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PERCEIVED NONFINANCIAL BARRIERS TO MATERNITY SERVICES IN GUILFORD COUNTY BY AFRICAN AMERICAN PREGNANT WOMEN

by

Karen Webb Bennett

A Dissertation Submitted to
the Faculty of the Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro 1996

Approved by

Dr. Martha Taylor

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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

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BENNETT, KAREN WEBB, PhD, RD. Perceived Nonfinancial Barriers to Maternity Services in Guilford County by African American Pregnant Women. (1996) Directed by Dr. Martha Taylor. 131 pp.

The purpose of this study was to identify perceived barriers which prevented African American pregnant women from accessing and utilizing maternity services in Guilford County. Fifteen African American postpartum women who received four or less prenatal visits and WIC services were recruited to participate in a two part study. Part one of the study included a face-to-face interview to complete a standardized questionnaire and was conducted within 24 to 72 hours after delivery. A food frequency was completed to determine the nutritional habits of the subjects. Focused ethnographic interviewing was used to conduct the second part of the project. Part two included in-depth interviews using a standardized questionnaire guide. The in-depth interviews were conducted with ten of the subjects in their homes.

Several nonfinancial barriers were found to prevent these women from accessing and utilizing services including lack of services in their communities; poor or absent transportation and/or childcare; and experiences, attitudes, and beliefs about health and nutrition. Two additional underlying themes that emerged from the qualitative data were not found with the standardized questionnaire. They were high levels of stress and lack of social support. Racist treatment was also cited as a nonfinancial barrier to maternity services. The diets of the subjects were marginally inadequate in all food groups except for protein, and each could have benefited from WIC Services. Future research should focus on improved strategies to recruit hard-to-reach women into care.

TABLE OF CONTENTS

I	Page
TITLE PAGE	. i
APPROVAL PAGE	. ii
CHAPTER	
I. INTRODUCTION AND BACKGROUND	. 1
Maternity Services Prenatal Services Infant Mortality North Carolina State Services. Baby Love Medicaid Program. Maternity Care Coordination (MCC). Special Supplemental Food Program for Women, Infants, and Children (WIC Program).	. 5 . 6 . 7 . 10
Nonfinancial Barriers to Care Limited Availability of Providers. Insufficient Services for High-Risk Populations. Experiences, Attitudes, and Beliefs. Transportation and Child Care Problems. Inadequate Recruitment Systems. Nutrition in Pregnancy Theoretical Perspective The Economic Approach The Socio-economic Approach The Geographic Approach The Social-Psychological Approach The Socio-Cultural Approach The Organizational or Delivery System Approach	14 14 15 15 15 19 20 21 21 22 22
II. METHODS	24
The Ethnographic Method of Research Ethnography in Health Sciences. Project Description. Study Subjects. Recruitment Process. Design Of Study Instrumentation Pilot Process Measurement of Key Variables Face-to-Face Standardized Interviews. Focused Ethnographic Interviews. Data Analysis	26 28 28 30 31 31 32 32

III.	RESULTS	. 37
	Summary of Guilford County Survey Characteristics of the Sample Categorization of the Subjects Nutritional Assessment Standardized Interviews Nutrition Knowledge Denial of the Pregnancy Social Support Transportation and Childcare The Health Care Delivery System. Geographic Location Health Beliefs and Practices Financial Focused Ethnographies: Indepth Interviews Unplanned Pregnancy Unprotected and Unsafe Sex Denial of Pregnancy and the Fear of Others Knowing Health Behaviors Stresses Transportation and Childcare Problems with the Health Care Delivery System Services Needed in the Community Distrust Inconvenient Hours The Role of the Church	. 37 41 . 42 . 45 . 49 . 51 . 52 . 54 . 57 . 57 . 60 . 60 . 64 . 69
IV.	DISCUSSION	81
	Limitations of the Study Clinical Implications. Demographic Data Reasons for Nonuse of Maternity Services. Transportation and Childcare Knowledge of Resources. Unplanned Pregnancies Unwanted Pregnancies Teen Pregnancy. Stressful Life Circumstances Satisfaction with the Health Care Delivery System Qualitative Data-Focused Ethnography. Recommendations. State Level University Level. County Level. Community Level. Family Level. Individual Level.	. 84 86 86 87 . 88 89 90 91 . 95 95 . 96 96

V. CONCLUSIONS AND RECOMMENDATIONS	8
The Relationship of this Study to Previous Work	8 9)1
BIBLIOGRAPHY 10)2
APPENDIX A. BENNETT NONFINANCIAL BARRIERS SURVEY)9
APPENDIX B. INDEPTH INTERVIEW GUIDE	27
APPENDIX C: RELIABILITY/VALIDITY COEFFICIENTS	28
APPENDIX D: CONSENT FORMS	30

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CHAPTER I

INTRODUCTION AND BACKGROUND

The American medical system represents this nation at its best as we have pioneered the cures to many diseases and perfected countless procedures to save lives. However, America's health care system is also one of its greatest challenges. From the 1940's through the 1970's, the United States made progress toward a broader financing of health services. Employment-based insurance and public programs (Medicaid and Medicare) expanded to reach more people and offer more benefits (Capron, 1985; Bayer, 1983). In the 1980's, the number of Americans who lacked health insurance coverage increased steadily and so did health care costs. In 1979, only 32% of the poor were receiving Medicaid (Bayer, 1983). By 1983, 47% of the poor received Medicaid (Lewin, 1985). This still left a large number of people without medical care. Minorities and rural citizens were over represented in this number. The result of this trend has been increased insecurity for the individual and the family. According to Families USA, more than 2 million Americans lose their health insurance every month (Clinton, 1993). Many get it back within a few weeks to months but every day a growing number of Americans are among the more than 37 million who are without health coverage. This figure includes about 9.7 million children (Clinton, 1993).

Unlike other nations who have made health care access a right of citizenship, the United States continues to treat it as a fringe benefit of employment, or as an individual financial responsibility in nonemergency situations. At the heart of this matter lies the health insurance system which allows insurance companies the right to pick and choose whom to cover. The companies divide consumers into categories to deny coverage to sick and old people, or to set high premiums to cover adverse risks.

Those at high risk and greatly affected by the adverse effects of poor or absent healthcare are pregnant women and their offspring. Low birthweight (LBW) contributes to infant death and is a continuing public health concern (Bourbina & Buescher, 1995). According to May, McLaughlin, & Penner (1991), prevention of one LBW baby can save the United States health care system \$14,000 to \$30,000, and a lifetime cost of up to \$400,000, whereas, prenatal care for a woman is only \$400 (National Commission to Prevent Infant Mortality, 1988). Table 1 suggests that the average cost of prenatal care is \$600. The National Commission to Prevent Infant Mortality (1988) recommended: (1) universal access to early maternity and pediatric care, including elimination of barriers to services; and (2) maternal and infant health as a national priority. The components of prenatal care which have the potential to reduce the frequency of LBW are: (1) initial and continuing risk assessment; (2) individualized care based on case management; (3) nutrition counseling; (4) education to change unhealthy habits; (5) stress reduction; (6) social support services; and (7) health education. One of the United States health objectives for the Year 2000 is the reduction in the percent of women who do not obtain prenatal care beginning in the first trimester of pregnancy (USDHHS, 1990). Unfortunately, little is known about which factors influence the mother's decision to seek and continue prenatal care. Goldenberg, Patterson, & Freese (1992) suggest that it is necessary to understand which woman is likely to receive no prenatal care and why. To come to this understanding will require an interdisciplinary team.

Rosenblatt (1989) reported that in 1985, 3,760,561 infants were born in the United States. Although the average birthweight was unchanged from the previous year, the proportion of infants weighing less than 2500 grams at birth increased slightly to 6.8 percent. He also reported 24% (902,535) of all mothers did not receive prenatal care until after the first trimester and 6% (225,634) received no care at all or only started care in the third trimester. This proportion increased every year from 1980 until 1988 (Rosenblatt,

Table 1 THE ECONOMY OF INTERVENTION

Prenatal Care for Nine Months	\$600.00
Medical Care for a Premature Infant for One Day	\$2,500.00
A Small Child's Nutritious Diet for One Year	\$842.00
Special Education for a Child with a Mild Learning Disability for One Year	\$4,000.00
Drug Treatment for an Addicted Mother for Nine Months	\$5,000.00
Medical Care for a Drug Exposed Baby for 20 Days	\$30,000.00
A Measles Shot	\$8.00
Hospitalization for A Child with Measles	\$5,000.00
School-Based Sex Education per Pupil for One Year	\$135.00
Public Assistance for A Teenage Parent's Child for 20 Years	\$50,000.00
Six Weeks of Support Services So Parents and Child Stay Together	\$2,000.00
Foster Care For A Child for 18 Months	\$10,000.00

Sources: State Office for Children, Children's Defense Fund, U. S. Department of Agriculture.

1989). During this same period, expenditures for obstetric and neonatal care continued to rise. In 1985, it exceeded \$15 billion (Rosenblatt, 1989). Despite the efforts of healthcare providers to expand services for pregnant women and to improve access to those services, the proportion of low birthweight infants remains high. Obviously, one challenge to healthcare providers is to determine the reasons that these women and their infants do not access the services that are available in their communities.

In order to better determine reasons for nonuse of Maternity Services in Guilford County by African American pregnant women, an exploratory study using ethnographic techniques was conducted. Guilford County includes High Point and Greensboro and is considered to be an urban area. Guilford County is located in North Carolina and is often referred to as a "Cadillac County" due to its resources and history as a trendsetter. Guilford County was chosen because of its successes in removing financial and many nonfinancial barriers in order to reduce its infant mortality rate (IMR). Although this county has made great strides in removing barriers, in 1992, 106 women who delivered infants in local hospitals had received no prenatal and WIC services (Moore, 1993).

Seventy-five percent of these women were income eligible for Baby Love Medicaid and WIC services (Moore, 1993).

A retrospective approach was taken to elicit information from African American pregnant women who used High Point Regional Hospital and Greensboro Women's Hospital for delivery. High Point Regional Hospital and Greensboro Women's Hospital accept uninsured patients. All pregnant women were identified by the Nurse Supervisor after they were admitted into the hospital in active labor and it had been determined that they had little to no prenatal care. After delivery, the post-partum African American women were asked to participate in this project.

The hypothesis tested was: There are no nonfinancial barriers that prevent the African American pregnant woman from utilizing Maternity Services in Guilford County.

Although Guilford County has been recognized as having a comprehensive system including prenatal, perinatal, postnatal, and WIC services, there are some women who cannot receive these services because of program guidelines and nonfinancial guidelines (e.g., nutritional risk indicators for WIC). These women represent a portion of the population which is hard to reach and whose need for services is not being met. In order to explore these perceived barriers, eleven research questions were also addressed. (See Appendix C)

Maternity Services

Prenatal Services

There is little disagreement among health and social science researchers that adequacy of prenatal care, nutrition, and income have a direct relationship to pregnancy outcome (The American Public Health Association, 1985; Green, 1981; Lewin, 1985). Adequate prenatal care begins in the first trimester and continues on a regular schedule until delivery. The care is provided by a trained health care provider and includes nutrition and exercise information, physical examinations, and laboratory tests. The lack of prenatal care is associated with poor pregnancy outcomes. These poor outcomes include high rates of infant and neonatal death, premature birth, birth defects, maternal death, and birth complications (Brann, 1981). Health professionals are beginning to view nonuse of maternity services as fetal abuse since the mother fails to provide the medical care that may prevent such adverse pregnancy outcomes (Mackenzie, Collins, & Popkin, 1982).

Although studies have clearly demonstrated the link between prenatal care and birth outcome, approximately one-fourth of all U.S. pregnant women do not receive adequate prenatal care (Rosenblatt, 1989). The Special Supplemental Food Program for Women, Infants and Children (WIC) Program served less than fifty percent of eligible women, infants, and children in the mid-1980's (USGAO, September 1990). In 1994, WIC served approximately fifty percent of those eligible. Demographic studies indicate that the typical

nonusers of prenatal services are black women, teens, women with more than four previous births, single women, poor women, and women with less than a high school education (Cramer, 1987). Fiscella (1995) reported that prenatal care has not been demonstrated to improve birth outcomes conclusively. However, he believes that those deciding funding for prenatal care must consider this in the context of prenatal care's overall benefits and potential cost-effectiveness. Fiscella (1995) reported that we may not have the statistical powers of detection to demonstrate that prenatal care improves birth outcome.

The problem of inadequate prenatal care is important to nutritionists working in health services, developmental services, and child welfare. Nutritionists are the experts who provide therapeutic nutrition support that aids in improving and maintaining optimal health. Because of the relationship of inadequate prenatal care to poor pregnancy outcomes, many of the babies born under such circumstances will be in the social services system for at least some portion of their lives. They are at high risk to be chronically ill and may require extensive public social services and medical care. These babies may also need help from many voluntary agencies. Babies born with inadequate prenatal care are at high risk for retardation (Escalona, 1984). They are at high risk to be born prematurely or with chronic problems, thereby, making them more difficult to care for. They are also at high risk for abuse or neglect (Benedict & White, 1985; Trout, 1983). (Refer to Table 1 for costs of intervention)

Infant Mortality

The death of an infant is not only a tragedy for a family but also a tragedy for the nation. Each year in the United States approximately 40,000 infants die before reaching one year of age. We define the infant mortality rate (IMR) as the number of infant deaths under one year of age per 1,000 live births (NC Governor's Commission on Reduction of

Infant Mortality, 1992). This rate is one of many indicators of a nation's overall health status.

Over the course of this century great strides have been made in reducing the IMR. In 1900, the IMR was 371.5 for blacks and 158.0 for whites (Hargraves & Thomas, 1993). Due to national policy changes, and improvements in nutrition, control of infectious diseases, and health care, the national IMR fell to 14.1 in 1977 (Hargraves & Thomas, 1993). In 1984, the IMR had fallen to 10.8 per 1000. The most recent figures from 1992 show the IMR at 9.9 per 1000 (Moore, 1994).

Improvements were made in all racial groups in the U. S. The IMR among White Americans has fallen from 12.0 in 1978 to 9.4 per 1000 in 1984. For Native Americans, the rate was 10.7 per 1000 in 1978 and in 1984 it dropped to 9.5 per 1000. For Black Americans, the rate in 1978 was 23.1 per 1000. It declined to 18.4 in 1984. In 1989, the IMR for Blacks in the U. S. was 18.6, whereas the rate for Whites was 8.1 per 1000. This is a risk ratio of 2.3 (Wise, 1993). Traditionally, the racial disparity in infant mortality has been considered a direct reflection of disparate social conditions and an accepted artifact of the social order.

North Carolina State Services

"Ten fingers, ten toes--the birth of a healthy baby" (North Carolina Governor's Commission on Reduction of Infant Mortality, 1993) is the dream of every parent. This is also the goal of the Governor's Commission on the Reduction of Infant Mortality and The North Carolina Healthy Start Foundation. In 1989, Former Governor James Martin established the Commission when North Carolina ranked worst in the nation for the highest IMR at 12.6 deaths per 1000 live births (See Table 2). This means that 1309 babies did not live to see their first birthday. By 1992, the IMR had dropped to 9.9 deaths per 1000 live births (North Carolina Governor's Commission's Annual Report, 1993). This means that 1031 babies died. Over 200 infant lives had been saved due to changes at the state level

Table 2 Infant Death Rates And Annual Percent Changes By Race North Carolina 1987-1993

YEAR	Total RATE	% CHANGE	White RATE	% CHANGE	Black RATE	% CHANGE
1987	12.1		9.6		17.5	
1988	12.6	+4.1	9.6	0.0	18.7	+6.3
1989	11.5	-8.7	8.7	-9.4	17.0	-9.1
1990	10.6	-7.8	8.2	-5.7	16.9	+6.3
1991	10.9	+2.8	8.0	-2.4	16.9	+6.3
1992	9.9	-9.2	7.2	-10.0	15.7	-7.1
1993	10.6	+7.1	7.9	+9.7	16.4	+4.5

NC Governor's Commission on Reduction of Infant Mortality Annual Report, 1993

which increased resources at the local, community, and institutional levels. In 1993, the IMR was 10.6 which was a slight increase over 1992 at 9.9.

Although many of these infants die due to disease, genetic defects, and accidents, many die from problems that can be prevented or the effects reduced. The factors listed by the Governor's Commission as influencing the IMR include but were not limited to: inadequate prenatal care, limited access to health care, prematurity, substance abuse, poor nutrition, mother's age, poverty, and level of education.

The Governor's Commission on the Reduction of Infant Mortality set seven goals in 1989. These goals are in compliance with the Surgeon General's Healthy People 2000 Objectives (NC Governors Commission's Annual Report, 1992). The goals set by the Governor's Commission are:

- --to reduce infant mortality to no more than 9.0 infant deaths for every 1000 live births by 1996, and no more than 8.24 infant deaths by the year 2000
- --to reduce infant morbidity through the reduction of low birthweight babies (<5.5 lbs. or 2500 gm), one of the primary causes of infant mortality
- --to promote the availability and utilization of our state's maternal and infant services
- --to promote the coordination of our state's maternal and infant services and to lobby for the development of additional services to reduce high risk pregnancies
- --to promote the adoption of behaviors that prevent high-risk pregnancies
- --to increase public awareness, involvement and support for all factors, including socioeconomic, relating to the prevention and reduction of infant mortality

It takes many programs, many people from all disciplines, and from all walks of life to meet the aforementioned goals. It is an ongoing challenge to which North Carolina and the nation have committed themselves. The Governor's Commission on the Reduction of Infant Mortality and the North Carolina Healthy Start Foundation, as well as many other initiatives, have been established to reduce the IMR. The following is a brief summary of

the major North Carolina programs in place which strive to meet the aforementioned goals to reduce the IMR (NC Governor's Commission's Annual Report, 1992).

Baby Love Medicaid Program

Regarded as a national model, this program is responsible for the shift in the financing of prenatal and pediatric care for low-income families. Medicaid is the primary government sponsored payment program aimed at providing funds for prenatal care for low-income pregnant women. This program is state administered. Each state establishes its own level of need, payment, and eligibility. To be eligible for Medicaid, a person must be categorically eligible for either Supplemental Security Income (SSI) or Aid to Families with Dependent Children (AFDC) (NC Governors Commission Annual Report, 1993). Federal funds for Medicaid are provided through the Title XIX block grant and are matched with state funds. The percentage is based on a formula using average per capita income level of each state compared with the national level. The WIC Program provides vouchers for nutrition supplements for pregnant women (and for mothers and their infants), and can also be included in this category that receives state funds. Because the Baby Love Program redefined households and expanded income eligibility, it extends Medicaid eligibility to an additional 22,000 pregnant women in North Carolina. It operates an aggressive outreach effort to potentially eligible clients.

Maternity Care Coordination (MCC)

MCC is operated under the realm of the Baby Love Medicaid Program. MCC provides a network of specially trained health care staff to assist pregnant women in obtaining medical benefits, community services such as car seat rental, maternity clothing and transportation, and other needed services such as WIC. For every \$1 spent on the MCC program, \$2.02 in medical costs for newborns is saved in the first 60 days of life. The savings are the result of reduced low birthweight rates and IMR (NC Governors Annual Report, 1993).

Special Supplemental Food Program for Women, Infants, and Children (WIC Program)

The Baby Love Medicaid and The MCC Programs are two of the major programs which work closely to prevent the births of premature and low birthweight babies. Many other initiatives exist. The major nutrition program that exists is the Special Supplemental Food Program for Women, Infants, and Children better known as the WIC Program. These three programs exist throughout North Carolina with a well established referral system. Because of the referral and follow-up system it is unlikely that a low-income woman receiving Baby Love Medicaid is not also on the WIC Program. All women who receive prenatal services through the Baby Love Program in Guilford County are certified for WIC through the prenatal clinic or the WIC Office. Because of coordination of these services in Guilford County, the financial barriers associated with the cost of direct care have been removed (only cost of direct care - not of transportation, adherence, etc.). Yet pregnant women who received few or no maternity services still appear at time of delivery in local hospitals.

A sample scenario to illustrate this problem might be: A 23 year old female obviously pregnant presents at the Emergency Room complaining of abdominal cramping, vaginal bleeding, and blurred vision. She is examined and determined to be 28 weeks pregnant and in pre-term labor. This woman represents thousands of women who each year receive prenatal care via the closest Emergency Room. During 1993, approximately 106 women who had not received prenatal care or WIC services delivered babies in Guilford County (Moore, 1994). Picture these numbers mounting as you cross the nation. As stated earlier, Rosenblatt (1989) reported 225,634 pregnant women received no care at all, or only started care in the third trimester.

It has been documented that pregnant minority women access the health care system later in pregnancy than white women (Boone, 1989). Minority women's infants die at

twice the rate of white infants (Hogue & Hargraves, 1993; James, 1993). Minority women fail at a higher rate to enter the system for care during the first trimester as recommended by the American College of Obstetrics and Gynecology (Hansell, 1991). Bourbina et al. (1995) reported that in 1992, Blacks comprised only 29% of the deliveries in North Carolina, but 48% of all perinatal deaths occurred among them. The rate of perinatal mortality for blacks was 23.9 per 1,000 deliveries, while for whites it was 10.3 per 1,000 deliveries. The reasons for these discrepancies are not fully understood. The Surgeon General's 1990 goal was that 90% of all pregnant women seek and obtain prenatal care in the first trimester which is 1 to 15 weeks gestation (Curry, 1989). This goal was not met.

