Published in final edited form as:
J Transcult Nurs. 2012 January ; 23(1): 29–37. doi:10.1177/1043659611423826.

Understanding Prenatal Health Care for American Indian Women in a Northern Plains Tribe

Jessica D. Hanson, MA[1]

[1]Sanford Research, Sioux Falls, SD, USA

Abstract

Early and regular prenatal care appointments are imperative for the health of both the mother and baby to help prevent complications associated with pregnancy and birth. American Indian women are especially at risk for health disparities related to pregnancy and lack of prenatal health care. Previous research has outlined a basic understanding of the reasons for lack of prenatal care for women in general; however, little is known about care received by pregnant women at Indian Health Service hospitals. Qualitative interviews were carried out with 58 women to better understand the prenatal health experiences of American Indian women from one tribe in the Northern Plains. Several themes related to American Indian women's prenatal health care experiences were noted, including communication barriers with physicians, institutional barriers such as lack of continuity of care, and sociodemographic barriers. Solutions to these barriers, such as a nurse midwife program, are discussed.

Keywords

American Indian women; nurse midwives; prenatal care

Introduction

Early and regular prenatal care appointments are imperative for the health of both the mother and baby to help prevent complications associated with pregnancy and birth (Baldwin et al., 2002; Iyasu et al., 2002; Long & Curry, 1998; Sokoloski, 1995; White, Fraser-Lee, Tough, & Newburn-Cook, 2006). Unfortunately, many populations of women do not seek early and ongoing prenatal care, leading to detrimental health outcomes in the infant (Castor et al., 2006; Cramer, Chen, Roberts, & Clute, 2007; Derbyshire, 2007; Lane, 2004; Rosenberg, 2004). For example, American Indian women are less likely to obtain prenatal care in the first trimester, which often causes various health disparities (Centers for Disease Control and Prevention, 2002; Indian Health Service [IHS], 2005; Iyasu et al., 2002; U.S. Institute of Medicine, 2006). However, little is known about why American Indian women are less likely to seek early and ongoing prenatal care. The purpose of this study was

Corresponding Author: Jessica D. Hanson, Health Disparities Research Center, Sanford Research/USD, 2301 East 60th Street North, Sioux Falls, SD 57104, USA, Jessica.D.Hanson@sanfordhealth.org.

Declaration of Conflicting Interests
The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

to understand barriers to adequate prenatal care among American Indian women from one tribe in the Northern Plains and to introduce solutions within the health care system, including the importance of nurse midwives.

Review of Literature

Importance of Prenatal Care

Prenatal care is unique in that the objective is primarily preventative. The focus of prenatal care is to educate pregnant women, inform them of risk factors, and discuss any of their concerns (White et al., 2006). Prenatal appointments provide an opportunity for physicians to identify high-risk patients and alleviate the risk for negative birth outcomes associated with substance-exposed pregnancies, high blood pressure, or other preventable maternal complications. Early and regular prenatal appointments provide an opportunity for women to receive information and counseling regarding their pregnancy, as well as maternal and fetal screening, diagnosis, and treatment of complications that may be discovered (White et al., 2006). Interventions targeted at the prevention and cessation of substance use during pregnancy are helpful in further reducing the rate of preterm delivery, low birth weight, substance-exposed pregnancies, fetal alcohol syndrome, and infant mortality (Baldwin et al., 2002; Iyasu et al., 2002; Long & Curry, 1998; Sokoloski, 1995).

Increased amounts of prenatal care lead to improved birth outcomes because they enhance the possibility for appropriate health-related interventions as needed (Sokoloski, 1995). Prenatal care plays an important role in reducing maternal and infant mortality, while a lack of care increases the risk factors for poor birth outcome, including disabilities and other infant health concerns (Lane, 2004). Women who obtain care in a timely manner are half as likely as those who received no prenatal care to have a low-birth-weight infant (Derbyshire, 2007; Rosenberg, 2004). In addition, delayed or insufficient prenatal care increases the risk of infant mortality and premature birth (Cramer et al., 2007). Mothers who have had significantly fewer prenatal visits display more risk factors that may lead to severe complications during the pregnancy (Kvigne et al., 2003). Late or no prenatal care increases the likelihood that the mother will smoke, consume alcohol, and ignore a physician’s advice regarding vitamins, diet, and exercise (Castor et al., 2006).

The reasons behind lack of prenatal health care are complex and varying. The forces that influence a woman’s attitude toward prenatal care can be social, psychological, behavioral, environmental, biological, or sociodemographic (Lia-Hoagberg et al., 1990; Misra, Guyer, & Allston, 2003). There are several dimensions to using care, including a woman’s awareness of her pregnancy, her acceptance of the pregnancy, self-care behaviors, communication with family members, communication with her partner, social attitudes toward prenatal care, availability of prenatal care, and her attitude toward health care providers (Campbell, Mitchell, Stanford, & Ewigman, 1995). Besides physical barriers to seeking care (i.e., time, cost, lack of transportation), barriers to prenatal care can also include internal thoughts and emotions unique to the individual, such as mental health issues, problems with substance abuse, or a history of domestic violence (Brown, 1989; Johnson & Nies, 2005; Timmerman, 2007). Women who receive inadequate care prior to

pregnancy commonly identify a greater number of barriers to prenatal care, and they perceive these barriers as more severe (Lia-Hoagberg et al., 1990).

