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## Indigent women and access to prenatal care

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INDIGENT WOMEN AND ACCESS TO PRENATAL CARE

by

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A thesis submitted in partial fulfillment of  
the requirements for the

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ABSTRACT

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by

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One aspect of America's health care system that illustrates the great need for health care reform, but receives little attention, is prenatal care. The United States has the second worst newborn mortality rate in the developed world. Adequate prenatal care results in healthier babies, more full-term babies delivered, and a decrease in other serious problems related to pregnancy and health care costs. The purpose of this study is to examine the history of prenatal policy and how it has developed into what it is today, to understand why medically indigent women are not receiving adequate prenatal care, and to highlight effective practices for enrolling women into prenatal care in order to enable healthy births and infants and to save on pregnancy related health care costs. The culmination of this study is an in-depth analysis of a Centering Pregnancy program, an innovative form of prenatal care.

## ACKNOWLEDGMENTS

I dedicate this thesis to my Dad, who I know is proud of me for finally completing my degree. I would also like to thank my family, especially my mom and brother for their continued support and encouragement throughout this journey.

## TABLE OF CONTENTS

CHAPTER 1 INTRODUCTION .....	1
Purpose of the Study .....	3
Significance of the Study .....	5
Methodologies.....	6
Conclusion .....	8
CHAPTER 2 PRENATAL CARE AND POLICY HISTORY .....	9
Welfare and Health Care Reform .....	17
CHAPTER 3 BARRIERS TO PRENATAL CARE.....	22
Economics of Low Birth Weight Babies .....	23
Socio-demographic Characteristics .....	25
Personal Barriers.....	30
System Barriers.....	33
CHAPTER 4 EFFECTIVE POLICY AND PRACTICE .....	38
State by State Policy and Practice.....	39
Centering Pregnancy.....	44
CHAPTER 5 METHODOLOGIES .....	52
Design .....	53
Aims and Hypotheses .....	53
Subject Recruitment and Procedure.....	54
Instruments.....	56
CHAPTER 6 STUDY RESULTS.....	57
Discussion.....	62
CHAPTER 7 IMPLICATIONS AND CONCLUSION .....	67
APPENDIX 1.....	72
APPENDIX 2.....	76
BIBLIOGRAPHY.....	77
VITA.....	88

## LIST OF GRAPHS

GRAPH 1	Decision to Access Prenatal Care .....	57
GRAPH 2	Percent of Planned Pregnancies .....	57
GRAPH 3	Marital Status .....	58
GRAPH 4	Reasons for Accessing Prenatal Care .....	58
GRAPH 5	Commencement of Prenatal Care .....	59
GRAPH 6	Barriers to Access According to Providers .....	60
GRAPH 7	Ways to Improve Access to Prenatal Care According to Providers .....	61



## CHAPTER 1

### INTRODUCTION

With approximately 46 million Americans without health insurance and many more who are not adequately insured, the well being and health of our citizens was a common topic for discussion during the 2008 Presidential campaign and continues to engender controversy today since the passage of the Patient Protection and Affordable Care Act of 2010. Health is a high-priority goal of most people, and its pursuit is of growing significance to the nation's economy and system of social justice (Longest, 2006). One aspect of America's health care system that illustrates the great need for health care reform, but receives less attention, is prenatal care. Inadequate access to health care deleteriously affects all people, especially the nation's children (American Public Health Association). The United States has the second worst newborn mortality rate in the developed world, and the report, State of the World's Mothers, 2006, which analyzed data from governments, research institutions and international agencies, found increased newborn death rates among U.S. minorities and disadvantaged groups. African-Americans have nearly double the mortality rate of the United States as a whole, with 9.3 deaths per 1,000 births (State of the World's Mothers, 2006).

These are just some of the statistics that exemplify the fact that all women do not access adequate prenatal care.

Prenatal care benefits all expecting mothers and their unborn. Rather than decreasing, rates of low birth weight (LBW) babies and preterm births have risen and are now the highest they have been in more than three decades. Babies born too small or too early are at higher risk for death and for both short and long-term health problems (Swamy, Ostbye & Skjaerven, 2008). Preterm birth, which is the birth of an infant before the completion of 37 weeks of gestation, is a significant problem in America. Along with producing substantial emotional strain on their families, preterm infants increase the economic costs to their families and communities and disproportionately utilize and impact the health care system (Matisson, Damus, Fiore, Petrini & Alter, 2001). Additionally, a mother who does not access adequate prenatal care is more likely to have an LBW child. Children of LBW are at high risk for a myriad of health problems including neonatal mortality and experience post-neonatal mortality rates 10-15 times greater than those found among infants of higher birth weight. LBW survivors are also more frequently diagnosed with handicaps such as cerebral palsy, seizure disorders, blindness, deafness, and learning disorders (McCormick, Brooks-Gunn, Workman-Daniels, Turner & Peckham, 1992). Mortality due to complications of prematurity (preterm birth, LBW and respiratory distress syndrome) is the second leading cause of infant mortality at a rate which is almost twofold greater than the third leading cause of infant mortality (sudden infant death syndrome) (Matisson et al., 2001). Adequate prenatal care results in healthier babies, more full-term

babies delivered, and a decrease in other serious problems related to pregnancy. As a society we need to examine effective means to accessing prenatal care, especially for the medically indigent woman, in an attempt to birth a healthy child and enable an equal foundation for all.

### Purpose of the Study

Prenatal care is an essential first step in a child's life. Children and the unborn have a special place in all societies, and their needs are frequently considered a high priority; but in reality their needs may frequently, for various reasons, go unnoticed. Pregnant women are subject to many health risks throughout their pregnancy, including gestational diabetes, high blood pressure and other disorders. According to the National Healthcare Quality Report (NHQR), in order to improve the chances of a healthy mother and child during pregnancy, birth and early childhood, prenatal care is a preventive service intended to identify and manage risk factors in pregnant women and their unborn children. The major components of prenatal care include the diagnosis and treatment of any health complication, counseling about diet, avoidance of drugs, and smoking cessation. Comprehensive prenatal care may prevent complications of pregnancy, which can have lifetime effects, and reduce preterm labor and neonatal mortality. The principal way poor prenatal care can affect infant health is through low birth weight. Low birth weight, defined as weight under 5.5 pound, is responsible for 75 percent of neonatal deaths and 60 percent of post-neonatal deaths (Infant Mortality, 1998).

Prenatal care is recommended beginning in the first trimester and is an effective way to promote good health for both mother and child. The percentage of women accessing early adequate prenatal care has remained relatively stagnant since 1990, when the Surgeon General created a goal of 90 percent. Data from 2007, which is the latest available data, shows that as a whole, the country is falling drastically short of that goal with only 70.5 percent of pregnant females receiving early and adequate prenatal care.

Prenatal care is vitally important to the health of pregnant women and their babies (Petrini, 2006). For women of childbearing age, childbirth and reproductive care are the most common reasons for women to access health care. Childbirth is the most common reason for hospital admittance and there are more than 11,000 births each day in the United States (AHRQ). Birth outcomes have lifetime effects. Inadequate prenatal care is associated with an increased risk of preterm births, low birth weight and infant and maternal mortality. Most programs and policies that attempt to improve pregnancy outcomes direct their attention on improving the utilization of prenatal care services (Petrini, 2006). Good prenatal care for all has the possibility to influence the future health and health care needs of society as a whole. The purpose of this study is to determine why medically indigent women are not accessing adequate prenatal care and how access can be improved in order to enable healthy births and infants and to save on pregnancy related health care costs. In order to fully understand this health care problem, the history of prenatal policy and how it has developed into what it is today will also be elucidated. The culmination of this study is an in-depth

analysis of a Centering Pregnancy program, an innovative form of prenatal care. Centering Pregnancy, though still unknown to many health care professionals, improves access to cost efficient, adequate prenatal care which in turn improves birth outcomes.

### Significance of the Study

It is common knowledge that disparities exist within the health care system in the United States. Health problems are more often seen among disadvantaged groups, with disparity rates stagnating or worsening over the past decade (Chavkin & Rosenbaum, 2010). In order to assess this problem and improve upon it, Congress mandated that the Agency for Healthcare Research and Quality (AHRQ) prepare annual reports on health care quality and disparities. In order to fulfill this, the National Healthcare Quality Report (NHQR) and the National Healthcare Disparities Report (NHDR) track the Nation's annual progress in improving quality and reducing disparities in health care and were first released in 2003. The AHRQ has requested guidance from the Institute of Medicine (IOM) in order to develop strategies and action plans to decrease disparities and provide equitable care that does not vary in quality due to personal characteristics such as socioeconomic status, geographic location, gender and/or ethnicity (Institute of Medicine, 2001).

As stated, not all women have equal access to prenatal care. The greatest determinant of health is socioeconomic status and therefore, pregnant indigent women naturally pose a higher risk. As reflected in the rational choice theory, it is

not cost effective for the private insurance market to include these women because their high risk challenges the potential profitability. In order to meet the specific health needs of this demographic, i.e. pregnant indigent women, the government must provide coverage of services to meet their pregnancy-related health care needs. There are numerous barriers to the services currently available that contribute to the inequality of care. Too frequently the dynamic relationship among individuals, their networks and the structures that result from and shape them, are downplayed or even disregarded entirely (Pescosolido, 1992).

The barriers that exist to accessing adequate prenatal care fall into three main categories: socio-demographic characteristics, personal barriers and systems barriers. By examining these three categories and all of their components, the disparities in our health care system in relation to access to prenatal care will be made evident. Once these disparities are understood and acknowledged, innovative programs that are able to overcome these barriers and therefore improve access to prenatal care can be highlighted, and advocacy for their expansion can begin, in order to help all pregnant women in America access adequate prenatal care.

### Methodologies

Creating a research question and deciding on the way to discover the answers to that question define the design of any study. Along with the form of the research question, two other conditions that help formulate which research method to use include whether or not control of behavioral events is required and

whether or not the focus is contemporary. According to Robert Yin, a case study asks the questions why and how. The aim of the research presented is to illustrate why medically indigent women are not accessing prenatal care equally to non-indigent women? And subsequently, how access to prenatal care can be improved with cost-efficient, viable, barrier-eliminating solutions? The case study presented will compare Centering Pregnancy, a nontraditional prenatal care program that is cost-effectively improving access, eliminating barriers and birthing healthy babies, with traditional prenatal care.

A case study is about studying what is peculiar and what is common in a specific case (Lobiondo-Wood & Haber, 2010). A case study design enables close scrutiny of an individual, a family, a community, an organization; some complex phenomenon that requires understanding (Lobiondo-Wood & Haber, 2010). The phenomenon this study targets is pregnant women participating in traditional prenatal care and pregnant women participating in Centering Pregnancy, a group form of prenatal care, in a rural hospital in Northeast Ohio. Health care professionals who work with these women are also targeted and included in this study.

The subjects involved in the study were given a survey complete. An advantage to using surveys as sources of evidence is that they allow for case study topics to be directly targeted without investing energy or time into other topics (Yin, 2009). In this study, the survey asks pregnant women who are currently accessing prenatal care about their attitudes and beliefs regarding the reasons they chose to do so and what they believe are effective ways to enroll other women

into prenatal care. It also asks health care professionals their views about barriers to care and their knowledge about how medically indigent women can currently access prenatal care. Because this study does not require the control of behavioral events, and because it focuses on contemporary events, a case study is an appropriate method to use.

### Conclusion

Prenatal care provides women with opportunities for ongoing assessment throughout their pregnancy. This ongoing assessment prevents complications from going unnoticed and potentially harming the mother and or baby. Not only is access to prenatal care an ethical situation, but there is also a cost-benefit to encourage women to access prenatal care, and to provide it to them, as studies estimate that each dollar spent on prenatal care yields between \$1.70 and \$3.38 in savings by reducing neonatal complications. When the long-term costs of caring for newborns with physical and developmental disabilities are considered, the savings increase radically and are even greater when unforeseen maternal complications are avoided (National Conference of State Legislatures, 2011). Studying access to prenatal care and creating solutions to improve it, or expanding solutions that are already in place will enable the opportunity not only to improve the health of unborn babies, but also to create a cost savings for each state and the nation as a whole each year.