Often women who do not receive care during the first trimester receive inadequate care (less than 9 visits/pregnancy) or no care at all (Hansell, 1991). Researchers show that a variety of financial and nonfinancial barriers exist that keep women from receiving care (Keiffer, 1992). This suggests that intra- and inter-personal factors should be explored in order to determine what measures public health professionals can take to eliminate the continuing disparity that exists between the races for poor pregnancy outcome.

It is accepted today that prenatal care and nutritional services sought early and often decrease the risk of a poor pregnancy outcome. Table 1 shows the dollar amounts needed to reduce the likelihood of a poor pregnancy outcome. It also suggests the human suffering and financial effects that occur when preventive services are not available. In the past, researchers focused on medical factors that contribute to poor pregnancy outcomes. This is vital research; however, if those at risk never access the social services and prenatal care system then care cannot be provided (Hansell, 1991).

Nonfinancial Barriers to Care

The Basic Automated Birth Yearbook of North Carolina Residents (1989) confirmed that 16.3% of all white pregnant women and 36.5% of all nonwhite pregnant women sought and obtained care after the 15th week of pregnancy. In 1992, 14.3% of all

white pregnant women sought prenatal services after 15 weeks gestation while 36.6% of all nonwhite pregnant women sought prenatal services after 15 weeks gestation (Basic Automated Birth Yearbook of North Carolina Residents, 1992). The same remained true in 1993 (Basic Automated Yearbook, 1993). These numbers show that despite the federal, state, and local changes which removed many financial barriers to prenatal services, the disparity among the races did not diminish. This suggests that nonfinancial barriers may play a role in eliminating this disparity. Curry (1989) surveyed 255 pregnant women who received WIC services and found 69% of them sought care in the first trimester; however, only 36% of those women actually began and maintained regular prenatal care in the first trimester.

The assumption has generally been made that if financial barriers were removed then problems with access to prenatal care would be solved (Dawkins, Ervin, & Weissfeld, 1988; Reis, 1992). There has been a growing interest and respect for nonfinancial barriers. It is recognized now that if all financial barriers were removed there would still be no shows for clinics (Kahler, O'Shea, Duffy, & Buck, 1992; Burke, 1992; Poland, Ager, & Olson, 1987). Curry (1989) listed the nonfinancial barriers as:

- 1. Limited availability of providers of maternity services
- 2. Insufficient services for high risk populations
- 3. Experiences, attitudes, and beliefs
- 4. Transportation and child care problems
- 5. Inadequate recruitment systems

These nonfinancial barriers were identified in the landmark study: Preventing Low Birthweight (Institute of Medicine, Committee to Reduce Low Birthweight, 1985) and was described in Curry (1989).

Limited Availability of Providers

This problem is not extensively discussed in the literature. Geographically isolated and rural areas are at greatest risk and have been most hurt by the escalating costs of malpractice insurance. This has forced many family practitioners to stop delivering babies. Some physicians in urban, as well as rural areas, no longer accept the uninsured or those who are Medicaid recipients (Curry, 1989; Schuleuning, Rice, & Rosenblatt, 1991). Some physicians will refuse to accept high-risk women because of the potential for a lawsuit (Schleuning et al., 1991).

Insufficient Services for High-Risk Populations

Although many areas offer specialized care for high-risk women, many high-risk women do not use those sites for care (Curry, 1989; Burke, 1992; Poland et al, 1987). Comfort with a certain doctor or clinic, fear of using a high-risk clinic, and transportation are reasons why some women receive inadequate care. Some clinics may not offer WIC and prenatal services and in some instances the closest clinic is many miles away.

Experiences, Attitudes, and Beliefs

A woman's experiences, attitudes, and beliefs can be barriers to seeking and receiving adequate prenatal services (Curry, 1989; Machala & Milner, 1991; Burke, 1992; Poland et al, 1987). For example, a woman may feel the clinic staff is unfriendly and does not like her. Some women feel pregnancy is a natural state and does not require medical attention if the pregnant woman feels well (Alcalay, Ghee, & Scrimshaw, 1993; Moore, 1994). Curry (1989) stated a woman's perception of being cared for and supported by the clinic staff has been found to be important rather than just the absence of hostility. Racism prevents some women from seeking care. Acceptance of the pregnancy by the father of the baby has been shown to affect the mother's decision of when to seek care (Zambrana, Dunkel-Schetter, & Scrimshaw, 1991).

Transportation and Child Care Problems

Alcalay et al. (1993), Zambrana et al. (1991), Poland et al (1987), and Burke (1992) have found that transportation and child care problems are barriers for many women. These barriers can be symptoms of poverty which is a financial barrier (Curry, 1989). Cury (1989) found that seven percent (7%) of the subjects interviewed stated that transportation was a problem. In addition, clinics generally do not offer child care services to their patients.

Inadequate Recruitment Systems

Curry (1989) stated that in 1985, the Institute of Medicine issued one of the first reports which recognized that recruitment services are needed to attract many women (Preventing Low Birthweight, Institute of Medicine, Committee to Reduce Low Birthweight, 1985). Since that time more reports have been published in agreement with the Institute of Medicine. Federal and state dollars have been allocated and outreach has been developed as a part of maternity services. Outreach programs have been incorporated in the existing Maternity Care Coordination and WIC Programs. Special dollars are budgeted for outreach components for each of them. However, little is known about what motivates women to seek care and to remain in care.

Nutrition in Pregnancy

The most important factor contributing to the IMR in the United States is low birthweight (LBW) (Wise, 1993; Buescher, Larson, Nelson, & Lenihan, 1993). LBW is defined as a birth weight of less than 2500 gm or 5.5 pounds (Wise, 1993). LBW is a result of premature birth prior to 37 weeks gestation, to intra-uterine growth retardation, or to both. The risk of mortality increases as birthweight decreases. U. S. neonatal intensive care units have the world's best record for saving lives of LBW babies, however, prevention is the goal. The average cost of each premature birth equals the costs of about 20 normal births (Young, 1994). The highest IMRs are observed in black mothers,

teenage mothers, and mothers of low educational status (Carter, 1991; Mason, 1991; Burke, 1992). LBW infants are at higher risk for developmental handicaps, birth defects, respiratory and other infectious diseases, and behavior problems.

While the causes of infant mortality are complex, we do know that three factors greatly affect pregnancy outcome. These three factors are (1) nutrition, (2) health care, and (3) income (Orstead, Arrington, Kamath, Olson, & Kohrs, 1985). No one can say how many infant deaths result from any one factor. However, we know that millions of women and children in this country endure poverty, malnutrition, and inadequate health care. These three factors are known to affect pregnancy outcome and will be the focus of this research.

It is well-documented that nutrition is important during pregnancy (Rush, Alirr, Kenny, Johnson, & Horvity, 1988; Worthington-Roberts, 1989). Well-nourished mothers who gain appropriate amounts of weight during pregnancy give birth to heavier, healthier babies. A poorly-nourished mother who eats well and gains enough weight during pregnancy can greatly improve her chance of giving birth to a healthy infant (Orstead, et al., 1985; Institute of Medicine, 1990). Proper nutrition is also important for an infant during his first year of life.

Research has demonstrated repeatedly that nutrition intervention improves the outcome of pregnancy (Orstead et al., 1985; Institute of Medicine, 1990). Increasing the food intake of malnourished mothers raises the birthweight of their infants significantly. The greatest gains are observed among infants of the most severely malnourished mothers. Although some of these risk factors are innate, acquired, or accidental, most are subject to personal or societal intervention (Orstead et al., 1985; Wise, 1993; Miller, Fine, Adams-Taylor, 1989). Cessation of drug usage and cigarette smoking are obvious examples of intervention as is adequate prenatal care. Risk factors associated with poor nutrition include low pre-pregnancy weight, inadequate maternal weight gain during pregnancy,

anemia, excessive alcohol consumption, and inadequate nutrient or energy intake (Institute of Medicine, 1990). Nutritional factors are also important in control of symptoms of diabetes, hypertension, and gastrointestinal disorders when such conditions are present (Anderson, 1982).

Maternal nutrition is critically important to both the mother and the fetus and is an essential aspect of complete maternity care (Orstead et al., 1985; Buescher et al, 1993). In spite of the expanding knowledge base and the removal of financial barriers, the numbers of infants with low birthweights and resulting perinatal handicaps, congenital injuries, and death continues to be high. Orstead et al. (1985) suggest that nutrition education has not been maximized.

Orstead et al. (1985) also suggest that nutrition knowledge is important only if it is introduced to and practiced by the one who is most involved, namely the pregnant woman. Orstead et al. (1985) stated that "the ultimate quality of the product of gestation can only be as good as the quality of the ingredients that produce it."

As cited by Orstead et al. (1985), nutrition and its effect on pregnancy outcome was documented in the 1940s by Burke et al. This research showed that women with poor dietary intakes tended to deliver infants who were shorter and lighter in weight, had a higher incidence of congenital malformations, and higher perinatal mortality, than the infants of women whose diets were adequate.

During World War II, some women in Holland experienced food shortages. These women had been previously well nourished. The insult of malnourishment during pregnancy resulted in babies being born weighing nearly 240 gm less than would have been expected (Smith, 1947). As cited by Orstead et al. (1985), there was no increase in prematurity, stillbirths, or congenital defects. In contrast, the average birthweights of the infants of women who were malnourished during the long siege of Leningrad were 500 to 600 gm lower than would have been expected. In addition, there was a marked increase in

prematurity, stillbirths, and neonatal mortality as reported by Antonov (1947) in Orstead et al. (1985).

Interest in nutrition and pregnancy declined in the 1950s. This was due to results published by McGanity, Bridgeforth, & Darby (1958) which suggested that nutrition did not play a role in pregnancy outcome. The results did not coincide with those noted above. In the 60s and 70s, research found that the nutritional status of the mother and her dietary intake during pregnancy were important factors which influenced her weight gain and the birthweight of her infant (Orstead et al. 1985).

While the causes of infant mortality are complex and the provision of adequate nutrition alone will not solve the problem, programs are in place which could end hunger and malnutrition. The best example of the programs that are currently in place to eliminate hunger and malnutrition is the WIC Program. The goal of the WIC Program is to promote the health of program participants during pregnancy and the postpartum period, infancy, and early childhood up to age five. The WIC Program provides nutritious foods and nutrition education as adjuncts to good health care (Buescher et al., 1993).

Reducing the nation's infant mortality and low birthweight (less than 2500 grams) rates have become a national priority since the mid 1980's. The cost to society is not only the death of 12 of every thousand babies born but also the permanent damage to many others who were born prematurely and too small. The latter have been shown to have a high rate of chronic problems, some requiring a lifetime of special social, educational, and health services (Infant Mortality among the poor, 1985; Womb rent is the cheapest rent, 1988). The U.S. National Commission to Prevent Infant Mortality reports, "Each year 11,000 low birthweight babies are born with long-term disabilities" (Infant mortality is not a health problem, 1988, p. 1). This suggests that there may be a need to determine nonfinancial barriers to prenatal care as well as what motivates hard to reach pregnant

women to access and utilize care. This may be a vital component to reducing the nation's infant mortality and low birthweight rates.

The Children's Charter drafted by the 1930 White House Conference addressed the right of the unborn child to "...full preparation for his birth, his mother receiving prenatal, natal, and postnatal care; and the establishment of such protective measures as will make childbearing safer" (Costin & Rapp, 1984, p.6). Although a lack of prenatal care has been a long time concern, that concern has been primarily expressed by health care professionals. During the past 20 years, nutritionists have become more attentive to the problem. The lack of prenatal care and the lack of WIC services are now listed on screening tools for assessing risk.

In the past, hospital nutritionists were not routinely required to screen patients for nutritional risks. Requests were usually made by the physician. Today, nutritional assessment is part of each assessment of all patients in hospitals, clinics, and health departments. As nutritionists take more responsibility on the health care team, they must address the issues of access and utilization for those they serve. In the past, social workers and physicians have been concerned with getting services to those who need them. Now nutritionists are demonstrating concern for these issues. It is imperative that nutritionist contribute to the body of knowledge in order to develop outreach and recruitment methods for these hard to reach women. Reis, Mills-Thomas, Robinson, & Anderson (1992) suggested that neither expanded Medicaid eligibility nor case-funding approaches have increased the use of early prenatal care.

Theoretical Perspective

An extensive review of published studies of nonuse of services was published by McKinlay (1972). He categorized six approaches to the study of nonuse of services. These were: socio-demographic, geographic, social-psychological, socio-cultural, economic, and organizational or delivery system. The socio-demographic approach

attempts to demonstrate patterns of utilization by age, gender, ethnicity, religion, and socioeconomic status. The geographic approach assesses distance to providers as a determinant
of use. Motivation, perception, and learning are the factors studied in the socialpsychological approach. The socio-cultural approach examines the relationship of culture,
ethnicity, or reference group influences on the nature of illness and help-seeking behavior.
The economic approach examines financial cost as a deterrent, and the organizational/
delivery system approach examines how professionals and staff may affect patterns of use
(e.g., those based on class distinctions, attitudes, stereotypes, language differences,
mismatch of treatment approaches, and policy deterrents).

This review focuses primarily on studies of nonuse of prenatal services because few studies have been published on the reasons for nonparticipation in WIC. Studies of nonutilization of health and social services have been conducted by several human service disciplines (McKinlay, 1972; Curry, 1989). Although there are some contradictory findings, several consistent themes emerge. These themes are: potential clients must have a knowledge of the service in order to use it; they must have a positive attitude toward the service; they must believe that the service will help; they must believe that the monetary, psychological, and social cost of seeking the service will be less than the gain received; and the service must be accessible and available (Curry, 1989; Rosenstock, 1990). Categories of nonutilization of services were established by McKinlay (1972) and are described below.

The Economic Approach

The economic approach, which examines financial cost as a deterrent, was not proven to be the major factor in seeking medical assistance. It was a contributing factor in the type of care and the timing of care that was sought. The research cited by McKinlay (1972) did not find financial cost to be an independent predictor of health service utilization.

The Socio-economic Approach

Studies reviewed by Gourash (1978) and McKinlay (1972) found trends in utilization of prenatal services by socio-demographic characteristics. However, these did not explain the decision-making or help-seeking behavior within the demographic categories. Asser (1978) linked gender and socioeconomic background to the style of help sought.

The Geographic Approach

Federal efforts to provide equal access to health care began on the premise that the health status of the citizens would improve if health care providers were locally accessible (Siegal, Gillings, Campbell, & Guild, 1985; Gutmann, 1983). The Rural Health Initiative and the National Health Service Corps placed physicians and other health care providers in communities which had not had health services available. These programs improved the infant mortality rates in their target communities (Omenn, 1981). However, the geographic approach does not examine other factors in the community that may have had an impact on pregnancy outcome. Factors such as improved economic conditions which led to better nutrition, less financial stress, and adequate housing are examples. It also fails to account for reasons of nonuse. Buechner, Scott, Smith, and Humphrey (1991) conducted a study to determine the WIC Program's effectiveness in reaching the neediest segments of the population. Buechner et al. (1991) found that WIC enrollment was associated more strongly with measures of risk than with measures of outcome. Buechner et al. (1991) concluded that rates of enrollment in the WIC Program were generally highest in areas of the state where high proportions of the population are at risk for poor birth outcomes and where birth outcome are actually poor. They also found that the geographic patterns of the measures of risk were different from the geographic patterns of the measures of birth outcomes in Rhode Island.

Buechner et al. (1991) concluded that the selection of measures from a limited number of existing data files may have resulted in the exclusion of important measures of risk and some key factors in determining birth outcomes. It is also possible that the analysis of data aggregated to small geographic areas is insensitive to some elements of the relationship between risks and outcomes.

The Social-Psychological Approach

From the social-psychological approach emerged the cost-benefit concept. Many cost-benefit studies have been completed. The Health Belief Model (HBM), based on Lewin's work, emphasizes the subjective world of the individual in seeking help as (s)he interacts in a field of events (Snowden, Collinge, & Runkle, 1982). McKinlay (1972) cited a study by Kegeles that found perceived vulnerability showed some correlation with help-seeking behavior. Decisions for action are based on give and take. What one gives, one expects to receive in equal or better proportion. Kahler, O'Shea, Duffy, and Buck (1992) found that perceived lack of benefits was a reason mothers gave for not participating in the WIC Program. Bendick (1980) and Snowden et al. (1982) discussed the interrelationship of benefits and cost to the client as a reason for nonuse. Bendick (1980) studied public assistance clients' nonuse patterns. He found that a large percentage of eligible people chose not to participate. He suggested that the benefits did not meet the cost for some. This cost-benefit analysis is similar to the HBM. The HBM states that the individual's perceived need must be greater than or equal to the individual's perceived benefit minus his cost (McLeroy, Bibeau, Steckler, & Glanz, 1988). McKinlay (1972) believes that the social-psychological approach has the greatest promise for explaining nonuse of services.

The Socio-Cultural Approach

Juarez and Associates, Inc. (1982) conducted a national marketing survey using the socio-cultural approach to study the patterns of use of prenatal care by minority women. In

this study, 130 low socioeconomic African American and Mexican American women who were pregnant or planning a pregnancy were interviewed. The purpose of this study was to determine the influences on their health care practices. The results indicated that the customs and beliefs of their social networks, especially their husbands or their mothers, affected decisions about personal care. The health care professionals, especially the physicians, were respected as authorities on health care, but that they did not spend time with the woman beyond the examination. The women believed the physician had difficulty communicating with this population of women. Kahler et al. (1992) documented the same results where 200 newly postpartum women who did not receive WIC services during the pregnancy were interviewed to determine barriers to care. Zambrana et al (1991) found that the relationship with the baby's father was positively associated with the early timing of prenatal care and more prenatal care visits in low-income minority women.

The Organizational or Delivery System Approach

Organizational factors deter women from care. A series of restrictive policies in some agencies prevent woman from obtaining care. Many institutions fail to provide adequate information on how to use the system and some fail to accept applications for services after the second trimester.

In summary, each of the methods offer insight into reasons of nonuse of maternity services by pregnant women. However, each is limited in providing a complete picture of why pregnant women chose to be nonusers of maternity services.

CHAPTER II

METHODS

Ethnographic Method of Research

The purpose of this research was to determine if nonfinancial barriers deter African American pregnant women from accessing and utilizing maternity services in Guilford County. The ethnographic method of research was chosen because it provides the subjects the opportunity to voice their views in a less restrictive and controlled research environment. The following section will describe this method with the intent to describe why this method is appropriate to answer the research questions posed for this project. The ethnographic method of research has had limited use as a method to determine the nonfinancial barriers to maternity services. Therefore, a literature review is limited.

Many agencies and different disciplines are currently discussing ethnography as a "new" paradigm for social science research. What is ethnography? Agar (1980) and Morse (1994) describes ethnography as an ambiguous term, representing both a product and a process. As a product, ethnographic research often results in a book. The book focuses on a social group and it may be guided by any number of theories or models. There is usually a central point to the book but it also includes historical, physical, biological, and social information about the group as well as beliefs it holds.

As a process, ethnography is a special approach to understanding the human situation. This research method allows for breadth and depth (informal ethnography) initially and focuses within that context with depth, problem-focus, and science over time (formal ethnography) (Patton, 1990; Agar, 1980). The beauty of this method is that it allows for both science which provides credibility and also for humanity which allows us to understand others (Baber, 1994). There are two minimal characteristics or themes of the

ethnographic method of research. First, ethnography assumes there is a student-child-apprentice relationship with the researcher in the learning role. The assumption here is that whatever the interests of the ethnographer, (s)he must understand the way that group members interpret the flow of events in their lives (Agar, 1980). Agar (1980) suggests that it is difficult to imagine any social science statement that does not make some assumptions about group members' interpretations. The ethnographer attempts to make such assumptions into empirical questions to ask during the research project, but at the same time remains prepared for surprises that (s)he had no idea existed before the study began (Baber, 1994).

The second assumption in ethnography is the search for a pattern. Morse (1994) and Agar (1980) stated that sometimes the ethnographer surrenders the control of situations, questions, and samples, apprentices himself to group members, and learns how they interpret the world. Direct prolonged contact with the subjects makes this possible. Agar (1980) suggested that the ability to account for events is not well enough understood to represent with simple formulations. Therefore, the researcher looks for emerging themes throughout each interview.

The ethnographer gathers the information for an ethnography by doing field work. Field work can include living with the group of people and studying their culture or can be limited to in-depth interviews over time. The ethnographer studies the peoples' values, daily life, and social relationships. Ethnography requires sensitivity as well as an ability to speak the language of the people being studied. The ethnographer must become involved with people to understand their culture. However, (s)he must remain a detached, scientific observer and be able to translate data so that the original meaning is preserved (Baber, 1994).

Ethnography emphasizes the insider's view of a society. It allows for the interpretation of the learned ways of acting, feeling, thinking in the group being studied

(Agar, 1980). It tries to determine how people who share a culture view their world. In short, ethnography depicts a peoples' way of life. This way of life is culture. Agar (1980) suggests that social scientists defined culture as the ideas, objects, and ways of doing things which were created by the group. It also includes arts, beliefs, customs, inventions, language, technology, and tradition (Agar, 1980).