In addition, the quality of health care that women received prior to their pregnancy may create an additional barrier to prenatal care, especially if they had negative experiences with health professionals in the past (Campbell et al., 1995). Barriers to care in general were related to the relationship between a patient and his or her physician, including a patient having a provider who has personalized knowledge of the patient and their health beliefs and who shows respect and listens to the patient (Sofaer & Firminger, 2005). Within the realm of prenatal health care, healthy prenatal behaviors were associated with a woman discussing more pregnancy-related health topics with her doctor, and improved effectiveness of health care often included increasing prenatal health promotion during routine visits (Vonderheid, Norr, & Handler, 2007).

American Indian Women: Lack of Care and Health Disparities

American Indian women are especially at risk for health disparities related to lack of early and ongoing prenatal health care. According to the IHS, prenatal care began in the first trimester for only 66.5% of Indian live births for the whole IHS population as compared with 81.3% for the U.S. all races population (IHS, 2005). American Indian women and their infants face more health disparities as a result of differences in prenatal care. According to Centers for Disease Control and Prevention (2002) and the U.S. Institute of Medicine (2006), the “very low birth weight” rate (VLBW) has increased slightly since 1990 among American Indians, and preterm birth is higher among American Indians than White women. Along with alcohol consumption and smoking during pregnancy, VLBW is associated with a lack of prenatal care and preterm birth and can cause long-term disabilities such as cerebral palsy, autism, mental retardation, vision impairments, hearing impairments, and other developmental disabilities (Centers for Disease Control and Prevention, 2002; Iyasu et al., 2002).

Lack or deficiency of prenatal care is also related to increased rates of infant mortality in American Indian populations. Infants born to American Indian mothers who reported less than seven prenatal visits are at a significantly increased risk for sudden infant death syndrome (Iyasu et al., 2002), and according to the IHS (2005), the infant mortality rate for American Indian infants is 22% higher than for U.S. “all races.” In addition, heavier drinkers enter prenatal care later than other women. A high percentage of American Indian mothers who had babies die from sudden infant death syndrome consumed alcohol while pregnant, a risk factor that commonly decreases with preventive prenatal health visits (Hankin, McCaul, & Heussner, 2000; Iyasu et al., 2002; Sokoloski, 1995). These data reiterate the need for a change in both the amount and quality of prenatal care that American Indian women receive.

While there is a basic understanding of the reasons for lack of prenatal care for women in general, no previous studies have focused on American Indian women. Therefore, little is known about the care received by pregnant women at IHS hospitals, the federal health care entity serving American Indians on U.S. reservations, or why it appears that American Indian women are less likely to seek early and ongoing prenatal health care. The need to

understand lack of prenatal health care in this population is the greatest in terms of low rates of prenatal care and high rates of infant mortality. The purpose of this article is to develop an understanding of prenatal health care experiences for Northern Plains American Indian women from one tribe seeking care at IHS facilities. This research will help identify barriers to prenatal health care, as well as potential solutions to address health disparities related to prenatal health care, including the importance of nurse midwives.

Method

Qualitative interviews were carried out with 58 American Indian women to better understand the prenatal health experiences of American Indian women in the Northern Plains and how these experiences might act as barriers to seeking timely and continuing care during pregnancy. Qualitative methodology is especially important with American Indian participants as the researcher may not be familiar with the variety of responses this population deems relevant. Many cultural elements can only be uncovered through open-ended, qualitative interviews (Mohatt et al., 2008).

The questions were taken from previous research and included open-ended and semistructured questions about current prenatal practices, views on pregnancy, the benefits and drawbacks of prenatal care, and opinions about current models of prenatal care (Dempsey & Gesse, 1995; Sokoloski, 1995). Measures focused on developing understandings of prenatal care opinions, as well as past prenatal care experiences, including patient–provider communication experiences, barriers to care, and suggestions for improving prenatal health care for American Indian women. Before beginning data collection, approval was acquired from all the appropriate institutional boards, including the university institutional review board, the tribe's own research review board, and the Aberdeen Area Indian Health Service Institutional Review Board, the agency that oversees health care and research for the tribes in this area. After approval from these organizations, a project coordinator, an enrolled member of the tribe and familiar with available social service agencies, began data collection.

