Culturally Specific Maternity Care in Wisconsin

Helen Luce, DO; Jackie Redmer, MD, MPH; Mark Gideonsen, MD; Lee Dresang, MD; Beth Potter, MD; Sarina Schrager, MD, MS

ABSTRACT
There are significant health disparities in maternity care in the United States. One way to decrease these disparities may be to improve prenatal care among underserved minority women. This article reviews cultural and ethnic issues that may impact maternity care within 5 different groups of women commonly seen by maternity care providers in Wisconsin: African American, Latina, Hmong, Amish, and immigrant women. Understanding concerns that are specific to each group (such as higher rates of gestational diabetes in Latina women or desires to limit pelvic exams among Hmong women) may help clinicians provide more patient-centered maternity care.

INTRODUCTION
There are significant health disparities in maternity care in the United States. One way to decrease these disparities may be to improve prenatal care among underserved minority women. A tenet of the patient-centered medical home model includes patient-centered care. In order to provide patient-centered maternity care, the clinician must be knowledgeable about each woman’s culture, race, and ethnicity and the unique risks that each may bring to her pregnancy. By being patient-centered, the clinician may be able to positively impact pregnancy outcomes. This article provides culturally specific information about 5 groups of women: African American, Latina, Hmong, immigrant, and Amish.

AFRICAN AMERICAN WOMEN
There has been a marked decline in maternal mortality in the United States for African American and non-Hispanic white (white) women since the 1940s. Historically, the maternal mortality ratio has been consistently higher for African American women.1 (Table 1) The causes of maternal mortality—including hypertensive disorders of pregnancy, postpartum hemorrhage, and cardiomyopathy—are equally prevalent for African American women as for white women, but mortality from these conditions is 2 to 3 times higher for African American women.2

The African American infant mortality ratio (IMR) also has been consistently higher than that of whites. From 1980 to 2000, the white IMR declined from 10.9 to 5.7 per 1000 live births while the African American IMR declined from 22.2 to 14.0 per 1000 live births.3 In 2006, the overall IMR was 6.69 per 1000 live births with African American IMR being 2.4 times greater than the white IMR.4 Madison, Wisconsin, is an exception to this comparative difference in infant mortality. From 2002 to 2007, the African American IMR equaled that for whites. It is not certain why African American IMR seem intractably higher in much of the country, or why it dropped so markedly in Madison.5

An important factor contributing to the higher African American IMR is the higher rate of preterm delivery and low birth weight (LBW) and very low birth weight (VLBW) babies. Preterm delivery accounts for 70% of perinatal deaths not attributable to chromosomal anomalies.6 In 2000, the African American rate of LBW infants was 13% and VLBW infants was 3.7%, compared with 6.5% and 1.14% respectively for white.7 In Madison, the drop in African American IMR corresponded with a drop in the African American rate of VLBW infants to 2% and in delivery at 28 weeks or earlier to 1.1%, which may be a causative factor.5

Sickle cell disease is an autosomal recessive disease. One in 12 African Americans has sickle cell trait and 1 in 300 has sickle cell disease.7 The American College of Obstetricians and Gynecologists7 recommends that women of African descent be offered sickle cell screening with a complete blood count and be offered genetic counseling.7 Women with sickle cell disease in pregnancy are at increased risk of miscarriage, stillbirth, intrauterine growth restriction, and preterm labor.8

Lack of access to prenatal care may contribute to inferior
perinatal outcomes. In a study of over 14 million births, the preterm birth rate was 15.1% for African American women who received prenatal care and 34.9% for those who did not.6 African American women are 3.2 times less likely to have pre-
natal care than are white women.6 Lack of preconception care (care prior to pregnancies), inter-conception care (care between pregnancies), and primary care may play as much of a role in pregnancy outcomes as care during a pregnancy.9,10

Being healthy prior to pregnancy with the help of quality primary care affects outcomes. A 50-state study found that an increase of 1 primary care doctor per 10,000 population is associated, on average, with a 2.5% reduction in infant mortal-
ity and a 3.2% reduction in LBW infants.9

Racism and the legacies of racism may play a role in worse prenatal care outcomes for African American women. Examples of racism in health care include the Tuskegee study where the US government conducted syphilis experiments on African Americans without their knowledge, as well as birth control/ eugenics practices/forced sterilization, and neglect of black patients. Less than 60 years ago, health facilities were legally separ-
ated by race, and today many clinics and hospitals with mostly African American clients are underfunded and understaffed.