Ethnography is a branch of anthropology that produces scientific descriptions of contemporary cultures. The ethnograph may be written, photographic, or a motion-picture report that provides a "thick description" (Patton, 1990). Patton (1990) quoted Denzin in describing a "thick description" as more than a "record of what a person is doing. It goes beyond mere fact and surface appearances. It presents detail, context, emotion, and the webs of social relationships that join persons to one another. Thick description evokes emotionality and self-feelings. It inserts history into experience. It establishes the significance of an experience, or the sequence of events, for the person or persons in question. In a thick description, the voices, feelings, actions, and meanings of interacting individuals are heard."

Ethnography in Health Sciences

Ethnographies are usually conducted over a long period of time. In other disciplines such as nursing or nutrition it is imperative that "rapid appraisals" or focused ethnographies be conducted, particularly for program development in health services. Focused ethnographies are time-limited exploratory studies with a discrete community or organization (Morse, 1994). Morse (1994) explained that the researcher gathers data primarily through selected episodes of participant observation, combined with unstructured and partially structured interviews. The number of key informants is limited. They are usually persons with a wealth of knowledge and experiences relative to the problem being studied. A focused ethnography is generally published in journals as research articles.

Focused ethnographies have the most potential for answering a specific research question(s) and ultimately improve the clinical practice on which that research question was based. Table 3 compares the focused ethographic methods of research to the traditional ethnographic methods.

Table 3 Contrasts Between Anthropologic and Health Sciences Ethnographies

Contrast Topic	Health Sciences Ethnography	Anthropologic Ethnography
Purpose	Improve Cultural appropriateness of professional practice	Deepen understanding of a people's social action
Definition of ethnography	As both methods for data collection and as product	As both a conceptual orientation and as product
Primacy of inductive methodology	Variable: Inductive methods may be used only after the topic of inquiry has been selected	Essential, the chief characteristic of anthropologic ethnography
Conduct of participant observation	At selected events/times only and for a limited period of time	Continuously, for a prolonged period, usually at least a year
Language of data collection	The researcher may not know the primary language of the informants; use of language interpreters is common	The researcher uses the primary language of the informants; use of interpreters is rare but acceptable in certain situations
Access of informants to the ethnographer	Informants usually live and work separately from the residence and worksite of the ethnographer	Informants have regular immediate access to the ethnographer's life space
The nature of knowing	Contrast and comparison, identification of pattern in narratives	Inference, insight, intuition developed as a function of being engaged with the context and text

Morse, J. (1994)

One must ask what is the basis for determining what is a "good" ethnography.

Morse (1994) suggested a "good" ethnography should be a tool which enables us to take a more understanding account of whomever we perceive as "The Other" or "Not Me."

Project Description

This project was divided into three parts. The first part consisted of a review of data collected from 1989-1993 by the Maternity Services Division in the Guilford County Health Department. The second part of this project consisted of structured closed-ended interviews with African American postpartum women. The third part of this project consisted of in-depth interviews with a subsample of the participants of the second part.

Guilford County Maternity Services conducted standardized interviews with all pregnant women who did not receive maternity services and who delivered their infants in the local hospitals in Guilford County. These data were collected from 1989-1993.

Approximately 500 patients were interviewed. The purpose of that project was to determine barriers to Maternity Services in Guilford County. To date these data have not been extensively analyzed although programmatic changes were made to remove financial barriers to services. Dr. Reva Phillips, Director of Family Planning and Maternity Services Division, was asked to provide the 1993 data collected by her department. However, Dr. Phillips provided all data from the project. These data were collected from 1989 to 1993. These data were used to determine demographic information about those women included in the project. This analysis provided facts necessary to document the disparity between the races and justify limiting subject recruitment to African American women. These data demonstrated the overwhelming need to focus follow-up projects on barriers to maternity services for African American pregnant women.

Study Subjects

A purposive sample of 25 patients was identified for the researcher by the designated nurse in each hospital. Twenty-five (25) women met the selection criteria and

only 15 were available for participation. Each woman was to be interviewed within 24 to 72 hours after delivery. These women delivered their infants in either the Greensboro Women's Hospital or High Point Regional Hospital in Guilford County, North Carolina from February 6, 1995 to July 15, 1995. These two hospitals are the only two hospitals in the county that accept women who received little to no prenatal care. The selection criteria for entry into the study were: (1) that the patient had not received WIC services during this pregnancy and; (2) the patient had not received more than four (4) maternity services visits. Voluntary consent to participate was obtained following the procedure approved by the University of North Carolina at Greensboro Institutional Review Board for Human Subject Research. Only African American women were invited to participate in this project. The questionnaire was designed to identify participants' perceptions of barriers to maternity services that may be related to their documented late entry into care (Appendix A).

The sample was divided into two groups. Group One included patients who had a positive pregnancy outcome. Group Two included patients who had a negative pregnancy outcome. Although positive pregnancy outcome is not a scientific term, it was used and defined as follows: a live infant born at 38-42 weeks gestation (full term), birthweight of 5.5 pounds or greater, and free of disease or disability. A live and healthy mother is also included in this definition (Group 1). A negative pregnancy outcome included stillbirths and infants who died after delivery. Group Two also included live infants born before 38 weeks gestation (premature), birthweight less than 5.5 pounds, and/or not free of disease or disability. The health of the mother of Group Two included that was she alive but not necessarily free of disease or disability. Death was excluded for obvious reasons. The World Health Organization (WHO) defines health as a "state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity" (Green, 1990).

WHO has not defined social, mental, and physical well-being; therefore, this definition remains open to interpretation.

The third part of the project consisted of in-depth interviews with 10 of the 25 women described above. Up to four one hour interviews were conducted with the 10 subjects. Every woman was asked to participate in the in-depth interviews. Each of the 15 participants received a small monetary gift of \$25 for participating in the closed-ended interviews. Based on the number of open-ended interviews completed (\$25 per interview), each of the ten subjects could have earned an additional \$100.

Recruitment Process

In order to gain access to the population, the researcher established contact with Ms. Lavon Beach, Director of Patient Services at the Greensboro Women's Hospital, and Ms. Becky Stewart, Chairperson of the Educational Research Committee at the High Point Regional Hospital. Each listed the materials that were required in order for their committee to meet and vote to grant admission to the facility. A packet included a formal letter requesting access to the facility, a copy of the University of North Carolina at Greensboro Human Subject Research Committee's letter of approval, and a condensed version of this proposal. The packets were forwarded to each hospital for review by the respective Institutional Review Board. As soon as approval was received, recruitment began.

Every African American pregnant woman who met the criteria stated above was asked to participate until 25 have been recruited. A standard consent form and research protocol, which were approved by the University of North Carolina at Greensboro's Institutional Review Board, was signed by each subject (Appendix D). Potential participants had the purpose of the study explained to them by the designated nurse at each hospital, and then each was invited to participate. No further contact was made if the woman chose not to participate.

Each woman was assigned to a sample group by the researcher based on data obtained from the patient or the patient's medical record. Phone calls were placed to the nursery admissions nurse three times per week at the Greensboro Women's Hospital to determine if subjects were available for recruitment. Amy Pendergrass, Maternity Services Coordinator at High Point Regional Hospital, phoned the researcher when a woman was identified as a potential subject.

Design of Study

This was an exploratory, descriptive study which used the focused ethnographic method of research to investigate nonfinancial barriers to Maternity Services in Guilford County for African American pregnant women. Part One of the project included a review of data collected by the Guilford County Health Department between 1989 and 1993. A cross-sectional design was used which involved data collection through a structured interview with closed-ended and fixed-choice questions and a review of each subject's medical chart. Part three of the project involved data collection through a standardized indepth interview. The interviews began following discharge from the hospital in a mutually agreed upon location in the natural environment of the subject. These in-depth interviews were recorded and transcribed. All demographic data with the exception of religion, work, and school, were obtained from the patient's medical record when available.

Instrumentation

Based on the review of the literature and the Guilford County Health Department data, the researcher designed a 102 item questionnaire (Appendix A). The items for the questionnaire were chosen after a literature review. Some questions were developed by the investigator, the chairperson of the doctoral committee, and the statistician. The questions were grouped based on the selected factors to be observed. These factors were demographic information (which includes age, marital status, address, attained educational level, school enrollment, religion, pregnancy risk status, months pregnant and delivery

date, number of previous pregnancies, and work status); experiences, attitudes, and beliefs among the women that make them unlikely to seek services as well as psychological barriers, and lack of transportation or child care (See Attachment C for validation and reliability coefficients).

Pilot Process

The instrument was pretested to determine the amount of time required to complete the interview and problems with interpretation of questions. Modifications were made to the questionnaire based on the pilot test interviews. Ten (10) African American women with children of varying ages were involved in the pretesting process. These women were residents of the Greensboro Housing Authority Warren and Smith Homes. Women were recruited for the pretesting of the questionnaire by randomly asking at each home. Each of those women was paid ten dollars for their participation. These women were chosen because they were readily accessible and closely matched the demographic characteristics of women based on race, income, and having had children. Time and resources prevented the researcher from pretesting with women who in past years delivered in the local hospitals and did not receive maternity services. This would have required access to hospital records.

Measurement of Key Variables

Face-to-Face Standardized Interviews

Demographic information included the woman's age, marital status (Question 18), address (Question 2) (rural vs. urban), educational level (Question 17), school enrollment status (did appointments interfere with school) (Question 56), religion (frequency of attendance) (Questions 83 & 84), pregnancy risk status (high or normal risk), months pregnant, delivery date, number of previous pregnancies (Questions 4 - 14), and work status (did appointments interfere with work) (Question 56).

The interview tool included questions to explore the nonfinancial barriers to care. The study, "Preventing Low Birthweight" conducted by the Institute of Medicine, Committee to Reduce Low Birthweight 1985, concluded that there are five major categories of nonfinancial barriers to care. They are: (1) limited availability of providers; (2) insufficient maternity services in some areas; (3) experiences, attitudes, and beliefs among women that make them unlikely to seek services or psychological barriers; (4) lack of transportation or child care; and (5) inadequate systems to recruit hard-to-reach women. For this study, limited availability of providers and insufficient maternity services in some areas were measured indirectly through the standardized interviews. Although, inadequate systems to recruit hard-to-reach women were not included as part of the interview tool the subjects were asked what would have prompted them to seek services (Questions 98, 99) during the standardized interview.

Limited availability of providers was measured by asking the woman if she knows who to call or where to go for services. If she stated "yes" she was asked for that information (Question 19). The insufficient services variable was measured by examining the responses to the question where did she go for services (Question 20). The woman was asked if clinic hours prevented her from getting services (Question 65).

Experiences, attitudes, and beliefs, or psychological barriers were explored with the use of several questions (Questions 38 - 74). The perceived importance of maternity services has been shown to be related to the timing at which a pregnant woman seeks services (Carter, 1991). It has been assumed by researchers that if the pregnant woman perceives maternity services as important, then she is more likely to seek services early (Curry, 1989). Carter (1991) suggested that if the pregnant woman does not perceive maternity services as important, she is less likely to seek services early. This variable was measured by asking the postpartum woman if she thinks prenatal services are important for having a healthy infant (Questions 53). She was asked if she thinks diet is important in

having a healthy infant (Questions 92). She was also asked to rank how important she thinks prenatal care is in having a healthy infant (Question 86). A 4-Point Likert Scale ranking was used for these questions and range from very important (4) to not important (1). A dietary frequency was completed for each woman to determine her dietary practices (Question 91).

Transportation and child care problems were considered both financial and nonfinancial barriers for some women and may be symptoms of poverty (Questions 55). Lack of transportation has been shown to delay a woman from seeking services (Curry, 1989; Burkes, 1992). These barriers were explored in the in-depth interviews as part of the social support characteristics of the woman's situation.

Inadequate recruitment systems for hard-to-reach women were not measured directly. To date little is known about what motivates women to seek and use services. The motivating factors (Questions 98 & 99) were asked of each woman and were also addressed in the in-depth interview. There is a documented relationship between the pregnant woman's support system and her decision to seek services (Curry, 1989; Burke, 1992). The premise is that if a woman has a positive social support structure, she is more likely to receive services early. A woman who does not have a positive social support structure is less likely to seek services early. Social support was measured by asking the woman several questions about church attendance (Question 83 & 84). These include if she went to church during this pregnancy and how often she had attended in the past month (Questions 83 & 84), the baby's father's attitude about the pregnancy (Question 79), and was he present at the delivery (Question 80).

Focused Ethnographic Interviews

After the completion of the standardized face-to-face interview, each subject was told about the in-depth-interviews and was given the opportunity to participate. All of the subjects agreed to participate in the in-depth-interviews. However, due to reasons such as

eviction and conflicting appointments, eleven subjects were interviewed. Of the eleven subjects only ten were successfully completed. One subject, who lived with her parents, was experiencing anger over their reactions to her lifestyle choices. The researcher deemed it inappropriate to continue with the interviews because of the possibility of a volatile situation between the family members.

An interview guide was used to conduct the interviews. The purpose of these interviews was to provide the subjects with the opportunity to answer the questions asked during the face-to-face standardized interviews in Part Two of the study, in detail (Appendix B). Notes were taken during the interview to formulate questions so that a thorough explanation could be obtained from the subjects. An audio tape was made for each interview. The audio tapes were transcribed and analyzed. The purpose of this part of the study was to "paint a portrait of a people" (Morse, 1994; Agar, 1980). Fictitious names were used to ensure confidentiality.

Data Analysis

There were three approaches used to analyze the data which were Fisher's Exact Test, The Ethnograph Computer Program (Seidel, 1994), and Gladys Block Food Frequency Questionnaire (Block, Hartman, Dresser, Carroll, Gannon, & Gardner, 1986). Fisher's Exact Test was used to determine whether any statistically significant differences existed between the positive pregnancy outcome group (Group One) and the negative pregnancy outcome group (Group Two). Fisher's Exact Test is one of several tests that can be used to determine association or statistically significant differences between groups. It is a global and comprehensive test and was chosen because it is the most appropriate test given the small number of subjects and the type of data collected for this project.

The Ethnograph Program (Seidel, 1994) was used for mapping, retrieving, and coding the transcribed data from the interviews conducted in Part Three of this project. The Ethnograph Program (Seidel, 1994) is an interactive menu driven computer program

designed to assist the researcher in some of the mechanical aspects of data analysis. The Ethnograph Program enables the researcher to code, recode, and sort data files into analytic categories. The researcher can review text, mark segments, and display, sort, and print segments in any order or sequence desired. Because the mechanical tasks are managed by the computer, the researcher can be more creative than ever before. Prior to the Ethnograph Program, the researcher had the cumbersome task of managing field notes, transcripts, documents, and other data. By using the computer to manage some of the mechanical tasks, the researcher is free to devote more time to the critical interpretation of the qualitative data. Analysis of these data compared characteristics of mothers with positive pregnancy outcomes (Group One) to mothers with negative pregnancy outcomes (Group Two). From this analysis, the differences between these groups were determined. The intended utility of this analysis was twofold. First, this data may support the findings from Part Two of this project. Secondly, the analyses of the responses generated during the indepth interview produced several themes. These themes provided new insight into the nonfinancial barriers that prevent African American pregnant women from accessing and utilizing maternity services.

The data obtained from Question 91 were analyzed using the Gladys Block NCI Food Frequency Program (Block et al., 1986). The Gladys Block NCI Food Frequency Program is a menu driven computer program designed to quantify dietary frequency data and provide an averaged daily nutrient intake analysis (Block et al., 1986). The results of these analyses were used to categorize the diets of the subjects as adequate or inadequate.

CHAPTER III RESULTS

Summary of Guilford County Survey

The purpose of reviewing the results of the Guilford County Survey was to determine the proportion of nonwhite women who received inadequate prenatal care (IPC) and no prenatal care (NPC). The data provided by the Guilford County Health Department from its 1989-1993 survey on women who received inadequate (IPC) and no prenatal care (NPC) showed that of the 500 IPC and NPC women who were interviewed, 75.6% (378) were nonwhite (Table 4).

Table 4 Race of Mother by Inadequate Prenatal Care (IPC) Patients and No Prenatal Care Patients (NPC) in Guilford County

Race	IPC	NPC	Total
Non-White	212	166	378
	56.1%	43.9%	75.6%
White	87	35	122
	71.3%	28.7%	24.4%
Total	299 59.8%	201 40.2%	500

In 1993, white women gave birth to 70.8% (134,689) of all live births in Guilford County and nonwhite women gave birth to 29.1% (55,492) of all the live births in Guilford County. However, Table 4 shows that nonwhite women accounted for over 75% of the women who received inadequate prenatal care.

Characteristics of the Sample

Demographic data indicated that the typical nonusers of maternity services are teens, women with more than four previous births, single women, poor women, and women with

less than a high school education (May et al., 1991). This description applies to women of all races and also suggests that any woman can be a nonuser. Black women are more likely to be nonusers of services than any other race (Bisgrove, Visness, Fortney, Smith, Lofy, and Shepherd, 1994). Only African American subjects were used in this study because of their high rate of nonuse of maternity services. Twenty-five women were identified as potential subjects by hospital staff at High Point Regional Hospital and the Greensboro Women's Hospital. One subject declined to participate and two subjects, ages 14 and 15, were being held incognito from their respective parents after delivery. It was unclear who the legal guardians were, so these two individuals were not approached even though they met the study's eligibility requirements. Eliminating these individuals was done to avoid any possible legal problems in the future. Seven of the remaining twenty-two women identified by hospital staff as potential subjects were ineligible as subjects due to the number of maternity services visits (>4) they had received prior to delivery. The final number of subjects participating in this study was fifteen.

The demographic data are listed in Table 5. The mean age of Group 1 (positive pregnancy outcome) was 20.43 (±2.67 years). The mean age for Group Two (negative pregnancy outcome) was 26.03 (±7.72 years). The parity means for Group One and Group Two were 1.75 (+1.16) and 3.14 (+1.95), respectively. The gravida means for Group One and Group Two were 2.0 (+1.06) and 3.4 (+2.64), respectively. The birthweights of the infants born to the mothers in Group One and Group Two were 7.48 pounds (±1.27) and 5.73 (±.74), respectively. Six of the subjects had experienced their first childbirth while one had been pregnant nine times and had given birth to seven offspring.

Table 5 Selected Characteristics of Subjects by Groups (Mean + SD)

	Group 1 N=7	Group 2 N=8
Mean Age (years)	20.43 (±2.67)	26.03 (±7.72)
Parity	1.75 ± 1.16	3.14 ± 1.95
Gravida	2.00 ± 1.06	3.4 ± 2.64
Infant Birthweight (in pounds)	7.48 ± 1.27	5.73 ± .74

Group 1=Positive Pregnancy Outcome; Group 2=Negative Pregnancy Outcome. No statistically significant differences were detected between the groups using Fisher's Exact Test

The attained educational level of Group One (positive pregnancy outcome group) is presented in Table 6. Statistically significant differences were not found between the two groups. Only two subjects (14%) (one from each group) had some college training or greater.

Tabel 6 Attained Educational level for Group 1 & Group 2

	Group 1 N=7	Group 2 N=8
< High School	3 (21%)	5 (33%)
High School	3 (21%)	2 (13%)
Some College		1 (7%)
College	1 (7%)	

Group 1=Positive Pregnancy Outcome; Group 2=Negative Pregnancy Outcome No statistically significant differences were detected between the groups using Fisher's Exact Test The marital status of Group One (positive pregnancy outcome group) and Group Two (negative pregnancy outcome group) is presented in Table 7. Statistically significant differences were not found between the two groups. None of the subjects were married and living with her partner. Only two biological fathers were present in the home. One man was the biological father of the first child only in the home, but he also took responsibility for the new baby (or second child).

Table 7 Marital Status for Group 1 and Group 2

	Group 1 N=7	Group 2 N=8
Never Married	6 (40%)	7 (47%)
Separated	1 (7%)	1 (7%)

Group 1=Positive Pregnancy Outcome; Group 2=Negative Pregnancy Outcome No statistically significant differences were detected between the groups using Fisher's Exact Test

Eight women worked outside of the home. One subject had Medicaid insurance at conception but still did not seek maternity services. Two of these eight subjects had private health insurance. The remaining six women along with the seven subjects who did not work outside of the home were economically dependent on social service programs for health insurance. Because the subjects were not living a married relationship, they were ineligible for any insurance benefits the father of the baby may have had. After delivery, all subjects left the hospital with Baby Love Medicaid. Through that program, the woman receives benefits for eight weeks postpartum, and her infant receives benefits for one year. Ten subjects (67%) reported total annual income of less than \$9,999, including benefits such as WIC and AFDC. Four subjects (27%) reported total annual incomes of \$10,000-\$14,999. One subject (6%) reported a total annual income between \$15,000-\$19,000.

(Table 8) The average number of people living in each household was 4.5. There were no statistically significant differences between the two groups.

Table 8 Reported Annual Income of Group 1 and Group 2

	Group 1 N=7	Group 2 N=8
\$0 - \$9,999	4(27%)	6 (40%)
\$10,000 - \$14,999	2 (15%)	2 (15%)
\$15,000 - \$19,999	1 (7%)	

Group 1=Positive Pregnancy Outcome; Group 2=Negative Pregnancy Outcome No statistically significant differences were detected between the groups using Fisher's Exact Test

Knowledge of the community's prenatal services did not appear to be a barrier to accessing prenatal care in our sample. Eleven subjects (73%) knew about WIC Services. Twelve subjects (80%) knew where to go for prenatal services. Only one subject had no previous knowledge or interaction with Guilford County Maternity Services. Each of the subjects had lived in Guilford County for at least three years. Seven subjects (47%) lived in Guilford County since birth. Place of residence was defined by the researcher as rural or urban. Rural was defined as areas outside of city limits. All subjects were classified as urban dwellers.