The project coordinator recruited participants by using contacts in the community and "word of mouth." A stratified sample was chosen from each district on the reservation (similar to a state's county) based on the percentage of total housing units in each district. This was done to identify and include in the sample an equivalent number of adult women of childbearing age, or ages 18 to 44, and "elder" women, defined by the community as women aged 44 years and older. It was critical to include elder women in this sample because of the important role that they play in the health and wellness of the community.

The women of childbearing age were known to the project coordinator based on the coordinator's previous work at a local health service organization and were contacted to see if they would be interested in participating; the elder women were approached at local community centers. Inclusion criteria included any American Indian women from the tribe of focus who had a previous pregnancy and who previously had prenatal health care at the main IHS facility or any of the outlying IHS clinics. Exclusion criteria included being non–American Indian and being currently pregnant, as the interest area was past experiences with

prenatal health care at the IHS facility. The interviews were conducted either in the participants' homes or in a private room at a community building.

The interviews were tape-recorded with the participants' permission and were sent to the project director for data transcription. Interview responses were entered into Atlas.ti, a software program created specifically for qualitative data analysis. Atlas.ti was used to store and organize the qualitative data. Data were analyzed using recommendations for qualitative research analysis from Cresswell (2009). Specifically, the raw data were organized via Atlas.ti and read through, then coded to look for themes within the data. To uncover and interpret interrelated themes, a conventional content analysis methodology was used (Hsieh & Shannon, 2005). Themes on prenatal health care experiences, barriers to care, and traditional definitions of pregnancy and prenatal health care were uncovered through reading all interview transcripts, making notes on initial impressions, and letting the codes emerge directly from the text (Hsieh & Shannon, 2005). These categories were put into three major clusters (see Results below) with several subcategories.

Credibility and confirmability of the qualitative data were established using Lincoln and Guba's (1985) techniques of conducting valid and reliable qualitative research. Specifically, credibility was established using prolonged engagement: The individual who conducted the interviews was an enrolled member of the tribe and worked previously in a health care organization, so rapport and trust were established. In addition, credibility was established by having the person conducting the interviews read the transcripts/coding and providing the final report to the tribal community. Finally, both credibility and confirmability were established by using qualitative and quantitative data collection, also known as "methods triangulation," to facilitate a deeper understanding of prenatal health care knowledge and experiences of American Indian women. This quantitative data collection, collected immediately before the qualitative interviews through Likert-type scale survey questions, was used to confirm attitudes and opinions regarding prenatal health care but was not included in this article due to the lack of variability in responses.

Results

A total of 58 American Indian women were interviewed using the questions in Table 1. The average age of the respondents was 40 (range = 18–77). Of the participants, 30 were between the ages of 18 and 44 and 27 were more than 44 years old (a goal of the project was to have a representative sample of these age groups), with one person not giving her age. The average number of previous pregnancies of the respondents was 3.72 (mode = 2, maximum = 10). Almost half (45.5%) of the participants were employed, with another 33.3% being unemployed and the rest stating they were a homemaker, a student, or retired. Less than half had some college (15.8%), an associate's degree (19.3%), or a bachelor's degree (14%), with 31.6% having a high school diploma and the rest (19.3%) having not completed high school. Finally, more than half of the respondents were either married and living with their spouse (26.3%) or in a relationship and living with their partner (24.6%), with the rest being single and never married, divorced, or widowed.

Communication Barriers

Interviews with American Indian women in the Northern Plains uncovered several communication barriers within prenatal health care. Many of the 58 American Indian women who were interviewed reported various communication difficulties with physicians at the IHS, the federal agency delegated with providing health care to American Indians living on reservations. Some of these communication barriers included physicians who seemed too busy to ask or respond to patient-related questions, feeling that the physician did not care about the patient or his or her reasons for seeking care, and an overall lack of trust of physicians, especially White physicians and "modern ways of medicine."

This lack of trust of IHS providers often resulted from negative experiences during pregnancy and delivery. When asked about her prenatal health care experiences, one American Indian woman in this sample stated,

> He [the doctor] said that I was going to have a C-section … [but] he wrote in my chart that I was supposed to have a natural birth. So I was in labor for 4 days before they did anything. And then they brought in a specialist.

Another woman, in describing past prenatal health care experiences, felt misled after the delivery of her son, saying, "They knew things that were wrong but never informed me until he was born and they said they knew ahead of time but I was never told."

It is such stories about substandard experiences that detour many women from seeking care during pregnancy. Many women felt discouraged from seeking prenatal care because they heard negative stories about poor prenatal care experiences from other American Indian women and immediately distrusted the provider or health care system as a whole.

Not all women had negative experiences affected by these communication barriers, with several stating they had "good" experiences. However, even in those positive experiences, many women still felt like there was something missing. For example, when asked about past prenatal health care experiences, one participant stated,

> I made it to all of my prenatal visits, I knew there was a lot more information that I wanted to know but I didn't ask for it, I don't know if they had it anyways, it was never offered there was no. … I went to the check-up and then they were done and there was no Q&A afterwards.