## CHAPTER 2

### PRENATAL CARE AND POLICY HISTORY

Pregnancy, childbirth and our nation's policies towards these events, along with policies towards health care in general, continue to change as our knowledge in these areas improve, as needs of the country change, and as our political agendas develop. Overall, the idea of prenatal care, as one thinks of it today, began in the 19<sup>th</sup> century; however, many precedents occurred before that period. Midwives have played an extremely active role in child birthing and have been attending childbirth from the onset of history, as even a biblical reference exists. It was also Roman law under Caesar that all women should be cut open if they were dying during childbirth. Though controversy exists as to where the term comes from, this is one explanation for the term "cesarean". Historically physicians were not present during childbirth until the 1700's. The invention of forceps in the early 1600's to assist in extracting newborns from the birth canal that otherwise might have died, greatly improved birthing outcomes. Due to the fact that men claimed authority of these instruments, they were able to establish professional control over childbirth and throughout the next three centuries the male-midwife and obstetrician gradually took the control from the female midwife, successfully decreasing her role (Huth, 2004).

Concern was growing due to the exceedingly high mother and infant mortality rates that continued to exist in the early 1900's, and consensus was beginning to develop that changes needed to occur. The Socialist Party in 1904 was the first American political party to endorse health insurance. President Theodore Roosevelt supported social insurance, including health insurance, believing a country could not be strong with citizens who were sick and poor (Feldhusen, 2000). The Children's Bureau, established in 1912 by President William Taft in Washington D.C., was the first organization to investigate and report on matters surrounding the wellbeing of children and child life pertaining to all categories and classes of people (The Children's Bureau, 1912). Among other things, the Bureau distributed instructional pamphlets on prenatal care and infant care. The first major investigations done by the Children's Bureau were focused on the causes of infant and maternal mortality rates. One hundred and twenty-four American babies per 1,000 were dying, and the maternal mortality rates were equally as devastating according to the Children's Bureau first published report. Due to the establishment of this Bureau and its investigations, a plan was developed to have public nurses provided in order to aid pregnant women with prenatal care. The Bureau's studies also showed a correlation between high infant and maternal mortalities with lower income groups. The Children's Bureau and advances in hygiene, obstetrics and medicine in general led to a decline in the maternal and infant mortality rates in the United States.

Due to the success of the Women's Suffrage Movement and the new, strong lobbying powers women now held, Congress passed the National

Maternity and Infancy Protection Act, also known as the Sheppard-Towner Act. This act provided matching funds to states for prenatal and children's health centers. Statistics further illustrated a strong case for government support of a health program focusing on the needs of women and children. At the time, the second leading cause of death for women was childbirth, one in five children died during their first year of life, and one in three died before the age of five (Gale Encyclopedia, 2000). The objective of the Sheppard-Towner Act was to reduce infant mortality. Health centers established with this legislation enabled nurses and physicians to care for pregnant women and children and to teach them about pre and post natal care.

Though the Sheppard-Towner Act was passed in 1921, largely in part because the male politicians feared voting against "women's issues" now that women had the right to vote, many people and organizations were against this legislation. The American Medical Association (AMA), the organization who most fervently denounced this bill and lobbied for its defeat, believed Sheppard-Towner was in the same category as compulsory health insurance: an effort by government to interfere in medical care. The AMA was strongly against government control over medical service (Moehling & Thomasson, 2009). The AMA, with help from a group known as the Anti-Suffragists and leaders from the Catholic Church, who feared sexual hygiene programs would be created and birth control techniques would be taught by the Children's Bureau, were ultimately successful in their lobbying efforts and the Sheppard-Towner Act was not renewed in 1927 and was obsolete by 1929. In spite of being allowed to lapse in

regards to federal aid to states, the Sheppard-Towner Act served as a prototype. The studies done by the Children's Bureau and improvements made after the passage of the Sheppard-Towner Act had lasting effects; in regions where the Act was concentrated, a significant decline in infant and maternal mortality existed. This is because the Act helped make it routine for U.S. mothers to regularly bring their infants to pediatricians for checkups. The Sheppard-Towner Act also set a precedent, as it was the first time children's health needs were earmarked by the federal government. After the Act was allowed to expire in 1929, two separate divisions of medical care for children emerged: one for those who had the resources to pay, which is fee for service or private medicine, and one for those who were unable to pay, known as welfare.

In spite of the economic condition of the United States, President Hoover convened a large summit in 1930, the White House Conference on Child Health and Protection. This summit produced a document entitled *The Children's Charter*, which recognized the rights of children as the first rights of citizenship in America. Among the rights spelled out in this charter was the right that each child should have full preparation for birth, including the mother and infant receiving prenatal, natal and post natal care; and to establish protective measures to make child-bearing safer (The Children's Charter, 1930). Unfortunately these rights were forced to remain only an aspiration, as the Great Depression did not allow President Hoover to determine a way to make them a reality even though the medical and social needs of both children and adults were escalating.

A landmark law developed and passed in 1935 during the Great

Depression, the Social Security Act, established numerous precedents and significantly increased federal aid for state and local public health programs and made financial assistance available for child welfare and maternal and child health. The Social Security Amendments in 1960 provided aid to the states by the federal government for “medically indigent” persons who were 65 years of age or older. These amendments, also known as the Kerr-Mills Act were the forerunner of the Medicaid program, established in 1965.

Over the last several decades, the federal government has dramatically expanded its role in providing and financing prenatal care in order to reduce infant mortality. A number of programs exist that serve disadvantaged pregnant women. Some of these programs exist to solely serve this target population while others serve a broader population. The existence of these programs is crucial to providing prenatal care to indigent women, yet many system barriers are associated with government programs, both real and perceived. For America’s poorest people, Medicaid is the largest source of funding for medical and health-related services. The Medicaid program, created in 1965 as Title XIX of the Social Security Act, has long been the primary public program supporting the provision of health care services to low-income Americans (Hill, 1992).

Approximately three quarters of Medicaid recipients are women and children even though Medicaid’s intent has never been to reduce infant mortality or improve pregnancy outcomes. In 2003 Medicaid covered 41 percent of all births in the United States (Kaiser Family Foundation, 2006). Women and children are the largest portion of recipients of Medicaid, with services including

prenatal, delivery, postpartum, and well-child care which are mandatory components of each state's Medicaid benefits package, yet these services generally consume only 25 percent of total Medicaid expenditures; whereas 75 percent of Medicaid spending comes from long-term care services required by aged and disabled populations.

Due to shortcomings related to eligibility limits, the Omnibus Budget Reconciliation Act of 1986 (OBRA-86) was passed. This allowed states to expand the eligibility limits to as high as the federal poverty level for pregnant women, infants and children up to the age of five. Beyond this, OBRA-86 was expanded further over several more years and the Omnibus Budget Reconciliation Act of 1989 (OBRA-89) required all states to cover, at minimum, pregnant women and children up to six years of age at 133 percent the federal poverty line. It is the legislative provisions in the various OBRA's that enabled states to extend financial access to health care to hundreds of thousands of families (Hill, 1992).

The goal behind expanding Medicaid was to improve access to care in order to decrease the infant mortality rate that was seen as a problem of access to health care. The goal was to increase access by removing the financial barriers for poor, pregnant women. Expansion of the program allowed more pregnant women to be covered, and therefore infant deaths would decline among Medicaid recipients due to the inclusion criteria, not because of the Medicaid program (Guyer, 1990). These legislative changes did nothing to address the wide range of problems and issues related to publicly funded prenatal programs, which more directly prevent women from giving birth to healthier babies.

Other government programs, aside from Medicaid also exist to help pregnant, indigent women. Title V of the Social Security Act of 1935 allocated the spending of federal money to identify, assess and meet the health care needs of low-income women and children or those with limited access. This money was given to states on a formula basis with states matching federal allotments. In 1981 this program developed into what is now known as the Maternal and Child Health Block Grant Program (MCH). Each state has its flexibility to design its own program and they are all different. The difference between MCH and Medicaid is that MCH is not an entitlement program and it must operate within each year's appropriated budget. Money from this program is used to hire clinical and administrative staff, to purchase medical supplies and equipment, and to contract with private physicians to staff public clinics, among other things. The direct delivery of services in public health care settings and state or locally administered health department clinics is supported by MCH programs. Based on guidelines created from the Omnibus Budget Reconciliation Act of 1989 (OBRA-89) up to 30 percent of program dollars can be spent on prenatal and maternity care provisions. Though the MCH is much smaller than Medicaid, in terms of power it serves a prominent role guiding the shape and direction of states' prenatal care delivery systems in state health departments.

The Community and Migrant Health Center Program is an example of another governmental program. It was established in 1965 to increase access to comprehensive primary and preventive health care and to improve the health status of underserved and vulnerable populations. The program exists in areas

where primary health care for a substantial portion of the population is limited by geographic, economic or cultural barriers. Services are designed to meet the needs of the community. A high priority of Centers has always been to improve the health of mothers and children and to reduce infant mortality. Their success is evidenced by the fact that communities with Migrant Health Centers have shown up to a forty percent reduction in infant deaths (Hill, 1992). In 1996 the community and migrant health center appropriation was consolidated to include the homeless and public housing programs.

In 1987 one in ten low-income infants born in the United States had a mother who received maternity care at a community or migrant health center. By 1999 four out of every ten poor children in America received their care in a Center. However, of the 650 Community Health Centers in operation in 1999, 45 percent were in severe financial trouble and 7 percent declared bankruptcy (McGrory, 1999).

The Special Supplemental Food Program for Women, Infants and Children (WIC) was created in 1972. WIC provides Federal grants to states for supplemental foods health care referrals, nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and infants and children up to age five who are found to be at nutritional risk (FNS). WIC has been effective at reducing infant mortality, low birth weight, anemia, and other health problems. The participation in WIC significantly reduces the chances of prematurity and low birth weight and the extraordinary costs of neonatal intensive care. Medicaid costs for new mothers and their infants during the first



60 days after birth are reduced between \$1.77 and \$3.13 for every dollar spent on WIC for pregnant women (Devaney, Bilheimer, & Schore, 1992). Medicaid mothers who did not participate in the WIC program were two to three times more likely to have had received inadequate prenatal care as those who participated in WIC (Devaney et al., 1992).

### Welfare and Health Care Reform

It is easy to agree on the fact that Health Policy in the United States is not perfect, but it is hard to agree on how to ameliorate the system. Incrementalism has indeed prevailed in the development of American health policy. Health policymaking is mostly a story of slow but constant evolution and modification, with the vast majority of health policies being modifications of, or amendments to previously enacted laws. Several health policy modifications, problems and attempts led to the most current reform.

Adjustments to Medicaid have been made in order to improve infant health by encouraging pregnant women to obtain adequate prenatal care. Eligibility requirements have expanded for Medicaid with a focus on increasing the generosity of income cutoffs. These expansions have increased the number of births covered by Medicaid from 15 percent to over 40 percent. This has not solved the problem however, because many women still fail to obtain adequate prenatal care and enroll in Medicaid at the point of birth, rather than before. This delayed enrollment means that Medicaid ends up paying for expensive treatment

in neo-natal intensive care units for gravely ill infants, rather than preventing their illnesses through appropriate prenatal care.