Categorization of Subjects

As previously indicated, the subjects were grouped according to pregnancy outcome in order to better define or describe the effects of lack of prenatal care in this sample. A positive pregnancy outcome was defined as both mother-and infant living and free of disease and/or disability with a birthweight greater than or equal to 5.5 pounds and length of gestation greater than or equal to 38 weeks. Eight subjects(53%) met the

requirements for the positive pregnancy outcome group (Group 1). Seven subjects (47%) met the requirements for the negative pregnancy outcome group (Group 2). Table 9 displays the data on the criteria for the classification into the groups.

The demographic characteristics of the women in each of these groups were compared to determine if there were significant differences. Multiple Stepwise Regression and MANOVA (Multiple Analysis of Variance) were not feasible due to the small sample size. However, Fisher's Exact Test was performed to determine if any statistically significant differences existed between the two groups. This test did not reveal any statistically significant differences for age of the mother and birthweight of the infant. Additionally, there were no significant differences between the groups for education, marital status, social support, and income.

Nutritional Assessment

The Gladys Block Food Frequency Questionnaire (Block et al., 1986) was used to calculate the dietary intake of 13 subjects. One subject could not complete the frequency because she became ill before the completion of the frequency. She was not reapproached. One subject lost 25 pounds due to vomiting during this pregnancy. She could tell me what she ate but she always vomited sometime after a meal. Therefore, her food frequency would have been inaccurate. Both of these subjects were in Group Two (negative pregnancy outcome).

Diets of participants were assessed for protein content, total calories, iron, Vitamins A and C, and calcium. The food frequencies were also analyzed for the number of servings from each food group. The individual results were used to determine if the subjects had an adequate or inadequate diet (Table 10). The diets of subjects in both groups were low in dairy products, grains, fruits, and vegetables. Both groups consumed adequate servings of protein rich foods, and the diets of both groups were high in fats and

Table 9

Classification of Subjects Into Groups

Category	Subject	Reason for Classification
Group 1 Positive Pregnancy Outcome	Nan	Full term Delivery (40w) Healthy Mother & Infant Birthweight 8# 12oz
Group 1 Positive Pregnancy Outcome	Sally	Full term Delivery (38w) Healthy Mother & Infant Birthweight 5# 11oz
Group 1 Positive Pregnancy Outcome	Patty	Full term Pregnancy (40w) Healthy Mother & Infant Birthweight 8# 3oz
Group 1 Positive Pregnancy Outcome	Suzy	Full term Pregnancy (39w) Healthy Mother & Infant Birthweight 6# 5oz
Group 1 Positive Pregnancy Outcome	Abby	Full term Pregnancy (41w) Healthy Mother & Infant Birthweight 9# 2oz
Group 1 Positive Pregnancy Outcome	Shelly	Full term Delivery (40w) Healthy Mother & Infant Birthweight 7# 7oz
Group 1 Positive Pregnancy Outcome	Fawn	Full term Delivery (40w) Healthy Mother & Infant Birthweight 6 # 8oz
Group 1 Positive Pregnancy Outcome	Tammy	Full term Delivery (39w) Healthy Mother & Infant Birthweight 6# 14oz
Group 2 Negative Pregnancy Outcome	Anna	Mother-Hypertension One twin-ICU-Respiratory Birthweight 5# 80z, 6#
Group 2 Negative Pregnancy Outcome	Angela	Preterm Delivery (?wks) LBW 5# 4oz Mother stated drug use ICU-Fluid in Lungs
Group 2 Negative Pregnancy Outcome	Ellen	Preterm Delivery (37w) Mother-Hypertension Birthweight 5# 10oz
Group 2 Negative Pregnancy Outcome	Page	Preterm Delivery (37w) LBW 5# 3oz Mother-addicted to drugs
Group 2 Negative Pregnancy Outcome	Erica	Preterm Delivery (34w) Mother-Alcoholic LBW 4# 11oz
Group 2 Negative Pregnancy Outcome	Ashley	Mother-Hypertension Birthweight 6# 10oz
Group 2 Negative Pregnancy Outcome	Betty	Preterm Delivery (37w) Birthweight 6# 7oz

Table 10 Average Number of Servings Reported Using the Block Food Frequency Program

	Dairy	Fruit	Vegetable	Grain	Protein	Fats & Oil
Food Guide Pyramid ^a	3-4	2-4	3-5	6-11	3	sparingly
Group 1 N=8	2.75 ± .7	1.75 ± 1.4	2.85 ± 1.0	4.8 ± 1.4	4.3 ± 1.3	6.75 ± 2.6
Group 2 N=5	2.84 ± .9	1.98 ± 1.1	2.4 ± .3	3.8 ± .8	3.1 ± 1.2	6.96 ± 2.7

^a Food Guide Pyramid, Home and Garden Bullitin #252, US Dept of Agriculture, Human Nutrition Information Service, 1992.

oils. Fisher's Exact Test, used to determine statistical significance between dietary intake and pregnancy outcome, did not reveal any significant differences between the two groups.

The subjects in Group One consumed on the average 175 calories more than the subjects in Group Two. Group One consumed on the average 38 grams of protein more than Group Two. These differences were not statistically significant. Both Groups consumed adequate amounts of protein to support pregnancy as listed in the USRDA guidelines (Table 11).

Group One consumed an adequate amount of calcium to support pregnancy, but the subjects in Group Two did not meet the RDA for calcium to support pregnancy. Subjects in both groups consumed adequate iron to meet the needs of the nonpregnant woman but not for a pregnant woman. To meet the high iron needs of pregnancy, iron supplements in addition to dietary sources are recommended. A daily supplement of 30 to 60 mg of iron is recommended (Table 11). Two subjects from Group One and two subjects from Group Two consumed a multivitamin during part of their pregnancies. However, they were not included in the overall analysis. None of the subjects chose to breastfeed their infants.

Standardized Interviews

Nutrition Knowledge

Ninety three percent (n=14) of the subjects believed they knew how to eat during pregnancy and believed that nutrition is very important when pregnant. All of the subjects believed a woman should take vitamins while pregnant. However, only 4 (26%) of the subjects reported taking a vitamin and/or mineral supplement while pregnant (Table 12).

Two of those subjects used prescription maternity vitamins and two subjects used over-the- counter vitamins. The subjects consuming prescription vitamins reported getting them from a pregnant "twin sister" or a "pregnant friend". One subject began vitamin supplementation in the second trimester and the remaining three subjects began vitamin supplementation in the third trimester. Seventy percent (n=10) of the subjects believed a

Table 11 Calculated Average Dietary Calorie, Protein, Iron, Vitamins A&C, and Calcium Intake

	Calories	Protein	Iron	Vitamin A	Vitamin C	Calcium
RDA a	2500 kcal	60 g	30 mg	5000 Iu	70 mg	1200 mg
Group 1 N=8	3065 ± 709	139 ± 30	20 ± 4	12,872 ± 3745	297 ± 194.3	1429 ± 168
Group 2 N=5	2890 ± 652	101 ± 23	17 ± 4	8778 ± 2069	289 ± 104	1079 ± 297

a US Dept of Agriculture, Human Nutrition Information Service, 1992.

Table 12 Nutrition Knowledge and Perceived Support

Question	Total	Group 1	Group 2
I know how to eat when pregnant. (True or False)	True14(93%) False1(7%)	True 7(47%)	True7(47%) False1(7%)
How important is good nutrition when you are pregnant?	very important14(93%) slightly important1(7%)	very important6(40%) slightly important1(7%)	very important(53%)
Should a woman take vitamins while pregnant?	yes15(100%)	yes7(47%)	yes8(53%)
Did you take vitamins and/or minerals with this pregnancy?	yes4(26%) no11(73%)	yes1(7%) no6(40%)	yes3(20%) no5(33%)
During what month of pregnancy do you think is the right time for a woman to start eating right?	As soon as she knows0(70%) 1st month3(21%) 4th month2(14%)	As soon as she knows4(27%) 1st month1(7%) 4th month- 2(13%)	As soon as she knows6(40%) 1st month2(13%)
How often would your family tell you about foods that are good for you to eat while pregnant?	Always10(66%) Almost Always1(7%) Sometimes-0 Almost never2(13%) Never2(13%)	Always5(33%) Almost never1(7%) Never1(7%)	Always6(40%) Almost Always1(7%) Almost never4(27%) Never5(33%)
How often would your friends tell you about foods that are good for you to eat while pregnant?	Always5(33%) Almost Always1(7%) Sometimes2(13%) Almost never0 Never7(47%)	Always3(20%) Never4(27%)	Always2(13%) Almost always1(7%) Sometimes-2(13%) Never3(20%)

woman should begin eating properly as soon as she knows that she is pregnant. An additional 21% (n=3) believed a woman should begin eating properly in the first month of pregnancy (Table 12).

The subjects reported their sources of information and support for eating properly were family, friends, and health services. Eleven (73%) of the subjects reported always and almost always receiving information and encouragement from their family members about foods that were good for them to eat while pregnant. Whereas only 6 subjects (40%) reported always and almost always receiving information and encouragement from their friends about foods that were good for you to eat while pregnant (Table 12).

When asked to reflect on motivators to seeking care, encouragement from partner and family were the responses most often given. The motivating factor for seeking maternity services by 47% (n=7) of the subjects was having an existing medical problem that required attention. This, however, did not keep these women in the medical system, and several left the Emergency Room and were not followed up by a hospital social worker. One subject refused the Emergency Room doctor's insistence that she seek care because she was hiding her pregnancy from her friends and community. The physician was very concerned about her health so he invited her to return to him for services. She stated that she trusted him so she did return for two more visits.

The standardized questionnaire was divided into the following sections: knowledge of availability of services and utilization of services; health beliefs, practices, and knowledge (included dietary habits and religious practices); social support; transportation, and childcare. Additional series of questions were used to determined the perceived barriers to maternity services. These barriers include denial of the pregnancy, lack of social support by her partner and family, stressful life events, transportation and childcare, problems with the health delivery system, geographic location, health beliefs, and financial problems.

Denial of the Pregnancy

When asked, "When did you suspect that you were pregnant", five subjects stated that they did not know that they were pregnant until the third trimester. Seven subjects (46%) did not want other people to know about the pregnancy, and six subjects (40%) were afraid to find out that they were pregnant. Seven subjects (47%) reported not seeking services because "I did not want other people to know that I was pregnant." One subject (7%) reported this question was not applicable to her because she did not know that she was pregnant until she delivered. When asked if she had too many other problems to worry about maternity services, 53% (N=8) of the subjects responded "true". (Table 13) Three of the subjects (21%) had planned to give their babies up for adpotion. Forty percent (40%) had planned to have an abortion but did not.

Social Support

Research has documented the pivotal role played by the woman's partner in the health decisions she makes (Culpepper and Jack, 1993; Zambrana et al., 1991). However, only 13% (N=2) of the subjects responded true when posed the statement, "I thought the baby's father would take care of evrything" (Table 13). Four subjects (26%) lived with their partner. Seven subjects (46%) lived with their parent (s). The remaining subjects lived alone or with her children. When asked when the baby's father was told about the pregnancy, 8 (53%) subjects reported that they told him as soon as they knew. The remainder told him later in the pregnancy. One of those subjects reported telling the father 3 days prior to delivery. When asked who was the first person she told about the pregnancy, only 2 subjects (13%) reported telling the father of the baby first. The remaining 13 subjects (87%) reported telling relatives about the pregnancy first. Seven subjects (47%) reported the babies' fathers' reactions to the news as pleased. The fathers of the babies of the remaining eight subjects (53%) were not pleased with the news (Table 13).

Table 13

Perceived Support from Partner/Spouse

Question	Total	Group 1	Group 2
I had too many other problems to worry about maternity services. True or False	True8(53%) False7(47%)	True3(20%) False4(27%)	True5(33%) False3(20%)
I thought the baby's father would take care of everything. True or False	True2(13%) False13(87%)	True1(7%) False6(40%)	True1(7%) False7(47%)
Who are you currently living with?	Partner/Spouse-3(20%) Parents(47%) Relative2(13%) Alone3(20%)	Partner/Spouse-1(7%) Parents4(27%) Relative1(7%) Alone1(7%)	Partner/Spouse-2(13%) Parents3(20%) Relative1(7%) Alone2(13%)
When did you tell your partner/spouse about the pregnancy?	As soon as I found out8(53%) Later in the Pregnancy7(47%)	As soon as I found out4(27%) Later in the Pregnancy3(20%)	As soon as I found out4(27%) Later in the Pregnancy4(27%)
When you found out that you were pregnant, who did you tell first?	Partner/Spouse2(13%) Your Parents2(13%) His Parents2(13%) Friend2(13%) Social Serv1(7%) Relative7(47%)	His Parents1(7%) Friends2(13%) Social Serv1(7%) Relative3(20%)	Partner/Spouse2(13%) Your Parents2(13%) Relative4(27%)
What was the baby's father's reaction to the news?	Very pleased3(20%) Pleased4(27%) Not pleased/ Displeased3(20%) Displeased3(20%) Very displeased2(13%)	Very pleased1(7%) Pleased3(20%) Not pleased/ Displeased1(7%) Displeased2(13%)	Very pleased32(13%) Pleased1(7%) Not pleased/ Displeased2(13%) Displeased1(7%) Very displeased2(13%)
Who went into the delivery room with you?	Partner/Spouse4(26%) Your Parent6(40%) No one1(7%) Other3(20%) * 1 subject delivered at home with friend.	Partner/Spouse3(20%) Your Parent3(20%) Other1(7%)	Partner/Spouse1(7%) Your Parent3(20%) No one1(7%) Other2(13%)

When asked, "who went into the delivery room with you," 4 subjects (26%) reported the baby's father was present. Ten subjects (67%) reported other relatives such as parents, siblings, and friends present in the delivery room (Table 13). One subject (7%) delivered at home with a friend.

The family has also been documented as playing a pivotal role in the process a woman follows to make decisions about her health. Nine subjects (60%) reported that their relatives' reactions to the news were that they were pleased. The remaining subjects reported their relatives' reactions were that of displeasure (Table 13).

The African American pregnant woman's social support for behavioral change while pregnant generally included her partner and family. The Black Church has been regarded as one of the primary organized social institutions trusted by the African American community. It was the intent of this research to determine the presence of the church in the subjects' lives. The religiosity of the subject was determined to predict if the Black Church could be used as an avenue for intervention. The African American subjects were asked how frequently did they attend church in the year prior to pregnancy and during pregnancy. Eight of the subjects (53%) reported not having attended church in the year prior to pregnancy. Seven (47%) of the subjects reported not having attended church while pregnant. Two (13%) reported attending church weekly the year prior to pregnancy and during pregnancy. One (7%) reported attending church monthly the year prior to pregnancy and during pregnancy. Four (26%) subjects reported attending church occasionally during the year prior to pregnancy, and five (33%) reported attending church occasionally during pregnancy.

Transportation and Childcare

Six subjects (40%) had no way to get to the health department. Three subjects (20%) did not have childcare, and four subjects (26%) could not miss work or school (Table 14).

Table 14

Transportation and Childcare

Question	Total	Group 1	Group 2
I had no way of getting to the Health Department. True or False	True6(40%) False8(53%) N/A1(7%)	True2(13%) False5(33%)	True4(27%) False3(20%) N/A1(7%)
You did not have anyone to take care of your children. True or False	True3(20%) False6(40%) N/A6(40%)	True1(7%) False2(13%) N/A4(27%)	True2(13%) False4(27%) N/A2(13%)
You could not miss work/school. True or False	True4(27%) False9(60%) N/A2(13%)	True2(13%) False5(33%)	True2(13%) False4(27%) N/A2(13%)

^{*} For each of the questions as administered see Appendix A

The Health Care Delivery System

Patient satisfaction is associated with a patients' decision to seek medical services. Sixty percent (N+9) of the subjects, when posed the statement "I could get convenient appointments" answered "false". Forty percent (40%) of the subjects (N=6) perceived that WIC clinic hours were not convenient and 47% (N=7) perceived the prenatal clinic hours were not conventient. Six subjects (40%) believed they had to wait too long to get an appointment with the doctor. Four subjects (26%) believed they had too long of a wait to get an appointment for WIC. Six subjects (40%) believed that even when they had appointments at the health department they had to wait too long to be seen by the doctor. Nine subjects (60%) believed even with an appointment you had to wait too long to be seen at WIC. Seven subjects believed the prenatal clinic hours were not convenient. Two subjects (13%) did not like the attitude of the doctor, nurse, or midwife. Four subjects (26%) reported having a previous bad experience at the health department (Table 15).

Table 15

Healthcare Delivery System

Question	Total	Group 1	Group 2
You couldn't get convenient appointments. True or False	True5(33%) False9(60%) N/A1(7%)	True3(20%) False4(20%)	True2(13%) False5(33%) N/A1(7%)
You felt the WIC clinic hours were not convenient. True or False	True6(40%) False8(53%) N/A1(7%)	True2(13%) False5(33%)	True4(27%) False3(20%) N/A1(7%)
You felt the prenatal clinic hours were not convenient. True or False	True7(47%) False6(40%) N/A2(13%)	True2(13%) False4(27%)	True5(33%) False2(13%) N/A2(13%)
You have to wait too long to get an appointment to see the doctor. True or False	True6(40%) False7(47%) N/A2(13%)	True3(20%) False4(27%)	True3(20%) False3(20%) N/A2(13%)
You have to wait too long to get an appointment for WIC. True or False	True4(27%) False10(66%) N/A1(7%)	True2(13%) False5(33%)	True2(13%) False5(33%)
Even when you have an appointment you have to wait too long to be seen by the doctor. True or False	True6(40%) False7(47%) N/A2(13%)	True3(20%) False4(27%)	True3(20%) False3(20%) N/A2(13%)
Even when you have an appointment, you have to wait too long to be seen at WIC. True or False	True9(60%) False5(33%) N/A1(7%)	True3(20%) False4(27%)	True6(40%) False1(7%) N/A1(7%)
I had a previous bad experience or a friend or relative had a bad experience at the Health Department. True or False	True4(27%) False9(60%) N/A2(13%)	True1(7%) False5(33%) N/A1(7%)	True3(20%) False4(27%) N/A1(7%)

^{*} For each of the questions as administered see Appendix A

Geographic Location

When asked if prenatal services were available where they live, only three subjects (20%) reported reported that there were no prenatal services available where they live.

When asked if WIC services were available where they live, three subjects (20%) believed there were not any WIC services where they live.

Health Beliefs and Practices

Research has documented that women who receive little to no prenatal care often report that they did not know that they were pregnant. About one-third of the subjects did not know that they were pregnant. Nearly one-half of the subjects (47%) did not want other people to know that they were pregnant. Thirteen (87%) of the subjects believed that a woman should have eight or more prenatal visits and that prenatal care is very important. Seven (47%) of the subjects received regular medical care (checkups, etc.) when they are not pregnant (Table 16).

Twelve (80%) of the subjects believe prenatal care can prevent a premature or deformed baby. More than one-half of the subjects (53%) did not think the doctor, nurse, nutritionist, or midwife could make her feel better during her pregnancy. Nearly one-half (47%) did not like to go to any doctor, clinic, nutritionist, or hospital (Table 16).

Eight (53%) subjects believed they knew what to do since they had been pregnant before. Six(40%) subjects were uncomfortable about medical tests and exams. Three (20%) subjects were planning to give their babies up for adoption and six (40%) were planning to have an abortion but did not (Table 16). When asked "what month of pregnancy do you think is about the right time for a woman to begin prenatal care", over one-half (53%) of the subjects stated "as soon as she knows". When asked who she turned to for helath advice when she suspected that she was pregnant, nearly one-half (47%) of the subjects said "no one".