Another woman stated that she had generally positive interactions with the doctor and midwife, but "it was just one time I kinda had some problems with my doctor when I was delivering my fourth one."

This highlights the need for ongoing quality assurance measures, such as teaching new IHS providers about culturally appropriate methods of interaction, as highlighted in the "Solutions to Barriers" section below.

Institutional Barriers

The institutional barriers mentioned by these 58 participants included long waiting times for short appointments, with a waiting time of up to 2 hours for a 15-minute appointment. When

asked about the drawbacks of prenatal care, one participant stated that a barrier to care was "waiting in a long line, just too busy up there, too long of a wait for me."

Another participant commented on the lack of a separate waiting area for pregnant women when asked about solutions to barriers to prenatal care, stating,

> Cuz (*sic*) then you won't wait in the waiting room with a bunch of sick people and you already have problems with being pregnant like back pain and swollen feet and maybe they could have special chairs that like massage you while you wait. That would be nice.

In addition, the majority of American Indian women reported seeing a different physician for each prenatal appointment. While continuity of provider usually occurred if a woman saw a nurse practitioner or nurse midwife, most participants typically had a different physician if she saw only a doctor. When describing her typical interaction with a provider, one American Indian participant summed up: "Oh, you don't have one? Here have this one. It's whoever you get that day that's who you see."

One participant responded to this common practice, stating that because a woman saw a different provider at each visit, there was no trust or relationship built up between the woman and the provider, and "you get violated every single time."

There were various reasons that women at an IHS facility might see a different provider at each visit, including high turnover of physicians. When responding to the drawbacks of prenatal care, one American Indian woman believed,

> That's the same way with all IHS things, you go to a regular doctor and the next time you go they are gone, and you have to see a different one. I think that's what is wrong with IHS.

Another participant concluded that because of this

> there is no … type of relationship built up between the mother and anyone in the staff. And I think that you know might have a lot to do with why they don't go back.

One participant described a major drawback to prenatal care as being "relationships because I don't think they have got any kind of trust or the way they trust is different."

Other Barriers

American Indian women in the Northern Plains identified several other barriers, including transportation issues or work schedules that affected getting to, or keeping, prenatal appointments. When asked if she attending all her prenatal appointments, one participant stated that "I was a working single mother during my pregnancies, and I did try to go as much as possible, but I didn't make all of appointments."

Many of the American Indian women in this sample were also dealing with other serious (and by their definition, more severe) interpersonal problems that overrode the focus on prenatal care, such as high rates of poverty, sexual or physical abuse, depression, and

substance use. According to the participants, most women in this tribal community "probably live under the poverty level" and that "they don't have the income or housing that they need." The participants also felt that many American Indian women did not have support from their partner and may have been embarrassed because of an unplanned pregnancy, leading to a lower amount of prenatal health care.

Finally, many American Indian women who were interviewed were uncomfortable seeing a male physician for anything having to do with pregnancy or prenatal care and felt it was embarrassing and inappropriate to have a male physician during pregnancy. Although nearly all the respondents saw a female nurse-midwife for one or more of their pregnancies, they still stated that they would not see a male doctor or had switched from a male physician to a female provider. As one American Indian participant stated, "It doesn't feel right for a man to be there. It's better for a woman because I'm having a baby."

One woman felt that questions regarding female-specific issues, such as menstrual periods, were inappropriate and too personal from a male physician: "You know it's embarrassing for a guy to know all of this, it'd be better that a lady to ask this because we are the same."

When asked why she preferred a female nurse midwife over a male doctor, one participant stated,

> And you know that to me that is what I wanted because I don't know how to put it, or if all Indian women are this way but it is like um, I would not want a man to examine me or whatever in the comfort zone of the lady.

Solutions to Barriers

Based on these three themes of barriers to prenatal health care—communication barriers, institutional barriers, and other barriers—several solutions for American Indian women seeking prenatal care were identified. First, communication barriers mainly dealt with relationships between a pregnant woman and her provider. One critical note was the suggestion to see a single provider throughout the entire pregnancy, especially a nurse midwife. Female providers were cited by the participants as the preferred provider sought during pregnancy, and most (if not all) nurse midwives are female. Although not identified specifically by the participants, nurse midwives might also be the preferred provider because of the one-on-one, individualized interaction they provide to patients, especially since many of the nurse midwives at local tribal clinics stay for the long term (i.e., not as much turnover). Therefore, while there are nurse midwives available in many IHS hospitals and clinics, additional funding for nurse midwife positions would be helpful to holistically meet the needs of American Indian prenatal patients.