Interviews of African American women found that stress and racism play a part in their reported pregnancy experiences.11 Racism has many layers including “women's childhood experiences and their potentially enduring impact, perceptions of institutionalized racism and internalized negative stereotypes, vicarious experiences related to their children, vigilance in anticipating future racism events, as well as the pervasiveness and chronicity of racism exposure.”12 Distrust of the health system is a complex topic and studies show varying results; 1 study suggests that African Americans value characteristics such as provider respect, care, and confidentiality more than tech-
ical competence.13 The experience of racism has been linked to VLBW infants in African Americans.14 However, African American women who see their provider as caring and competent will use the health system more.15

Beyond provider attitudes and interactions, economic rac-
ism and structural racism are intangibles that may affect preg-
nancy outcomes of African American women. While African American women face racism and often have worse birth out-
comes, there are many strengths commonly found in African American communities. Intergenerational family support and
multigenerational families have been an asset for many African American women.16

Latina Women

The Latino population in the United States is made up of a
diverse group of people from Spanish-speaking regions in
North and South America as well as in the Caribbean. Despite
the fact that Latinos are among the most socioeconomically

disadvantaged groups in the United States, Latina women
have some of the most favorable birth outcomes. This has
been called the Latina Paradox.17 The most favorable outcomes
occur in women from Mexico and Central America who have
recently immigrated to the United States, compared with more
acculturated women.

Latina women often enter prenatal care late in pregnancy. Only 57.7% of Latina women receive prenatal care in the first trimester, as compared to 76.2% of white women.18 However, despite this difference, Latina women still have better birth outcomes with less fetal demise and preterm birth than most other ethnic groups. Latina women have a higher risk of con-
genital abnormalities. There is a higher incidence of neural tube defects among Latina women—4.18 per 10,000 births com-
pared to 3.37 and 2.9 per 10,000 births for white and African
American women.18 According to data from the Centers for Disease Control and Prevention (CDC), adequate intake of folic acid remains low in the Latino population in the United States. One subgroup of Latina women, women from Puerto Rico, is at higher risk for preterm and low birth weight births.18

Latina women have lower risk of maternal mortality com-
pared to other women.18 The risk of hypertensive disorders
is low in Latina women. However, Latina women have twice
the rate of preeclampsia when compared to white women.19

Latina women have higher rates of obesity and diabetes before
becoming pregnant. In addition, they have higher rates of
gestational diabetes. In a retrospective cohort study of almost
140,000 women, 4.9% of Latina women developed gestational
diabetes as compared to 3.4% of white women and 3.2% of
African American women. In this study, Asian women had the
highest risk of gestational diabetes mellitus (GDM) at 6.8%
($P<0.001$).20 During delivery, Latina women are at a higher
risk of having a caesarean section. In 1 study, Latina women
had a 1.19 times greater risk of c-section despite adjusting for
known risk factors such as pre-existing disease and pregnancy
complications.21

The Latina Paradox does not apply only to birth outcomes. There is a lower all-cause mortality among Latinos in most age
groups except for young adult males. It remains unclear what
accounts for the Latina Paradox. Some researchers have attrib-

| Year | Ratio  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1940</td>
<td>2.4</td>
</tr>
<tr>
<td>1950</td>
<td>3.6</td>
</tr>
<tr>
<td>1960</td>
<td>4.1</td>
</tr>
<tr>
<td>1970</td>
<td>3.9</td>
</tr>
<tr>
<td>1980</td>
<td>3.4</td>
</tr>
<tr>
<td>1990</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Table 1. Maternal Mortality Ratio between African American and White Women (African American Maternal Deaths per 100,000 Live Births/White Maternal Deaths per 100,000 Live Births)
uted the improved health outcomes to only healthy immigrants coming to this country. Others feel there are cultural and social protective factors. There is strong cultural support for maternity and healthy behaviors as well as social support of other family members—sisters and extended family—in new immigrants. These protective factors seem to disappear in future generations.