Eligibility for the Medicaid program used to be largely restricted to participants enrolled in Aid to Families with Dependent Children (AFDC), a program that was started in the 1935 in order to provide aid to children whose families had little or no income. This link of Medicaid and AFDC, commonly referred to as welfare, meant that qualifying income cutoffs were very low. Congress enacted several laws beginning in the late 1980's severing the connection between welfare and Medicaid eligibility. Federal law required states to provide Medicaid coverage to pregnant women with incomes up to 133 percent of the poverty level by April 1990. States also had the option to cover women with incomes up to 185 percent of the poverty level and receive federal matching funds. Even though these Medicaid expansions for pregnant women were taking place, as many as half of newly eligible, uninsured, pregnant women did not access coverage in time to benefit from improved prenatal care. Furthermore, non-participation was concentrated among women who were not income-eligible for AFDC, signifying that simply increasing the income eligibility cutoff did not break the connection between welfare receipt and Medicaid coverage (Currie & Grogger, 2002). State governments recognized this problem and made a number of administrative reforms intended to make it easier for pregnant women to enroll into Medicaid regardless of their welfare status. During these expansions, states were also reforming their welfare systems, and in 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) was

enacted. This reform eliminated AFDC and replaced it with Temporary Assistance to Needy Families (TANF).

A significant part of legislation in The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) changed legal immigrants' access to public health insurance. First, immigrants were denied Medicaid benefits if they arrived in the United States after August 1996. Secondly, immigrants were limited or denied participation in Temporary Aid to Needy Families (TANF), which serves as an entry point to Medicaid. Federal welfare reform is associated with an increase for this portion of society of low-income families of between 17 and 27 percent in the proportion of low-educated, foreign-born single women who are uninsured (Kaushal & Kaestner, 2005).

A consensus existed during the 2008 Presidential Campaign that health care reform was necessary though no consensus existed as to the appropriate way to reform the system. After much heated debate and concessions from all sides, on March 23<sup>rd</sup>, 2010, President Obama signed into law the Patient Protection and Affordable Care Act, also known as health care reform of 2010. A number of reforms from this legislation will become effective within the first year of its' signing with many more adjustments to take place over the next several years. However, even with the new bill, many Americans do not believe that everyone deserves health care, but rather that only certain privileged populations should have access, while millions of others do not. In regards to access to prenatal care, several aspects of the reform will enable more women the opportunity to be covered.

Starting January 1, 2014, states will be required to provide Medicaid to nearly all people under age 65 with income below 133 percent FPL (about \$14,400 for an individual in 2010), facilitating greater eligibility of covered access (Guyer, 2010). The new bill also allows children to remain covered under their parents' plans until the age of 26, which will also enable young women to have access rather than the possibility of having none or having to apply for Medicaid. Altogether Medicaid and Children's Health Insurance Program (CHIP), its smaller companion program, are expected to cover an additional 16 million people by 2019 (Guyer, 2010). With additional requirements including mandating that employers supply coverage to their workers, a total of 32 million additional citizens will be insured by 2019, but an estimated 23 million will still be uninsured (The White House, 2010). In order to promote and ensure available providers, the new law will give a ten percent bonus to general providers and general surgeons to encourage more providers to remain generalists rather than choose a more lucrative specialty. Increasing Medicaid payouts is also part of the law to offer incentives to providers to take on more patients who are covered by Medicaid. Simply having Medicaid or access to Medicaid does not ensure access to care. One must also find a willing provider.

As illustrated, the country has made forward progress. However, regression has occurred as well. Together, hierarchy and provider-based networks can be considered the "traditional" modes of governance, especially when it comes to guiding health policy, but both have been subject to challenge on the grounds that they privilege insider policy expertise and limit the capacity of

citizens and/or consumers to influence and form policy (Tenbenschel, 2008).

Simply having the knowledge that prenatal care is important and that it enables healthy births, babies and mothers, does not give it the power to be policy. Policy makers, health care professionals with expertise in this field and consumers of prenatal care need to explore effective programs, advocate for their expansion and create policy that ensures all women have access to adequate and effective prenatal care.

## CHAPTER 3

### BARRIERS TO PRENATAL CARE

The advantage of having prenatal care is not unnoticed by the government. *Healthy People 2020*, is a science-based set of national objectives for improving the health of all Americans over the next ten years. For three decades, *Healthy People* has established benchmarks and monitored progress in order to promote collaborations across sectors, guide individuals in making informed health decisions, and measure the impact of prevention activities (*Healthy People 2020*). In 1990 the Surgeon General created a goal to have 90 percent of all pregnant women access early and adequate prenatal care. This remained the goal for both *Healthy People 2000* and *Healthy People 2010*. However, because no improvements were made, the target in *Healthy People 2020* is set at a ten percent increase from the last available data (2007) when 70.5 percent of women accessed early and adequate care. Therefore the benchmark for Healthy People 2020 is 77.6 percent, rather than once again setting a lofty, and what seems to be unattainable, goal of 90 percent. As a whole, the country's numbers are not improving and most demographics fall short of the original 90 percent goal. Only Asian Pacific Islanders (90.2 percent), non-Hispanic Whites (93.5 percent) and

college-educated Whites (92.7 percent) achieved the Healthy People 2010 target (AHRQ, 2007).

Understanding the current policy and trends regarding access to prenatal care is necessary before the proper improvements can be made. Current health care policy disenfranchises many people including the least among us, the unborn. As with the rest of America's health care, access to prenatal care is not a right but is something that can be withheld if proper qualifications are not met. Access to prenatal care should not be forgotten in the health care debate. It is not only an ethical issue but also an economic issue. Increased access improves birth outcomes and the health of our nation as a whole and can lower long-term health care and other costs.

#### Economics of Low Birth Weight Babies

Every year nearly one million American women deliver babies without receiving adequate medical attention. Babies whose mothers receive no prenatal care are three times more likely to be born at a low birth weight and five times more likely to die than those whose mothers received prenatal care (Medical Moment, 2004). Low birth weight (LBW) is defined as less than 2,500 grams, about 5.5 pounds. In determining the underlying health of a newborn, birth weight is a key indicator. Despite advances in medical technology and the delivery of health services, nearly 30,000 infants in this country die because of low birth weight (LBW). LBW infants who do live have a greater chance of suffering from costly and chronic conditions throughout their lives. In 1988, the

cost of having a normal birth weight baby was \$1,900. Thirty-five percent or \$4 billion of the estimated \$11.4 billion spent on health care for infants in 1988 was for the incremental costs caused by low birth weight infants. This amounted to almost \$15,000 additional for each of the 271,000 infants born with low birth weight in 1988 (Lewitt, Schuurmann Baker, Corman, & Shiono, 1995). Not only is the immediate medical attention necessary for a LBW baby drastically higher, but children ages three to five who were LBW infants are almost twice as likely to be hospitalized as normal birth weight children and once admitted to the hospital, have longer lengths of stay. LBW children age three to five are hospitalized four times more frequently per year than children of the same age who were born at a normal weight. According to the National Medical Expenditure Survey from 1987, the annual per capita expenditures on care in the hospital for children three to twelve years old were \$112 in 1988 dollars including physician and hospital charges. Thus, the incremental cost per LBW child ages six to ten was about \$470 in 1988. For the approximately 1.3 million LBW children in this age group, the total cost was \$610 million per year in 1988 dollars.

Along with health care costs, educational costs also increased for LBW babies. Between the ages of six and fifteen, children are 50 percent more likely to be enrolled in some type of special education program than their peers if they weighed less than 2,500 grams at birth. Estimates of the annual incremental special education costs linked with LBW range from \$447 million to \$244 million in 1988-1989 dollars (Lewitt et al., 1995). And not only are LBW children more apt to use special education services than normal birth weight children, they are



also more likely to repeat a grade in school. Whether in special education or not, repeating a grade costs several thousand dollars per student.

Barriers that keep women from entering PNC must be better understood in order to improve maternal health and to eliminate racial/ethnic disparities in the health outcomes of mothers and infants (CDC, 2000). Barriers that inhibit access to prenatal care are comprised in three categories: socio-demographic, personal, and system. These barriers coincide with the initial Socio-Behavioral Model (SBM) of the 1960's that is divided into predisposing factors, enabling resources, need and use of health services (Andersen, 1995). Prenatal care is the first measure to create equality for all babies born in the United States. With barriers in place that inhibit access, this equality cannot be realized. Due to the fact that lack of prenatal care correlates to low birth weight and one cannot simply outgrow all of the negative side effects of low birth weight, the consequences of no prenatal care can last a lifetime. Therefore, access to prenatal care must be achieved in order to help facilitate all Americans to reach their full potential.

#### Socio-demographic Characteristics

Socio-demographic characteristics play a vital role in a woman's ability to access prenatal care. These characteristics are a combination of social and population factors including age, sex, income, race/ethnic origin, educational attainment, marital status and geographic location. A cumulative effect of several of these characteristics is often apparent in regards to a woman's ability to access prenatal care.

In order to fully comprehend why all women are not receiving prenatal care, women's access to and the quality of healthcare must first be examined. The Census Bureau estimated that there are 152 million women in the United States, more than half of the population, and 47 million are of racial/ethnic minorities. Unfortunately, poverty disproportionately affects women as nearly 14 percent of women live in households with incomes below the federal poverty level, compared to 11 percent of men (AHRQ, 2008). Poverty rates are highest for families headed by single women, especially if they are black or Hispanic. In 2009, 29.9 percent of households headed by single women were poor, while 16.9 percent headed by single men and 5.8 percent of married-couples lived in poverty.

Many health care professionals sustain an almost single-minded belief that disparities in access to health care across socioeconomic groups are the key reason for the major discrepancies in health status between wealthy persons and poor persons (Andrulis, 1998). Socioeconomic status is the greatest determinant of health, and because a greater percentage of minorities live in poverty, their health status is worse than those not living in poverty. Low socioeconomic status is one barrier to care. According to the National Poverty Center at the University of Michigan, poverty rates for blacks and Hispanics are significantly higher than the national average. In 2009, 25.8 percent of blacks and 25.3 percent of Hispanics were poor, compared to 9.4 percent of non-Hispanic whites and 12.5 percent of Asians. Poor people in America often have rates of infant mortality and morbidity that approximate those of Third World or developing countries. A distinct, consistent correlation between inadequate prenatal care and low income

exists, and the elimination of financially based differences in relation to access to care is vital in any attempt to create equal outcomes across different socioeconomic groups. A report from the Center for Studying Health Systems Change conducted in 1996 and 1997 found that families classified as low income were more likely than any other group to report decreased access to health care within the last three years. The recent economic downturn has undoubtedly forced many more into this category of low income and decreased access to care.

Both gender and racial/ethnic disparities exist for women in regards to health care. Significant gaps exist between the care received by men and women in the United States. Women receive better care than men for 18 percent of measures, worse care for 22 percent, and comparable care for 59 percent (AHRQ, 2008). According to the 2008 National Healthcare Disparities Report, black women receive poorer quality care than whites for 53 percent of measures and have worse access to care for 29 percent. Also, Hispanic women receive poorer quality of care than non-Hispanic whites for 60 percent of measures and have poorer access for 87 percent. Finally, for services unique to women, blacks and Hispanics both receive poorer quality care for 75 percent of measures. Data from 2008 shows the disparity that exists between different races and access to prenatal care: 76.3 percent of Blacks, 77.6 percent of Hispanics and 69.6 percent of American Indian or Alaska Native received prenatal care compared to 85.5 percent of Whites (AHRQ, 2008). Black women are more than three times as likely as white women not to receive prenatal care, and regardless of their prenatal care status, their infants are significantly more likely to die within their first 27

days of life than are infants born to white women (Vintzileos, Ananth, Smulian, Scorza & Knuppel, 2002).