Barriers related to institutions can be overcome through supplemental appointments, home visits, a case management referral system, and help with transportation by outreach workers. The participants also proposed an emphasis on culturally appropriate education, intervention, and prevention, including overcoming communication barriers with their provider. Women suggested classes with a traditional elder woman on pregnancy and health care and more funding for pregnancy-related programs and education for the newly parenting. Using at least one of these will ideally increase patient contact with some type of

health care worker and will help overcome long waiting times at IHS. When waiting time for appointments is reduced, it is likely that patient satisfaction will improve, leading to optimal clinical care. In addition, incentives such as baby care items were identified to encourage women to attend prenatal health care appointments more consistently.

While interpersonal barriers to prenatal care may be more difficult to overcome because of the intrinsic position these forces play in women's lives, the participants suggested several solutions. First, there need to be multiple options for treatment for pregnant and newly parenting women drinking or using narcotics. Women living in rural and isolated areas have few options in relation to treatment, and programs, especially those that are culturally sensitive, are essential. In addition, although these services are rare, case management services and a referral system are imperative to guide women to the appropriate system, whether that is within social services, homeless or violence shelter referrals, or treatment programs. Women in this study also identified programs for partners and fathers as important to improving women's experiences during pregnancy.

Finally, the American Indian participants in this preliminary study strongly suggested woman-centered and culturally focused care, especially a specific clinic where women could receive holistic reproductive care, such as prenatal care and family planning options. This includes "traditional ways at IHS," a clinic focused on women's needs and prenatal care similar to off-reservation clinics, and promotion of the IHS nurse-midwife program. The majority of participants preferred having a female provider during some aspect of her prenatal care, especially when it was a provider who they saw regularly and continuously. Nurse midwives and nurse practitioners were identified as crucial to providing quality prenatal health care. Nearly all the younger women interviewed saw a nurse midwife for their prenatal care and delivery. They were happier and more comfortable with a midwife for several reasons, including the fact that most would rather see a woman than a man for prenatal health care and they felt the nurse midwife spent more time with them than a doctor. As one woman stated, "I didn't really talk to him like they way I did to (midwife's name)" because many women felt it is embarrassing and inappropriate to discuss many issues with a male physician. In addition, a midwife is seen as a positive alternative to traditional physician-dispersed medicine because "at least they take an interest once in awhile" and their care is provided on a continuum as opposed to different doctors at every visit.

Discussion

This study is unique in that it is one of the first qualitative studies to identify specific barriers to prenatal care for American Indian women in the Northern Plains, important both for understanding health disparities in this population and for policy development. Overall, this study indicated that it was quality of care, interaction with health care providers, and the worth, or lack of worth, that women identify in seeking care during pregnancy that may inhibit prenatal health care utilization. Communication barriers identified included communication difficulties with physicians at the IHS: physicians who seemed too busy to ask or respond to patient-related questions, feeling that the physician did not care about the patient or their reasons for seeking care, and an overall lack of trust of physicians.

Institutional barriers were described as long waiting time for appointments and lack of continuity of care. Long waits for short appointments led many of the American Indian women interviewed to conclude that prenatal appointments were a “waste of time.” Finally, other barriers to prenatal care were identified, such as transportation difficulties and being uncomfortable seeing a male physician. These barriers often inhibit American Indian women from seeking timely and continuing care throughout their pregnancies.

However, several solutions to these barriers were offered by the participants. These included improving patient–provider communication by encouraging culturally appropriate education, intervention, and prevention. This can be implemented via training with the health care providers as well as having pregnant women work with community elders. Implementing solutions to communication barriers is essential, as better communication with health care providers will ideally lead to better education on prenatal issues and more positive experiences within the realm of prenatal care, as “a more satisfactory course of care depends on more attention to the interpersonal relationships between caretakers and patients” (Sullivan & Beeman, 1982, p. 329). Women who seek little or no prenatal care often cite a dislike of going to doctors or having a previous unsatisfying experience with health services (Brown, 1989; Rogers & Schiff, 1996).

In addition, although it was difficult to determine clear themes of solutions for institutional barriers (i.e., long waiting times and lack of continuity of care), it is important for these issues to be addressed via policy changes in order to encourage early entrance into prenatal care. Patients are more satisfied with their care if they waited less than 30 minutes (Handler, Rosenberg, Raube, & Kelley, 1998), and many women do not receive prenatal care because the appointment was too short and impersonal (Curry, 1990). This leads to greater levels of distrust and feelings of disrespect, as patients measure quality of care through clear coordination and seeing the same physician throughout (Sofaer & Firminger, 2005). Maintaining patient-centered care and positive relationships between a provider and a patient can lead to better opinions about care and thus greater utilization of care (Rutten, Augustson, & Wanke, 2006).