**Hmong Women**

The Hmong people, native to Laos, were forced to flee due to persecution after US troops left Vietnam. The United States accepted a majority of these refugees as immigrants. Based on 2000 US Census data, the Hmong population in the United States is 169,428. California, Minnesota, and Wisconsin, respectively, have the largest reported Hmong populations in the United States.22

There are 18 recognized clans in the patriarchal Hmong society. Decisions are made by the eldest male family member with input from other male members of the clan.23 The Hmong place a significant emphasis on large families. Hmong culture traditionally views pregnancy and childbirth as the “major contribution” that a woman makes to the family.24

There are many barriers to integrating into the Western medical system for Hmong patients.25 The largest barrier is language. There are no Hmong words for many Western medical and anatomical terms.23 Another barrier for Hmong women, who are extremely modest, is the physical exam. Not understanding the different perspectives on health may present another major barrier between Hmong people and Western medicine.25 Hmong patients seek trusting relationships and behaviors that demonstrate caring. These have greater value than medical skill.

A study of 648 Hmong women found that one-third did not start prenatal care until the third trimester and only one-sixth sought care in the first trimester.25 Another study of 141 Hmong couples reported that 60% began prenatal care in the first trimester when delivering infants in the United States.26 A study of 52 Hmong women found that common barriers to initiating early prenatal care included transportation, language, and not wanting to be examined.24 Some Hmong patients believe that being touched by a doctor or having an ultrasound in the first half of the pregnancy may cause a miscarriage.24,26 Others believe that Western medical care is for illness, and pregnancy is not considered an illness.28 Many Hmong women believe that pelvic exams violate their privacy.25,28,29 Many Hmong women experienced sexual assault and rape in refugee camps, and pelvic exams may cause significant emotional trauma for these women.28

Traditionally, Hmong women follow a healthy diet and very rarely use caffeine, tobacco, and alcohol;26 however, younger Hmong women assimilated to American culture should be asked about the use of these substances during pregnancy.

Whereas pregnancy is considered a “hot” state, the delivery process is considered a “cold” experience and puts the Hmong woman at risk of soul loss.25 To protect modesty, drawing curtains, draping appropriately during pelvic exams, and limiting vaginal exams during labor may be helpful, when appropriate.25

Protective jewelry, which can include silver or copper necklaces and string or yarn bracelets, should not be removed unless absolutely necessary.25,28 These are believed to tie the soul to the person’s body and removal could cause soul loss, illness, and/or death.28,30 Review of herbal medications being used by the laboring patient is important so any potential interactions with pharmaceuticals can be avoided.25

Preterm deliveries are less frequent in the Hmong population. Only 1% preterm deliveries were reported in 1 study, compared to 11.9% in the general US population during the same time period.26 In 1 study of 430 Southeast Asian (SEA) women in the United States, grand multiparity, short interpregnancy intervals, anemia, parasitic infections, and hepatitis B were frequent findings.31 Fetal distress, dystocia, and cephalopelvic disproportion are uncommon in Hmong women.28,31 Birth weights are similar to the comparison non-Hmong population until 39 weeks gestation, after which Hmong neonates are significantly smaller.31 Invasive procedures are discouraged in the Hmong culture and low rates of amniotomy, episiotomy, and cesarean sections were noted.31

**Perinatal Health and Immigration**

Research on the impact of migration status on perinatal health outcomes has shown conflicting results. Some studies show negative associations between maternal and neonatal mortality and complications in labor;32,33 while others demonstrate “the healthy migrant effect” in which immigrants have less preterm birth or low birth weight compared to the host country women.34-37 These observations are based on the theory that people who are more able to migrate and be mobile are healthier and generally have better birth outcomes than those who do not move. Thus, the better birth outcomes observed among foreign-born women, compared to US-born women, stem in part from a “selection bias” prior to conception. Additionally, acculturation and the incorporation of the norms and behaviors of the host country may negatively impact the health of subsequent generations after immigration.34-37