Table 16

Health Beliefs and Practices

Question	Total	Group 1	Group 2
I did not know that I was pregnant. True or False	True5(33%) False10(66%)	True2(13%) False5(33%)	True3(20%) False5(33%)
I did not want other people to know I was pregnant. True or False	True7(47%) False7(47%) N/A1(7%)	True3(20%) False4(27%)	True4(27%) False3(20%)
How many visits do you believe a woman should have?	3 or less1(7%) 8-123(20%) 13-152(13%) 16 or more8(53%) Don't Know1(7%)	16 or more6(40%) Don't Know1(7%)	3 or less1(7%) 8-123(20%) 13-152(13%) 16 or more2(13%)
How important is getting prenatal çare?	Very Important13(87%) Considerably Important1(7%) Slightly Important-1(7%) Not Important0	Very Important7(47%)	Very Important6(40%) Considerably Important1(7%) Slightly Important-1(7%)
Do you go for regular medical care when you are not pregnant?	Yes7(47%) No8(53%)	Yes2(13%) No5(33%)	Yes5(33%) No3(20%)
You did not bother because pregnancy care visits cannot prevent a premature or deformed baby. True or False	True3(20%) False12(80%)	False7(47%)	True3(20%) False5(33%)
You do not think the doctor, nurse, nutritionist, or midwife can make you feel better during your pregnancy. True or False	True8(53%) False7(47%)	True3(20%) False4(27%)	True5(33%) False3(20%)

^{*} For each of the questions as administered see Appendix A

Table 16 continued. Health Beliefs and Practices

Question	Total	Group 1	Group 2
You do not like to go to any doctor, clinic, nutritionist, or hospital. True or False	True7(47%) False8(53%)	True3(20%) False4(27%)	True4(27%) False4(27%)
You knew what to do since you had been pregnant before. True or False	True8(53%) False4(27%) N/A3(20%)	True2(13%) False4(27%) N/A1(7%)	True6(40%) N/A2(13%)
You were afraid or uncomfortable about medical tests and exams. True or False	True6(40%) False9(60%)	True3(20%) False4(27%)	True3(20%) False5(33%)
You were planning to give the baby up for adoption but did not. True or False	True3(20%) False12(80%)	True1(7%) False6(40%)	True2(13%) False6(40%)
You were planning to have an abortion but did not. True or False	True6(40%) False6(60%)	Truė2(13%) False5(33%)	True4(27%) False4(27%)
What month of pregnancy do you think is about the right time for a woman to begin prenatal care?	As soon as she knows8(53%) 1st month3(20%) 2nd month1(7%) 4th month1(7%) 6th month1(7%) 9th month1(7%)	As soon as she knows4(27%) 1st month1(7%) 2nd month1(7%) 4th month1(7%)	As soon as she knows4(27%) 1st month2(13%) 6th month1(7%) 9th month1(7%)
Who did you turn to for health advice?	Partner/Spouse1(7%) Your Parents7(20%) No one7(47%) Relatives3(20%) Friends1(7%)	Partner/Spouse1(7%) Your Parents5(33%)	Your Parents2(13%) Relatives3(20%) Friends1(7%)

^{*} For each of the questions as administered see Appendix A

Financial

One subject thought her income was too high for maternity services. Two subjects (13%) thought the health department would not take them due to lack of insurance.

Focused Ethnographies: Indepth Interviews

Fourteen of the subjects agreed to participate in the in-depth interview portion of the study. One subject was not asked to participate because of difficulty with responding to the standardized questionnaire. This subject relied heavily upon her sister to help her complete the interview. This subject appeared to be intellectually challenged. Ten of the subjects were successfully interviewed and the data were recorded on tape and later transcribed. As stated earlier the criteria used to determine who participated was the subjects' willingness to be interviewed. This transcribed data was analyzed with the aid of the Ethnograph Computer Program. From this analysis, several themes emerged.

Unplanned Pregnancies

Based on the mothers' comments or situations at the time of the interviews, it was evident that all 15 of the subjects had pregnancies that were unplanned. A pregnancy was considered unplanned if the woman was using birth control, if she stated the pregnancy was unwanted, if she denied the pregnancy, or if life circumstances showed no forethought or planning was given to providing for the baby. All of the subjects met one or more of these criteria. One of the subjects showed no forethought or planning in providing for the baby.

Betty, an 18 year old mother of two, became pregnant after a single engagement with a coworker at a popular fast food establishment. She was certain her live-in boyfriend was not the father of her baby because she always used birth control (condoms and foam) with him whereas she used only condoms with her coworker. Betty explained, "that I didn't want to be pregnant again. I already bad a child. I..I..can't handle two kids. I just

didn't think...besides I didn't even..I haven't completed my life yet. I was gonna go back to school...I just wasn't ready and I still ain't".

Erica, a 33 year old homosexual, had been imprisoned for the past three years. She discussed having been tired of women. She decided to spend time with a man for a change. Erica was not skilled in the use of birth control measures, and she felt her judgment was clouded due to alcohol abuse. Although Erica agreed to participate in the indepth interview, she was unable to keep any of the five rescheduled appointments. The Guildford County Child Protective Service took custody of the infant because she tested positive for drugs/alcohol use at delivery.

Shelly is a 16 year old ninth grader. In the past two years she has been pregnant twice: one pregnancy resulted from repeated sexual molestation by her 24 year old stepbrother, and the second was the result of times spent with her 19 year old boyfriend. Shelly agreed to and completed the in-depth interview.

Tammy is a 23 year old mother of four and is totally dependent on social programs for her existence. Tammy stated this was an unplanned pregnancy. She agreed to participate in the in-depth interview but had been evicted from her home at the time of my arrival. She was unreachable after that time.

Anna is a 38 year old mother of seven, and has been with the same man for twenty years. Her partner physically abuses her, and Anna said she was afraid of him. She loves her new twins, but she did not plan this pregnancy. She believes "God meant this to be."

Angela is a 32 year old mother of four, who gave one child up for adoption, and stated that she, "gave into the coaxing by her boyfriend to forego condom use since there were none in the house." Her baby was made a ward of the county due to her use of drugs prior to delivery. She regained custody two weeks after delivery. Angela agreed to and successfully completed the in-depth interview.

Ellen, an 18 year old mother of three, found herself pregnant by her best friend. He wanted a baby, but she did not. They used the withdrawal method as their form of birth control. He was trying to replace the baby that he thought was his with another woman. Ellen agreed to and successfully completed the in-depth interview.

Paige is a 21 year old mother of three. She is a drug addict and believes she got pregnant because her mind was clouded by drugs. Paige agreed to and successfully completed the in-depth interview. The Child Protective Services Department took custody of the infant because she tested positive for drugs/alcohol at delivery.

Nan is an 18 year old mother of one. Although this pregnancy was not planned, it did not apparently present a problem for her. She and her boyfriend are very much in love. They both work. Nan had agreed to complete the in-depth interview but moved prior to the scheduled appointment.

Fawn is an 18 year old mother of one. Her 27 year old boyfriend is not around much. She wanted to "finish school this year but turned up pregnant". Fawn agreed to and successfully completed the in-depth interview.

Abby is a 22 year old and a newly graduated civil engineer. So is her partner. This was her senior year. "So many have helped me to reach my goals how could I let them down." Now was not the time for a baby. Abby was asked to and successfully completed the in-depth interview.

Suzy is an 18 year old mother of one. Suzy appears intellectually challenged, and her older sister does all the talking for her. Suzy was not asked to participate in the indepth interview.

Patty is a 19 year old mother of two. Her grandfather is disappointed in her because he wanted her to do more with her life. This baby was unexpected, and her partner does not want to marry. Patty was asked to and successfully completed the indepth interview.

Sally is a 23 year old mother of three. She wanted to work and get off welfare but with another baby she does not see how she can at this time. Her nursing assistant license is about to expire. This year was not a good time for another baby. Sally was asked and successfully completed the in-depth interview.

Ashley is a 28 year old mother of two. Her partner was recently released from prison, and was still in transition into society. They were just beginning to get established in their apartment. The pregnancy changed everything, and the relationship soon ended. Ashley agreed to participate in the in-depth interview, but much of her interview was inappropriate for this study.

Unprotected and Unsafe Sex

From the above accounts of the subjects it is evident that these women were not consistently practicing protected and safe sex.

Denial of Pregnancy and the Fear of Others Knowing

The women's use of denial was the third theme to emerge. Betty said, "I thought all the vinegar I used on my greens stopped my period." As time passed (8weeks), she realized that she was pregnant. Betty stated, "Right after I missed my first period I was in a state of denial alot. Probably after I was three months because I wasn't too sure after my first period but I was also in a state of denial for a long time. Probably like when I was three months." When asked why she thought she was in denial, Betty stated, "because I didn't want to face the fact that I was pregnant... 'cause I knew I used protection and stuff but I could not face the fact that I was pregnant. I didn't want to be pregnant again. I already had one child."

Betty quit her job and wore oversized clothes. To hide her pregnancy from her friends and visitors, she spent the remainder of her pregnancy on the sofa with a pillow in front of her abdomen. Her live in boyfriend was told later in the pregnancy (5 months), whereas her mother was told in the beginning. They assisted her in this elaborate scheme

to hide this pregnancy. "I thought my boyfriend would leave...it's not his baby."

Rosetta's twin sister was also pregnant. She had planned to tell everyone that she was keeping her sister's baby.

Abby stated, "I was still in denial. I still...for some reason...even though I knew...I didn't want to know." She went on to state, "I did not want to believe it therefore I didn't face it." She knew this was a problem. She was in her senior year of Engineering school and so was her partner. She stated, "Lots of dreams and alot of goals...it just wasn't the right time." She told her partner in January after coaxing from her partner's sister. Abby described how she began missing her periods in October and how she suspected that she was pregnant but pushed it from her mind. She stated, that "once it (baby) started moving in December and January...I knew then. Once it start moving there's no mistaking that for anything else." She was still in denial. She concentrated on school and wondered when the baby would be born. When asked who knew about the pregnancy, Abby, stated that, "but my stresses with that were telling my grandmother and telling my father. Those were my two main stressors".

Angela stated, "I told him that night, I said, look, my family...the women on my momma's side is very fertile. It's just one of them things, it's just happens. It's like that." Angela gave in to the her coaxing by her boyfriend to forego condom use since there were none in the house. He assured her that she would not get pregnant just this once. She also stated, "the reason I told my momma...because I thought she'd give me the money to abort the baby, but she didn't. So I said I'll go ahead and have the baby and I'll give the baby up for adoption...I was going through so many changes with the baby that I decided to keep the baby." "I wasn't overjoyed at all. It was like I kinda went through a depression stage. Angela...my last two months was when I really realized I was going to keep my baby."

Shelly is a ninth grader and had been sexually molested by her 24 year old stepbrother. She had gotten pregnant but was given an abortion. This pregnancy was the

result of a relationship she developed with an older teen boyfriend from the neighborhood. He is a 19 year old high school graduate. When asked at what point did she suspect that she was pregnant, Shelly stated, "I didn't suspect it...I didn't even think about it. I was still having my periods." She went on to describe that she "didn't think about it until my momma said something." Shelly stated, "Yeap I felt some stuff but I thought it was like my stomach growling most of the time." She was eight months pregnant when her mother questioned her about possibly being pregnant. Shelly's classmate, Bianca, "used to touch my stomach and say yeah...you've got a baby in there and I'd say no I don't." Shelly's other classmates said constantly..."you're pregnant...I just didn't want to hear it". When asked if deep down she knew she was pregnant she stated, "Yeah. But I didn't...I didn't want everybody to know...if you tell somebody you're pregnant at school...everybody will find out...you don't even have to go to people they'll find out." Shelly's teacher stated on several occasions that she had "a basketball in there", but did not pursue the matter with her or the school counselor.

Fawn stated that she "didn't want to think about being pregnant." She stated that "at first we (27 year old partner) kind of talked about me having an abortion, but at the time I really didn't want to turn to that option because, this was June, in February my father died and then in May my nephew passed away. He was only two months old, …abortion really wasn't…didn't sound to good to me at the time." Fawn also lost her grandmother in November of 1993.

Ellen is a 18 year old mother of three children. She stated that she, "wasn't too happy, because I really didn't want anymore kids. This one snuck up on me this time. I just said to myself after I had him (pointing to the 14 month old) that I didn't want to have anymore kids, then the guy that I talked to ...he just went on ahead and made another big mistake." Their form of birth control was the withdrawal method. She hid the pregnancy from her mother for the first six months of the pregnancy.

Anna is a full-time employee at a High Point ceramic figurine manufacturer. She stated that, "I didn't want to be pregnant because I was pregnant five times and I didn't want to have no more babies." Anna also stated that, "I was really depressed, I was...I was really upset and depressed but then...and him being a father again. Not doing anything, hanging around. Not really helping out...he don't really help out...really." Although Anna did not deny her pregnancy, it was an unwanted and unplanned pregnancy. She did not tell her partner about the pregnancy until the second trimester.

Patty said that "when it came into my mind that she might be pregnant", she stated, "I got scared". Her partner told her to tell her family but she said, "no, I ain't telling it yet." Patty told her family in April and delivered in May. Patty stated that, "We was sitting here talking one day and sitting here doing my daughter's hair and she said, (Patty's mother), 'Girl you need to stop.' I said, 'What you talking about?' 'You need to stop trying to hide it.' I said, 'I'm not hiding nothing.' She said, 'Yes you is, look at your stomach on the side bulging out of your pants.'" She got late maternity services with her first pregnancy, too. Patty stated, "that I was working too, I was doing good and all of a sudden." She said, "she didn't want to think about it. But, if I have this baby I will have to stop working and then we won't have no money coming in and then I'm going to be staying at home." I "blocked it out of my mind, think about something else, try to keep busy or something, don't worry about it."

Sally's husband had been released from prison only one month when she missed her period. She was not pleased when she suspected she was pregnant. Things weren't going well in their relationship. Sally stated, "I asked him to leave" because of his inappropriate behavior. Her mother vowed to help her raise the baby. She stated, "I just, really, I just wasn't ready for no more kids. I didn't know, really, what I was going to do, I was just... found...I jumped in this situation, I didn't know, I wanted to have an abortion

but then I didn't want to have one and I couldn't really never make up my mind what I really wanted to do." Sally soon lost her job and had to move in with her mother.

Health Behaviors

When asked about behavioral changes practiced while pregnant, Betty stated she "just laid down all the time. I took the prenatal vitamins...like when my sister went to the doctor so I did that. And very seldom I would go out and walk and stuff. And when I did...it was a pretty good ways but other than that I just ate and rested. I was eating and I was also resting or would lay down and I would go to sleep all the time." When asked about medicines, Betty stated, "No, I didn't take nothing' just prenatal vitamins" which she had gotten from her twin sister who was also pregnant at that time. When asked how often she used alcohol and cigarettes, she replied, "No, I don't drink. No, I don't smoke." When asked about drug use she responded that she"is not a drug user."

Abby stated that her "diet did not change" but "I was thinking of vitamins...I did make it a point somehow to makeup my mind to take vitamins everyday...I think that was one of the reasons we were blessed and he turned out as well as he did because I did take vitamins the entire time." When asked about exercise, she stated "the only real exercise that we got was walking...we parked kind of far off campus walking to the Engineering Building." When asked about her use of medicines she stated, "No. Because I've been one to not take anything when I have a headache...I'd just lay down and take a nap or whatever..there was nothing ever taken." When asked about alcohol, drugs, and cigarette use she stated, "I never drink. No drugs. I've never smoked."

When asked about the things she did to take care of herself, Sally stated that "basically, really, I didn't do, really nothing. I was just, you know, I was in a daze the whole time. I couldn't really believe I was pregnant again...I ain't really cared that much. I was just down and out to be honest." She stated that, "As I got further along, maybe 'bout sometime this year I started thinking like that but, but then I was just eating just to be

eating if I got hungry but, I didn't really drink milk that much when I was pregnant with my other kids. I just didn't really like it." After Sally told her mother in January, she believed that she started eating better. She stated that "I just started, I started eating more and was trying to go to the doctor and I walked some, trying to exercise a little bit, that's about it." She smoked one cigarette a day.

Angela was unable to keep food down during most of her pregnancy. She stated, "the doctor at the emergency room gave her some pills to take and they helped but she ran out." She stated, "the baby needed the food but I couldn't keep anything down. I hurt so bad."

When asked about her beliefs on the use of maternity services while pregnant Angela said "I see absolutely no purpose. You can feel how much a baby grow in your own belly. Like I was saying, she's not gonna be no long baby, you know, I can tell. It was certain things I can do myself that he was essentially doing and all that and getting paid all that hundreds and hundreds of dollars for a visit."

When asked to describe how she took care of herself Angela stated that "Every time I went to the store I made sure I had milk, juice, and stuff like that. I tried to eat a balanced diet, but...." Angela lost twenty-five pounds over the course of her pregnancy due to vomiting. When she could eat, she ate a lot to try to make up for the loss. After delivery, Angela used cabbage leaves on her breasts to help dry up her milk and to avoid engorgement.

When asked about exercising Angela stated that she did much walking. When asked about medicines she stated that "I could take stuff for headaches and stuff like that. I would try. I would even bring that back up." She explained how she tried to drink beer, but "I couldn't hold it." Angela smoked cigarettes but she stated that she "cut back smoking." She was continuing to smoke less. She stated, "I do be saying Lord take the taste from my mouth." Angela says he is answering her prayers. In the past she drank

beer everyday. She explained, "Just like drinking. But I really did some good drinking it was just something like everyday like when I would get off of work. I would be like I gotta get me a beer. You know?" Angela says the Lord is working in her life. She asked God to "Take all that. It used to be a fun thing... but now it's nothing to it, it's like a high risk killing yourself thing now."

Fawn did not change her diet and exercise habits during this pregnancy. However, if she becomes pregnant again she stated that she would "go straight to the doctor and get checkups like I'm supposed to and eat better." When asked to describe what "eating better" meant, she stated "more vegetables." Fruits weren't a problem. "I ate fruits. I hated milk. It would tear my stomach up if I thought of drinking milk by itself." She smokes five cigarettes daily. She found she could take in milk with cereal. When asked if her appetite changed she replied that she started eating "like a hog. Breakfast food. I had never been a real breakfast person. I would get to the place where I would want to get up in the morning and eat breakfast instead of skipping it, like I usually do." Fawn's partner suggested that she "cut down on junk food and eat more vegetables and stuff like that." Fawn said, "she ate more candy than vegetables. I craved them." When she smelled washing powder she wanted to eat it. When asked if she gave in to this urge, she said, "Now I knew if I did I would get really sick, so I.... That's the only thing that kept me from eating it." "I used to like the Jell sponges, like brand new sponges, and just get it and chew on it while pregnant."

Paige was one of two subjects who admitted drug abuse. She did not make any positive behavioral changes during this pregnancy. She stated the drugs clouded her mind. Her partner described that she would often go three days without food. She smoked ten cigarettes daily.

Shelly stated that she had a good appetite. She had to start eating breakfast. She ate when she was hungry.

Ellen has chronic hypertension and pregnancy worsened the condition. She walked daily with her older sister because her sister told her it would help control her weight gain and strengthen her muscles for delivery.

Ellen described how she had a C-section with her first baby one month before her due date because her blood pressure was so high. With the second baby she kept her blood pressure low by eating "salads and carrots and fruits and stuff. It stayed down on its own." Her sister insisted that she walk every day to help control her blood pressure. She gained 45 pounds with her second baby. She stated that she gained "about 30 pounds with the new baby and I done about lost that ... all." With this last pregnancy she explained that she walked "just about every day." Every day her older sister came by with planned trips to walk somewhere. When asked about her diet she said to keep her blood pressure down she ate "salad. Somebody told me to eat a carrot a day to keep the blood pressure away. I always eat three carrots." When asked about the use of medicines, Ellen explained that she "didn't take anything for my headaches. 'Cause if I take Tylenol they still won't go away. So I don't really take anything." When asked if she was worried about her blood pressure during her pregnancy, Ellen stated, "yeah, because he told me when I start seeing these little starlight things my blood pressure... that means my blood pressure going up and for me to lay on my left side and go down and don't move. So I just laid down a lot when I started seeing them stars." When asked if this scared her enough to go to the doctor, Ellen stated, I always walk to Rite-Aid to check my blood pressure. When asked what's too high (blood pressure), she responded "190 over 90... because then once it gets that high, most likely its gonna keep going up."

Ellen smokes cigarettes but she is not a heavy smoker. Ellen stated she "keeps one pack for a whole week if no guys come around." She does not use illicit drugs while she is pregnant.

Anna has chronic hypertension. She explained that she "got on a good plan as far as watching my pulse... see the last time I had high blood pressure... I had a lot of weight gain so this time I tried to watch it. I ate more yogurt, more bananas, more apples, more fruit juice, instead of all those 7-ups." Donna's youngest child is on WIC. She shared his foods. She stated, "WIC helped out far as cereals, we had to eat the whole bran cereal stuff like that, and the milk." Anna explained, "basically I watch what I eat 'cause last time I'd pig out on hot dogs, bologna sandwiches, big old thick sloppy bacon and eggs, with all the stuff running out it, and none of that stuff good for you, you know. Blow me up, swell me up, my blood pressure go sky high." She remembered information she had learned from the nutritionist with her other pregnancies. Anna smoked but stated, "I've been cutting down, like right now, I haven't had a cigarette. It depends sometimes on how my nerves get."

Anna believed that her job was strenuous enough to be considered exercise. She described that she "poured molds." Anna reported that she "stood up most of the time my whole pregnancy. But then I have to load my truck everyday. If I have to pour 400 parts I have to load 400 parts on that truck to send them through. We had to pour 'em, take them out, load them up, and push them down. I might get an order where I need 1,000 pots in two days so I have to pour extra fast, you know. I'm like one of their top pourers." When asked what medicines she took during her pregnancy Anna explained, "I didn't know, she(a nurse) told me that I could have took some of those over-the-counter vitamins, I never would have thought that. Because she (nurse) asked me if I was on any type of vitamins, and I told her no, and she told me to go this is when I got sick and I went to the doctor, she told me I could just go buy One-A-Day, or any kind of multivitamin. Which I never would have knowed that." When asked about alcohol, Anna stated "that alcohol will kill you!" She smoked ten cigarettes a day and never used drugs.

When asked to describe the things she did to take care of herself while pregnant,
Patty stated "Eating right, don't do no drugs and no alcohol, plenty exercise working and
stuff." Patty does not smoke. When asked about medication she said "usually sometimes
when I have the headache I really don't take nothing until it start really, really hurting.
That's the kind of person I am."

Stresses

Eight of the ten subjects reported one or more stresses in their lives, in addition to the pregnancy during twelve months prior to their pregnancies. The schedule of Recent Experience (Justice and Justice, 1979 pp 114-15), assigns points to life events that are considered stressful. The list below includes the events reported by the women in this study.