Finally, one of the main solutions was to see a single provider throughout the entire pregnancy, especially a nurse midwife. Specifically, the majority of participants preferred having a female provider during some aspect of her prenatal care, and nurse midwives and nurse practitioners were identified as crucial to providing quality prenatal health care. Female providers are essential to increasing utilization of prenatal health care among American Indian women. A lack of female health care providers prevents some women from presenting all their health needs (Currie & Wiesenberg, 2003), and the sex of a provider and quality of interactions are often associated with the trust the patient had with their health care provider (Halbert, Armstrong, Gandy, & Shaker, 2006). This may be because nurse midwives tend to discuss more topics with their pregnant patients (18.3 topics vs. 15.1 topics discussed by doctors), which is associated with attending more prenatal appointments (Vonderheid et al., 2007). When compared with MD doctors, women who see a certified nurse midwife for prenatal care reported more encouragement to engage in positive health behaviors; this may be because nurse midwives are more likely to engage in health-related discussions with the patients on a one-on-one basis, whereas doctors are more likely to rely

on clinic staff (who may not have time or resources to do so) for teaching patients (Vonderheid et al., 2007).

While this study did not identify how these barriers or introduced solutions could influence the utilization of care among American Indian women from this tribe, previous literature highlights that the quality of health care that women received during pregnancy has been found to create a barrier to seeking ongoing care if the woman has a negative experience with her health care provider (Campbell et al., 1995). This is concerning as American Indian women are less likely to seek prenatal care in the first trimester (IHS, 2005) and are faced with a variety of maternal–child health disparities, including higher rates of infant mortality and very low birth weight babies (Centers for Disease Control and Prevention, 2002; Iyasu et al., 2002).

This research is similar to Lia-Hoagberg et al. (1990) in which barriers to prenatal care are identified for a particular subpopulation of women. Previous research has already delved into reasons for lack of entry into prenatal health care (Park, Vincent, & Hastings-Tolsma, 2007; Sarnoff & Adams, 2001; Walker, Cooney, & Riggs, 1999), although none of these has focused specifically on American Indians in the Northern Plains using qualitative methods. In addition, previous studies have identified various methods of increasing first trimester prenatal care (i.e., transportation and monetary incentives; Laken & Ager, 1995; Melnikow, Palieschekey, & Stewart, 1997), although, again, none of these have been tested with rural American Indian tribes. Recent research has begun exploring the utilization of home visitation (Barlow et al., 2006; Walkup et al., 2009) and “cultural broker” programs (Burhansstipanov et al., 1998), both of which could be excellent models of care for encouraging early and consistent prenatal health care among American Indian women in the Northern Plains.

Conclusion

This study was an important first step in understanding prenatal health care experiences for American Indian women from one tribe in the Northern Plains. Few studies have delved into reasons for lack of prenatal care among American Indian women, although this is a population with high rates of infant mortality and low-birth-weight babies. There are several concerning aspects of prenatal care as experienced by the women in this sample. Because comprehensive prenatal health care is such an important preventive measure during pregnancy, it is troubling to note that the American Indian women in this study cited several barriers to care. These barriers included communication barriers, especially lack of trust of physicians and various examples of unsatisfying experiences with their health care during pregnancy; institutional barriers such as long waits for appointments and lack of continuity of care; and other barriers, such as interpersonal problems that overrode the focus on prenatal care (i.e., transportation issues, violence in the home, and living in poverty).

There are a few identified limitations to this study. First, data were collected using a convenience sample rather than a random sample of American Indian women. Also, the sample was only in one tribal community in the Northern Plains. Therefore, the findings from this study cannot be generalized to American Indian women overall or even American

Indian women from all tribal communities in the Northern Plains. Finally, as with any qualitative study, there is the potential for analysis bias, recall error, reactivity of the participant to the interviewer, and self-serving responses (Patton, 2002).

Although much was uncovered in this study, several questions are left unanswered. For example, there may be other barriers to receiving care for American Indian women who were not identified in this study. Therefore, future studies with other tribal communities are necessary to more fully understand the complex issue of using care throughout pregnancy in diverse American Indian populations. Also, there was no direct correlation made between actual utilization of prenatal care and how it might have been affected by their experiences in the health care setting. In addition, several feasible solutions to barriers to care were suggested, and it is important to implement and evaluate these potential models of care within the realm of prenatal care. For instance, the women interviewed preferred nurse midwives for prenatal care; therefore, it is important to evaluate the benefits of implementing a large nurse midwife recruitment program for tribal communities. Larger tribes might also benefit from a “centering pregnancy” program.

Finally, many of the interviewees discussed the need for culturally competent care and the inclusion of cultural traditions within prenatal care. This could be in the form of a cultural broker case management program with pregnant American Indian women or comprehensive cultural competence training for health care providers. Overall, the women from this tribal community in the Northern Plains described how a community-based approach that includes elder women, fathers, and other important individuals will not only increase utilization of care during pregnancy but will also empower women before, during, and after pregnancy.

Acknowledgments

The author would like to thank Fred Cedar Face, Shawnda Otto, DenYelle Kenyon, PhD, and Amy Elliott, PhD, for their invaluable help with project development, tribal approval, and input into this article.

