Spanish, hospitals are not only breaking the law, but are also committing a major wrong against the personal preferences of their Latina patients.

Another significant recommendation of this study is to expand specific health services for Latinas, including affordable diagnostic ultrasounds, family planning services, and domestic violence counseling. It was mentioned again and again that locating affordable ultrasounds would greatly reduce Latinas' economic burden during pregnancy. Secondly, by making more Latinas aware of their family planning options, there may be fewer unintended pregnancies resulting in less stress and financial burden for these women. Lack of crisis shelters that can accommodate non-English speaking women forces many victims of domestic violence to return

to their partners without any other option. It is clear that the domestic violence resources in Allegheny County need to expand their services by hiring bilingual staff.

Finally, it is apparent that more Spanish-speaking prenatal care clinicians are necessary in Allegheny County. Obtaining reliable translators is frequently a burden for clinicians and patients, adding extra costs to the facilities and often forcing patients to accommodate the schedule of the translators. Sites that use telephone or Internet-based translation services are forced to use less reliable, more time consuming methods of interpretation. If more Spanish-speaking clinicians were available, there would be less need for third-party translators, including professional interpreters as well as family and friends. Eliminating the third party would increase patient satisfaction and confidentiality, improve the doctor-patient relationship, and reduce appointment durations. In addition to reducing language barriers, improving cultural competence regarding care for Latinas could also improve the patient-provider relationship. This could be accomplished through a series of workshops or effective provider education materials.

There are limitations to this study. As the number of prenatal care clinicians who work with Latinas in Pittsburgh is quite small, only a few individuals met the study's eligibility criteria, resulting in a few interviews. In addition, no male providers agreed to be interviewed, which could impact the results. No one from a large hospital system was interviewed; therefore, the perspective of a larger health facility was not included. Finally, all of the interviewees included in this study may have a "pro-Latina" bias in that they are more sympathetic to the challenges of this population, which may differ from providers who serve this population but do not support their right to low-cost or free, high quality care as a result of citizenship issues.

While it is crucial to garner the provider perspective, future studies regarding prenatal care for Latinas in Allegheny County should include patient responses. Comparing the results of

this study to a similar study of interviews with Latinas would reveal whether or not patients and providers view the study topics in similar ways. This thesis is a modest starting point for future research and improvements in prenatal care for Latinas in Allegheny County, PA. While it is clear there are many individuals working hard to provide quality prenatal care for this population, many barriers continue to set back the accomplishment of quality care for every single Latina mother.

In reality, Allegheny County serves as just one example of many other areas with inadequate resources for relatively small but growing Latino populations. As these populations continue to grow and require more assistance, they will face many of the barriers found in this study. Only by identifying, reducing and ultimately eliminating those barriers can we hope to improve health outcomes in this population. In the end, this thesis is written with the hope that policymakers and health facility administrators will heed the providers' recommendations and will do their part in order to ensure that every Latina immigrant receives truly adequate prenatal care.

APPENDIX A

INTERVIEW QUESTIONS

- 1. Please generalize your patient base (age, race, language spoken, socioeconomic status, country of origin, maritial status, children, type of employment, etc.)
- 2. Tell me about your interactions with your Latina patients: (Probes: how frequently do you see them, how long do their appointments last, what types of services do they need, how do they differ from your other patients, what factors do you associate with your Latina patients.)
- 3. How do you handle consulations with Spanish-speakers?
- 4. What specific challenges do you encounter providing care for Latina patients?
- 5. What strengths or assets are evident in your Latina patients that serve as protective factors in terms of prenatal care?
- 6. If you provided care for this population in other parts of the US, what challenges or opportunities are unique to working with this population in Allegheny County?
- 7. What do you think could be done to improve prenatal care for this population?