Life Event	Value	X	Occurrences=Score
Major change in financial state	100		
Separation from mate	65		
Death of a close family member	63		
Detention in Jail or other institution	63		
Major change in health of a family member	44		
Pregnancy	40		
Gaining a new family member	39		
Beginning or ceasing formal school	26		
Major change in social activities	18		
Major change in eating habits	15		
Christmas	12		

Totaling the points gives one some indication of the level of stress one has experienced in the past year. The Justices used this scale to demonstrate that abusing parents experienced almost twice the level of stress as a matched group of non-abusing parents. In that research the abusing parents had a score of 234 while the score for the non-abusers was 124. The following descriptive statements offer many examples of the stresses these women endured.

Anna is in an abusive relationship. She wants her partner of 20 years out of her life but she is scared to ask him to leave "cause there would be a whole lot of violence... I wish I could get him out." Anna described what would happen if she asked him to leave because she was all too familiar with it. She said, "he'd bust my eyes open, bust my head open, bust my head open back here when he shot at me..." "Yeah, I know what it's going to be like." "The police came, they gonna take him, and he... they'll let him right back out." He would always come looking for her. Anna said, "That's what he's gonna do. I could lock him back up, but that ain't gonna do no good if he's gonna come back here and kill me. I already been shot about three different times." In the past, her partner "split my lip from here to here, on the inside, bust my eyeball (pointed to the bone under her eye), the back of my head, the top of my head." Anna's 15 year old son has told her repeatedly, "he's gonna get...buy a gun and shoot him." Anna has left many times but she eventually comes back. She is a battered woman. Anna has twin newborns, an eight year old, a three year old, a one year old, and a fifteen year old son that all live with her. Her partner comes and goes as he chooses. He is in and out of jail. Anna described how she would protect her children. "And I wouldn't let him do nothing like that. He disciplines them when they need it, but he don't whoop them and cuss at them like he do me. I don't like him cussing at me in front of them either. He's called me a bitch in front of them too. I don't like that. He won't mess with them. I won't let him... I'll go to jail first."

Fawn had experienced stressful times during 1993 and 1994. Her father died in February of 1994. Her newborn nephew died in May 1994. She suspected that she was pregnant in June of 1994. "In November of 1993 my father's mother passed away."

Fawn stated she was attending a high school completion program at GTCC, which she started in September of 1994. She accepted that she was pregnant and quit school in October. She stated, "it was all coming too fast."

Ellen is an 18 year old mother of three children. She has a 3 year old, and 14 month old and a newborn baby. She wanted to get an abortion but the father of this baby became angry at the mention of an abortion. Ellen said, "he told me if I give it up for adoption that he would never, never talk to me again. And he was my best friend before he was a boyfriend, and I don't have many girls as friends... So I didn't want to lose one friend for just a mistake that I could be making in my near future. Because most likely in one year I'll want to see this baby." Ellen's 16 year old partner was on the rebound and had recently been told that the baby he thought was his with a 25 year old woman was not his. Ellen remembered that "all of a sudden he just start saying he wanted a baby." Their method of birth control was the withdrawal method. Ellen stated, "When I'm being careful, I just tell him like please don't come in here (ejaculate) or whatever, because I don't need anymore kids. The adult woman involved "thought they was going together so she kept getting things complicated." Ellen did not know where to turn. Her mother moved into her apartment earlier this year because she has kidney problems. Ellen also wanted to move out of this complex because she was worried about the type of people living there.

Paige is addicted to street drugs and she abuses alcohol. Everything seems hard for her. She stated "she needs to get away. Just get away from everybody." Her partner was in prison for "about 3 years." Paige explained that "People was talking junk about me and I didn't like it and I started to kill myself. They tried to get me to talk to the school counselor. I disagreed with everything she said. My daddy tried to talk to me the night I tried to kill myself. I couldn't talk to him." Paige believes she needs to change her life. She knows if she does not she won't survive. Earlier, Child Protective Services removed

her 2 older children from her care and placed them with her Aunt. She lost the new baby, too. She wants her children back.

Sally is a married woman. She now lives with her mother. She explained that in 1994, "I wasn't working or nothing like that... My husband had just gotten out of prison. We was together (in her apartment) for about a month. He just kept going back and forth. He couldn't make up his mind whether he wanted to be at home or be out in the streets, so I just let it go." Sally had to move into her mother's home because she lost her job. She demonstrated during the interview how she pulled her knees up to her chest and rocked back and forth throughout her pregnancy.

This is Sally's second pregnancy. Her first pregnancy was terminated in September of 1993. This pregnancy was the direct result of repeated molestations by her 24 year old stepbrother. She told her mother when she suspected that she was pregnant. She participated in legal proceedings and counseling sessions through the remaining months of 1993. The man was convicted but given probation. The family sent him to South Carolina to live with relatives. In June of 1994, she met her boyfriend who was a 19 year old high school graduate. She conceived her second baby that month.

Transportation and Child care

Paige did not have access to transportation and believed that lack of transportation kept her from services, She stated "if we had a car he would do what he had to do. He got license." Tracy, her partner, said "I wouldn't be here. She wouldn't be here either. I'd take her where she needed to go and drop her off and I'd go to work." When offered transportation, Paige accepted readily and explained "that everywhere I need to go is at Family Planning." She believed that public transportation was not good for her because she had to "haul 3 kids on the bus and everything." She did not have a sitter and could not afford to hire someone.

Anna was in a catch 22. The school system investigated why her 15 year old son "was missing a lot of days." She would always say that he had been ill. Anna would then explain to her son that "I could lose my job...then we'd be poorer than we already is." She states "it's hard to get caught up". Anna misses a lot of work so that her son can go to school sometimes. She had been trying to get the children into daycare and had "been on their list for dadgone six months. And she finally called me, but I'm on maternity leave now and there ain't nothing they can do. Now I gotta go back on the waiting list." Anna explained how she had thought about lying and telling the daycare center that she was still working but she did not want "to get in trouble." Anna did not own a car and stated that she wonders how she is going to "load them all up...and catch the bus with all of them, get them to daycare, then get back on the bus and get to work, cause most of them don't open until 6:30." Anna must transport her twins and three year old to different daycare centers, and get her 8 year old to school.

Problems with the Health Care Delivery System

Many experiences were shared by the ten subjects who participated in the in-depth interviews, however, the underlying theme that emerged with these women was the disrespect that they felt they suffered at the hands of those hired to help them. The interesting point in this is that these ladies internalized their mistreatment as racism. Many quotes included if "I were white" this would not have happen to me. The following will include excerpts from the transcripts which will depict their experiences.

Patty does not trust the system. She described that she "tried to call my social worker but everytime I called his answering machine was on and I kept on leaving messages and he never called. So then somebody told me to go up to the health department, 'cause like on Tuesdays if you can find a social worker up there, they'll get you signed up for Medicaid. You know...I went up there and signed up and she kept on asking me did I want to sign up for AFDC (Aid For Families With Dependent Children)

check and I told her no, and she was like well, it can really help you out and I was like "no"!, I just want to get signed up for Medicaid. She just kept on talking about qualifications that you have to meet to get a AFDC check and I told her I didn't want that, I just wanted to sign up for Medicaid. She just kept on asking me questions like, "Your partner with you now? He going to be with you..." She was like, giving me, you know, warnings, he's with you now, he may not be with you when the baby is born, you might need to get signed up. I'm telling her no, I don't need any money 'cause I'm already working." Patty was unable to produce the three check stubs requested by the Medicaid social worker. She only had two. She was told, "Well, until we can get your Medicaid straightened out you got to, we got to contact your employer and we got to get the other check stubs..." Patty told the social worker, "I might be kind of far along." Eventually the paper work was complete and she was given an appointment for May first, which was one month later. She delivered before she could get in to see the doctor. The social worker told her during her application for Medicaid that her due date was November 1995. This was based on her menstrual cycle however, Patty explained that she was further along than six weeks. She was amazed that no one would listen to her. She encouraged the social worker to look at her stomach. They told her she was six weeks pregnant, and she delivered six weeks later.

Abby found that by stating that she would be graduating with a Civil Engineering Degree from a local university, she could gain access into offices and the staff would gladly help her. Abby described her first encounter at the Health Department. She stated, "When I came in it was setup that when I could see the doctor was a month from when I came in. But she ...I don't know...I must have looked so sad...I was really depressed that day and I had to actually face it that day. I was already upset about everything going on and trying to get help and they be saying they can't see you until whenever. And when I was on my way out the door about in tears she stopped me and said hold on a second and she went

back and came with an appointment form to see the doctor. Then she took me up to the Medicaid worker and got my Medicaid." Abby believed that "Pearl Morgan kinda took care of everything." This employee made her feel cared for and welcomed. She was the only employee who did not know that they were college graduates. This impressed Abby and her partner. She believes this is the way it should be.

"John and I experienced that throughout the whole experience. Even when I went to apply for Food Stamps...same thing...the moment they knew we graduated from college it was different. She believed the attitude of the staff after they found out that they were engineers was "we understand ya just graduated from school and you need just a little help to help get yourself together...so that's ok."

Services Needed in the Community

Betty would have asked for services if there were nurse midwife professionals in her community. She also believes WIC should be available in the community. She said, "if they could come to your house you should be able to do it over the phone or something and send it to you in the mail or something." When asked to expound on this topic, she explained, "she brought it with her in the hospital that day I got ready to leave...that day. ...she signed me up and Lataya up."

Angela stated, "we're going back to the midwife ways that some of the things they are doing is what midwives used to do anyway." She believes that had there been a midwife in her community..."I'd a went to her. I would. And then you see..midwives they wasn't just in it for the money. They were out there helping..." When asked what would have prompted her to get WIC services, she stated that "WIC services should be in my community." She explained, "you can get WIC in Smith Homes (housing project) but Smith Homes ain't no short walk. If there was one in my homes I probably would have ...you know."

Anna did not own a car and had young children and a full-time job. She believes the health professional must come into the community and reach those they are hired to serve. Anna was asked how would it be easier. She believed if WIC came to her job or "to the home. Like after I had the babies, I had three or four different nurses come here." She believed that they could bring WIC with them. She believes that "just like at the hospital, they come ...give you the checks right there. So why can't they do that for everything else?" She described that "at a certain time...they have the bloodmobile come around when they want some blood. They park the van, you can go on in and draw the blood." "They can do the same thing for WIC. It would help alot of these children out here."

Distrust

Anna believes that misinformation is a viscious attack on the patient. The misinformation she received created more barriers for her to try to remove. In January of 1995, a representative from her insurance company came to her job to have a meeting with the staff to explain the changes in their coverage. "The way the man explained it to me ...I had to have \$500 up front before they would even begin to pay a penny. And here I'm thinking why I can't go to the doctor this week because I don't have \$500...I try to put back (save up). And windup thinking that why I can't go this week because I don't have the money. Went to Medicaid and took three months which I finally got it, took three months before it finally come." Anna decided that she would not use the insurance and just use Medicaid.

Anna had problems completing her Medicaid applications and it took longer than she had expected. She "didn't think about ...setting up a payment schedule " with Dr. Crawford. She tried to use her insurance when she saw that the Medicaid process was lengthy. She described, "Reading those books and everything is what I'm saying, then I got confused, because I didn't go in the beginning...of my pregnancy...if I didn't go like

although I knew I was pregnant, if I went like six months they wasn't going to take me. You had to go for the whole prenatal thing. I didn't understand it...I still don't understand it. Had to keep calling that 1-800 number asking questions. "

Then there was the thing when I got to the doctor. The primary doctor, he had to examine you to tell you you're pregnant, which I had a big old belly, but he only told me I had to go see (Dr.) Crawford. Which I had to pay him \$20 to do that. But I called him on the phone to make an appointment she said you don't need to see us we'll just give you a referral. When she gets to this physician's office, "he starts people calling the insurance company to check that I'm insured. They tell me they can't see me until I go to Bethany (Private Maternity Clinic). So I had to leave him, go over to Bethany, and then come back." Anna was walking miles to do what the health professionals asked of her. She stated, "I was walking, because without the Medicaid they wouldn't give you the transportation. Anna was able to get out of this trap when a the doctor who would be managing her pregnancy called the doctor who was suppose to make the referral and said, "She's just got a big old belly." The doctor agreed to make a verbal referral over the phone. She thought of using the health department but she believed the health department clinic was for teenagers. She never bothered to call to get help.

Anna felt that she was treated like a criminal even though she had an insurance card. She witnessed white pregnant women getting services without the cajoling she suffered. She firmly believes that she would have been treated better if her skin was of a different hue.

Ellen did not trust in the system. She explained, "Cause last time when I got pregnant with him (pointing to one year old), they told me it might-a-been a tumor so I didn't go to the doctor until I was about six and a half months with him, too. Then when I...when I went to the doctor the first time they told me the pregnancy test came out negative. Then when I went back when I was six months with him they told me it was true

(pregnant)." "The hospital told me that I may have a tumor and then they took a pregnancy test and they told me it was positive. But I went to my private doctor and they took a pregnancy test and they told me it was negative." At that time Ellen was "goin' to Pine West so I went to Dr. Crawford this time 'cause I didn't want anymore mistakes."

Inconvenient_Hours

When asked if she wanted WIC while pregnant, Anna described what WIC is like. "Yes, I've got the WIC. I didn't really have a problem with the WIC. Except when it's time to be recertified. You know, it's kind of hard, my paycheck is so messed up, it's kind of hard to get your time schedule, you know, when I'm gonna give you work hours. They always want you to come at 10:00 or 11:00, and then you have to sit there for two hours or two and a half hours and...I miss a day's pay. And then I think, I can just buy milk. 'Cause I'm not going to go up there at 10:00 and sit until twelve and I won't make it back to work or whatever, you know my whole day is gone, and it's for a couple of gallons of milk and some eggs." She went on to explain..."you have to wait so long, you have to sit there for so long. But they ask you ninety thousand questions, what you eat the day ahead, stuff like that. How many of this did you eat, how many of that did you eat, this is what I'm gonna tell you, eat this, don't eat that. You know, they're only giving you milk and eggs and cheese. But they try to tell you what meat to and what meat not to eat, but they not giving you any."

Fawn used to go to the Health Department with her cousin when she was pregnant. She observed, "when I went with her when she went to take her baby up there to get a shot, and we were sitting there all day long". Ellen likes using a private physician for care because with a private physician they "get me in there and they get me out. The health department...you'd be sitting up there for the rest of your life just waiting on them. I already do that alot with them as it is."

The Role of the Church

Each of the ten subjects who participated in the in-depth interviews responded to what role the church could have played in their lives during their pregnancy. The African American community has regarded the Black Church as one of the primary organized institutions that it trusts. During the in-depth interviews the subjects were asked to describe their church affiliation now or in the past and the role the church might play if any in assisting pregnant women in their respective communities. Betty stated, the church could "take them back and forth to church". Abby misses her church family alot since she moved to Greensboro to attend college. She has been unable to find a church where she feels at home. Abby believes "Just being in a church ... just being around what I call that family love that which is what I feel at my church at home. Where someone loves you and someone's concerned about you. I think just the experience of being there would have been helpful. Nobody would have to do anything special ... just knowing that there was a place we could go... you know".

Patty did not believe the church should tell her what to do because she is an adult. Fawn attended church "every Sunday" as a child. However, like Patty, she believed the church could help her but she did not want the church telling her what to do. Angela attends church infrequently. She too believes the church could offer help to pregnant women if they need it, however, "I like the church, but it's still perpetrators in there" Angela defines "perpetrators" as "I mean somebody like, okay on Sunday I see them in church and they're like, "Hi Angela...how you doing and I'm glad to see the baby is doing fine, but Monday when I see you, you drive by me and it's raining". When asked if the churches could help in any way, Ellen replied, "Cause I don't think they really help the people that's...not getting transportation, I don't think they're ready to do that." Her mother would like to see the church take a more active role in their community. She said, she has never talked to her church about helping in the community that way before.

Sally believes the church should help families in need. She stated, "You know, like some people be like, some churches helped me do this and helped me do that but then, what I have heard is some churches do that, right, and then you go to them for help and you got to go through these changes about how much income you get and all this and that and that was something I never did never understand". Sally would like to see the church take an active part in her community. She believes the church members would come around and visit with families or leave a card in the door. The card could offer services such as prayer or a confidential person to talk with as needed. Anna is part of a group of women who go around to homes to pray with people. She has a friend who comes weekly to pray with her. It gives her strength. Shelly attends church with her family. She enjoys her Sunday school teacher and believes she cares about her well-being.

CHAPTER IV

DISCUSSION

This was an exploratory study which attempted to determine the nonfinancial barriers to maternity services for African American women. The sample for this study was 15 women who received little to no maternity services and who used the Greensboro Women's Hospital and High Point Regional Hospital for delivery. These hospitals are designated as the providers for uninsured patients and high-risk maternity care in Guilford County.

Limitations of the Study

Limitations of this study include a small sample size from only one county in North Carolina. Because of the small sample size, it is difficult to draw statistical inference. Therefore, the findings may not be generalizable to the U.S. population of African American women who receive little to no prenatal care. However, this applies only to the quantitative portion of the project (Part 2) which included the face-to-face standardized interviews. The focused ethnographic interviews or in-depth interviews (Part 3) may be generalizable to other African American pregnant women who receive little to no prenatal services.

The criteria used for selecting subjects to participate in this project included the quantity of prenatal visits (≤ 4 visits) and being of African American decent. Quality and timing of prenatal visits should have been included as part of the criteria for subject recruitment. This would have increased the sample size. In several instances, which were cited by the staff at the Greensboro Women's Hospital and High Point Regional Hospital, some pregnant women who initiate prenatal care in the third trimester receive multiple visits (>4) due to their high risk status, thereby, eliminating them from this study. By using a

quantitative measure as the sole criteria for recruitment except for race, potential subjects were not included in this study.

Focused ethnographies, like all other types of ethnographies require that the researcher discuss the biases (s)he brought to the research. The biases brought to this research include: (1) that these women were economically disadvantaged; (2) the men in their lives did not exert great influence on their decision to seek services; and (3) that these women were insensitive and uncaring. However, the exact opposite was found to be the case. Of the 10 subjects interviewed during the in-depth interviews, only four subjects, based on their home, it's furnishings, and the apparent total household income, were living in substandard conditions and were considered to be economically disadvantaged by the researcher.

Additionally, the women's partners played a pivotal role in their lives. The man was involved in her decision to use birth control inconsistently, to deny the pregnancy, and to not seek services. Unfortunately, the frequency of intercourse was not explored during the in-depth interviews. Therefore, this study cannot offer any insight on the dynamics of how the partners failed to recognize the woman's pregnant abdomen by sight or by feel, as well as, the dynamics associated with when to use birth control and his beliefs on prenatal care. This suggests that future research should include the woman's partner in order to understand his role and how the dynamics of their relationship affects her decision to seek services.

Although these women did not plan their pregnancies and the baby was not wanted initially, each women stated that she wanted her baby by the time she delivered. It is safe to say that these pregnancies were unplanned and untimely, however, these babies were not unwanted.

The tools used to interview these subjects were developed by the researcher after a review of the literature. The standardized questionnaire was pretested prior to its use with

low income African American women. Validity and reliability coefficients were calculated and it was determined from these calculations that the questions were valid and reliable. The phrasing of the questions used for the face-to-face interview and the in-depth interview guide was strategic in: (1) developing trust between the subjects and the researcher; and (2) presenting the researcher an advocate for women who did not receive adequate prenatal care with hopes of assisting the medical community in developing strategies to help other women in the same situation. The researcher also referred these women to social service program as needed.

Trust was important in gaining access to and acceptance by these women because pregnant women who receive little to no prenatal care receive negative attention from the hospital staff and medical team. Physicians, by hospital guidelines, must treat these cases as possible abuse and/or neglect. (S)he is obligated to order lab tests for possible drug/alcohol use. Regardless of the outcome of the lab tests these women remain under scrutiny. They are extremely sensitive to the judgement and questioning of the hospital staff and nursing team, thereby making it imperative that the researcher develops trust with the subjects immediately.

During the introduction of the project and the signing of the consent forms, the researcher was asked many questions by the potential subjects about how many women receive little to no prenatal care. The guilt experienced by each of these women was due in part by the hospital protocol in managing these cases. However, the feelings of guilt may have been present prior to delivery. This researcher comforted and reassured the patients during the recruitment phase of the project. Unfortunately, these conversations were not recorded.

Three subjects had their infants removed from their custody by Guilford County Child Protective Services soon after delivery. One subject was granted custody of her infant two weeks after delivery. The design of the questionnaire, although tested for reliability and validity, may be viewed by some researchers as somewhat biased. Curry (1989) suggested that it is not enough to be free of hostility and judgement of these women but one must be openly friendly, warm, and caring. The interaction with the subjects in this study suggests that we must "be on their side". These women believed the system would harm them and possibly destroy their families; therefore, establishing trust was crucial for continued interaction.

The need to develop trust continued into the in-depth interviews. The interview guide was used during the in-depth interviews as a means to solicit the same information from each subject. The wording of the questions asked during the in-depth interviews varied from subject to subject. The researcher adopted the subjects style of communication to encourage dialogue. The subject was allowed to control the pace and the direction of the interview. However, the interview guide was used to ensure that each subject reported to some degree on each question.