The content is solely the responsibility of the author and does not necessarily represent the official views of the National Center on Minority Health and Health Disparities or the National Institutes of Health.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding for this update was made possible by a pilot grant from grant award #5P20MD001631-04 from the National Center on Minority Health and Health Disparities.

References

Baldwin LM, Grossman DC, Casey S, Hollow W, Sugarman JR, Freeman W, Hart LG. Perinatal and infant health among rural and urban American Indians/Alaska Natives. American Journal of Public Health. 2002; 92:1491–1497. [PubMed: 12197982]

Barlow A, Varipatis-Baker E, Speakman K, Ginsburg G, Friberg I, Goklish N, Walkup J. Home-visiting intervention to improve child care among American Indian adolescent mothers. Archives of Pediatrics & Adolescent Medicine. 2006; 160:1101–1107. [PubMed: 17088511]

Brown S. Drawing women into prenatal care. Family Planning Perspectives. 1989; 21:73–80. [PubMed: 2714428]

Burhansstipanov L, Wound DB, Capelouto N, Goldfarb F, Harjo L, Hatathlie L, White M. Culturally relevant “navigator” patient support: The Native Sisters. Cancer Practice. 1998; 6:191–194. [PubMed: 9652252]

Campbell JD, Mitchell P, Stanford JB, Ewigman BG. Women's perception of self-worth and access to health care. Journal of Family Practice. 1995; 41:457–464. [PubMed: 7595263]

Castor ML, Smyser MS, Maile MT, Park AN, Lawson SA, Forquera RA. A nationwide population-based study identifying health disparities between American Indians/Alaska Natives and the general populations living in select urban counties. American Journal of Public Health. 2006; 96:1478–1484. [PubMed: 16571711]

Centers for Disease Control and Prevention. National Center for Health Statistics: Birthweight and gestation. 2002. Retrieved from http://www.cdc.gov/nchs/fastats/birthwt.htm

Cramer ME, Chen L, Roberts S, Clute D. Evaluating the social and economic impact of community-based prenatal care. Public Health Nursing. 2007; 24:329–336. [PubMed: 17553022]

Cresswell, JW. Research design: Qualitative, quantitative, and mixed methods approaches. 3rd ed.. Thousand Oaks, CA: SAGE; 2009.

Currie D, Wiesenberg S. Promoting women's health-seeking behavior: Research and the empowerment of women. Health Care for Women International. 2003; 24:880–899. [PubMed: 14742127]

Curry MA. Factors associated with inadequate prenatal care. Journal of Community Health Nursing. 1990; 7:245–252. [PubMed: 2243268]

Dempsey P, Gesse T. Beliefs, values, and practices of Navajo childbearing women. Western Journal of Nursing Research. 1995; 17:591–604. [PubMed: 8597227]

Derbyshire E. Low maternal weight: Effects on maternal and infant health during pregnancy. Nursing Standard. 2007; 22(3):43–46. [PubMed: 17966921]

Halbert CH, Armstrong K, Gandy OH Jr, Shaker L. Racial differences in trust in health care providers. Archives of Internal Medicine. 2006; 166:896–901. [PubMed: 16636216]

Handler A, Rosenberg D, Raube K, Kelley MA. Health care characteristics associated with women's satisfaction with prenatal care. Medical Care. 1998; 36:679–694. [PubMed: 9596059]

Hankin J, McCaul ME, Heussner J. Pregnant alcohol-abusing women: Women and alcohol. Alcoholism: Clinical & Experimental Research. 2000; 24:1276–1286.

Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qualitative Health Research. 2005; 15:1277–1288. [PubMed: 16204405]

Indian Health Service. Regional differences in Indian health, 1998–1999. 2005. Retrieved from http://www.ihs.gov/publicinfo/publications/trends98/region98.asp

Iyasu S, Randall LL, Welty TK, Hsia J, Kinney HC, Mandell F, Willinger M. Risk factors for sudden infant death syndrome among Northern Plains Indians. Journal of the American Medical Association. 2002; 288:2717–2723. [PubMed: 12460095]

Johnson RL, Nies MA. A qualitative perspective of barriers to health promoting behaviors of African Americans. Association of Black Nursing Faculty Journal. 2005; 16(2):39–41.

Kvigne VL, Leonardson GR, Borzelleca J, Brock E, Neff-Smith M, Welty TK. Characteristics of mothers who have children with fetal alcohol syndrome or some characteristics of fetal alcohol syndrome. Journal of the American Board of Family Medicine. 2003; 16:296–303.

Laken MP, Ager J. Using incentives to increase participation in prenatal care. Obstetrics & Gynecology. 1995; 85:326–329. [PubMed: 7862366]

Lane T. Maternal mortality risk rises with cesarean birth, falls with prenatal care. Perspectives on Sexual Reproductive Health. 2004; 36:37–38.