Pregnant women have specific health care needs and face unique risks throughout a pregnancy. Efforts have been made to improve maternal and infant health, yet many American women continue to have poor outcomes in this regard. Maternal health risks are plentiful and dangerous, and the U.S. has higher maternal mortality rate than most other developed countries with 15.1 maternal deaths per 100,000 live births (Chavkin & Rosenbaum, 2010). This statistic makes us far from reaching the goal of 3.3 maternal deaths per 100,000 live births set by the Surgeon General in *Healthy People 2010*. In actuality, maternal mortality has recently increased after remaining stagnant for several decades. Maternal mortality rates clearly illustrate health care disparities in relation to income, geography and race. Black women have an overall maternal mortality rate three times greater than that of white women and in some states a rate of six times greater (Fiscella, 2004).

Due to advances in neonatal care and technology, infant mortality has declined. However, disparities are present as infant death rates which, are highest in the south, can be more than twice as high for blacks when compared to whites (Chavkin & Rosenbaum, 2010). Further illustrating this fact, the *State of the World's Mothers Report 2006* finds that higher newborn death rates among U.S. minorities and disadvantaged groups exist and the mortality rate for African-Americans is 9.3 deaths per 1,000, nearly double that of the United States as a whole. This study also found that only 17 percent of all U.S. births were to

African-American families, but 33 percent of all low-birth weight babies were African-American, which is suggestive of lack of adequate prenatal care (Geogheagan, 2006).

Women with less than high school education and high school graduates had lower rates of services than women with at least some college education. Only 73.0 percent of women with less than a high school degree received early prenatal care in comparison to 82.4 percent of high school graduates and 91.5 percent with any college education. White mothers are more likely to have completed high school than are black mothers, and therefore the relationship between educational attainment and race is also significant (Curry, 1990).

Age also plays a large role in determining whether a mother will have adequate prenatal care. Women at either age extreme are also least likely to receive adequate prenatal care. The United States has the highest rate of teen pregnancy in developed countries and it has recently risen after a decrease in the late 1990's. This is troubling because adolescents are the most likely to receive no care at all along with being the least likely to begin care early, which may be due to the fact that twenty percent of adolescents lack any health insurance (Henshaw, 2004). The states with the highest number of births to women under 18 years of age are all southern states including the District of Columbia. Older mothers, those women who become pregnant at thirty-five years of age or older, also tend to delay prenatal care or receive no care at all, a tendency that increases with age.

Geographic location is also a risk factor in accessing prenatal care. It is common to have fewer providers in both urban and rural areas, which in itself decreases access. People who live in the most rural (areas with fewer than 10,000 people) and inner-city areas have several things in common: they are more likely to live in poverty, have poorer health status, and experience higher mortality rates than suburban residents (Blumenthal & Kagen, 2002). The rates of low birth weights, which often signify lack of sufficient prenatal care, were highest in the District of Columbia and the southern states of Alabama, Louisiana, Mississippi and South Carolina (Child Health USA, 2010).

Marital status is also a socio-demographic characteristic that can predict access to prenatal care. Even within the same race and with similar education levels, married women are three times more likely than unmarried women to receive adequate prenatal care.

### Personal Barriers

Along with socio-demographic characteristics, personal barriers play a vital role in access to prenatal care. Personal barriers consist of motivational and attitudinal impediments to care. Motivational barriers include factors that make it difficult to mobilize personal resources and energy to seek health care such as family problems, depression, or substance abuse. Attitudinal barriers are beliefs that either explicitly or implicitly discourage the use of formal health care services (Kalmuss & Fennelly, 1990). Cultural beliefs and influences are more examples of attitudinal impediments.

Though easy to be overlooked at first glance, attitudinal barriers do not seem to be as relevant as they really are in predicting and understanding the use of services, including accessing prenatal care (Andersen, 1995). One of the most influential attitudinal barriers exists when a lack of value is placed on prenatal care. The belief that prenatal care is not important inherently puts attaining it very low on a priority list. Nearly twice the rate among non-Medicaid women, half of all women with Medicaid coverage who had their first prenatal care visit after the first trimester indicated that they began care as early as they wanted (Marks, 1997). Particularly among women with Medicaid coverage, knowledge of the importance of prenatal care remains a barrier to receive early care.

Another major determinant of inadequate prenatal care is unplanned pregnancy. Unplanned pregnancy, which is more often associated with unmarried women, was an independent predictor for a delayed first prenatal care visit and for a reduced number of visits. Almost half of all women in the United States have experienced an unintended pregnancy and 40 percent of those have abortions (Chavkin & Rosenbaum, 2010). This means that 60 percent of unintended pregnancies are carried to term, but prenatal care will often be delayed while the mother is deciding whether or not to maintain the pregnancy and while she is fully grasping the idea that she is now pregnant. Ambivalence toward an unplanned pregnancy is often felt, which may result in late entry into prenatal care or sporadic use of prenatal care. Black women, poor women and those with only a high school education, have twice the rate of unintended pregnancy as other demographics.

The attitude and beliefs that pregnant women feel about their health care provider and whether or not they believe their provider cares about them are also associated with whether or not a woman is likely to access prenatal care. If women feel the care they are receiving is depersonalized, they are less likely to continue with care, and if women fear prenatal care for whatever reason, they will not seek it. Lack of information and knowledge about prenatal care in conjunction with where to seek services also decreases access to prenatal care.

As with attitudinal barriers, motivational barriers play a significant role in whether or not a woman will access prenatal care. Cultural and ethnic attitudes and beliefs are some of the strongest influences in a woman's life and can come from relatives, social circles and those with whom she associates. These attitudes and beliefs are often seen and heard with greater pressure when a woman is pregnant. Cultural health practices that do not coincide with modern medicine also influence prenatal care utilization. It can be very difficult for a woman to make her own decisions if her desires do not correspond to those in the community in which she lives. The belief that pregnancy is a natural event rather than a medical condition is an example of a cultural/ethnic belief that has been shown to influence the use of prenatal care (Curry, 1990). This belief, which often comes from the elders of a community, can influence a woman to not seek medical or prenatal care because pregnancy is natural, and medical attention is not necessary; merely healthy living will ensure a healthy baby.

A woman's motivation and personal resources greatly effect whether or not prenatal care will be accessed. Dysfunctional lifestyles such as drug and



alcohol use or abuse or homelessness can have a profound influence on the use of prenatal care and are associated with erratic, poor or no prenatal care at all.

Women with addiction problems may choose to avoid entering the health care system for fear of having their habits discovered.

Personal resources also impact whether or not prenatal care will be accessed. The absence of social support can impede access to care whereas its presence results in improved pregnancy outcomes. Tangible support such as transportation, money, shelter and childcare has been found to facilitate accessing prenatal care; however, when support is nonexistent, care is delayed (Curry, 1990). Women who struggle to obtain basic needs such as food and shelter or who are caring for other children and working may not even consider accessing prenatal care. Other factors related to inadequate prenatal care include denial, fear and/or shame and poor self-esteem.

### System Barriers

System barriers are barriers beyond the woman's control, yet have a remarkable impact on the type of prenatal care, if any, a pregnant woman will be able to access. System barriers include policy and provider barriers. The major types of barriers within these two categories include: lack of available providers, lack of transportation, negative institutional practices, and dissatisfaction with prenatal care or the provider (Curry, 1990). System barriers are very difficult to overcome, even if a woman is attempting to access prenatal care, it may be entirely out of her control whether or not she will be successful. Health personnel

and facilities must first be available where people live and work. Secondly, people must have the means and know-how to get to those services and make use of them (Andersen, 1995).

Though finding a provider may be an easy task for someone with private insurance, it can be a challenge for someone with Medicaid or no insurance at all. Many providers do not accept Medicaid patients because reimbursements are low, and living in a geographically isolated area only compounds this problem. Not only is it difficult to find a provider, but also accessing that provider due to negative institutional practices may pose additional problems and barriers including crowded clinics and scheduling difficulties such as limited availability of appointments, frequent busy signals when telephoning clinics, long waiting times, and interaction with insensitive and culturally incompetent health care professionals (Loveland Cook et al., 1999). Women who work and students do not always have the ability to miss work or school in order to attend an appointment. Too much paper work, poor coordination between services, and confusion on where to go are also common institutional barriers that impede access to prenatal care. Getting to the provider can also pose a problem as not all women have access to transportation due to scheduling conflicts, geographic location and finances.

The problems and issues that exist in relation to publicly funded prenatal programs are examples of system barriers. These barriers include making eligibility systems more user friendly in order to facilitate entrance into a prenatal program, overcoming the negative public perception of the Medicaid program,

addressing the shortage of health care providers who specialize in pregnant women, and addressing the quality, comprehensiveness and continuity of care provided for pregnant women in the Medicaid system. Many people eligible for social programs do not participate in them, signifying that income eligibility is not the only barrier to care. For example, only two-thirds of those eligible for AFDC and Food Stamps participate (Blank & Ruggles, 1996). There are two commonly accepted explanations for eligible non-participation: people do not participate based on the stigma that exists for those who do utilize available services, and the deterrents to participate outweigh the advantages or feasibility to actually seek out the services. The rates of non-participation in Medicaid are even greater than those of non-participation in other governmental programs, indicating that barriers to obtaining medical care under this program may be particularly great (Currie & Grogger, 2002). Pregnant women who participate in welfare are automatically enrolled in Medicaid, but those who are not must go through a lengthy application process that may include the requirement to show birth certificates and/or citizenship papers, proof of residency such as utility bills and rent receipts, and pay stubs to prove income. There is a limit in many states for the number of days an applicant has to provide the appropriate documentation, and applicants are often required to return for several interviews, a difficult task for the working poor, who may be unable to take time off of work, rely on public transportation and may have to care for other children. Available evidence suggests that up to a quarter of Medicaid applications are denied due to administrative requirements

such as failing to attend all required interviews or not producing the necessary documentation within the allotted time period.

Furthermore, simply being enrolled in Medicaid does not guarantee access to care. In comparison to private insurances, Medicaid typically pays about half as much; therefore finding a willing provider can be a difficult task. One study of new mothers who arrived in emergency departments in labor with “no physician of record” found that 64 percent of the women cited their inability to find a doctor willing to accept them as the greatest barrier to obtaining prenatal care (Aved, Irwin, Cummings & Findeisen, 1993). Minority mothers experience these hardships with even more severity due to the fact that cities are highly segregated by income and race. For example African Americans without private insurance who live in urban areas are often turned away by private practices and are therefore more likely to receive services from large urban teaching hospitals.

Several studies have concluded that low-income women in clinic settings do better than those with private physicians. This may be because clinics provide case management including nutrition counseling, psychological and social resources, and social and emotional support which may lead to healthier behaviors (Guyer, 1990). With more than two-fifths of our nation’s births being covered by Medicaid, it is important to ensure that the care its recipients are accessing is adequate.

Another common, negative institutional practice that hinders access to care includes lack of cultural competence. Cultural competence is a set of attitudes and cultural behaviors which are integrated into the practice methods of

a system, an agency and its professionals, that allows them to work effectively in cross cultural situations (Arnold & Boggs, 2007). Cultural competence in health care requires health care professionals to understand and respond effectively to the values, customs and beliefs of people of different backgrounds than their own who are involved throughout all phases of the health care delivery system. Language problems, including using medical jargon, not speaking someone's language or being "talked down to," have also been acknowledged as negative institutional practices. Lack of cultural competency can lead to negative experiences for anyone attempting to navigate the health care system, especially pregnant women. Negative experiences within the health care system lead to dissatisfaction with prenatal care and can ultimately affect whether or not a woman receives adequate prenatal care.

Barriers to prenatal care pose a very real problem to access. It is easy for a person who has private health insurance to overlook the numerous obstacles that those without insurance or those on public assistance must face throughout every phase of their involvement in the health care system. If a person with private insurance is dissatisfied with their care or their health care provider, she can easily find a new provider with no detrimental outcomes. However, a medically indigent person does not have this luxury and is relegated to what is available to her, regardless of its convenience or adequacy. All real and perceived barriers that deter or inhibit access to prenatal care for medically indigent women must be addressed when discussing and creating options and policy to improve access to prenatal care in America.