- 8. What is the role of family members, friends and other social support in terms of support during the pregnancy? Describe the social support system.
- 9. Would you improve/change anything about the typical interactions you have with your Latina patents?
- 10. Tell me know what you know about the "Hispanic Paradox".
- 11. When do most of your Latina patients enter prenatal care? How does this differ from other patients?
- 12. Describe the doctor-patient relationship that you have with your Latina patients.
- 13. What are your impressions of the acculuturation of your patients (or lack thereof) and how that affects pregnancy behaviors and outcomes.
- 14. How do your Latina patients get to their appointments? Are you aware of problems that your patients have getting to appointments?
- 15. Tell me about your concerns with regard to your Latina patients' privacy.
- 16. Do you feel that you have all the resources you need to adequately serve this population? Are you satisfied with your working conditions to serve this population?
- 17. Is there anything else that you would like to share?

APPENDIX B

SUPPLEMENTAL INTERVIEW QUESTIONS

| 1. | What is the highest level of education that you have obtained? |
|----|--|
| 2. | How long have you worked in prenatal care? How long with this population specifically? |
| 3. | What is your job title? |
| 4. | How long have you worked in Allegheny County? |
| 5. | What are the hours of operation of your facility? |
| 6. | How long do you spend with your Latina patients? Do you spend more or less time with other OB patients, about the same, or it depends? |

| 7. | How do your patients pay for their services (medical assistance, private insurance, |
|----|---|
| | out of pocket, patient assistance from facility, etc?) |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

BIBLIOGRAPHY

- Acevedo, M. C. (2000). The role of acculturation in explaining ethnic differences in the prenatal health-risk behaviors, mental health, and parenting beliefs of Mexican American and European American at-risk women. *Child Abuse and Neglect*, 24(1), 111-127.
- Balcazar, H., Krull, J. L., and Peterson, G. (2001). Acculturation and family functioning are related to health risks among pregnant Mexican American women. *Behavioral Medicine*, 27(2), 62-70.
- Balcazar, H., Peterson, G., and Cobas, J. A. (1996). Acculturation and health-related risk behaviors among Mexican American pregnant youth. *American Journal of Health Behavior*, 20, 425–433.
- Beck, L. F., Morrow, B., Lipscomb, L. E., Johnson, C. H., Gaffield, M. E., Rogers, M., et al. (2002). Prevalence of Selected Maternal Behaviors and Experiences, Pregnancy Risk Assessment Monitoring System (PRAMS), 1999. Centers for Disease Control and Prevention.
- Berkman, L. F., Glass, T., Brissette, I., and Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science and Medicine*, 51(6), 843–857.
- Brown, E. R., Ojeda, V. D., Wyn, R., and Levan, R. (2000). Racial and Ethnic Disparities in Access to Health Insurance and Health Care. Los Angeles, CA: UCLA Center for Health Policy Research.
- Cunningham, P., Baker, M., Artiga, S., and Tolbert, J. (2006). Health Coverage and Access to Care for Hispanics in "New Growth Communities" and "Major Hispanic Centers". Kaiser Commission on Medicaid and the Uninsured. The Henry J. Kaiser Family Foundation.
- DeNavas-Walt, C., Proctor, B. D., and Hill Lee, C. (2004). Income, Poverty, and Health Insurance Coverage in the United States: 2004. US Department of Commerce. US Census Bureau.
- Donabedian, A. (1980). *Definitions of Quality and Approaches to its Assessment*. Ann Arbor, Michigan: Health Administration Press.
- Dunkel-Schetter, C., Sagrestano, L., Feldman, P., and Killingsworth, C. (1996). Social support and pregnancy A comprehensive review focusing on ethnicity and culture. In G. Pierce,