One of the largest studies on pregnancy outcomes in immigrant women included a retrospective cohort study of all deliveries at Grady Memorial Hospital in Atlanta, Georgia, from 1991 to 2002. A total of 49,904 deliveries were analyzed, and 27% were foreign-born from 164 countries. Compared with US-born women, foreign-born women had a higher mean birth weight (3315 g vs 3083 g), and a lower risk of preterm delivery, perinatal mortality, hypertension, and HIV infection. However, foreign-born women had an increased risk of dia-
Livelihoods typically revolve around small farms, carpentry, and crafts. Families can theoretically live as they choose within the bounds of the Ordnung, but in practice, community norms dictate many details of daily life. Families are patriarchal and submission to church, husband, or father is enforced.

Amish people generally enjoy good health thanks to a lifestyle that includes plenty of exercise, a healthy diet, and low rates of tobacco and alcohol use. There is not a lot of evidence-based research within this community. One population-based survey of 288 Amish women in Pennsylvania found that Amish women had fewer LBW babies but the same number of preterm babies as a comparison group.

Several Amish health care beliefs pose challenges to medical providers. Support is limited for preventive measures, although some families are open to Rhogam. Medical interventions may be shunned in favor of natural remedies or sham treatments that are actively promoted to this community. Women may delay entry into prenatal care or seek care from lay providers instead of medical professionals. Women who suffer miscarriage or stillbirth may struggle with what they’ve done to precipitate “God’s wrath.” Financial and legal concerns prevent some Amish people from seeking care from physicians. The cost of a hospital birth may exceed a family’s annual cash income.

Certain Amish cultural norms present challenges to maternity care providers as well. Children are told that babies arrive directly from heaven so one cannot discuss peripartum issues in the presence of adolescents or children. The man often speaks for his wife, and makes health-related decisions, and may decline or delay treatment, raising concerns for control or abuse issues. Barriers to the identification of abuse include male domination and pressure to resolve issues within the community.

<table>
<thead>
<tr>
<th>Box. Clinical Pearls for Maternity Care Providers in Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen pregnant African American women and those considering pregnancy for sickle cell trait with a hemoglobin electrophoresis.</td>
</tr>
<tr>
<td>When treating immigrant women, don’t make assumptions because immigration status is a broad concept depending on length of time in country, economics, language, and circumstances of migration.</td>
</tr>
<tr>
<td>Hmong women are extremely modest; therefore, protective measures such as drawing curtains, draping appropriately during pelvic exams, and limiting vaginal exams during labor, should be considered by health care providers, when appropriate.</td>
</tr>
<tr>
<td>Hmong society is patriarchal, and decisions are often made by the eldest male family member with input from other male members of the clan.</td>
</tr>
<tr>
<td>Amish do not participate in insurance schemes and are very sensitive to cost. It is helpful to provide the cost of any visit, procedure, or intervention along with counseling of risks and benefits.</td>
</tr>
<tr>
<td>Amish families have wide latitude to do what they think is right within the bounds of the community’s Ordnung, so don’t assume an Amish patient will automatically decline an examination or intervention on religious grounds.</td>
</tr>
<tr>
<td>Latina women have lower rates of maternal mortality, but higher rates of pre-eclampsia and gestational diabetes as compared to white women.</td>
</tr>
</tbody>
</table>