## CHAPTER 4

### EFFECTIVE POLICY AND PRACTICE

Prenatal care is scientifically proven to improve birth outcomes both for mother and child. With this knowledge at hand, as a government who values life, we must do what is possible in order to ensure access to adequate prenatal care for all. The infant mortality rate in the United States declined by 90 percent during the twentieth century. This is largely due to advancements of science including a better understanding of the spread of infection and of aseptic techniques as well as many technological advances. However, even with these advancements, according to the most recent available data, the United States is 29th out of all developed countries in the world with an infant mortality rate of seven deaths per 1,000 births, which has a direct connection to inadequate prenatal care (HCSA, 2007).

Over the past twenty years, from when it was first established, little improvement has been made to reach the goal of having adequate prenatal care for 90 percent of all births. Though there has been what seemed to be some significant policy changes in order to improve access to care, the reality of the situation is that little has changed. It is commonly believed that the universal availability of free prenatal and maternal health care is what is responsible for

lower rates of infant mortality in other developed nations. Though each country may have different health care financing systems, in all of them the central government has identified the services that are to be provided and, in the case of maternity care, has removed any and all barriers to those services. The full range of perinatal coverage is provided without charge to women of all socioeconomic levels, with only a few small fees that are readily eliminated in the event of need (IOM, 1989). This belief is further evidenced by a study from the former New Jersey Commissioner of Health and Human Services who found that health insurance coverage is critically important. Women without any insurance coverage during their pregnancy had the lowest rate of first trimester prenatal care with only 73 percent, while 96 percent of women with health insurance were accessing prenatal care in the first trimester (Guadagnino, 2008). The United States is among the highest of all industrialized countries on health care spending yet continues to have worse outcomes than those who spend less (Kaiser Family Foundation, 2009). Effective policies and practices, both in terms of outcomes and costs, must be examined in order to improve the quality of American healthcare and to ensure a healthy and just start at life for all those born here.

#### State by State Policy and Practice

Early and adequate prenatal care is key to decreasing infant mortality disparities. The United States has a higher infant mortality rate than most industrialized countries yet spends far more on neonatal intensive care (McDonough et al., 2004). Improvements in access to prenatal care have been

seen in some states due to innovative program and policy initiatives. Several of these practices will be discussed and should be considered for implementation in other states and at a national level.

In general, the countries that have lower infant mortality rates than the United States provide universal prenatal care; America still does not. Research has shown that expanding access to care will improve outcomes and reduce cost. Medicaid was expanded in the 1990's but a variation of outcomes existed because of how each state chose to utilize and optimize federal policies to extend care and coverage to pregnant women from underserved communities. Compared to other states, California was more successful in improving access to prenatal care, yet racial/ethnic disparities still persisted. However, California still achieved the greatest reduction in prenatal inadequacy in almost all of the ethnic groups studied with the Medicaid expansion. Its success is credited to the fact that California started one of the most inclusive Medicaid expansions and put in measures to remove barriers to utilization and enrollment (Capitman, Bengiamin & Ruwe, 2007). Insufficient supply and unequal distribution of health care resources is believed to be a main reason racial disparities still exist.

Rhode Island implemented several practices in order to facilitate access to prenatal care. The state began offering free pregnancy tests, shortened application forms, increased reimbursement to prenatal and obstetrical providers, created toll-free access to information about counseling services, and conducted outreach campaigns. These changes created a 17 percent increase in patients receiving prenatal care within seven years and there was a 5 percent decline in LBW



infants. The state also saved money due to the fact that a woman who receives cost-effective prenatal care is less likely to have a child who will utilize costly neonatal intensive care units.

No matter the type of health care, it is important that current research and knowledge be appropriately and successfully passed from provider to patient. In regards to prenatal care, many infant mortality risk factors are reduced by early linguistically and culturally appropriate prenatal care (McDonough et al, 2004). For example, in certain parts of California, there was a high incidence of Sudden Infant Death Syndrome (SIDS) in spite of successful campaigns that were reducing the incidence elsewhere. These statistics dropped when California translated their SIDS educational messages and materials into the primary languages of different communities. This illustrates the importance of cultural competency in delivering care, a fact providers must be aware of when serving their clients/patients. Cultural competence is applicable and necessary to all forms of health care, but it is particularly important to improve access to prenatal care, as many medically indigent women in America do not speak or understand English. These women must have access to interpreters and written information in their native language, a facet of cultural competence, in order to understand and even be able to attempt to comply to a providers orders and suggestions.

The location of where a pregnant woman lives can determine whether or not she may access prenatal care. Fewer providers are available in rural areas, which causes a decrease in access. In order to combat this problem Maine has set up a program known as Rural Medical Access Program (RMAP). This program is

designed to promote prenatal services in underserved areas in Maine. Medical malpractice premium assistance is provided through RMAP to qualified eligible physicians who are licensed and practicing in Maine, who provide prenatal care and delivery services, and practice at least 50 percent in underserved areas of the state (Department of Professional & Financial Regulation, 2010).

Mobile health vans are an example of a more modern and innovative way to deliver care and improve access for a number of health care issues. In Miami-Dade County in Florida, use of a mobile healthcare van was implemented to improve utilization of prenatal care services and birth outcomes. Mothers who used the van for at least one prenatal visit accessed care sooner, and a greater number of mothers in this mobile van group had adequate care (O'Connell, Zhang, Leguen & Prince, 2010). The mobile group also had a statistically lower percentage of LBW infants (4.45 vs. 8.8 percent). These results suggest that mobile vans can have significant positive impact improving access to early prenatal care and improved birth outcomes too. The use of mobile vans in areas with insufficient numbers of providers, high risk women and culturally diverse women should be considered to improve birth outcomes and access to prenatal care throughout the country.

Increasing the amount of Community health workers is another example of a solution to eliminate barriers to access care, be it prenatal care or any other form of care. Community health workers are community members who serve as connectors between health care providers and health care consumers to promote health among groups that have traditionally lacked access to adequate care.

Community health workers have formally existed in the United States since the 1960's when the federal government supported programs intended to expand access to health care for underserved communities. Community health worker programs exist in every state, but limited data is available on the exact work they perform.

Community health workers can contribute to primary and preventive care in several different ways: increasing access to care, improving quality of care and reducing costs of care. As members of the communities in which they work, community health workers can explain health and system information in the community's language and value system (Witmer, Seifer, Finocchio, Leslie & O'Neil, 1995). Quality of care can be improved because community health workers are able to educate providers about specific community needs, cultural relevance and cultural competence. As part of the interdisciplinary health care team, community health workers can contribute to the efficacy of care including the coordination, the continuity and the overall quality of care. They can greatly contribute to outreach programs, health education, and ultimately to reducing rates of low birth weight and infant mortality. Community health workers are also able to reduce the cost of care, as they are relatively inexpensive to train, hire and supervise in comparison to other health care professionals. They have the ability to provide a necessary service to overcome the barriers that exist in relation to accessing care within our health care system.

## Centering Pregnancy

It is well documented that high-quality prenatal care is the single most important factor in improving maternal and infant health (MHQP, 2010). Adequacy of prenatal care reflects not only initiation and number of visits, but also quality and content of care, and content of prenatal care might be a more significant predictor of outcome than number of visits (Ickovics et al., 2003). Centering Pregnancy is an innovative, high-quality, group prenatal program that was developed in 1989 in conjunction with the publication *Caring For Our Future: The content of Prenatal Care* by the US Public Health Service Expert Panel on Prenatal Care. Centering Pregnancy is comprised of a set of “Essential Elements” that provide the foundation for group prenatal care and helps integrate group support and extensive health education with the traditional form of prenatal care. Centering Pregnancy follows the three fundamental components of prenatal care: assessment, education/skills building, and support. The barriers, i.e., socio-demographic, personal and system, that deter or prevent access to prenatal care are traditionally addressed or eliminated through the design and implementation of the Centering Pregnancy program.

The premise of Centering Pregnancy is that the most effective and efficient form of prenatal care can be delivered and received in a group setting. In essence, the core of Centering Pregnancy is in the relationships and the establishing of them. The dynamics of the group enhance both learning and support for all participants. It is founded on the belief that pregnancy is a process of wellness and a time when women can be encouraged to take responsibility for

their own health and learn self-care (Massey, Rising & Ickovics, 2006). Group dynamics and positive peer pressure help to eliminate attitudinal and motivational impediments to accessing prenatal care. Centering Pregnancy allows women to interact with other women experiencing the same physiological changes, and therefore helps the women deal with both emotional and physical stress. The group dynamic defeats the feeling of isolationism that can occur for many women, especially if the pregnancy was unplanned. All prenatal care takes place in a group setting rather than in the examination room. This step alone removes system barriers between health care providers and patients while reducing anxiety and fear of the health care system.

The template for Centering Pregnancy was established in Minnesota in the 1970's at a childbearing center where midwives delivered prenatal care to low-risk women and their partners in a group setting with other couples with similar gestation. This program was created based on the philosophical belief that an active union of health care provider and patient holds the greatest potential for the personal growth of both. The patient is viewed as an equal partner in care and works actively with the care provider to create goals and appropriate ways to reach those goals (Rising & Lindell, 1982). Centering Pregnancy was officially implemented in a hospital clinic in Connecticut in 1995 and primarily offered to Medicaid-eligible, ethnically diverse, prenatal groups.

Centering Pregnancy is very different from the traditional model of prenatal care. It includes ten two-hour prenatal group sessions with eight to twelve women who share similar due dates, rather than individual appointments

with a provider. This model allows for more than twenty hours of contact time between the care provider and the pregnant woman, again, eliminating system barriers in regards to access to prenatal care. The structure of group care permits more time for provider-patient interaction and more opportunity to address clinical as well as behavioral, psychological and social factors to facilitate healthy pregnancy (Massey et al., 2006). In contrast, in the traditional form of prenatal care, pregnant women generally have roughly an hour and a half of time with their provider divided into ten to fifteen minute visits, a drastically less amount of time overall. This dramatic increase in time that women have with the provider enables opportunities for women to gain skills and knowledge vital for a healthy pregnancy and childbirth. Each woman is encouraged to bring the baby's father or another support person with her to group meetings.

Centering Pregnancy begins at twelve to sixteen weeks of pregnancy after an initial prenatal assessment and laboratory testing is completed and concludes in early postpartum and follows the recommended schedule of prenatal visits from the American College of Obstetrics and Gynecology (i.e., monthly and then biweekly). An obstetric provider and someone trained in the Centering Pregnancy model facilitate the sessions. Group prenatal care encompasses the recommended content for optimal care, and as such is structured to improve the quality of care and consequently perinatal outcomes (Ickovics et al., 2003).

In 2001 the Institute of Medicine (IOM) published *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*, which found the current United States health care delivery system to be insufficiently organized to meet

the current healthcare challenges of the country and was in need of fundamental change. Many patients, doctors, nurses and health care leaders were concerned that the care delivered was not appropriate for the care needed. The frustration levels of both patients and providers have probably never been higher, but the problems remain (IOM, 2001). Though the report did not specifically spell out how to fix the system because it did not want to thwart creative solutions that may come about, it did include ten suggestions that should be included in any reorganization of the healthcare system.

Established in 1970, the Institute of Medicine (IOM) is the health arm of the National Academy of Sciences, which was chartered under President Abraham Lincoln in 1863. It is a non-profit organization that works independently of the government and provides authoritative and unbiased advice to the public and elected officials. The recommendations from the IOM are important for a number of reasons. First, the Institute of Medicine is highly regarded and its recommendations impact policy development and initiatives. Secondly, the ten recommendations the IOM laid out in its 2001 report parallel the Essential Elements that are the backbone of Centering Pregnancy, further illustrating the innovativeness along with the breadth and depth of Centering Pregnancy.