Lia-Hoagberg B, Rode P, Skovholt CJ, Oberg CN, Berg C, Mullett S, Choi T. Barriers and motivators to prenatal care among low-income women. Social Science & Medicine. 1990; 30:487–495. [PubMed: 2315731]

Lincoln, YS.; Guba, EG. Naturalistic inquiry. Beverly Hills, CA: SAGE; 1985.

Long CR, Curry MA. Living in two worlds: Native American women and prenatal care. Health Care of Women International. 1998; 19:205–215.

Melnikow J, Palieschekey M, Stewart GK. Effect of a transportation incentive on compliance with the first trimester appointment: A randomized trial. Obstetrics & Gynecology. 1997; 89:1023–1027. [PubMed: 9170485]

Misra DP, Guyer B, Allston A. Integrated perinatal health framework: A multiple determinants model with a life span approach. American Journal of Preventive Medicine. 2003; 25:65–75. [PubMed: 12818312]

Mohatt G, Rasmus S, Thomas L, Allen J, Hazel K, Marlatt G. Risk, resilience, and natural recovery: A model of recovery from alcohol abuse for Alaska Natives. Addiction. 2008; 103:205–215. [PubMed: 18042193]

Park JH, Vincent D, Hastings-Tolsma M. Disparity in prenatal care among women of colour in the USA. Midwifery. 2007; 23:28–37. [PubMed: 16842895]

Patton, MQ. Qualitative research and evaluation methods. Thousand Oaks, CA: SAGE; 2002.

Rogers C, Schiff M. Early versus late prenatal care in New Mexico: Barriers and motivators. Birth. 1996; 23:26–30. [PubMed: 8703254]

Rosenberg J. Low birth weight is linked to timing of prenatal care and other maternal factors. International Family Planning Perspective. 2004; 30:101–102.

Rutten LJ, Augustson E, Wanke K. Factors associated with patient's perceptions of health care providers' communication behavior. Journal of Health Communication. 2006; 11(Suppl. 1):135–146. [PubMed: 16641079]

Sarnoff R, Adams E. Racial and ethnic disparities in the discordance between women's assessment of the timing of their prenatal care entry and the first trimester standard. Maternal and Child Health Journal. 2001; 5:179–187. [PubMed: 11605723]

Sofaer S, Firminger K. Patient perceptions of the quality of health services. Annual Review of Public Health. 2005; 26:513–559.

Sokoloski EH. Canadian First Nations women's beliefs about pregnancy and prenatal care. Canadian Journal of Nursing Research. 1995; 27:89–100. [PubMed: 7621378]

Sullivan DA, Beeman R. Satisfaction with maternity care: A matter of communication and choice. Medical Care. 1982; 20:321–330. [PubMed: 7078291]

Timmerman GM. Addressing barriers to health promotion in underserved women. Family & Community Health. 2007; 30(1 Suppl.):S34–S42. [PubMed: 17159630]

U.S. Institute of Medicine. Preterm birth: Causes, consequences, and prevention. 2006 Retrieved from http://www.iom.edu/CMS/3740/25471/35813.aspx.

Vonderheid SC, Norr KF, Handler AS. Prenatal health promotion content and health behaviors. Western Journal of Nursing Research. 2007; 29:258–276. [PubMed: 17420520]

Walker LO, Cooney AT, Riggs MW. Psychosocial and demographic factors related to health behaviors in the 1st trimester. Journal of Obstetric, Gynecologic, and Neonatal Nursing. 1999; 28:606–614.

Walkup JT, Barlow A, Mullany B, Pan W, Goklish N, Hastings R, Reid R. Randomized controlled trial of a paraprofessional-delivered in-home intervention for young reservation-based American Indian mothers. Journal of the American Academy of Child & Adolescent Psychiatry. 2009; 48:591–601. [PubMed: 19454915]

White DE, Fraser-Lee NJ, Tough S, Newburn-Cook CV. The content of prenatal care and its relationship to preterm birth in Alberta, Canada. Health Care for Women International. 2006; 27:777–792. [PubMed: 17060178]

Table 1

Interview Questions

1.	How do you define “health” and “wellness”? What do these terms mean to you?
2.	How do you view and define pregnancy or pregnant women in general?
3.	How do you define “prenatal care”? What does this term mean to you?
4.	Based on this definition, describe your own prenatal health behaviors (i.e., frequency, experiences, etc.).
5.	Describe a typical interaction with a physician (any physician seen for prenatal health care reasons).
6.	What do you see as some of the benefits of prenatal health care?
7.	What do you see as some of the drawbacks of prenatal health care?
8.	What barriers to prenatal health care do you see for American Indian women?
9.	What are some solutions to these identified drawbacks and barriers?
10.	What are your opinions on current models of prenatal health care?
11.	How would you define a “traditional American Indian view” of prenatal health care?
12.	What are your thoughts on combining these traditional views with current prenatal practices?