- B. Sarason, and I. Sarason (Eds.), *Handbook of Social Support and the Family*. New York: Plenum Press.
- Gurman, T. A. and Moran, A. (2008). Predictors of appropriate use of interpreters: Identifying professional development training needs for labor and delivery clinical staff serving Spanish-speaking patients. *Journal of Health Care for the Poor and Underserved*, 19(4), 1303-1302.
- Estimates of the Unauthorized Immigrant Population Residing in the United States: 1990 to 2000. (2003). Retrieved February 3, 2009, from http://uscis.gov/graphics/shared/aboutus/statistics/III_Report_1211.pdf
- Handler, A. D., Raube, K. P., Kelley, M. A. S., and Giachello, A. P. (1996). Women's Satisfaction with Prenatal Care Settings: A Focus Group Study. *Birth*, 23(1), 31-37.
- Harley, K. and Eskenazi, B. (2006). Time in the United States, social support and health behaviors during pregnancy among women of Mexican descent. *Social Science and Medicine*, 62(12), 3048-3061.
- Healthy People 2010. (2000). National Health Promotion and Disease Prevention Objectives. Washington, D.C.: US Department of Health and Human Services.
- Hummer, R., Powers, D., Pullum, S. G., Gossman, G., and Frisbie, W. (2007). Paradox found (again): infant mortality among the Mexican-origin population in the United States. *Demography*, 44(3), 441-457.
- Hunt, L. and de Voogd, K. (2007). Are Good Intentions Good Enough?: Informed Consent Without Trained Interpreters. *Journal of General Internal Medicine*, 22(5), 598-605.
- Julliard, K., Vivar, J., Delgado, C., Cruz, E., Kabak, J., and Sabers, H. (2008). What Latina Patients Don't Tell Their Doctors: A Qualitative Study. *Annals of Family Medicine*, 6(6), 543-549.
- MacDorman, M. F. and Mathews, T. J. (2008). Recent Trends in Infant Mortality in the United States, NCHS Data Brief.
- Raube, K., Handler, A., and Rosenberg, D. (1998). Measuring Satisfaction Among Low-Income Women: A Prenatal Care Questionnaire. *Maternal and Child Health Journal*, 2(1), 25-33.
- Registry of Interpreters for the Deaf. (2005). NAD-RID Code of Professional Conduct. Retrieved March 8, 2009, from http://www.rid.org/ethics/code/index.cfm.
- Reichman, N. E. and Kenney, G. M. (1998). Prenatal care, birth outcomes and newborn hospitalization costs: patterns among Hispanics in New Jersey. *Family Planning Perspectives*, 30(4), 182-187.

- Sarnoff, R., and Adams, E. (2001). Racial and Ethnic Disparities in the Discordance Between Women's Assessment of the Timing of Their Prenatal Care Entry and the First Trimester Standard. *Maternal and Child Health Journal*, 5(3), 179-187.
- Stewart, A. L., Napoles-Springer, A., and Perez-Stable, E. J. (1999). Interpersonal processes of care in diverse populations. *Milbank Quarterly*, 77(3), 305-339.
- Tandon, S. D., Parillo, K., and Keefer, M. (2005). Hispanic Women's Perceptions of Patient Centeredness During Prenatal Care: A Mixed Method Study. *Birth*, 32(4), 312-317.
- US Census Bureau. 2005-2007 American Community Survey. (2007). ACS Demographic and Housing Estimates. Retrieved January 20, 2009, from http://factfinder.census.gov/servlet/ADPTable?_bm=y&-context=adp&-qr_name=ACS_2007_3YR_G00_DP3YR5&-ds_name=ACS_2007_3YR_G00_&-tree_id=3307&-redoLog=false&-geo_id=05000US42003&-_sse=on&-format=&-_lang=en
- Wheatley, R. R., Kelley, M. A., Peacock, N., and Delgado, J. (2008). Women's Narratives on Quality in Prenatal Care: A Multicultural Perspective. *Quality Health Reseach*, 18(11), 1586-1598.
- Zambrana, R. E., Scrimshaw, S. C., Collins, N., and Dunkel-Schetter, C. (1997). Prenatal health behaviors and psychosocial risk factors in pregnant women of Mexican origin: The role of acculturation. *American Journal of Public Health*, (87), 1022–1026.