Centering Pregnancy is unique to other models of care because of its ability to empower each woman and to enable her to take charge of her pregnancy. Women are taught how to take their own blood pressure and weight and how to record their results in their personal medical records. Each woman

helps with her own records and is able to see them and look through them at any point, something that is rarely, if ever, seen or even offered in the traditional model. This self-care activity improves her understanding of the physiologic measures and their implications for her total health, taking her from a passive to an active participant in her own care (Rising, Kennedy & Klima, 2004). This simple task of teaching women how to monitor themselves and allowing them to view their progress in their chart eliminates system barriers and is a powerful tool to aid women to feel in control of their care (a suggestion of the IOM), and of their pregnancy, a characteristically important feeling to pregnant women of all cultures, socioeconomic status, backgrounds, and ages.

The two-hour meeting time of each session of Centering Pregnancy has two distinct purposes. The first thirty minutes of the meeting are generally focused on health assessment. Throughout this time each woman will meet with the provider, most likely in a corner of the group room, and participate in a focused physical assessment, including documentation of the fetal heart rate and measurement of fundal height. At this time each woman is able to talk privately about any concerns she might have which she is encouraged to share during group discussion. This enables individual time for each woman with the provider. The assessment in the group space normalizes the process and enables the women to have personal confidence with how well and similar their pregnancies are progressing. Little by little the group bonds in this shared, unique time and sees the normalcy of the physical changes of pregnancy (Rising et al., 2004).



While the other women are waiting, each documents her weight and blood pressure, looks in her chart, socializes with other members of her group, and completes self-assessment sheets for each session. These sheets are designed to promote self-care evaluation and provide the basis for group discussion. Having several activities occur at once eliminates unproductive waiting time and encourages and facilitates families to become better acquainted. The Centering Pregnancy model enhances the effectiveness and the efficiency of the time slot and decreases waste, another recommendation of the IOM.

After the individual assessments are complete, the second part of the meeting begins by everyone sitting in a circle to promote equality and openness. This portion focuses on education and discussion, which the provider facilitates. One core concept of Centering Pregnancy is that the woman is an expert on her own care and what she needs. Though the provider may facilitate the discussion, the women truly lead it and are free to discuss their ideas and concerns in an open and nonjudgmental format. The atmosphere created through Centering is non-hierarchical. This enables the participants to use their own strengths and knowledge and contribute to the education and experience of the group. The facilitator does not dominate the group but rather provides guidance and education when appropriate. Centering decreases the paternalism that is ingrained in our health care system and improves and solidifies the provider-patient relationship by enabling them to become partners in care (Massey, 2006).

This facilitated group discussion format promotes a wide range of topics that come from concerns raised by the participants themselves. Responses and

support come from all involved: the women, the partners, the provider and the facilitator. Instillation of hope, confirmation that their problems are not unique, receipt and offering of support and advice, and interpersonal learning are among the many factors that enable patients to change as a result of facilitated group interaction (Novick, 2004). These factors of facilitated discussion and non-hierarchical approach establish transparency (another recommendation of the IOM), described to be when information flows freely, is shared honestly, and enhances women's abilities to make well-informed decisions in regards to her health and health care.

Each of the ten sessions has a defined topic to discuss and is set up in the same two-hour format. The topics areas for education in Centering Pregnancy include: Nutrition, Exercise, Relaxation techniques, Understanding pregnancy problems, Infant care and feeding, Postpartum issues including contraception, Communication and self-esteem, Comfort measures in pregnancy, Sexuality and childbearing, Abuse issues, Parenting, and Childbirth preparation, along with any other concerns or questions a woman might bring with her. Participants are given written information, both at the beginning of joining Centering Pregnancy with a preset schedule and information on topics to be discussed, along with further information at each meeting. Each group has pre-scheduled visits for the entire duration of the program, which enables the women to plan their own personal schedules no longer at the mercy of their providers. This facet of Centering Pregnancy: openly laying out what topics will be discussed at each stage of pregnancy, providing the women with educational information, and presetting the

schedule of appointments, anticipates the needs of the women throughout their pregnancy, which is another recommendation of the IOM.

Centering Pregnancy evolved from the awareness that the current system was not responding to the needs of all women and their families and a basic belief that women desire the best for their babies. Since its inception, over 700 professionals from numerous backgrounds, including midwives, nurses, physicians, social workers, educators, and administrators, have been trained in the model. There are more than fifty active sites throughout the United States and Canada practicing this form of care (Rising et al., 2004). At the time this study, was conducted, Summer and Fall 2009, only four Centering Pregnancy sites existed in the state of Ohio, today nine different sites offer Centering Pregnancy, and at least two more are in the process of opening. Centering Pregnancy redesigns the way health care is delivered to women during pregnancy and eliminates barriers to access care. It is a revolutionary redesign of prenatal health care delivery. Centering Pregnancy is a way to provide health care that provides benefits for the system, is embraced by childbearing women, energizes providers and responds directly to the vision of the Institute of Medicine for Health Care for the 21<sup>st</sup> century (Rising et al., 2004).

## CHAPTER 5

### METHODOLOGIES

It is common knowledge that disparities in health care exist. Access to effective and adequate prenatal care is just one area where disparities are present. Countless research has been done on prenatal care, examining its effectiveness, the ability to access it, and how to improve upon both of these. As already discussed, research answers the question why medically indigent women are not receiving adequate prenatal care, and it identifies all of the different barriers that impede a woman's ability to do so. Improving access not only means opening the door for more women, it also, and maybe more importantly, means changing the type of care these women are receiving.

The design of this study is based on the case study model. This particular model asks the questions why and how. Why medically indigent women are not receiving adequate prenatal care has already been answered. In order to highlight successful, feasible solutions to these barriers and problems, this study looks at how to improve the current situation and improve access to effective, adequate prenatal care for medically indigent women while analyzing one program, Centering Pregnancy in particular. The primary purpose of this study was to determine if Centering Pregnancy improves access to adequate prenatal care in comparison to traditional prenatal care? The study examines the attitudes and

beliefs of those currently in the health care system, either as patient, provider or administrator in order to determine effective practices for enrolling women into prenatal care and to overall improve access to care for medically indigent women.

### Design

A case study design was the template for collecting data for this study. According to Robert Yin, a case study is an in depth, empirical inquiry that investigates a contemporary phenomenon within its real-life context. Women involved in Centering Pregnancy and women involved in traditional prenatal care were given questionnaires to fill out about their prenatal care experience. Health care professionals who work with pregnant women were also involved in this study and were given a separate questionnaire to complete. The findings or conclusions in a case study are likely to be much more convincing and accurate if derived from several different sources of information following corroboratory mode (Yin, 2010). Therefore, the surveys from different sources, both the patients and the health care professionals, provide a systematic approach to collecting data about prenatal care.

### Aims and Hypotheses

The overall goal of this study was to examine the effectiveness of Centering Pregnancy, a nontraditional form of prenatal care that eliminates many barriers to access and to compare results to traditional care. Several other aims existed in this study, including determining why women chose to access prenatal

care and their views about the prenatal care they received. It was also to determine what pregnant women and health care professionals view as barriers to accessing prenatal care and their beliefs on how access to care can be improved.

In accordance with previous research and current data, it is believed that women who choose to access prenatal care do so based on their education and knowledge that prenatal care is beneficial to their unborn child. Due to the increased amount of time women involved in Centering Pregnancy have with the provider and the vast array of topics covered throughout their meetings, Centering women will feel more adequately prepared for labor and delivery and more satisfied with their prenatal care than those women participating in traditional prenatal care. Those women not involved in Centering may not feel as equipped or may feel their prenatal care was insufficient.

#### Subject Recruitment and Procedure

Researching traditional prenatal care alone would not highlight ways to reduce barriers that exist to accessing prenatal care. By researching and questioning participants in Centering Pregnancy, this study was able to look at a unique form of prenatal care with hopes of discovering ways to improve care for all pregnant women and reduce barriers to access. Following study approval by the respective institutional review board of the university and of the participating hospital, subjects were recruited from a rural hospital obstetric unit in Northeast Ohio that provided Centering Pregnancy as a form of prenatal care.

The hospital is an acute-care general hospital with one hundred thirteen registered beds. The hospital opened in 1970 and provides services for residents of three counties. In 2008, the hospital merged with Summa Health System in Akron, a nonprofit organization, and became the fifth hospital of this health system. Summa Health System encompasses a network of hospitals, community health centers, a physician-hospital organization, a multi-specialty physician organization, a health plan, research, and multiple foundations. Summa is one of the largest integrated delivery systems in Ohio. The population of Summa Health System Hospitals includes: 33.25 percent commercial/managed care and other, 5.22 percent self pay, 14.86 percent Medicaid and 46.86 percent Medicare (Medicaid and Medicare includes the respective managed care). The hospital involved in this study provides all general medical services including numerous clinical specialties: cardiology, gastroenterology, general surgery, neurology, sleep medicine, oncology and hematology, pain management, palliative care services, plastic surgery and urology. With more than five hundred employees, the hospital is one of the largest employers in the area. The Labor and Delivery Unit at the hospital consists of nine beds and thirty-three employees. The Centering program involved in this study was one of four sites providing Centering Pregnancy in the state of Ohio and the only site available in Northeast Ohio at the time this study was conducted in the fall of 2009 along with some follow up work in the fall of 2010.

The women involved in Centering Pregnancy were asked if they wanted to participate in a study regarding access to prenatal care. If they consented to this,

they were given a questionnaire to complete. The health care provider of those involved in traditional prenatal care asked participants if they were interested in participating in the study. Again, if they consented to this, they were given the questionnaire. The original intent of this study was to only observe medically indigent women. However, due to the limited availability of Centering and the nature of Centering, which places all women regardless of insurance or any other factor into the same group based only on due date, both medically indigent and non-indigent were observed.

### Instruments

The questionnaires given to participants were specifically developed for this study. They were created after critically appraising the best available research on the topics of access to care, prenatal care and Centering Pregnancy, along with an in-depth investigation of government research, statistics, recommendations, and goals. Feedback from health care professionals was also used when coming up with questionnaires. Centering Pregnancy is a relatively new concept and as such, there are few high quality research studies available, though several long-term studies are currently being conducted. It is not yet known what types of data collecting tools are being used in the Centering studies that are currently underway and therefore it is impossible to compare with the measurement tools in this study.



## CHAPTER 6

### STUDY RESULTS

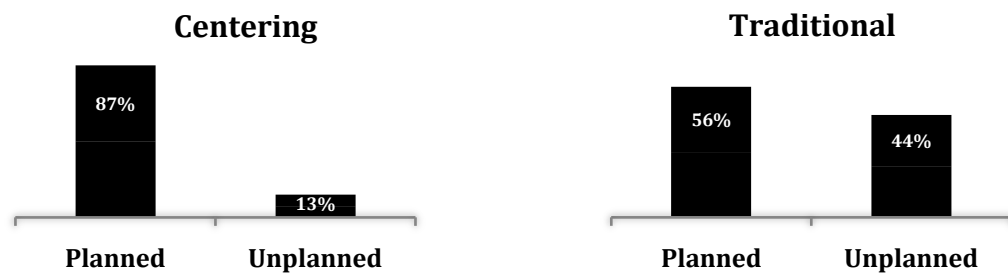
A total of fifty-four pregnant women participated in the study including thirty-eight from Centering Pregnancy and sixteen who received traditional prenatal care. Eleven health care professionals anonymously completed the survey including administrators, physicians, certified nurse midwives and nurses.

GRAPH 1 Decision to Access Prenatal Care



This does not represent society at large however; due to the nature of this study all participants were already receiving prenatal care.