The Gladys Block Food Frequency was used to solicit the dietary habits of the subjects. It was chosen because it had been tested on the general population and had been determined to be valid and reliable. However, with any tool, limitations do exist. The Gladys Block Food Frequency is based on the recollection of dietary habits by the subject; however, it does not address retention of what was consumed (e.g., vomiting, diarrhea) by the subject; nor does it consider cooking methods. It is unlikely that these women could accurately remember what they are during their pregnancy particularly with the stressors they endured. Some researchers question its cultural sensitivity; however, the Gladys Block Food Frequency includes all food groups.

Clinical Implications

With the limitations addressed above, it still remained obvious that trends and themes emerged from both the quantitative and the qualitative data which pose many clinical implications. Analyses of the dietary data and the birth outcome revealed no statistically

significant differences between the positive pregnancy outcome group (Group 1) and the negative pregnancy outcome group (Group 2). However, the subjects, based on their reports of health problems such as hypertension, could have benefited from therapeutic nutritional intervention by a licensed nutritionist. Although statistically significant differences were not found between the groups, a trend was evident. The older mothers were in Group Two (negative pregnancy outcome group). They also had more children and the birthweight of their babies was less than the babies born to Group One (positive pregnancy outcome group). One suggested explanation for this effect is maternal stress.

Maternal stress has nutritional implications. Stress is known to elevate the epinephrine and norepinephrine levels which reduce blood flow and oxygen to the fetus. Therefore, stress may inhibit fetal growth or weight gain (McAnaney & Stevens-Simon, 1990). The involvement of amino acids in specific processes during pregnancy suggest that failure to produce an infant weighing 5.5 pounds or more may be mediated by immune system/neuroendocrine/diet interactions. Stress enhances the physiological need for additional epinephrine and norepinephrine. Both of these catecholamines increase during the course of pregnancy in normal circumstances. Therefore the requirement for tyrosine is increased with the production of increased quantities of catecholamines during pregnancy, in general, and during stress in particular. Edwards et al. (1994) hypothesized that a change in the ratio of non-essential amino acids to essential amino acids may present a less than favorable mixture of amino acids for fetal protein synthesis. This may imply that there is a need for a high protein well balanced diet to counteract the effects of stress on the woman's health and offspring. This also suggests dietary intervention as early in pregnancy as possible with the goal of preconceptual nutrition counseling.

The dietary data showed that fourteen (93%) subjects believed they knew how to eat when pregnant. However, the results of the analysis demonstrated that these women had diets low in all food groups except for protein. The protein content in their diets was

analyzed based on a healthy pregnant woman. This suggests further research on diet and stress to determine how much protein is required when a pregnant woman is under stressful conditions beyond what is physiologically common to every pregnant woman.

Demographic Data

The demographic profile for these women showed that the typical nonuser was single, urban, and 23 years old. She had less than 2 previous children and was pregnant with the first child before she graduated from high school. This suggests a need for postpartum interventions which should include planning for future pregnancies and AIDS prevention. She did not depend on public financial aid and did not have insurance. She has lived in her community for three or more years. Some had low levels of education whereas some have college training. This implies that many women could fit this profile which suggests the need for intervention with all women of childbearing age.

Reasons for Nonuse of Maternity Services

Reasons for nonuse of maternity services were categorized into positive pregnancy outcome and negative pregnancy outcome. Upon analysis there were no significant differences between these two groups. This may be due to the small number of subjects. All of the subjects stated that the pregnancy was unplanned and untimely. However, they did not state the baby was unwanted. Two of the subjects reported planning for an abortion but were unable to do so because of a lack of funds. Three subjects reported that they did not know that they were pregnant. Two of those three subjects were addicts of alcohol an illicit drugs. The remaining 12 subjects tended to have values and lifestyles congruent with mainstream society. It seems these women would welcome maternity services information if it were easy to obtain.

Transportation and Childcare

Some of the reasons cited for nonuse of maternity services were inconvenience and expense to get the services. Distance to care was the major factor for these women,

although each lived within the city limits. Only one subject owned a car. The remaining subjects depended on family and friends for transportation. Mass transit is available in Guilford county, but one subject stated it is impossible to manage small children on the bus. Others said it was difficult to maneuver themselves on and off a bus while pregnant. One of these subject stated that no chairs are available at the clinic. Also, children cannot be left unattended in the waiting area. This is problematic because the woman cannot recieve her exam with her children in the exam room. The Guilford County Health Department does not offer childcare services for the patients visiting the clinic. Only one subject reported financial reasons a determent to services. She believed her physician required a \$500 deposit at her first visit.

Knowledge of Resources

A few women were deterred because they didn't know where to go for care.

Information about programs is not as available as some providers may believe.

The data gathered during this study indicate that most of the population of women who do not get maternity services have multiple problems. Although this situation is treated as a medical problem, the lack of maternity services may be more of a social problem with implications for poor health outcomes. For the women in this study, it was apparent that the lack of maternity services is a symptom of other social and economic problems of the family.

Babies born to mothers with no maternity services are at high risk for poor health, developmental problems, and social problems (Benedict et al, 1985). It is widely accepted today that not receiving maternity services puts the pregnancy at high risk for infant death and premature babies with low birthweight and possible birth defects (Escalona, 1984). This study revealed families with high levels of stress, teens who had two to three babies to care for, women who were alcohol and/or drug users, and women who did not plan their babies. These factors suggest that this population is at high risk for later abuse and/or

neglect of their children. As stated earlier, research has demonstrated a correlation between no prenatal care and child abuse (Escalona, 1984). Researchers have also demonstrated a link between the poor pregnancy outcomes and lack of maternity services and longterm or chronic health and mental functioning problems of the child. This combined with other lifestyle behaviors such as smoking and drug and alcohol use, should be considered abuse (Benedict et al, 1985).

In the Guilford County Maternity Services System, there is no coordinated social service approach to the problem of prenatal care and nutrition services. Outreach and early identification of these pregnancies is important to coordinating needed services. A postnatal program approach appears to be definitely needed as a preventive measure for future unplanned pregnancies within this population (Carrington, et al., 1993).

Unplanned Pregnancies

All of the pregnancies of the individuals in this study according to the behaviors and circumstances reported by the women were unplanned. Some stated not having used birth control each time which made conception more likely. Some did not state what birth control measure they were using, but they did state that they had hoped to have a baby much later than now. Some subjects described how they felt when they discovered that they were pregnant and three women stated they wanted to get sterilized but did not know how to go about doing that.

Some of the women denied the pregnancy while some successfully kept the pregnancy secret from their families until very late in the pregnancy. Some were experiencing multiple crises in their lives such as eviction and/or partner leaving and had made no plans for the baby. Some of the subjects had abused alcohol or drugs or were multipara teenage mothers who seemed to have no control of their lives nor an ability to plan for a pregnancy.

Unwanted Pregnancies

Although these pregnancies were unplanned and unwanted initially, subjects reported that by the third trimester they wanted their babies. The three women who were substance abusers stated their pregnancies were unwanted and unplanned but they wanted to keep their babies. Three of these women, however, lost their babies to the Child Protection Services. Babies born to all of these women who participated in this study should be considered at high risk. All health professional, including the nutritionist, are asked to pay close attention to the families who are at risk. These women deserve and require intensive followup to ensure they receive family planning services (Carrington, Thompson, Mitchell, Namerow, Gordon, Loftman, & Williams, 1993). Those professionals and paraprofessionals serving these women should continue with warm caring ways.

Teen Pregnancy

Thirteen of the subjects had been or were then teen mothers and ten of them had not completed high school. These women who started as teen mothers were typical of the circumstances described by researchers of teen pregnancy and its sequelae (Cartoof, 1979). They are at high risk for remaining low income mothers because of a lack of education and are more likely to have subsequent unplanned pregnancies. Those who become pregnant in their teens are a high risk population for later abuse or neglect of their child. These factors have implications for the nutritionist in the field of teen pregnancy nutrition and services for pregnant teens through WIC. Such a nutritionist must be able to identify child abuse and high risk situations for child abuse and make referrals to the appropriate professionals. The nutritionist is now more than ever a part of the interdisciplinary team and is therefore relied upon to make necessary referrals and recommendations.

Stressful Life Circumstances

Pregnancy is a life stress and requires biological, emotional, and lifestyle changes that are often difficult for some individuals. In addition to the stress of pregnancy, eight of the women who participated in the indepth interviews described multiple stressful events in the past year. Some had a previous pregnancy within the past year. Some had lost children to the Child Protective Services while others were graduating from college or dropping out of school. One subject was in an abusive relationship of twenty years.

Clearly those individuals with multiple stressors have difficulty dealing with a pregnancy and it is important that early prenatal care is as accessible and welcoming as possible for them to utilize. Thus there appears to be a need for advertising prenatal services. Staff who greet the public should receive training in behaviors that relate sensitivity to the emotional needs of economically and emotionally stressed clients. They should aso be trained to recognize and deal with the types of behaviors through which these clients might express their emotions.

Edwards et al. (1994) reported a two-fold decrease in the incidence of infant LBW, from 20.6% in women admitted to an urban prenatal clinic but not recruited for the research project to 8.3%, in African American women enrolled in an interdisciplinary research project conducted in the same urban prenatal clinic. Nutritional, biochemical, medical, psychosocial, lifestyle, and environmental data were collected by trained African American interviewers. The researchers attributed the two-fold decrease in the incidence of LBW to the mediation of maternal stress by project personnel, in effect, by providing an additional support system through the caring, sensitive environment provided by the project clinical staff, who met the women at each of their clinic-scheduled appointments.

Edwards et al. (1994) found that infant gestational age was correlated with having more respect for self (n= 343, p=0.042). Infant head circumference was significantly correlated with "I am a person of worth" (n=191, p=0.011). A positive self attitude was

correlated with delivery of term infants (n=180, p=0.036). Maternal serum vitamin E was significantly correlated, inversely, with the three trimester mean for plasma zinc (n=134, r=-.24, p=0.004). Both vitamin E and zinc are associated with the enhancement of the immune response. Women with a positive self attitude and higher self esteem were more likely to deliver infants at term. The number of persons in the mother's social support network was directly correlated with her infant's gestational age.

Satisfaction with the Health Care Delivery System

The underlying theme from the qualitative data for the satisfaction with health delivery system can be summarized as a trust issue. The women did not trust the health care delivery system due to the lack of respect shown by it. They readily assumed that their experiences were racist treatment. Although the goal of this research was not to determine racist treatment from disrespect, the apparent resulting emotion is the same, namely, distrust. The goal of the current delivery system, therefore, should be to change its image within its community if it is truly committed to serving its citizens.

Qualitative Data-Focused Ethnography

Themes emerged from the qualitative data that supported the information obtained during the face-to-face standardized interviews. In addition, new themes emerged from the in-depth interviews that were not found in the face-to-face standardized interviews. This suggests that focused ethnographies are vital in exploring problems or phenomenons such as African American pregnant women receiving little to no prenatal care. Themes that emerged from Parts Two and Three of the project included denial of pregnancies, unplanned pregnancies, lack of social support, stressful lives, and lack of transportation.

Two overriding themes that seemed to have emerged from the in-depth interviews were the subjects' ability to engage in harmful activities to please: (1) her partner primarily, and secondarily her (2) family and friends. The second theme to emerge was the distrust these women felt towards the healthcare system.

The ability of the subjects to engage in risky behaviors may be due to the socialization of women in this country. In this patriarchial society, women are reared to please others often times at their own detriment. The phenomenon of women engaging in risky behaviors may stem directly from that societal influence. The lack of social support for a woman who has been socialized to meet the needs of others often leaves her feeling overwhelmed and alone to deal with a pregnancy. African American women have been socialized to believe their value or worth is based on pleasing others.

Each woman who participated in the study engaged in risky behavior with her partner. With the threat of AIDS and the nation's goal to decrease the spread of it, these women put themselves at unnecessary risk as well as their offspring. These women for whatever reason do not understand that someone who cares for and respects her would never hurt her or ask her to engage in behaviors that could be harmful. Harm includes: (1) ending her education or employment to care for an infant that was unplanned, which is likely to leave her in poverty for many years; (2) the continued practice of risky behaviors while pregnant, such as alcohol and drug use; and (3) engaging in unprotected and unsafe sex. In order to avoid displeasing her partner, she chose to deny her pregnancy. Does this suggest that these women believed that a man makes them valid as women? It seems difficult to believe that a man engaging in sexual activities with a woman cannot tell any difference in her physique. Future research should include: (1) focused ethnographies on the dynamics of the couple's relationship; and (2) interventions that empower women of childbearing age to take charge of their lives.

Secondary to pleasing her partner was the woman's attempt to please her family. To cope with this situation, she denied her pregnancy and continued as if her life had not changed. The family remained uninvolved until the very last weeks of the woman's pregnancy. Some family members approached the woman just before delivery, however, we do not have data on why these relatives chose to watch their daughters go through a

pregnancy without medical care. It was beyond the scope of this project to dermine the dynamics in a family which allows the family to remain uninvolved possibly jeopardizing the wellbeing of their daughter and their grandchild. Future research should include the relatives which make up the woman's social structure. It is apparent that the partner and the family exert powerful influence on her decision making processes.

The guilt associated with these pregnancies stemmed from fear of disappointing others. This included the hospital medical team. She experienced guilt for getting pregnant as if she got that way by herself, guilt because her family would know that she was promiscuous, guilt that she may have harmed her own child once she accepted the pregnancy, and guilt when she met the medical system at delivery. Her apparent coping mechanism for dealing with this guilt was to say she did not know that she was pregnant. During the in-depth interviews the women admitted to themselves and to the researcher that yes they knew that they were pregnant but other circumstances prevented them from seeking services. Stating that they did not know that they were pregnant was a quickly developed coping skill used to protect themselves from the assaults of society. Apparently, the American culture forgives us for not practicing the appropriate behaviors when we did not know about the pregnancies.

The second theme that emerged from the data is the distrust these women had of the medical system. The central goals of medical care are patient satisfaction and improved health status. Patient provider interaction has been researched for many years and studies continue. However, it has been difficult to measure because of the number of variables associated with satisfaction. Understanding the process of interaction between patients and providers is necessary to help health professionals and patients communicate effectively. Effective communication facilitates decision making and improves patient understanding, satisfaction, and cooperation.

Joos & Hickam (1990) suggests that in the course of interaction with patients, providers have the opportunity to exercise a variety of types of social power by which they can influence patients' attutudes, motivations, and behavior (Joos & Hickam, 1990) stated theories of social power and influence provide a framework for understanding how information delivery, interpersonal skills, and patient-provider conflict affect patients' attitudes, behavior, and health care outcomes. The sources of social power that providers may use to influence patients are expert, legitimate, coercive, reward, informational, and referent power. Informational power and referent power produce longterm enduring attitude and behavior change. Of the six types of social power, informational power is based on the content and persuasiveness of the communication and the cognitive changes that result from the information. It is largely independent of the personal social influence of the provider. In contrast, referrent power is based on a patient's identification with the provider as a person like herself or himself in some respect and feelings of communality, security, and trust (Joos & Hickam, 1990).

Of the six types of social power, informational power can be employed by using techniques to enhance the persuasiveness of the message and to improve information delivery, understanding, and recall. In their literature review, Cleary and McNeil (1988) stated that the characteristics of the provider or the organization that attempts to make care personal are associated with higher levels of satisfaction. Techniques to establish referrent power include emphasizing the patient's well-being as a mutual goal, giving positive feedback, and accepting feedback. Skillful delivery and interpretation of verbal and nonverbal communication are important for implementing referent power and creating its motivating effect. Research continues on patient-provider interaction, however, what is known is that the healthcare provider does play a vital role in a woman's decision to seek and utilize services, as well as make needed changes in health behaviors (Zastowny,

Roghmann, & Caffereta, 1989). The use of informational and referrent power can be taught to practitioners.

Recommendations

Multiple levels of change may be needed in order to remove barriers to maternity services. The following are recommendations on continuing the efforts towards removing nonfinancial barriers to maternity services.

State Level

One of the roles appropriate for the State to play is a continued commitment to empowering the county to be innovative in meeting the needs of it's communities. This includes supporting the county's effort to provide services in new and unique ways. The State should continue its support of research by supporting University projects which are committed to improving the human condition and a continued commitment to a multidisciplinary approach to providing services to its citizens. For example, in North Carolina, WIC recently included the Maternity Care Coordinators (MCC) as WIC certification and provision of services providers.

University Level

One of the primary roles of the University must be to continue its commitment to training health care providers. Training healthcare providers should include sensitivity training with repeated opportunities to practice these learned behaviors. Zastowny (1989) suggest teaching and developing skills in informational and referrent power. It is imperative that the University continues its commitment to providing a relevant educational experience to its students.

A second role of the University is its continued commitment to qualitative research.

Qualitative research is necessary to providing relevant information to agencies committed to providing healthcare. For example, patient provider interaction should continue to be explored. This project suggest that it may be a factor in the accessing and utilization of

services by African American pregnant women. This type research is pivotal in assisting these agencies in program development, planning, implementation, as well as planned interventions. Universities house research scientists with expert skills in determining community needs which may provide the governing bodies of the state and its counties with pertinent information in the allocation of resources. The University must take an active role in dispersing its wealth of skills and knowledge in government.

County Level

Six of the subjects reported the need for maternity services in their respective immediate communities. This suggests a county level commitment to the decentralization of services into the communities relevant to the needs of the citizens. A commitment to research at the county level will assist the governing body in making decisions on the allocation of resources. A commitment to research may be useful in program development, program planning, implementation, and community interventions.

Sensitivity trainings for staff and service providers may assist in eliminating nonfinancial barriers to service by teaching employees appropriate behaviors to practice in providing services to those they are committed to serve.

Community Level

Although the subjects were spiritual and freely acknowledged their Christian beliefs, only one subject was affiliated with an organized church. Research has documented the pivotal role of the Black Church in the African American community. The Black Church along with civic organizations could work together to help eliminate barriers to maternity services which may be relative to each community. For example, an urban African American community may have different barriers to services as compared to a rural African American community.

Family Level

The family as well as the woman's partner may be able to affect change in the lives of these women during and after these pregnancies. The woman's partner may be pivotal in her decision to seek maternity services. Fourteen (97%) of the subjects' partners were physically present throughout the pregnancies. However, the women told them about the pregnancies in the second and third trimesters. One subject reported that the father of her baby was told three days before delivery.

In all of the pregnancies, someone close to the each of the subjects was aware of the pregnancy or suspected that she was pregnant. However, in every case the partners, relatives and/or friends supported the woman's denial of the pregnancy. Their role could include encouraging the woman to seek maternity services. The partner could assist by practicing safe and protected sex along with his partner. He too is responsible for the birth of these children and if he is not planning to begin or enlarge his family he must commit to responsible behaviors.

Individual Level

The beginning of the problems for these subjects was their practicing unsafe and unprotected sex along with her partner. Her responsibility in managing this problem is the use of birthcontrol and condoms to prevent unplanned pregnancies and prevent exposure to the AIDS virus. These women should take advantage of services available to assist them and their infants. However, determining nonfinancial barriers to those services is the essence of this project. Other research continues on barriers to contraceptive use as well as to services.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

The Relationship of this Study to Previous Work

The literature review examined six approaches used in explaining the nonuse of maternity services. They were: economic, geographic, socio-demographic, socio-cultural, social-psychological, and delivery system. The reasons for nonuse given by the subjects could not be placed neatly into any one single category. Results of this study indicate that reasons for nonuse were diverse and were generally multifaceted in nature. No single approach to dealing with nonuse of maternity services would be effective for this population of women.

The social-psychological explanation seems to apply to many women. All of the subjects were experiencing multiple stressful events which affected their ability to seek care. Some also perceived the problems of childcare, transportation, and long waiting as too costly for them, while others denied they were pregnant, altogether.

The delivery system explanation applied to many women. This included those who attempted to get services but were unable to or were delayed in getting services because of policies of the provider. A small number of subjects could be included in the sociocultural explanation to explain the nonuse of services. These include teen mothers with multiple births, drug users, and the individual who believes maternity services are not necessary.

Distance to care (geographic explanation) did in part deter some women from care. The ability to pay for care (economic explanation) deterred one woman from seeking maternity services. The sociodemographic explanation was not helpful in predicting the characteristics of women who do not use maternity services nor their reasons for nonuse of services. These subjects resemble any African American pregnant woman.

Importance to Other Disciplines

Health care professionals have been addressing the issue of prenatal care for many years. Many attempts have been made to reduce the incidence of babies born without maternity services. There is a renewed national interest in making maternity services available to all pregnant women because of the cost; both financial and human. This study may help to: identify some of the barriers to maternity services; develop coalitions at the local, state, and federal levels to remove these barriers; and generate ideas for intervention.

Nonusers of maternity services are diverse and the reasons for nonuse of maternity services appear to be diverse and complex. Because these reasons are diverse and complex, resolving the issue of nonuse of services will be difficult. An improved, more readily accessible maternity service system with warm caring employees would have been used by two of the subjects. The remaining thirteen subjects had complex needs that required a community support network. These women were living situations that were stressful, and their focus was not on their needs but on the needs and expectations of those surrounding them.

Birth control was a second thought and was used only when available. Only one woman used birth control consistently, while the other fourteen women used it occasionally. Three women spoke of permanent sterilization. Paperwork for Medicaid patients requesting sterilization must be submitted one month prior to delivery, and these women could not meet this requirement due to lack of maternity services. Family planning services should be made readily available to women in a timely manner. Decentralization of services into the community is needed for outreach and to provide services to women in their environment. Every woman requested this service. Although the pregnancy was unwanted initially, all women wanted their babies after delivery. Two children were taken by Child Protective Services because the mothers tested positive for drugs or alcohol at the time of delivery.