Maternity Care of Amish Women

Old Order Amish adhere to Christian traditions dating to 17th century Switzerland. Amish believe in remaining separate from the world, so they avoid having electricity or telephones in the home. Each congregation of 20 to 40 families is autonomous, with a set of rules, the Ordnung, and male leaders are selected by drawing lots. Amish people marry young and contraception is not condoned, so families are often large. A retrospective study of 475 Amish women in Ohio found that women over 44 had an average of 8.3 live births during their lifetimes. Livelihoods typically revolve around small farms, carpentry, and crafts. Families can theoretically live as they choose within the bounds of the Ordnung, but in practice, community norms dictate many details of daily life. Families were at slightly greater risk of feto-infant mortality than “majority” receiving populations. Additionally, Asian and sub-Saharan African migrants were at greater risk of preterm birth, low birth weight, and health-promoting behavior were as good or better than as those for receiving-country women in greater than 50% of all studies. Meta-analyses of different ethnic groups, however, found that Asian and sub-Saharan African migrants were at slightly greater risk of feto-infant mortality than “majority” receiving populations. Additionally, Asian and sub-Saharan African migrants were at greater risk of preterm birth. The same study showed that Latin American migrants in the United States had a lower risk of preterm birth. A separate study of Latina women in the United States found evidence to support infants born to Mexican migrants had a lower risk of low birth weight and small-for-gestational age compared to those who were of the same ethnicity but did not migrate. Results of epidemiologic data must be interpreted with caution as experimental design varies considerably across studies. Socioeconomic factors or whether comparison groups included all host-country women or host-country women from the same general ethnic group are of particular importance. The circumstances of immigration and refugee status, time in country, and language fluency preclude making generalizations about the health status of immigrants.

One recent systematic review included 23 studies of maternal fetal health outcomes for immigrant women in western, industrialized countries including the United States, Europe, and Canada. Most studies used population-based data registers. Migrants’ results for preterm birth, low birth weight, and health-promoting behavior were as good as or better than as those for receiving-country women in greater than 50% of all studies. Meta-analyses of different ethnic groups, however, found that Asian and sub-Saharan African migrants were at slightly greater risk of feto-infant mortality than “majority” receiving populations. Additionally, Asian and sub-Saharan African migrants were at greater risk of preterm birth. The same study showed that Latin American migrants in the United States had a lower risk of preterm birth. A separate study of Latina women in the United States found evidence to support infants born to Mexican migrants had a lower risk of low birth weight and small-for-gestational age compared to those who were of the same ethnicity but did not migrate. Results of epidemiologic data must be interpreted with caution as experimental design varies considerably across studies. Socioeconomic factors or whether comparison groups included all host-country women or host-country women from the same general ethnic group are of particular importance. The circumstances of immigration and refugee status, time in country, and language fluency preclude making generalizations about the health status of immigrants.
Genetic disorders including maple syrup urine disease and Crigler-Najjar syndrome are prevalent among Amish people because of “founder’s effect”: most Amish descend from about 200 18th century immigrants. Amish people are aware of health risks of consanguinity and do not marry close relatives. Spontaneous chromosomal anomalies including Down syndrome are seen at rates similar to other communities. Routine genetic screening is not done, so careful reviews of family history are essential to identify risks of genetic disorders.

CONCLUSION
Maternity care providers will benefit from more culturally specific information about their patients. Understanding the unique characteristics of each pregnant patient may improve care and reduce disparities.

Funding/Support: None.

Financial Disclosures: None.

REFERENCES


The mission of WMJ is to provide a vehicle for professional communication and continuing education for Midwest physicians and other health professionals.

WMJ (ISSN 1098-1861) is published by the Wisconsin Medical Society and is devoted to the interests of the medical profession and health care in the Midwest. The managing editor is responsible for overseeing the production, business operation and contents of the WMJ. The editorial board, chaired by the medical editor, solicits and peer reviews all scientific articles; it does not screen public health, socioeconomic, or organizational articles. Although letters to the editor are reviewed by the medical editor, all signed expressions of opinion belong to the author(s) for which neither WMJ nor the Wisconsin Medical Society take responsibility. WMJ is indexed in Index Medicus, Hospital Literature Index, and Cambridge Scientific Abstracts.

For reprints of this article, contact the WMJ at 866.442.3800 or e-mail wmj@wismed.org.

© 2011 Wisconsin Medical Society