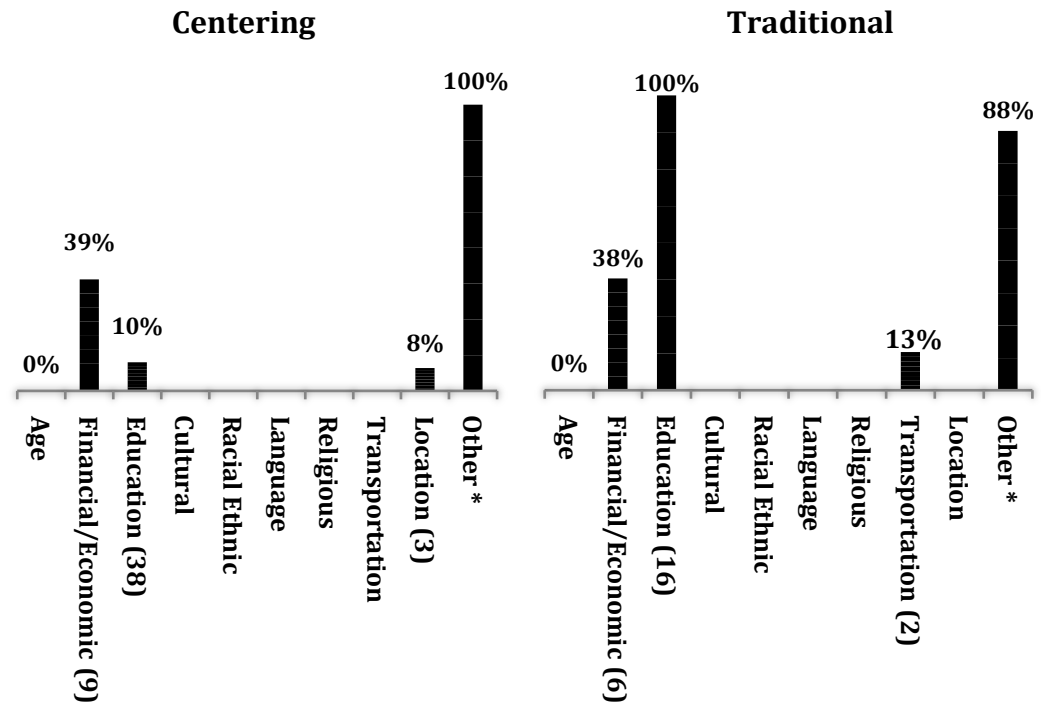
GRAPH 2 Percent of Planned Pregnancies



GRAPH 3 Marital Status



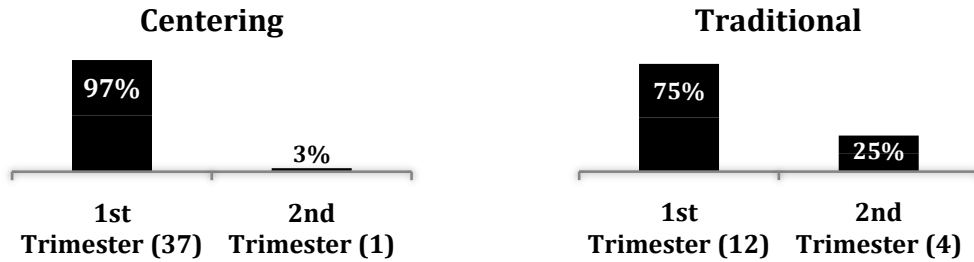
GRAPH 4 Reasons for Accessing Prenatal Care



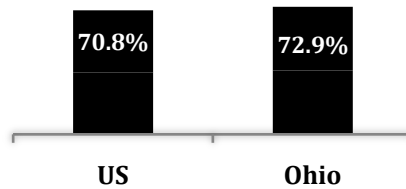
\* Other: “for the health of the baby”

\* Other: “for the health of the baby”

GRAPH 5 Commencement of Prenatal Care

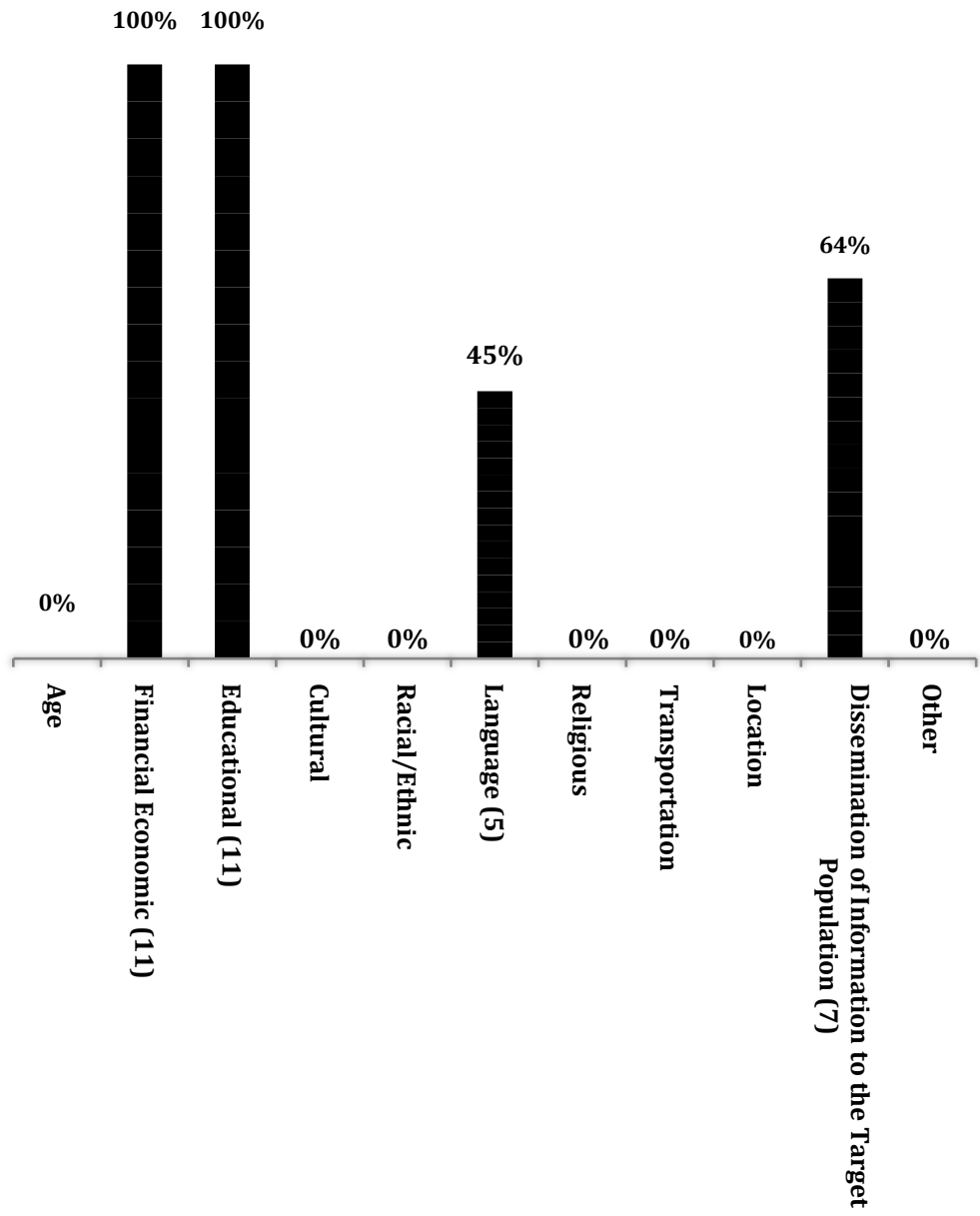


Prenatal Care in 1st Trimester According to *Healthy People 2020*



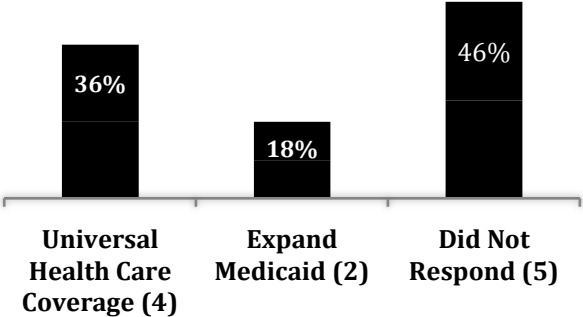
All women who participated in the study said they were pleased with their prenatal care, but seven of the sixteen who received traditional prenatal care stated “more time with doctor” would have improved their care. When asked to rate their anxiety about labor and delivery on a scale of 0-10, with zero being no anxiety and ten being very anxious, the women involved in Centering stated they were less anxious than those who were participating in the traditional form of care. The Centering women averaged a two on the scale whereas the traditional women averaged a five. Whether through a private insurer or Medicaid, all women said they had coverage, aside from some co-pays for their prenatal care.

GRAPH 6 Barriers to Access According to Providers



Centering pregnancy was mentioned as a method to provide continuous care for medically indigent women, but that was only amongst the providers who were aware of Centering. Planned Parenthood was also mentioned as a possible way to provide prenatal care for those women who do not have insurance. In regards to improving continuity of care for women without insurance, more education and more availability were cited as ways to improve. All providers stated that access to prenatal care could be improved by having it more readily available and by educating the public as to what programs and availabilities actually exist near them. In regards to ways to improve access to care through their own facilities, the health care professionals listed “create greater public awareness of locally accessible Centering programs” and “educate the public on Centering Pregnancy.” The providers involved in Centering also emphasized the importance of expanding the availability of Centering programs because of the positive outcomes they and their patients experience.

GRAPH 7 Ways to Improve Access to Prenatal Care According to Providers



## Discussion

This study was designed to highlight the effectiveness of the Centering Pregnancy program. It was also meant to elucidate why women choose to access prenatal care or not. The original intent was to only look at medically indigent women, i.e. those on Medicaid or those without any insurance. Due to location however, and because Centering Pregnancy was being studied, the sample had to include all women, with or without insurance. Part of the success of Centering is related to the fact that all women, regardless of insurance type, education, or financial situation, are placed in the same group, all contributing their own strengths, and learning from and helping one another.

The demographics of the women in this study included women of all ages, education levels and backgrounds. The questionnaire did not ask the age or the education level of the woman or their parity, which could have further highlighted differences based on different demographics. Also, all of the women in the study were Caucasian and spoke English as their first language, a weakness of the study that does not represent society at large, but that reflects this rural demographic. This lack of diversity is most likely the reason that the providers in the study highlighted financial/economic and educational as the most evident barriers to access. These providers do not see the diverse clientele that exist in clinics in different areas. None of the providers spoke Spanish or any other language, neither did anyone in the office; therefore, a Spanish speaking immigrant, for example, would not choose this hospital because she would not be able to communicate. Centering as a prenatal care program at this specific site would be

totally ineffective to any non-English speaking person. Transportation is another possible barrier to care that was not considered by the providers. No public transportation exists where the hospital is located; therefore, if someone does not drive or have access to someone who drives, perhaps a migrant worker, they cannot access this hospital or the programs offered.

The women in this study chose this hospital or Centering itself for several different reasons. They were either already patients of these specific providers, lived nearby for those who did not have a primary care physician, or chose to travel to this hospital, though a number of other hospitals would have been more convenient, in order to participate in the Centering Pregnancy program. Some women traveled as far as one hour in order to participate in Centering. These women who specifically sought out Centering were all very active in their pregnancy related decisions and had extensively researched different forms of prenatal care. This leads one to believe that in order to discover this program, these women have a certain level of education along with knowledge about the healthcare system, as many providers themselves, are not even aware of Centering. The women that chose Centering also have the ability, both financially and time-related, to travel the hour each way to the program for all prenatal visits -- a luxury many women simply do not have.

The health care professionals overall had a lack of knowledge about the health care system in relation to medically indigent women. Perhaps they do not see a large number of women without insurance, or it is not within their scope of practice to facilitate that part of the prenatal care process that involves insurance

coverage and paperwork. Though an exact number is not known, several of the women participating in the Centering program were on Medicaid, but again, these women are not singled out, and everyone is treated as equals.