Remarkably, all of the ten women interviewed during the indepth interviews reported making behavioral changes during their pregnancies. This implies that although these pregnancies were unplanned and untimely they eventually were wanted. Practitioners should take note that this population does practice selfcare. Should practitioners promote more selfcare in the media since selfcare is being practiced and lack of information and misinformation is dangerous? This could serve a dual purpose to educate all women of childbearing age whether they are likely or not likely to seek services.

Practicing selfcare implies the women are open to education/information. This may be a golden moment to establish a knowledge base for good health during pregnancy by ongoing media campaigns designed to promote nutrition, exercise, and general good health. This should be a part of the budge for every health agency committed to providing services to women.

Based on the qualitative data obtained in this study, the subjects believed the church could be instrumental in their lives. Further research is needed to determine what types of interventions could be promoted through the church to help remove barriers that exist for this population in accessing and utilizing maternity services. This researcher proposes the church could be instrumental in the decentralization of maternity services into the communities and function as an institution of social support for these families.

One change in the system which may help this population access care involves the decentralization of services into the community. Providing transportation for these women and childcare at the clinic site would have eliminated some barriers. Culturally appropriate publicity about available services and an improved information and referral network that include physicians, nurses, nutritionists, social workers, health assistants, and social services employees is needed. Staff who greet clients on the phone and in the clinics should be trained to present a welcoming and accepting manner and to develop methods to make sure the women understand the information they are given.

Women who are ineligible for services should receive followup visits from a social worker. This is especially important when the family has suffered recent stress such as loss of employment. Racially diverse groups of people who already suffer racism and sexism should also receive followup. The current system, however, is not designed for them and they continue to live with a heightened sense of awareness stress. There are strategies at the state, university, county, community, family, and individual levels that need to be developed and implemented. This type of research may assist program planners and developers in tailoring services to meet the needs of these women.

Future Research

It is the goal of this researcher to replicate this study and include quantitative and qualitative criteria for subject recruitment to increase sample size. The partners will be included as a separate part of the project. A revision of the questionnaire will also be included as well as the development of questionnaire tools for interviewing the partners. The intervention phase of this type project could include a support network of community men and women assisting and encouraging the subject to seek postpartum care and pregnancy planning services for birth control and condoms (Carrington, Thompson, Mitchell, Namerow, Gordon, Loftman, & Williams, 1993).

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APPENDIX A

Bennett Nonfinancial Barriers Survey for Maternity Services

Date_					
1.	Name	·····			
2.	Address				
3.	Date of Birth				
4.	Gravida				
5.	Parity	9	Pregravid Wgt		
6.	EDC	10.	Current Wgt		
7.	# Weeks Gestation	11.	Height		
8.	List Any Health Problems		- -		
Infan	t's Data				
12.	Birthdate				
13.	Birthweight				
14.	Birthlength				
15.	6. Health Problems				
16.	How long have you lived in Guilford County?				
17.	What is the highest grade you completed in s	school?			
	Less than high school				
	High School				
	Some College				
	College				

18.	What is your ma	rital status?			
	Married	Divorced	Widowed	Separated	Never Married
Knov	wledge of Availa	ability of Se	rvices and Ho	ealth Practices	
19.	When you suspe Maternity Servic		ere pregnant di	d you know where	e to go for
	Yes (if yes a	sk where)	
	No				
20.	Eventually, whe	ere did you go f	or your pregnar	acy care visits for	this pregnancy?
	Private Doct	or (Name		Date)
	Clinic (Name	e		Date	_)
	Hospital Em	ergency Room	(Name	D	oate)
	Did not go fo	or checkups (sk	ip to question 2	2)	
21.	How many appo	intments did yo	ou have?		
	0	1	2	3	_4
22.	Did you know at Department?	oout WIC Servi	ices offered at the	ne Guilford County	y Health
	Yes				
	No (if no, sk	ip to question ?	27)		
23.	Did you apply fo	r WIC Services	s at the Guilford	County Health De	epartment?
	Yes (date		_)		
	No (skip to q	uestion 26)			
24.	Were you eligibl	e for WIC Serv	rices?		
	Yes				
	No				
25.	Did you go for y	our first visit at	: WIC?		

	Yes (date)
	No
26.	How did you learn about WIC?
	On WIC before with other pregnancy
	Friends
	Relatives
	MD or health personnel
	Social Services Staff
27.	Did you know about prenatal services at the Guilford County Health Department?
	Yes
	No (Skip to Question 32)
28.	How did you know about prenatal services in Guilford County?
	Used the services before
	Friends
	Relatives
	Other
29.	Did you apply for prenatal services at the Guilford County Health Department?
	Yes (date)
	No (skip to question 32)
30.	Were you eligible for their Prenatal Services?
	Yes
	No
31.	Did you go for your first visit at the Prenatal Clinic?

	Yes (date)	
	No	
2.	I know how to eat when pregnant.	
	True	
	False	
3.	I did not need to get WIC because	
	I have enough food	
	I don't eat those kinds of foods	
	I don't accept charity	
	I don't want someone telling me how to eat	
	Other (please list)	
•	Did you go to the doctor because you had a medical problem?	
	Yes (explain	_)
	No	
	Not applicable to me	

36. What kind of insurance did you have when you found out that you were pregnant?

	None
	Medicaid
	Private Insurance
	Military
	Did not need insurance
37.	What kind of insurance do you have now?
	None
	Medicaid
	Private Insurance
	Military
	Do not need insurance
Nonfi	inancial Barriers
The fo	ollowing are some reasons women go late in their pregnancy or not at all for maternity
servic	es at the Health Department. Please answer true, false, or not applicable to me.
38.	I thought the Health Department would not take me because I was married.
	True
	False
	Not applicable to me
39.	I thought the Health Department would not take me because my income was too
	high.
	True
	False
	Not applicable to me

40.	I thought the Health Department would not take me because I did not have
	insurance.
	True
	False
	Not applicable to me
41.	I did not want other people to know I was pregnant.
	True
	False
	Not applicable to me
42.	I had no way of getting to the Health Department.
	True
	False
	Not applicable to me
43.	You have to wait too long to be certified at the Health Department.
	True
	False
	Not applicable to me
44.	You have to wait too long to get an appointment for WIC.
	True
	False
	Not applicable to me
45.	You have to wait too long to get an appointment to see the doctor.
	True
	False
	Not applicable to me

46.	Even when you have an appointment you have to wait too long to be seen at WIC.
	True
	False
	Not applicable to me
47.	Even when you have an appointment you have to wait too long to be seen by the
	doctor.
	True
	False
	Not applicable to me
48.	I had a previous bad experience at the Health Department or a relative or friend had
	a bad experience at the Health Department.
	True
	False
	Not applicable to me
49.	You thought that no one would accept you for care.
	True
	False
	Not applicable to me
50.	You thought the baby's father would take care of everything.
	True
	False
	Not applicable to me
51.	You were planning to give the baby up for adoption.
	True
	False
	Not applicable to me

52.	You had planned to have an abortion, but did not.
	True
	False
	Not applicable to me
53.	You did not bother because pregnancy care visits cannot prevent a premature or
	deformed baby.
	True
	False
	Not applicable to me
54.	You thought you had to be showing before you could go.
	True
	False
	Not applicable to me
55.	You did not have anyone to take care of your children.
	True
	False
	Not applicable to me
56.	You could not miss work or school.
	True
	False
	Not applicable to me
57.	There are no local doctors, midwives, and nurses where you live.
	True
	False
	Not applicable to me

58.	There are no local dietitians and nutritionists where you live.
	True
	False
	Not applicable to me
59.	You could not get a doctor, midwife, or nurse to see you.
	True
	False
	Not applicable to me
60.	You could not get a dietitian or nutritionist to see you.
	True
	False
	Not applicable to me
61.	You could not get convenient appointments during your pregnancy.
	True
	False
	Not applicable to me
62.	You had too many other problems to worry about maternity services.
	True
	False
	Not applicable to me
63.	Are there other reasons you did not get pregnancy care?
	Please list
64.	Are there other reasons you did not get nutritional services?
	Please list

65. You felt the clinic office hours were not convenient		nvenient.	
	WICTre	ueFalse	Not applicable to me
	Prenatal CareTr	ueFalse	Not applicable to me
66.	You did not think it w	as important to see a	doctor, nurse, or midwife.
	True		
	False		
	Not applicable to 1	ne	
67.	You did not want to the	nink about being preg	nant.
	True		
	False		
	Not applicable to a	ne	
68.	You were afraid or un	comfortable about me	edical tests and exams.
	True		
	False		
	Not applicable to 1	ne	
69.	You knew what to do	since you have been	pregnant before.
	True		
	False		
	Not applicable to r	ne	
70.	You were afraid to fin	d out you were pregr	nant.
	True		
	False		
	Not applicable to r	ne	

71.	You did not like the attitude of the doctor, nurse, midwife, or nutritionist.
	True
	False
	Not applicable to me
72.	You did not know that you were pregnant.
	True
	False
	Not applicable to me
73.	You do not like to go to any doctor, clinic, nutritionist, or hospital.
	True
	False
	Not applicable to me
74.	You do not think the doctor, nurse, nutritionist or midwife can make you feel better
	during your pregnancy.
	True
	False
	Not applicable to me
Social	l Support
75.	Who are you currently living with?
	Partner/spouse
	Parents
	Other relative
	Friends
	Alone [with child(ren)]
	Other (List)

W	Then you found out that you were pregnant, who did you tell first?
	_Partner/Spouse
	_Your parents
	_His parents
	_Friend
	_Social Services
	_No one
	Other (List)
De	escribe his/her reaction to the news.
	_Very pleased
	_Pleased
	_Not pleased or displeased
	_Displeased
	_Very displeased
W	hen did you tell your partner about the pregnancy?
	_As soon as I found out
	_Later in the pregnancy
	_He does not know/never
Sk	kip 79 if partner was chosen for 76
W	hat was his reaction to the pregnancy?
	_Very pleased
	_Pleased
	_Not pleased or displeased
	_Displeased
	_Very displeased
	Not applicable

Who went into the delivery room with you?
Partner/spouse
Your parents
His parents
Friends
No one
Other
How often would your family tell you about foods that are good for you to eat
while pregnant?
Always
Almost always
Sometimes
Almost never
Never
How often would your friends tell you about foods that are good for you to eat
while pregnant?
Always
Almost always
Sometimes
Almost never
Never

<u>Reli</u>	giosity -
83.	How often did you attend church in the year before you were pregnant?
	weekly
	bi-weekly
	monthly
	occassionally
	Did not attend church during that year
84.	How often have you attended church during this pregnancy?
	weekly
	bi-weekly
	monthly
	occassionally
	Have not attended church during this pregnancy
<u>Heal</u>	th Beliefs, Practices, and Knowledge
85.	When you found out that you were pregnant, who did you turn to for health advice?
	Partner/husband
	Your parents
	His parents
	Friend
	Social Services

___No one

___Other _____

86.	In your opinion, how important is getting pregnancy care?
	Very important
	Considerably important
	Slightly important
	Not important
87.	What month of pregnancy do you think is about the right time for a woman to start
	seeing the doctor for pregnancy care visits?
	As soon as she knows she is pregnant
	1st month
	2nd month
	3rd month
	4th month
	5th month
	6th month
	7th month
	8th month
	9th month
88.	How many total pregnancy care visits do you believe a woman should have?
	None
	3 or less
	4-7
	8-12
	13-15
	16 or more

89.	Do you go for regular medical care when you are not pregnant?
	Yes
	No (Skip to question 91)
90.	Where do you go for medical care when you are not pregnant?
	Private doctor
	Health Department
	Emergency Room
	Other
<u>Diet</u> :	ary Beliefs, Knowledge and Habits
	Complete Food Frequency Question 91
91a.	How many cigarettes do you smoke per day?
92.	In your opinion, how important is good nutrition when you are pregnant?
	Very important
	Considerably important
	Slightly important
	Not important
93.	Should a woman take vitamins while pregnant?
	Yes
	No
94.	Did you take vitamins and/or minerals with this pregnancy?
	Yes (if yes, which ones and date started)
	No

95.	What month of pregnancy do you think is about the right time for a woman to start
	eating right?
	As soon as she knows she is pregnant
	1st month
	2nd minth
	3rd month
	4th month
	5th month
	6th month
	7th month
	8th month
	9th month
	You should always eat right
96.	How did you learn how to eat during pregnancy? (List only one)
	Relative (give relationship)
	TV
	School
	No one
	Magazines, books, etc.
	Other
97.	How do you like to learn about nutrition? (List only one)
	TV
	Radio
	Magazines, books
	Other (Please list

98.	What would have prompted you to (List all that she offers)	o seek WIC services?	
99.	. What would have prompted you to seek prenatal services? (List all that she offers)		
100.	How many people live in your hom	e?	
101.	What is your yearly income?	102. List the social services you receive	
	\$0-\$9,999	WIC	
	\$10,000-\$14,999	Food Stamps	
	\$15,000-\$19,999	Housing Assistance	
	\$20,000-\$24,999	Medicaid	
	\$25,000-\$29,999	AFDC	
	\$30,000-\$34,999	Other	
	\$35,000-\$39,999		
	\$40,000-\$44,999		
	\$45,000 and over		

Thank you. These are all of the questions that I have for you right now.

APPENDIX B

Indepth Interview Guide Ask these questions in the past, present, future

I. Discovery of pregnancy:

When did you suspect that you were pregnant?

Describe how you felt.

How far along were you when you found out that you indeed were pregnant?

How was the pregnancy confirmed?

II. Value of Maternity Services

Did you desire WIC?

Did you desire Prenatal Services?

III. Help Seeking Behavior

Who did you tell first about the pregnancy?

Describe their reaction.

Describe the baby's father 's reaction.

Whom did you contact about services?

How was the contact made (ie, phone, in person, through relative or friend)

What was said about the availabilty of services for you?

What did you do next?

Describe extended family support and include partner's role, family's role, church's role or influence

Distance to closest provider and WIC Clinic

Number of dependents

Family income (insurance)

What would have motivated you to seek WIC and Prenatal Services?

What could the family, partner, church, have done to motivate you to seek care?

IV. Self-care

Describe what you did(do) to take care of your health when services were not available? Descibe sources of information about self-care.

nutrition, exercise, medicines, alcohol, cigarettes, drugs

Miscellaneous: How long have you lived in Guilford County?

APPENDIX C

Bennett Nonfinancial Barriers Survey

Title-The Bennett Nonfinancial Barriers Survey (BNBS)

Author-Karen W. Bennett

Publisher-Bennett Consulting Firm

Copyright date-The first edition was 1994.

Group for which the test is intended-The BNBS is most recommended for use with African American women of childbearing age. It has been standardized in adequate samples of females.

Purpose and recommended use-The BNBS can be used to determine the woman's perceived nonfinancial barriers to maternity services. The information derived from employing this tool can be used for but is not limited to planning future programs, improving existing programs, and planning and implementing interventions.

Validity as determined by the author

Validity was established in several ways. Initially, the instrument was developed by writing questions that would distinguish financial barriers from nonfinancial barriers. The hypothesis for this project was that nonfinancial barriers that prevent African American pregnant women from seeking maternity services in Guilford County do not exist. Five nonfinancial barriers are known to prevent African American pregnant women from seeking services. They are: (1) geographic location, (2) lack of transportation and childcare, (3) beliefs, expectations, and values, (4) lack of knowledge of available services, and (5) lack of service providers.

Geographic Location-Two questions were included in the survey to determine if the sites of care were accessible to patients. The reliability coefficient for these questions was not less than 85%.

Transportation and Childcare-Two questions were included in the survey to determine if lack of transportation and childcare made care inaccessible to patients. The reliability coefficient for these questions was not less than 80%.

Beliefs, Expectations, and Values-Twenty-six questions were included in the survey to determine if her beliefs, expectations, and values made care inaccessible to patients. The reliability coefficient for these questions was not less than 85%.

Lack of Knowledge of Availability of Services-Thirteen questions were included in the survey to determine if the woman was familiar with services in her community. Of the thirteen questions, six questions challenged the woman by asking her to tell the name of the facility or practitioner that she knew. She was also asked to give dates as to when she tried to get services if she stated that she tried to access the maternity services system. The reliability coefficient was not computed for these questions because they were open-ended.

Lack of Services Providers-Four questions were included in the survey to determine if the woman perceived that there were providers available to her. The correlation coefficient for these questions was not less than 90%.

Null Hypothesis

Nonfinancial barriers that prevent African American pregnant women from seeking maternity services in Guilford County do not exist. (Questions 21-57)

Research Questions

- 1. What are the health beliefs of the African American pregnant woman that deter her from seeking services? (Questions 68-73, 4, 5, 10-18, 36, 37, 49, 51, 52, 56)
- 2. What are the roles and/or practices of the African American pregnant woman's family that deter her from seeking services? (Questions 58-65)
- 3. What are the roles of practices of the African American pregnant woman's partner that deter her from seeking services? (Questions 58-63)
- 4. What are the roles or practices of the African American pregnant woman's church that deter her from seeking services? (Questions 66 & 67)
- 5. What are the life issues that deter the African American pregnant woman from seeking services? (Queston 45 and indepth interview)
- 6. What are the beliefs of the African American pregnant woman regarding the importance of nutrition during pregnancy? (Questions 75-79)
- 7. What is the dietary practice of the African American pregnant woman? (Question 74)
- 8. What is the African American pregnant woman's social support for behavioral change during pregnancy? (Questins 64, 65, and indepth interview)
- 9. What is the source of nutrition information for the African American pregnant woman? (Questions 80, 81, and indepth interview)
- 10. What are the motivators to seek maternity services for the African American pregnant woman? (Questions 82, 83)
- 11. What is the knowledge base on the availability of maternity services of the African American pregnant woman? (Questions 3-9)

Questions 19, 20 are financial

APPENDIX D

Barriers to Care by African American Pregnant Women Oral Consent Form

I am from the University of North Carolina at Greensboro. I am asking you to participate in a project to find out reasons why pregnant African American women do not seek Maternity Services. There are two parts to my project. First I will interview you about your reasons for not seeking services. This will take about 30 minutes. I would like all participants to complete this part of the project. The second part involves a few special women who will have the opportunity to describe their reasons for not seeking services in more detail. You may be asked to participate in the longer interviews. The information I collect from you will be private. I will assign you a code number so that your name cannot be linked with the information. The information I obtain may be of direct benefit to you by providing you with referrals for services useful to you. This project will benefit other patients because I will be able to use it to help the Maternity Services Department in Guilford County better meet the needs of African American prenatal. Your decision about whether to participate in this project is completely voluntary and will not affect the services you receive currently or in the future. In addition, if the information you give us indicates the need for additional evaluation or services, we would like to make a referral for those services to be provided to you.

Signature of Person Obtaining Consent DATE on Behalf of UNCG

CONSENT FOR RELEASE OF INFORMATION

I,, by signing my name bel at High Point Regional Hospital to SUBMIT MY NUMBER, AND ADDRESS To Karen Webb Be in the Department of Food, Nutrition, and Food Ser Human Environmental Sciences, at the University one of her assistants, IN ORDER THAT I MAY PARTICIPATE in a research project entitled, "Prenatals." I FURTHER ATTEST THAT I STATEMENT PREPARED AND SUBMITTE by Karen Webb Bennett, AND I UNDERSTAN BY KAREN WEBB BENNETT OR HER A POSSIBLE PARTICIPATION in the research	NAME, TELEPHONE ennett, a fourth year doctoral student rvice Management, in the School of of North Carolina at Greensboro, or to Y BE CONSIDERED TO Barriers to Care by Minority HAVE READ THE PROJECT ED to High Point Regional Hospital D that I WILL BE CONTACTED SSISTANT REGARDING MY
By my signature below, I FURTHER CONFIR UNDERSTAND that High Point Regional Hospita above named research project; that I HAVE NOT INFLUENCED TO RELEASE MY NAME, ADDRESS; that I HAVE NOT BEEN COEF PARTICIPATE; that WHETHER OR NOT INAME, TELEPHONE NUMBER, AND ADDIT WE'D BEEN COEF PARTICIPATE; that WHETHER OR NOT INAME, TELEPHONE NUMBER, AND ADDIT THAT I AM VOLUNTARILY CONSEINAME, and address released to Karen We'D BUT THAT I AM VOLUNTARILY CONSEINAME, and address released to Karen We'D Bent THAT I MAY BE CONSIDERED TO PARTAGREE TO HOLD High Point Regional Hospita administrators, and all other persons, firms, corpora whether named or referred to herein or not, HARM of actions, claims, demands, damages, costs, loss of arising out of, or as a result of THE RELEASE ON NUMBER, AND ADDRESS AND MY PAR' NAMED RESEARCH PROJECT, if I so claims	al is not responsible for any part of the FBEEN COERCED OR TELEPHONE NUMBER, AND RCED OR INFLUENCED TO I CONSENT TO HAVE MY DRESSED RELEASED to Karen FE ANY EFFECT WHATSOEVER INT REGIONAL HOSPITAL; NTING to have my name, phone nett or her assistant, IN ORDER ICIPATE; and that I FULLY al, its agents, employees, ations, associations, or partnerships ILESS of and from any and all causes of service, expenses, and compensation OF MY NAME, TELEPHONE TICIPATION IN THE ABOVE
SIGNATURE OF PATIENT	DATE
WITNESS	DATE
WITNESS	DATE