It was the intent of this study not only to use questionnaires as a form of data collection, but also to compare the birthing results of Centering Pregnancy to the birthing results of traditional prenatal care within the same hospital. The data that was going to be compared included: preterm births, low birth weight babies, babies who needed advanced care or longer stays in the hospital, women receiving cesarean sections, women who breastfed and women satisfied with their prenatal care. Unfortunately this was unable to occur as this data became inaccessible to me, and therefore, this specific part of the study is inconclusive due to lack of information.

This study took place over a five-month period. The study was intended to continue for several more months; however, the hospital's board of trustees, in a closed-door meeting, decided to close the entire birthing unit of the hospital, including the obstetrical and gynecological units and the Centering Pregnancy program. The staff, patients and public were notified in early October of this decision and over the next month the workforce and patient load was gradually reduced until it was non-existent by October 31<sup>st</sup>. The patients who did not give birth prior to October 31<sup>st</sup> were forced to find another facility for labor and delivery and the providers needed to find new places of employment. This study was also forced to conclude prematurely.



Several public protests and rallies in regards to this decision occurred, specifically with the intent of saving the Centering program since at the time it was the only Centering program available in Northeast Ohio. The Centering Pregnancy program at this location was started in 2007. Since that time period, due to the remarkable outcomes of Centering, cesarean sections declined dramatically, as did the number of patients receiving any form of pain medication or anesthesia during labor, as 56 percent successfully chose no medication for labor and delivery. These two procedures bring in high revenue to hospitals from insurance companies. The average initial hospital cost of \$4,372 for a planned primary cesarean was 76 percent higher than the average of \$2,487 for planned vaginal births, and the length of stay was 77 percent longer with a stay of 4.3 days compared to 2.4 days (Declercq et al., 2007). If women are not electing to have these procedures, providing labor and delivery services will not be a cost-effective use of hospital space.

Even though there was a ten percent increase in the number of births from 2008-2009 due to the growth of the Centering program, the decision to close the hospital was still implemented because those giving birth at the hospital were not utilizing the services that bring in revenue, i.e. cesarean sections and anesthesia procedures. Research has shown the population in the hospital's primary service market is aging, meaning fewer women need maternity services. The space was turned into a Cardiac Rehabilitation facility, a generous revenue builder for any hospital. Summa is able to justify the closure of the unit and remain true to its

commitment to the community due to the fact that two other Summa Health Systems hospitals in the area provide labor and delivery services.

Due to circumstances beyond the control of this study, not all goals were achieved. The hasty conclusion of this study, including having the women involved in the Centering groups fill out the questionnaires in the middle of their prenatal care, rather than at the conclusion, may have altered some of the data regarding their feelings toward their prenatal care and their readiness for labor and delivery. It is clearly evident however, by the closing of the birthing center due to lack of earnings, which is ironically based on the accomplishments of Centering Pregnancy, that the program is highly successful and can help curtail healthcare spending in America. The closing of the unit prohibited the intention of this study, i.e. to compare Centering Pregnancy results to traditional prenatal care, from being sufficiently demonstrated. Centering Pregnancy works at reducing barriers, improving access to care and reigning in healthcare costs. More high quality research needs to be conducted in order to further illustrate and solidify its ability to improve access to prenatal care in America for all women, especially medically indigent women.

## CHAPTER 7

### IMPLICATIONS AND CONCLUSION

Prenatal care is an opportunity to provide primary, secondary and tertiary care to expecting mothers and their unborn babies. Nearly one million American women deliver babies without receiving sufficient medical attention every year. Babies born to mothers who received no prenatal care are three times more likely to be born at low birth weight and five times more likely to die than those whose mothers received prenatal care (HRSA, 2010). The benefits of prenatal care are well documented and proven but may be difficult to assess because the quality and the content of prenatal care vary greatly from practice to practice (Jekel, 2007).

All women want to give birth to a healthy baby. Armed with knowledge, women will do whatever is in their means, as evidenced by the women in this study who traveled great distances for the Centering Pregnancy program, to receive what they believe to be superior care rather than choose care based solely on convenience. For women without knowledge and without these means however, more choices of available, adequate care need to exist in order to improve access to care for medically indigent women. Based on the literature

review and the study conducted, several implications for research, for practice and for advocacy become apparent.

Adequate prenatal care is associated with reductions in the risk of preterm delivery and low birth weight. More high quality research needs to be done on alternative methods of providing quality prenatal care and effective ways to eliminate barriers to access. Centering has shown improved birth outcomes and made the health care system accessible for all women, including medically indigent women. Available research shows that women who participated in Centering Pregnancy had a 33 percent reduction in preterm birth. In order to further solidify its merit and ability to improve access to quality prenatal care, several large randomized controlled trials involving more than 1,000 women in public clinics in Connecticut, Georgia and New York are currently taking place. The conclusion of these studies and the published findings will help educate the public and health care professionals on the topic of Centering and its ability to eliminate barriers and improve access to quality care. Greater access to quality evidence and awareness of programs such as Centering has the potential to change current practice and influence future policy. These changes are unlikely to occur however without strong, solid research.

The government is aware of the importance of prenatal care and the need to improve access to it. *Healthy People 2020*, which establishes the health goals of the country to attain by 2020, has listed a goal of 77.6 percent of all women to access early and adequate prenatal care. Simply having a goal however does not mean that it will be achieved, as evidenced by the fact that 90 percent was the

goal for the past three decades. Because that has not been attained, the new goal strives to improve upon the existing rate by only ten percent, perhaps a more feasible goal to achieve.

The government has attempted to improve access to prenatal care through different health care reforms expanding the Medicaid program, yet no significant improvements have occurred. All pregnant women at or below 133 percent the Federal Poverty Line (FPL) are covered by Medicaid, and in some states, the cut off has been expanded to 300 percent the FPL. Simply expanding the Medicaid program however is not sufficient if the goal is to decrease the gap in newborn health between poor and non-poor populations (Dubay, Joyce, Kaestner, & Kenney, 2001). The new health care reform, which includes expanding Medicaid, will enable 32 million people to be eligible to access care of all kinds (The White House, 2010). However policy must also be created to mandate that all prenatal care be adequate and effective especially if millions more are eligible to receive prenatal care. Policy changes must occur in order to mandate change. Research needs to shed light on how exactly to create cost efficient, adequate prenatal care in all geographic locations, in order to influence the health reforms that will continue to take place. Centering Pregnancy is currently undertaking this feat and will have the opportunity to positively influence policy change.

The study presented here showed the lack of knowledge on the part of the health care professionals who work with pregnant women in regards to how medically indigent women can access prenatal care. If educated professionals in the field are unaware of how women can access adequate care, how can women

with varied means, education and knowledge of the health care system be expected to know what to do or where to turn? This study along with other available research show that more public resources and outreach needs to exist in order to help women who are not currently insured but eligible for Medicaid, those who are uninsured and not eligible, and those who are underinsured. More research needs to be conducted on programs that are succeeding at breaking down barriers to care and providing women with adequate prenatal care. Centering Pregnancy is an example of a program that eliminates barriers and opens the health care system for all women.

Centering Pregnancy as a means to provide quality, efficient prenatal care works. It is rapidly expanding throughout the country because of its effective way to deliver care. Different Centering groups are developing as a means to provide care for a variety of health issues including chronic care, diabetes, parenting and menopause. It is an evidence-based redesign of healthcare delivery that helps promote: efficiency, effectiveness, safety, culturally appropriate patient centered care timeliness, and more equitable care (Centering Healthcare Institute). The Centering model is on the forefront of system reform and responds to the Institute of Medicine's rules for Redesign of the Healthcare system. It provides care that is culturally appropriate and facilitates the building of health communities (Centering Healthcare Institute, 2009).

Even though the United States spends more than any other nation in the world on health care (CMS, 2007), it is ranked 29th for infant mortality (NCHS, 2007). Access to prenatal care has not improved over the last thirty years. With

the recommendations from the IOM and from the new studies that the Centering Healthcare Institute will publish, we as a society, including all those with knowledge, those in the health care professions, and those in elected positions, need to create a plan that will ensure we meet the 77.6 percent goal, if not the original goal of 90 percent, of all women accessing adequate prenatal care. The future of our country's health and economy are in the hands of all of those who vote. Americans need to continue to speak and advocate with their ballots. Health care professionals need to speak and advocate by staying abreast of the most current research and evidence based practice and participate in hospital policy forums as well as public policy forums. Centering Pregnancy is just one way to ensure the health of babies born in America.

Centering Pregnancy maximizes care, as reflected in the optimum outcomes, while minimizing costs. Pregnancy and prenatal care provide an opportunity to identify existing health risks and problems in women in order to prevent future problems for these women and their children (*Healthy People 2020*). Access to early, adequate prenatal care for all women can prevent death and disability, reduce the economic burden on the health care system, and provide for a healthy foundation for all Americans.

## APPENDIX 1

### **Questions for Women Who Are Currently Pregnant or Have Recently Given Birth:**

Did you choose to access prenatal care for your unborn child?

Yes                  No

If no, please explain why you did not.

If no, will you access prenatal care for future pregnancies? Why or why not?

Was your pregnancy planned?    Yes    No

Are you married?    Yes    No

Did any of the following influence your decision to have or not to have prenatal care? Please explain:

- Age
- Financial/economic
- Education
- Cultural
- Racial/Ethnic
- Language
- Religious
- Transportation
- Location
- Other



If yes, you did access prenatal care, why did you choose to do so?

If yes, when did you decide to begin prenatal care? (How far along were you in your pregnancy?)

How did you hear of the prenatal program that you participated in?

Are you pleased with your prenatal care? How could it have been improved?

How are you paying for your prenatal care and what is the cost to you?

On a scale of 0-10, with zero being no anxiety and 10 being very anxious, how anxious are you about labor and delivery?

0      1      2      3      4      5      6      7      8      9      10

How do you think more women can be influenced and/or reached to access prenatal care?

## **Questions for Administrators, Physicians, Certified Nurse Midwives and Nurses Who Work with Pregnant Indigent Women**

What barriers exist in influencing women not to access prenatal care?  
Please explain:

- Age
- Financial/economic
- Educational
- Cultural
- Racial/Ethnic
- Language
- Religious
- Transportation
- Location
- Dissemination of Information to the Target Population
- Others

In regards to prenatal care, what kind of continuity exists within the health care system for patients without insurance?

In your experience, how can continuity be improved?

How does your organization compare to others in the area/ in the state/ in the nation in providing prenatal care to indigent women?

How can access to prenatal care be improved?

What can your organization do better?

What is the one thing that would have the largest positive effect on improving access to prenatal care?

APPENDIX 2

**Social/Behavioral IRB – Exempt Review  
Approved as Exempt**

**DATE:** March 26, 2010

**TO:** **Dr. Kenneth Fernandez, Political Science**

**FROM:** Office of Research Integrity – Human Subjects

**RE:** Notification of IRB Action by Dr. Ramona Denby Brinson, Chair  
Protocol Title: Indigent Women and Access to Prenatal Care  
OPRS# 0911-3273M

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This memorandum is notification that the project referenced above has been reviewed by the UNLV Social/Behavioral Institutional Review Board (IRB) as indicated in Federal regulatory statutes 45CFR46.

**PLEASE NOTE:**

Attached to this approval notice is the **official Informed Consent/Assent (IC/IA) Form** for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

The protocol has been reviewed and deemed exempt from IRB review. It is not in need of further review or approval by the IRB.

*Any* changes to the exempt protocol may cause this project to require a different level of IRB review. Should any changes need to be made, please submit a **Modification Form**.

If you have questions or require any assistance, please contact the Office of Research Integrity - Human Subjects at IRB@unlv.edu or call 895-2794.

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